

Hosting Partner



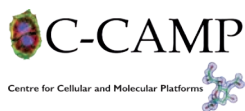
PEOPLE'S FESTIVAL OF INNOVATIONS **2025**

November 17-20, 2025

Affordable, Inclusive and
Accesible Innovations Impacting Society:

Addressing Local and Global Challenges

Organizing Partners



MESSAGE

Dr. Renu Swarup



The People's Festival of Innovations 2025 (PFoI 2025), the fourth in the series is being hosted by India International Centre, New Delhi and organised by C-CAMP, Bengaluru and GIAN, Ahmedabad. PFoI 2025 from 17 - 20 Nov 2025

.This platform has over the last few years exhibited its strength to catalyse the convergence of deep-tech and grassroots innovations from across India, focusing on affordable and inclusive solutions for unmet social needs. The Festival brings together over 100 innovators, startups, industry leaders, entrepreneurs, domain area professionals, academicians, investors and policy makers to discuss the success stories, challenges and future trends for taking these innovations forward to address local and global challenges.

In the past three sessions it has been experienced that while we have brought the Deep tech and grassroots innovators together on a common platform, their challenges in deployment and impact of their innovations need to be understood better and a platform created to help the innovations to move through the value chain. On one side, advanced solutions are being created to tackle societal issues, yet many fail to achieve real-world impact. On the other hand, grassroots innovators in rural areas possess a deep understanding of local needs but often lack the technical know-how and resources to refine and scale their ideas to meet global benchmarks.

In recent years, efforts have been made through the

People's Festival of Innovation (PFoI) to nurture such collaboration across the innovation value chain.. Building on these discussions, the idea of a Network for Innovation and Social Entrepreneurship began to take shape. Envisioned as a structured, collaborative platform, it aims to connect grassroots and deep-tech innovators with academic and research institutions, incubators, investors, industry leaders, and government agencies. Its mission is to catalyze systemic innovation, foster cross-sector partnerships, and create an enabling environment where bold ideas can evolve into high-impact solutions for real-world challenges. The Vision is to foster a connected innovation ecosystem where grassroots creativity and deeptech excellence converge—driving scalable, inclusive, and sustainable solutions for real-world challenges. In the PFoI 2025, we will present a Social Innovation Alliance platform which will help bridge this gap and address specific challenges being faced at different stages of the Innovation value chain. The aim is to take the Innovation from Spark to Scale and catalyse the translational pathway to help these transformative ideas to deliver impactful socially relevant solutions

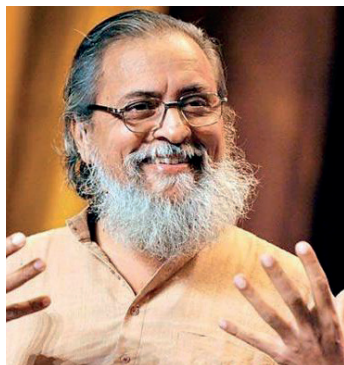
We look forward to welcoming you to the Festival for an engaging conversation with innovators.



Dr. Renu Swarup
*Former Secretary to Government of India
Department of Biotechnology,
Ministry of Science and Technology*

MESSAGE

Prof. Anil Gupta



A global search for frugal solutions to grassroots technological challenges often leads to the open-access databases of the Honey Bee Network. The Network pioneered a participatory, bottom-up approach to

scouting, spreading, spawning and scaling solutions developed by common people—solutions that are affordable, accessible, and created without outside help.

The fourth edition of the People's Festival of Innovation (PFoI), organized jointly by C-CAMP and GIAN, features several new initiatives. A key step this year is bringing innovators from more marginalised regions to provide them a platform to interact with leading scientists, technologists, and innovators. This is an opportunity for them to share their own creativity and learn from others. We have curated a diverse mix of grassroots innovations that demonstrate frugality, offering valuable lessons even for deep-tech innovators. In turn, we expect deep-tech innovators to share their journeys in blending advanced science with local, frugal solutions. Launch of SATHI accelerator jointly by C-CAMP-GIAN is another major initiative which may help accelerate the innovations from and for the grassroots with the help of several partners.

We must also recognise the policy challenges that remain for grassroots innovators. These include creating standards, establishing unit cost benchmarks for making them eligible for bank loans, and ensuring buyers can access risk-financing. Furthermore, having public institutions characterise and test these solutions is a major challenge, as it is crucial for building investor and buyer confidence in their reliability and robustness.

Many regions with high poverty are also rich in biodiversity. Characterizing this diversity is essential for its potential commercialization. For instance, flaxseed once sold for ₹100 per quintal. After scientists characterized it as a rich source of Omega-3

and Omega-6 fatty acids, its value rose to ₹100 per 100 grams. Many more such bio-resources, currently *abundant or abandoned*, can generate employment and entrepreneurial opportunities for the knowledge-rich but economically poor.

We hope this People's Festival of Innovation, graciously hosted by the India International Centre in partnership with C-CAMP and GIAN, will open new paths of progress for grassroots innovators. We also hope scientists recognize the potential to learn from these innovators, and blending their formal knowledge with the innovators' grassroots wisdom. May the festival inspire not only young visitors but also policymakers, bankers, and investors to engage with these creative minds, helping an inclusive India move towards becoming a developed India - Viksit Bharat.

The Honey Bee Network volunteers and the GIAN team look forward to drawing energy and inspiration from the innovators at this festival, strengthening our collective journey towards creating scaled-up enterprises. The SATHI accelerator being set up jointly by C-CAMP and GIAN will hopefully add value not only to grassroots innovators but also to traditional knowledge holders, whose creativity and conservation spirit can generate novel products and services.

GIAN, the Honey Bee Network, and its sister institution SRISTI look forward to PFoI with great expectations. We believe it will unleash the full developmental potential of the deep-tech innovations mobilized by C-CAMP and the grassroots innovations scouted by GIAN and the Honey Bee Network volunteers.

Dr. Anamika Dey, CEO of GIAN, joins me in wishing PFoI great success in transcending the limits of frugality, inclusivity, and innovation in the service of the common people of our country and the world at large.



Prof. Anil K Gupta

Founder, Honey Bee Network, SRISTI, GIAN & NIF,
Visiting Faculty, IIMA & IITB, Academy Professor, ACSIR,
CSIR Bhatnagar Fellow 2018-21.

MESSAGE

Dr. Swati Basu



Over the last decade, India has laid emphasis on innovation as a growth strategy. As a result, there is continuous improvement in its World Innovation Index ranking. Innovation creates growth in society by addressing its diverse challenges and in the process changes lives.

Innovation is imperative for the economic and human capital growth of the country.

The People's Festival of Innovation at the India International Centre continues to provide an excellent platform for the fourth consecutive year for showcasing promising innovations being undertaken by innovators across the country. The inaugural festival in 2022 celebrated grassroots and deep-tech innovators, facilitating exchanges of ideas and catalysing societal growth through enhanced public dialogue. The second year's festival focused on scaling innovations across sectors of national importance including healthcare, agriculture, natural resource management, and clean energy. The third year emphasized affordable, inclusive, and accessible innovations addressing local and global challenges seamlessly. More intense interactions with investors and mentors along with engagement with policymakers and collaboration with technical experts paved the path for developing robust innovator accelerators.

The current year's festival of innovation, with the theme "From Spark to Scale: Transforming Innovative Ideas to Socially Relevant Solutions," marks a significant transition. India's innovation ecosystem is

undergoing rapid transformation driven by advances in artificial intelligence, machine learning, and gene editing. However a persistent gap remains: deep-tech innovations often fail to address grassroots realities due to contextual disconnect, while grassroots innovators possess deep local wisdom but necessary structure, refinement, and support networks to scale remains a challenge. Both face critical gaps in idea validation, technical and business support, infrastructure access, and scaleup assistance.

Through dialogue and interactions across each year's festival of innovation, a shared imperative have emerged---the urgent need for a national-level social innovation network bridging grassroots and deep-tech innovators. This network would ensure promising ideas becoming catalysts of transformation by supporting carefully selected cohorts of start-ups, through tailored mentorship, prototype development, along with technical and market insights, infrastructure access, and investor connections.

The festival would bring together innovators, start-ups, industry leaders, entrepreneurs, policymakers, domain experts, academics, and investors to explore scaling pathways. Through curated theme-based sessions, storytelling of successful innovations, and targeted networking, the festival would create a dynamic space for growth and collaboration.

This e-book compiles the remarkable work of promising innovators and their incredible journey in developing solutions that serve society. It will inspire students, researchers, start-ups, and entrepreneurs to become part of the larger innovation ecosystem of the country and the world for a better future for all.

Dr. Swati Basu
*Former Scientific Secretary
O/o PSA*

FOREWORD

Dr Taslimarif Saiyed



People's Festival of Innovations (PFoI), India's most inclusive celebration of socially impactful innovations, started off as a gamechanging concept. The aim was to provide a unique national platform that embraces both advanced

scientific and grassroots innovations, fostering public engagement, dialogue, and participation in supporting India's dynamic innovation ecosystem. This was where, innovations in agriculture stood alongside advancements in stem cell therapy and gene editing, traditional sustainability practices intersected with cutting-edge climate technologies, ingenious farming machinery shared a platform with artificial intelligence and machine learning.

The Festival in its 3rd edition in 2025 is a showcase of India's Innovation Story like no other.

PFoI's USP is the understanding that the scope for problem-solving is not necessarily confined to the higher echelons of scientific research, that grassroots innovations with more immediate impact may solve problems on the ground faster. At the same time, it spotlights cutting-edge innovations and state-of-the-art scientific advancements that catalyse pathbreaking impact in the long run, changing how we work, live and coexist. The confluence of both of these is the uniqueness of PFoI.

But building PFoI was only the first step in igniting conversations. In over three years of this festival, we

have shared knowledge, fostered meaningful exchange of ideas and built a vibrant innovation community.

Three years of this festival have now underlined a growing realization that meaningful innovation can no longer thrive in silos; rather, it demands a well-connected, inclusive, and collaborative ecosystem.

To respond to this urgent need, this year at PFoI we are announcing a national level alliance for creating a symbiotic and systematic Innovation and Social Entrepreneurship ecosystem.

Envisioned as a structured, collaborative platform, the idea of the Alliance is to connect grassroots and deep-tech innovators with academic and research institutions, incubators, investors, industry leaders, and government agencies.

Its vision is to foster a connected innovation ecosystem where grassroots creativity and deep-tech excellence converge and thrive —driving scalable, inclusive, and sustainable solutions for real-world challenges.

SAATHI, the Social Alliance for Accelerating Transformative & High-impact Innovations is the highlight of PFoI 2025. I am tremendously excited for PFoI 2025 and look forward to participating in this year's celebration of India's innovative spirit.

PFoI is founded, anchored and organised with the able support of our fantastic collective teams across co-partners C-CAMP, GIAN and Honey Bee Network.

Dr. Taslimarif Saiyed

CEO & Director

Centre for Cellular and Molecular Platforms (C-CAMP)

Considered one of the country's premier cultural institutions, the India International Centre is a non-government institution widely regarded as a place where statesmen, diplomats, policymakers, intellectuals, scientists, jurists, writers, artists and members of civil society meet to initiate the exchange of new ideas and knowledge in the spirit of international cooperation. Its purpose, stated in its charter, is 'to promote understanding and amity between the different communities of the world'. In short, the Centre stands for a vision that looks at India as a place where it is possible to initiate dialogues in an atmosphere of amity and understanding.

The Centre's dedication to the values of liberal humanism is best reflected in its activities and calendar of events. These cover a wide range, from lectures, seminars, panel discussions, international and national conferences to a variety of cultural events of music, cinema, performing and visual arts, both classical and folk. Entry to these is not restricted to members as all its programmes are open to the wider public of the city. Three core departments provide fitting platforms for its activities; the Programmes Division, the Library and the Publications Division.

The activities of each of these departments complement the work done by others. Moreover, none of these activities are commercial in nature but are carried out in the spirit of public service. The Centre is equally famous for its gracious hospitality, and its hostel rooms are in great demand as they provide comfortable and personalised service with modestly priced meals. Beautiful gardens, with shady trees and fountains, a bar, a tea lounge and several refreshment areas are popular venues for members to meet or entertain guests.

Some of the important objectives of the Centre, as proposed in the Memorandum of Association, are:

To promote understanding and amity between the different communities of the world by undertaking or promoting the study of their past and present cultures, by disseminating or exchanging knowledge thereof, and by providing such other facilities as would lead to their universal application.

To undertake, organise and facilitate study courses, conferences, seminars, lectures and research in matters relating to different cultural patterns of the world.

To undertake, facilitate and provide for the publication of newsletters, research papers, and books, and of a journal for the exposition of cultural patterns and values prevailing in different parts of the world.

To establish and maintain libraries and information services to facilitate study of world cultures.

To cooperate with approved institutions and interested bodies for the purpose of helping the cause of understanding among peoples of different cultures.

To organise and maintain, as far as possible on a no-profit/no-loss basis, limited residential accommodation, with cultural and educational amenities, for the members of the society as well as non-members specially invited to participate in the activities of the Centre.

To invite cultural leaders, scholars, scientists and creative artists, who may or may not be members of the society, to take advantage of the facilities offered by the society.

To establish for the management and administration of all the properties, moneys, assets, and activities of the society, a Trust consisting of seven trustees, five of whom shall be Life Trustees and the remaining two elected, one by individual members and the other by institutional members.

SPONSORS

Gates Foundation

Gates Foundation

Guided by the belief that every life has equal value, the Gates Foundation works to help all people lead healthy, productive lives. In developing countries, it focuses on improving people's health and giving them the chance to lift themselves out of hunger and extreme poverty. In the United States, it seeks to ensure that all people—especially those with the fewest resources—have access to the opportunities they need to succeed in school and life. Based in Seattle, Washington, the foundation is led by CEO Mark Suzman, under the direction of Co-Chairs Bill Gates and Melinda French Gates and the board of trustees.

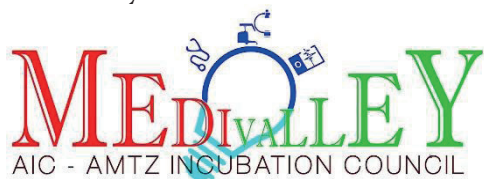
Wadhvani Foundation



Founded in 2001 by Silicon Valley entrepreneur Dr. Romesh Wadhvani, Wadhvani Foundation is a high-growth, not-for-profit tech organization dedicated to social good. The foundation with worldwide presence has focused on a simple, powerful mission: accelerating job growth and enabling millions to earn a family-sustaining wage and lead a dignified life. The Foundation is positively impacting the lives of millions of individuals across multiple countries in Asia, Africa, and Latin America through its four core initiatives: Entrepreneurship, Skilling, Innovation & Research, and Government Digital Transformation.

Associate Partners

Medivalley Incubation Council



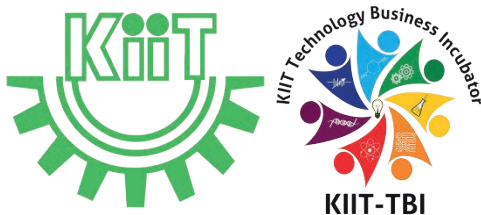
Medi Valley Atal Incubation Centre, the innovation arm of Andhra Pradesh MedTech Zone (AMTZ), is India's only incubation facility dedicated exclusively to health technology innovation. Funded by NITI Aayog under the Atal Innovation Mission, it is strategically located within India's premier medical device manufacturing hub. Medi Valley supports innovators through every stage—from ideation to manufacturing—offering access to AMTZ's comprehensive ecosystem, including scientific, regulatory, manufacturing, and trade facilities. Its state-of-the-art biomedical engineering labs enable hands-on product development and prototyping. Accredited by NABL, BIS, and CDSCO, Medi Valley upholds the highest standards of quality, safety, and regulatory compliance, positioning itself as a national leader in medical technology incubation and commercialization.

BioCyTiH Foundation



BITS BioCyTiH Foundation is a deep-tech innovation hub that integrates biology with cyber-physical systems (Bio-CPS) to develop affordable, high-impact solutions in healthcare, agriculture, water, and environment. Supported by BITS Pilani, the foundation fosters interdisciplinary collaboration across biology, computing, and engineering to translate research into real-world applications. Through its focus on technology development, entrepreneurship, infrastructure, and skill-building, it nurtures startups, accelerates innovation, and builds a strong talent pipeline. With state-of-the-art facilities and global partnerships, BITS BioCyTiH Foundation serves as a catalyst for cutting-edge Bio-CPS research and innovation addressing India's critical societal and technological challenges.

Kalinga Institute of Industrial Technology (KIIT-TBI)



At KIIT-TBI, we're on a mission to empower the next generation of innovators, disruptors, and changemakers. Through our integrated approach to startup incubation and acceleration, we provide aspiring entrepreneurs and startups with the knowledge, skills, and support they need to turn their ideas into reality and build successful ventures from the ground up. Through collaborations with local governments, academic institutions, and industry partners, we've amplified our reach and deepened our impact. Together, we're not just building successful enterprises; we're transforming lives and shaping the future of the eastern and northeastern regions of India.

BSC BioNest Bio-Incubator (BBB)



BSC BioNEST Bio-Incubator (BBB) at the Regional Centre for Biotechnology (RCB), an Institute of under the Department of Biotechnology, Government of India, is a premier innovation hub supported by DBT-BIRAC's BioNEST scheme. BBB provides state-of-the-art incubation space, empowering startups in healthcare, med-tech, diagnostics, biopharma, agritech, and environmental sustainability. To date, BBB has supported 60+ startups, and facilitated 20+ market-ready products. Through mentorship, IP support, and funding access, BBB is shaping India's next generation of bio-innovators and technology-driven entrepreneurs.



Social Alpha is a mission-driven organization that fosters science and technology-led entrepreneurship to create social, economic, and environmental impact. It supports innovators through their lab-to-market journey, helping them develop and scale solutions that address India's pressing developmental challenges. Built around the Foundation for Innovation and Social Entrepreneurship (FISE), a not-for-profit platform, Social Alpha operates a nationwide network of technology and business incubators supported by Tata Trusts, the Government of India, and several academic, corporate, and philanthropic partners. Through its unique three-tier ecosystem, Social Alpha bridges innovation and investment, empowering early-stage entrepreneurs to translate impactful ideas into sustainable ventures.

Venture Center



Venture Center is an initiative of the National Chemical Laboratory (NCL) under the Council of Scientific and Industrial Research (CSIR), is India's leading technology business incubator for science and technology startups. Incorporated as the Entrepreneurship Development Centre, it is approved by DST-NSTEDB and DBT-BIRAC. Venture Center's mission is to nucleate and nurture world-class, science-led ventures that address global challenges, fostering innovation-driven entrepreneurship in sectors such as healthcare, environment, energy, agriculture, and engineering. The incubator provides a robust ecosystem offering mentorship, funding access, innovation management, and collaborative R&D support, bridging academia and industry. With a focus on deep-tech startups and inventive enterprises, Venture Center continues to play a pivotal role in building India's innovation-driven economy and positioning Pune as a global hub for scientific entrepreneurship.



IKP Knowledge Park

IKP Knowledge Park established in Hyderabad's Genome Valley as India's first Life Sciences Park, has grown from providing state-of-the-art infrastructure to becoming one of the country's leading incubators and innovation enablers. The park co-locates global corporations, startups, and research institutions, creating a thriving life sciences innovation ecosystem. With operations in Hyderabad and Bangalore, IKP now supports startups across biotech, healthcare, agriculture, digital health, energy, and climate innovation. As a non-profit organization, IKP follows a triple-bottom-line approach, collaborating with startups, academia, government, and industry to build a sustainable innovation ecosystem. Its mission is to nurture ideas from concept to market while driving impactful change for people and the planet.



IIT Bombay

Indian Institute of Technology Bombay (IIT Bombay), established in 1958, is one of India's premier institutions for higher education, research, and innovation. IIT Bombay has continuously advanced academic excellence, research, and entrepreneurship while fostering inclusivity and holistic development. The Institute provides a vibrant environment for students, researchers, and entrepreneurs. IIT Bombay is recognized for its cutting-edge research, strong academia-industry linkages, and world-class infrastructure. The Institute has established several Centers of Excellence in frontier areas such as Artificial Intelligence, Digital Health, Green Energy, Quantum Science, and Bioengineering. It continues to nurture leaders and innovators dedicated to solving local and global challenges, contributing to India's progress and promoting a sustainable, inclusive future.



GHARDA CHEMICALS LIMITED

Gharda Chemicals Limited

Founded in 1967 by the late Dr. Keki H. Gharda, Padma Shri awardee and the visionary Founder, Chairman, and Managing Director, Gharda Chemicals Limited has grown into one of India's most respected R&D-driven chemical companies. With a strong and diversified portfolio across Crop Protection Chemicals, Intermediates, High-Performance Polymers, and Pigments, the company has evolved over five decades from a small enterprise into a global industry leader. Today, Gharda operates eight manufacturing facilities across India, employs over 2,500 people, and serves customers in more than 90 countries. Its legacy is deeply rooted in pioneering research, innovative processes, and a relentless drive to reshape the chemical landscape.

As a true 'Make in India' and 'Atmanirbhar' organization, Gharda has successfully indigenized global technologies to create solutions that contribute to national progress and community welfare. Beyond business, the company remains committed to social responsibility through its philanthropic initiatives and institutions, including Gharda Hospital, Gharda Library, Gharda Institute of Technology, and the Gharda Foundation. These efforts reflect a long-standing belief in giving back to society.

Gharda's journey is built on the passion of people who are driven by purpose, innovation, and service. The company continues to push the boundaries of conventional chemistry and nurtures strong collaborations with customers, partners, academia, and other stakeholders to deliver solutions that meet evolving global needs while upholding sustainability and environmental responsibility. With customer-centricity and transparency at its core, Gharda remains dedicated to its mission: "Knowledge converted through products to wealth for the good of society."



building, NABARD remains at the forefront of rural transformation, nurturing grassroots creativity and enabling a resilient, self-reliant rural India.

The National Bank for Agriculture and Rural Development (NABARD) is India's apex development bank, established in 1982 under an Act of Parliament to promote sustainable and equitable agriculture and rural development. Over the past four decades, NABARD has played a transformative role in strengthening the rural economy through agri-finance, infrastructure development, financial inclusion, rural innovation, and the promotion of community-based institutions, including SHGs, JLGs, cooperatives, and FPOs. With a strong focus on participative development, technology adoption, and institutional strengthening, NABARD continues to drive prosperity across India's villages.

Vision

Development Bank of the Nation for Fostering Rural Prosperity

Mission

Promote sustainable and equitable agriculture and rural development through participative financial and non-financial interventions, innovations, technology and institutional development for securing prosperity.

NABARD empowers rural India through financial, developmental, and supervisory initiatives that touch every aspect of the rural economy. These include refinance support to banks, district credit planning, implementation of Government of India schemes, livelihood promotion, market linkage programmes, skilling initiatives, and oversight of Cooperative Banks and Regional Rural Banks (RRBs). Landmark initiatives, such as the Self-Help Group (SHG) Bank Linkage Programme—the world's largest microfinance movement—and the Kisan Credit Card (KCC), have transformed access to credit for millions. NABARD is also a national leader in watershed development, climate adaptation, and rural infrastructure financing, having supported nearly one-fifth of India's rural infrastructure creation. Through continuous innovation and institution-

Bringing together grassroots and deep-tech innovations

CONTENTS

Meeting Agenda..... 14

PFoI Speakers’ Brief introductions..... 20

Deep-tech innovations..... 39

Grassroots Innovations..... 80

C-Camp Team..... 122

GIAN- Team..... 124

People's Festival of Innovations (PFoI) 2025
17th- 20th November, 2025
India International Centre, New Delhi

From Spark to Scale: Transforming innovative ideas to socially relevant solutions

Agenda

Date	Venue	Time	Sessions
17th Nov	Multipurpose Hall Kamladevi Block Gate No 1	10.30 - 01.00	
	Seminar hall verandah	10.30-10.50 AM	Networking & Tea
		10.50-11.20 AM	Opening Session- Festival Theme Talk – (From Spark to Scale: Transforming innovative ideas to socially relevant solutions Dr. Harish Hande, Co-Founder, SELCO Solar Light Private Limited
		11.20-12.00 PM	Social Alliance for Accelerating Transformative & High-impact Innovations An Interactive Session with Innovators and SAATHI partners Session moderator: Dr. Taslimarif Saiyed, CEO & Director, C-CAMP Panel Members: Dr. Dilip Kumar Chekuri, MediValley-AMTZ, Ms. Suman Gupta- BSC BioNEST Bio-Incubator (BBB), RCB, Ms. Megha Jain, Gates Foundation, Dr. Anil Wali, BioCyTiH Foundation, Dr. Mrutyunjay Suar, KIIT
		12.00-12.10 PM	Inaugural – Lighting the lamp
		12.10-12.15 PM	Welcome Address – Dr. Taslimarif Saiyed, CEO & Director, C-CAMP
		12.15-12.20 PM	Opening Remarks – Dr. Swati Basu, Former Scientific Secretary, O/o PSA
		12.20-12.25 PM	Opening Address - Shri K. N. Shrivastava, Director
		12.25-12.30 PM	Special Address – Prof. Anil Gupta, Founder, Honey Bee Network, SRISTI, GIAN & NIF, Visiting Faculty, IIMA, IITB, Academy Professor, AcSIR
		12.30-12.35 PM	Festival Vision Address — About the Festival – Dr. Renu Swarup, Former Secretary, Dept. of Biotechnology, Govt. of India
		12.35-12.45 PM	Inaugural Address – Dr Vijay Kumar Saraswat, Member, NITI Aayog, Chancellor, Jawaharlal Nehru University

		12.45-01.10 PM	Launch of SAATHI (Social Alliance for Accelerating Transformative & High-impact Innovations) video of PFOI (3 min) Address by Ms. Archana Vyas (5 min) Launch of SAATHI poster (2 min) Group pic with all partners (2 min) Dr. Dilip Kumar Chekuri, MediValley-AMTZ, Ms. Suman Gupta- BSC BioNEST Bio-Incubator (BBB), RCB, Ms. Archana Vyas, Gates Foundation, Ms. Megha Jain, Gates Foundation, Dr. Anil Wali, BioCyTiH Foundation, Dr. Mrutyunjay Suar, KIIT	
		01.10 PM	Vote of thanks	
	Gandhi King Plaza (GKP)	01.10- 01.30	Inauguration of Exhibition	
	Seminar hall verandah	01.30-02.15 PM	Lunch	
	Multipurpose Hall Kamladevi Block Gate No 1	02.15 -3.15 PM	Session 1: Scaling Innovations for Societal Impact— -Dr Renu Swarup and Dr Anil Gupta Why does taking an idea to scale fail at multiple steps — overcoming the challenges Session Moderator: Dr Renu Swarup & Dr Anil Gupta Panel Members: Dr. Markandeya Gorantla, ATGC, Dr. Pramod Garg, AIIMS, Dr. Akriti Sharma, CEO of Pusa Krishi and Senior Scientist at ICAR–IARI, Arun Chandru, Pandorum Sunil Khairnar (Founder and Director of Indigram Group) Brigadier Ganesham Pogula Shri P Vivekanand Shri Sundaram	
	Seminar Rooms (parallel sessions)	3.15 – 4.30 PM	Session: 2 Identifying need based challenges - finding the right solutions In this session the Experts will interact with the innovators and respond to the issues raised by them on how to take innovations to scale and deployment Interactive Q &/A SESSION Session Moderator: Dr Mrutyunjay Suar, Director General R&D, KIIT Panel Members: Dr. Amit Dinda, AIIMS, Dr. PVM Rao, IITD, Dr. Ashwani Pareek, NABI, Dr. Shams Yazdani, ICGEB	Session: Tapping grassroots knowledge, institutions, and technologies for rural transformation. Chair: Dr Sanjay Kumar, Chair ASRB Dr Ranjay Singh- Astd. Director General of Agriculture Extension at the Indian Council of Agricultural Research (ICAR) Prof. Nazir Ahmad Ganai VC SKAUST K 2bc Prof Laxman Sharma (Dean, Sikkim University)

				Grassroots innovators: Ishwar S Kundu G K Ratnakar Gurmeil singh Perna Samakhya wool
	GKP (common session)	4.30 PM-6.00 PM	Interactive session focusing on marginal and remote/tribal areas Moderated by Dr Mrutyunjay and Dr Aslam Story Telling (2 grassroot + 1 deeptech) Tea & Networking, Exhibition time	
18 th Nov	Seminar Room (Parallel Sessions)	10 .00- 1.30 PM		
		10.00-11.30 AM	Session 3: Smart Capital: How to unlock Funding— View points from Investors and Government on opportunities which exist Session Moderator: Dr. Premnath Venugopalan, Founding Director, Venture Centre Panel Members: Ms. Padmaja Ruparel, IAN, Ms. Rema Subramanian, Ankur Capital, Dr. Shrishendhu Mukherjee, Wadhwani Foundation, Dr. Manish Diwan, Head, Biofoundry	Session: Tapping Grassroots creativity and frugal innovations- an international perspective Keynote Speakers: Serge Rohmer- Professor and a Research Engineer/Scientist (Enseignant chercheur) at the University of Technology of Troyes (UTT) in France Nigel Collin (Australian business and creativity expert, author)
	Seminar hall verandah	11.30-11.45 AM	Tea	
		11.45 - 1.15 PM	Session 4: Building the right partnerships — taking innovations to impact This session will focus on how innovations are taken forward to create an impact Experts who have facilitated it and Startups who have created that impact will share their thoughts Session Moderator: Deepanwita Chattopadhyay, Chairman and Managing	Innovation through Enterprises, Markets & Institutions” Hemendra Mathur (Chair & Moderator) Keynote Speaker: Sunil Khairnar (Founder and Director of Indigram Group) Founder presentations (Forecast, Biome, Sajeevan)

			Director, IKP Knowledge Park. Panel Members: Dr. Neeraj Jain, PATH, Dr. Amit Shah, Jhpiego, Mr. Vivek Mishra, Fibroheal, Dr. Manoj Kumar Rupa, Capsber	Anish Kumar Startup Founders
	Seminar hall verandah	1.15 - 2.30 PM	Lunch & Networking	
	Seminar Room (Parallel sessions)	2.30 – 4. 00 PM	Master Class on IP and Technology Transfer Dr. Shrishendhu Mukherjee, Wadhvani Foundation, Dr Malathi Lakshmikumaran, L&S Attorneys and Dr. Rijuta Garapaty, Sathguru consultants	Leveraging IP for grassroots innovators: Ajay. K Garg – Senior Partner, Anand and Anand Vikrant Rana – Managing Partner at S.S. Rana & Co., New Delhi. Jatin Y. Trivedi – Senior Partner at Y.J. Trivedi & Co., Ahmedabad.
	GKP	4.00 PM—5.30	SPECIAL SESSION ON Mind on the Margin, not Marginal Minds Prof. Anil Gupta Story Telling (2 grassroot + 2 deeptech) Tea & Networking, Exhibition time	
19th Nov	GKP (common session)	10.00-1.00 PM 10.00 – 11.15 AM	Discussion 1- Scaling Innovations –Assessing the Impact of Social innovations This session will be a free-flowing conversation with innovators focusing on how do we assess the impact of social innovations Lead Talk & Moderator – Dr. Satyajit Majumdar, Managing Director, TISS Incube Foundation Session Moderator: Dr. Satyajit Majumdar, Managing Director, TISS Incube Foundation Panel Members: Mr. Sujay Dixit, CEO, TISS Incube Foundation, Dr. Jatinder Kaur Arora, Adviser, Northern Region S&T Cluster (PI-RAHI: PU IIT Ropar Regional Accelerator for Holistic Innovation Foundation); Former Executive Director, Punjab State Council for Science and Technology, Dr. Vipin Kumar, chief Scientists, NIF; Dr. Anamika Dey, CEO, GIAN, Dr Ranjay Kumar Singh, ADG, ICAR	
	GKP	11.15-1145 AM	Tea	

	GKP (parallel session)	11.45 – 1.00PM	Discussion 2 - Scalability vs Sustainability This session will be a free flowing conversation moderated by a senior expert focusing on how to strike a balance between scaling innovations and ensuring their sustainability. It is important to create the right framework of policy and ecosystem Session Moderator: Dr. Kavita Singh, Independent Director, Gennova Biopharmaceutical Panel Members: Dr. Avijit Bansal, SIB, Dr. Nitin Sisodia, Founder & CEO Sohum Innovation Lab, Dr. Srikant Sastri, Investor and Startup Mentor,	Grassroots Innovators (Online Innovators) Sunflower Seed Variety- Surendra Pal Sunflower Seed Extractor- Lakhnala Patel Pepper Thresher- Binoy Sebastian Low cost fish dryer and stove- Maibam Deben Singh Annapurna Rice Library- Mahan Chandra Borah Tractor Operated Orchard Sprayer - Rajendra Jadhav Sola Wood Sheet Making Machine (Sheet Slicing)- Deepak Sardar Mittidhan: hand tools for workers - Hiren Panchal Polanga Decorticator- Rajesh Sahoo Root-Fusion Nutmeg: Multi-Root Approach Grafted Saplings for Enhanced Yield & Resilience-Gopi C. M HRMN-99 Apple Variety- Hariman Sharma Rice/Grain Sorting Machine - Mohan Sharma Tractor-Bund: Precision Bund Maker with Adjustable Settings- Mridupaban Handique Fruits and Vegetable Capper- Shaji Varghese SK4, a high-yielding turmeric variety - Sachin Kamlakar Karekar Improved Drought Tolerant Dual Purpose Sorghum Variety- Himatbhai Virjibhai Lakkad
	GKP	1.00 - 2.00 PM	Lunch	
	GKP	2.00 - 5.00 PM	Story Telling (3 grassroot + 3 deeptech). Moderated by Prof Anil Gupta Interactions between Deeptech and Grassroots	

	GKP	4.00 PM	Tea & Networking, Exhibition time
20 th Nov	GKP (common session)	10.30 – 12.30 PM	Investor One-on-One interactions IAN, Blume, Social Alpha, BioRx
	GKP (common session)	12.30 – 02.00 PM	Interactive sessions between deeptech & grassroots and Feedback Moderators- Dr. Swarup and Prof. Gupta
		2.00 PM	Lunch & Close

Inaugural Address

Dr. Vijay Kumar Saraswat
Member, NITI Aayog, and
Chancellor, Jawaharlal Nehru University



Padma Bhushan and Padma Shri awardee Dr. Vijay Kumar Saraswat is a distinguished scientist with decades of experience in defence research, retiring as Secretary, Defence Research and Development Organisation (DRDO). He is widely credited with the indigenous development of strategic missile systems such as Prithvi, Dhanush, Prahaar, and Agni-5, the two-tiered Ballistic Missile Defence system, and the nuclear submarine INS Arihant. As Member, NITI Aayog, he currently drives the transformative 'Methanol Economy' programme for transportation and energy generation, and leads the development of National Supercomputing Systems. Dr. Saraswat has also evolved roadmaps for alternative energy systems (clean coal, high-efficiency concentrated solar power, and hydrogen-based economy) as Homi Bhabha Chair Professor and Chairman of R&D Advisory Councils, demonstrating a vast experience that spans strategic defense technology to national policy on clean energy and innovation.

Festival Theme Talk - From Spark to Scale: Transforming innovative ideas to socially relevant solutions

Dr. Harish Hande,
Co-Founder, SELCO Solar Light Private Limited



Dr. Harish Hande is a pioneering social entrepreneur and the co-founder of SELCO Solar Light Private Limited. His major contribution is his vision to catalyze development outcomes via sustainable energy by demonstrating an economically and environmentally sustainable model for bringing affordable solar power to the poor in India's countryside. Since 1995, SELCO has reached over half a million people by installing solar photovoltaic systems in southern Indian states, proving his belief that "renewable energy, poverty reduction and sustainability can go hand in hand." His work is globally recognized for addressing energy poverty and providing reliable electricity to marginalized communities where supply was unreliable or non-existent.

Social Alliance for Accelerating Transformative & High-impact Innovations

Dr. Taslimarif Saiyed
CEO & Director, C-CAMP



Dr. Taslimarif Saiyed, the CEO and Director of C-CAMP, is a leading figure in neuroscience and innovation management. He holds a Ph.D. from the Max Planck Institute for Brain Research and completed postdoctoral training at UCSF, followed by experience as a Management Consultant in the Bay Area biotech sector. Trained in strategic management at UC Santa Cruz, UC Berkeley, and the Wharton School of Management, Dr. Saiyed combines deep scientific expertise with strong leadership acumen. At C-CAMP, he leads the Discovery to Innovation Accelerator program, fostering life science and healthcare innovations and enabling the translation of cutting-edge research into impactful technologies. His visionary leadership continues to drive India's biotechnology ecosystem toward global excellence.

Dr. Dilip Kumar Chekuri
CEO, Medi Valley - AMTZ



Dr. Dilip Kumar Chekuri is an innovator and biomedical technologist, currently serving as the CEO of the Atal Incubation Center – NITI Aayog MediValley, which he has transformed into one of India's top and self-sustaining medical technology incubators. Dr. Chekuri has consistently driven impact in strengthening healthcare systems, with key roles at the World Bank, Asian Development Bank, and national health programs like Ayushman Bharat. Since 2017, he has been integral to the Andhra Pradesh MedTech Zone (AMTZ) and the Kalam Institute of Health Technology (KIHT). Under his technical leadership, he has been crucial in framing over 559 medical device standards for the Bureau of Indian Standards and contributing as an Adjunct Technical Expert to the Product Linked Incentive (PLI) Scheme for Medical Devices and the establishment of four medical device parks under the Government of India. His pioneering work earned him the prestigious AAMI Iconoclast Award, which celebrates leaders who redefine the future of medical technology.

Ms. Suman Gupta
COO, BSC BioNest Bio-Incubator (BBB)



Ms. Gupta is the Chief Operations Officer of the Bio-Incubator at Regional Center for Biotechnology

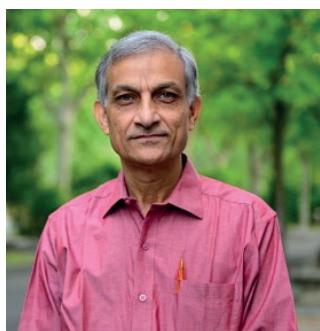
which is an academic institution established by the Department of Biotechnology, Govt. of India under the auspices of UNESCO. She provides leadership to the Bio-incubator that nurtures the entrepreneurs in the area of Biotechnology and provides them the required mentorship to commercialize their ideas. She has been instrumental in setting up the state-of-the-art incubation facility that has supported more than 70 startups since its inception in Nov. 2018. Ms. Gupta has been a prudent Drug Discovery scientist, having over 20 years of rewarding association with premier multinational Pharma companies. She has played a key role in finding several clinical candidates leading to Investigational New Drug molecules. She is an experienced project manager and an expert in managing global collaborations. She is an alumnus of MSU, Baroda, Bharati Vidyapeeth University, Pune and Ruia college, University of Bombay.

Ms. Megha Jain
Senior Advisor, BMGF



Megha Jain is a Senior Advisor at the Bill & Melinda Gates Foundation (BMGF), where she works to advance partnerships and investments that drive large-scale social and economic impact. She has extensive experience in impact investing, strategy consulting, and corporate finance, with a career spanning over 15 years across diverse sectors including financial services, healthcare, education, consumer, livelihood, and agriculture. Before joining the Gates Foundation, she led the India team at Insitor Partners, an impact-focused venture capital fund, where she worked on investments supporting inclusive and sustainable growth. Earlier, she worked with Lincoln International in M&A advisory, and with Ernst & Young in strategy consulting, advising clients across industries on business transformation and growth strategy.

Dr. Anil Wali
CEO, BITS BioCyTiH Foundation



Dr. Anil Wali is a seasoned academic and innovation leader with a Ph.D. in Chemistry from IIT Delhi. Renowned for fostering academia-industry collaborations, he has guided numerous startups through mentoring and incubation programs. With expertise in technology transfer and intellectual property management, Dr. Wali has been instrumental in bridging research and practical applications, driving innovation across India's entrepreneurial ecosystem.

Ms. Archana Vyas
Director, Program Advocacy & Communications,
Growth, Opportunity & Empowerment
Gates Foundation



Archana Vyas is a senior leader at the Gates Foundation, overseeing advocacy and communications for the Global Growth & Opportunity and Gender Equality divisions. She advances key initiatives in financial inclusion, agriculture, sanitation, education, and women's empowerment. Since joining the foundation in 2014, she has led major collaborations with governments and institutions, including establishing the Behavioural Insights Unit at NITI Aayog with Ashoka University. Previously, she held leadership roles at Reckitt, managing communications across

Asia, the Middle East, and Africa, and earlier worked in advertising. Archana holds degrees in Physics, Public Relations, and Business Administration, and studied Behavioral Insights in Policy at Harvard Kennedy School. She also serves on the WHO Technical Advisory Group on Behavioural Insights and the South Asia Learning Collaborative at Georgetown University.

Scaling Innovations for Societal Impact

Dr. Renu Swarup
Former Secretary, Department of Biotechnology
Government of India



Dr. Renu Swarup is the Former Secretary, Department of Biotechnology (DBT), Ministry of Science & Technology, Government of India, and Former Chairperson of BIRAC. With over three decades at DBT, she played a pivotal role in shaping India's National Biotechnology Strategy and promoting innovation-led growth through policy, research, and industry - academia collaboration. As the Founder Managing Director of BIRAC, she nurtured a thriving biotech innovation ecosystem supporting over 5000 startups and SMEs. Dr. Swarup is a Fellow of NASI, Vice Chair of ICARS (Copenhagen), and serves on key global health advisory boards, including the G7 Global Health Multistakeholder Group. Her contributions have earned her several national and international honours, including the BioSpectrum Person of the Year (2012), National Entrepreneurship Award (2017), and the Dr. B.S. Bajaj Memorial FABAA Excellence Award (2023).

Prof Anil Gupta
Founder, Honey Bee Network, SRISTI, GIAN & NIF



Padmashree awardee, Dr. Anil K Gupta is a scholar in the area of grassroots innovation. He is the founder of Honey Bee Network, SRISTI, NIF & GIAN. Previously he was a full-time professor and currently he is a visiting faculty at Indian Institute of Management, Ahmedabad and at IIT Bombay. One of his most popular courses is Shodh Yatra. He holds the fellowship of, National Academy of Agricultural Sciences; Fellow, the World Academy of Art and Science, California 2001 and Fellow, INSA; AcSIR Academy professor.

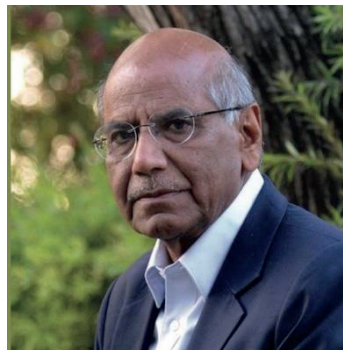
Dr. Swati Basu
Former Scientific Secretary , O/o PSA



Dr. Swati Basu is the Former Scientific Secretary at the Office of the Principal Scientific Adviser (PSA), Government of India, and currently serves as a Scientific Consultant in the PSA, focusing on environment and climate sciences. She has previously served as Director, NCMRWF, and Advisor, Ministry of Earth Sciences, where she led major national initiatives in weather forecasting modernization and Earth system science programs. As Advisor in the Ministry of Earth Sciences, played pivotal role for

successful implementation of various international agreements and policy decisions related to Earth system Science programs, Played crucial role in modernization of India Meteorological Department.

Shri Shyam Sharan
President, IIC



Padma Bhushan awardee Shyam Saran is one of India's most respected diplomats and foreign policy strategists. A former Foreign Secretary of India, he also served as the Prime Minister's Special Envoy for Nuclear Affairs and Climate Change, contributing significantly to India's nuclear diplomacy and global climate engagements. After retiring from government service in 2010, he led the Research and Information System for Developing Countries and chaired the National Security Advisory Board (2013–2015). Currently, he serves as President of the India International Centre (IIC) and Honorary Senior Fellow at the Centre for Policy Research. In 2019, he was honoured with Japan's Order of the Rising Sun, Gold and Silver Star for his contribution to India-Japan relations.

Shri K. N. Shrivastava
Director, IIC



As the Director of the India International Centre (IIC), he brings over 44 years of extensive experience in Public Administration. A retired IAS Officer from

the 1978 Batch, his distinguished journey reached its zenith as the Secretary of the Ministry of Civil Aviation, Government of India. His commitment to public service is evident in pivotal roles for the Governments of Karnataka and India, overseeing projects like the Almatti Dam and initiating the Bangalore Metro Rail. His expertise spans ministries such as Civil Aviation, External Affairs, the Archaeological Survey of India, Railways, and Mines, including crucial involvement with the Bangalore Metro Rail Corporation Limited. Internationally, he has been a key part of the Indian Prime Minister's entourage during global visits, showcasing diplomatic acumen in bilateral discussions with the Ministry of State for External Affairs. This distinguished career reflects steadfast dedication to public service, leaving an enduring impact on governance and development across diverse domains

Dr. Markandeya Gorantla
Executive Chairman, ATGC



Dr. Markandeya Gorantla is a leading biotech innovator, entrepreneur, and patent leader whose pioneering work has been featured by the World Economic Forum as a global case study in sustainable biomanufacturing. A Rockefeller Fellow, he holds over 26 global patents spanning synthetic biology, material science, and regenerative therapeutics. Dr. Gorantla is the Executive Chairman of ATGC Biotech, India's leader in pheromone-based crop protection, and the Founder of deep-tech accelerator Whale Tank BioCatalyst LLP. His diverse ventures, including Bharat Advanced Therapeutics (developing India's first mutation-targeted leukemia therapy) and Utopia Therapeutics (advancing a first-in-class obesity vaccine), demonstrate his commitment to building scalable, science-driven enterprises that align innovation with environmental and human health impact across synthetic biology, material science, and regenerative therapeutics.

Dr. Pramod Garg
Professor and Associate Dean, AIIMS



Dr. Pramod Garg is a Professor of Gastroenterology and Associate Dean (Research) at the All India Institute of Medical Sciences (AIIMS), New Delhi, whose major clinical and research focus is on pancreatic diseases. He is currently serving as the Secretary of the International Association of Pancreatology and as an Associate Editor of the international journal, *Pancreatology*. He is a Fellow of the National Academy of Science, the National Academy of Medical Sciences, and the Royal College of Physicians. He is also an active contributor to national science policy, serving on the project review committees of the Department of Biotechnology and the Department of Science & Technology.

Dr. Akriti Sharma
CEO of Pusa Krishi and Senior Scientist at ICAR-IARI



Dr. Akriti leads nationwide efforts to translate agricultural technologies from lab to farmers' fields. She has incubated and accelerated 500+ startups, mobilizing ₹30 crore in funding and impacting 38 lakh farmers. Her work spans technology commercialization, IP management, and building scalable agri-enterprise models. She heads major national programs like RKVY-RAFTAAR and NIDHI-TBI, while driving institutionalized

incubation processes at Pusa Krishi. With 14+ years of experience, 4 books, 40+ research papers, and 100+ trainings, she is committed to strengthening India's agri-innovation and startup ecosystem.

Mr. Arun Chandru
Co-founder, Pandorum Technologies



Arun Chandru is a deep-tech innovator and co-founder of Pandorum Technologies, a tissue engineering and regenerative medicine company. Chandru is a gold medalist from the Indian Institute of Science, and was featured in the Forbes Asia '30under30' list of Healthcare and Science. Corneal opacity is one of the major causes of blindness worldwide. There are millions waiting for donor tissue that could potentially give them vision, but less than 2% receive this transplant. There is an acute shortage of human donor corneas globally. Pandorum's lab-made 'Liquid Cornea' - an agent hydrogel, induces and supports transparent regeneration of one's own cornea and restores vision. Pandorum Technologies is supported by the Government of India and marquee investors, and has received notable awards. The company has R&D labs in Bangalore India, and California USA, and works with partners globally.

Identifying need-based challenges - finding the right solutions

Dr. Mrutyunjay Suar
Professor and Director General, CEO at KIIT TBI, KIITS University



Dr. Mrutyunjay Suar is a Professor and Director General of Research and Development at KIIT University, Bhubaneswar, where he also serves as CEO of KIIT-TBI. As Chairman of the Bhubaneswar City Knowledge Innovation Cluster (BCKIC), an initiative of the Office of the Principal Scientific Adviser to the Government of India, he continues to drive R&D-led entrepreneurship, translational research, and technology-driven manufacturing hubs, especially in marine biomanufacturing. A passionate advocate for innovation-led research, Dr. Suar has been instrumental in strengthening the industry - academia innovation interface at KIIT, promoting translational science and entrepreneurship in the life sciences ecosystem. His contributions to innovation and academia have been recognized with several national and international awards, including the ASM Professorship (2012) and the GP Chatterjee Memorial Award at the 102nd Indian Science Congress.

Dr. Amit Dinda
AIIMS



Dr. Amit Kumar Dinda serves as the Research Director at Amrita Vishwa Vidyapeetham, Faridabad, and formerly led the Centre for Medical Innovation and Entrepreneurship (CMIE) at AIIMS, New Delhi, where he played a pivotal role in advancing translational research and fostering innovation-driven healthcare solutions. A physician-scientist with over four decades of excellence in pathology, nanomedicine, and regenerative medicine, Dr. Dinda's work has significantly shaped India's biomedical research landscape. His contributions span the development of nanoparticle-based oral gene delivery systems, single-shot vaccines, precision nanocarriers for cancer and infectious diseases, and nano-enabled diagnostics. He has authored over 350 peer-reviewed publications, 12 patents, and several key national guidelines on nanopharmaceutical safety. Beyond research, he has been instrumental in establishing regulatory standards for biotechnology and nanotechnology.

products in collaboration with BIS, ISO, and GCRSR, driving India's global leadership in regulatory science and translational healthcare innovation.

Dr. PVM Rao
Professor, IITD



P. V. Madhusudhan Rao is a professor in the Department Design and Department of Mechanical Engineering at IIT, Delhi. His current teaching and research interests include product design & manufacturing with a special emphasis on design of medical & assistive devices. He heads ICMR National Center of Assistive Health Technology, co-founder of Assistech lab in Khosla school of information technology and coordinator of the IIT Delhi Design Innovation Center (DIC). He has several patents and design registrations to his credit, many of which have been commercialized. He and his team's translational research efforts have led to successful products and solutions which are presently in the national and international market and have made an impact. He also serves as founder, board member and scientific advisor of many start-ups and technology business incubators.

Dr. Ashwani Pareek
Executive Director, National Agri-food
Biotechnology Institute



Dr. Ashwani Pareek is the Executive Director of

the National Agri-Food Biotechnology Institute (NABI) and Chief Executive Officer of the Centre for Innovative and Applied Bioprocessing (CIAB), Government of India. He also serves as a Professor of Life Sciences at Jawaharlal Nehru University (JNU), New Delhi, and Adjunct Professor at the Regional Centre for Biotechnology (RCB). With over 25 years of research and leadership experience, Dr. Pareek has made transformative contributions to plant molecular biology and agricultural biotechnology, particularly in developing Stress Tolerant Rice of the Next Generation (STRONG)—a breakthrough innovation that earned him the President of India Award for Technology Development. His pioneering research focuses on plant adaptation to salinity, drought, and multiple abiotic stresses using genomics, bioinformatics, and genome editing tools. With over 200 publications, 20 PhDs guided, and numerous patents, Dr. Pareek's innovations continue to shape global agricultural sustainability. He is a Fellow of NASI, INSA, and NAAS, and recipient of several honours including the Tata Innovation Award and NASI-Reliance Platinum Jubilee Award.

Dr. Syed Shams Yazdani
Group leader, ICGEB



Dr. Shams Yazdani is a leading microbiologist and Group Leader of the Microbial Engineering Group at the International Centre for Genetic Engineering and Biotechnology (ICGEB), New Delhi. He has made pioneering contributions to synthetic biology, metabolic engineering, and biofuels. Earlier in his career, Dr. Yazdani developed technologies for recombinant streptokinase and malaria vaccine candidates, successfully transferred for clinical trials and commercialization. Dr. Yazdani serves on expert committees of DBT, DST, BIRAC, and the CII National Committee on Biotechnology, and represents India in global synthetic biology forums. Widely recognized as a "Biofuel Revolutionary," his work continues to drive innovation in sustainable bioenergy and industrial biotechnology.

Dr. Mohd Aslam
Advisor, DBT



Dr. Aslam serves as Advisor at the Department of Biotechnology (DBT), Government of India, where he oversees the planning, coordination, and monitoring of key R&D programs in plant biotechnology and allied disciplines. He plays a pivotal role in leading major national initiatives, including the Centres of Excellence in Biotechnology, Translational Research in Products and Processes from Medicinal and Aromatic Plants, and Technology Development in Silk. As Member Secretary of the Technical Advisory Committee for Centres of Excellence and DBT's Expert Groups, he ensures strategic alignment between research and application. Additionally, Dr. Aslam functions as the nodal officer for DBT's autonomous institutions—National Institute of Immunology (NII), Institute of Bioresources and Sustainable Development (IBSD), and International Centre for Genetic Engineering and Biotechnology (ICGEB)—as well as for BIRAC, fostering innovation, translational research, and industry collaboration in India's biotechnology ecosystem.

Smart Capital: How to unlock Funding

Dr. Premnath Venugopalan
Founding Director, Venture Centre



Dr Premnath is Head, NCL Innovations at CSIR-NCL and Founder Director, Venture Center (National award winning inventive enterprises and deep tech

incubator). Dr Premnath is a technology developer, innovation and incubation manager, startup mentor and a co-founder of 2 medtech startups. One of his inventions -- a breakthrough material for hip and knee joint replacements — has been implanted in more than a million patients worldwide. Another technology for porous maxillo-facial implants has been implanted in thousands of patients in India and abroad. He has provided leadership for teams that have won National awards for technology development, intellectual property management and business incubation. He is chemical engineer and an alumnus of MIT in the US, IIT-Bombay (Distinguished Alumnus, 2022) and has been a Chevening Technology Enterprise Scholar in Cambridge, UK.

Ms. Padmaja Ruparel
Co-Founder, Indian Angel Network (IAN) ,
Founding Partner, IAN Fund



Padmaja Ruparel is a prominent leader in India's entrepreneurial and investment ecosystem. She is the Co-Founder of the Indian Angel Network (IAN), the country's largest platform for seed and early-stage investments, and the Founding Partner of IAN Fund, a SEBI-registered venture capital fund. She also established BioAngels, which India's first sector-focused angel network in partnership with BIRAC. With extensive experience across corporates, M&A, and startups, she serves on several government and industry boards including SIDBI, TDB, TiE NCR, IVCA, and NASSCOM's Deep Tech Council. Recognized among Fortune India, Forbes India, and Business Today's "Most Powerful Women," she was also honoured by the Women Economic Forum as the "Woman of the Decade in Investment Banking." She serves on several national boards, including SIDBI, TDB, and TiE NCR, and is a Co-Chair of the Global Business Angel Network (GBAN) and member of NASSCOM's Deep Tech Council, actively driving innovation, entrepreneurship, and inclusive growth in India's startup ecosystem.

Ms. Rema Subramanian
Co-Founder and Managing Partner, Ankur Capital



Rema Subramanian is the Co-Founder and Managing Partner of Ankur Capital, a pioneering venture capital fund investing in deep science and technology-led innovation from India for global impact. With over four decades of experience spanning entrepreneurship, investing, and operational leadership, she has played a pivotal role in building and scaling category, creating businesses from the digitalization of financial services in the early 1990s to edtech ventures at the dawn of the internet era and technology-driven SMB transformations in the 1980s. Her career reflects a strong ability to anticipate technological shifts and nurture early-stage ventures, helping multiple companies achieve 20x growth. Rema has been an influential voice in India's innovation ecosystem, serving on key bodies such as the Indian Venture Capital Association (IVCA), BIRAC selection board, and Indian Innovation Council (IIC). Through Ankur Capital, she continues to drive forward-looking investments that bridge science, technology, and social impact.

Dr. Shrishendu Mukherjee
Managing Director, Wadhvani Innovation network, Wadhvani foundation



Dr. Shirshendu Mukherjee is the Managing Director of the Wadhvani Innovation Network (WIN) at the

Wadhvani Foundation, where he leads strategic partnerships and innovation initiatives that foster scientific and technological advancements in areas such as AI, quantum science, biotechnology, and healthcare technologies. With over three decades of leadership experience spanning the pharmaceutical industry, government, and global philanthropic organizations, he has been instrumental in driving innovation-led social impact programs. Dr. Mukherjee previously led the Grand Challenges India Program and the national Mission COVID Suraksha, facilitating the development of indigenous COVID-19 vaccines. He continues to drive impactful collaborations at the intersection of science, policy, and enterprise.

Dr. Manish Diwan
Head, Biofoundry



Dr. Manish Diwan, Head – Biofoundry, NCR Biotech Cluster & IVCOL at BIRAC, and Mission Director – Make in India (Biotech Sector), Department of Biotechnology, Government of India, is a visionary leader with over three decades of experience spanning public sector, academia, and industry. Widely regarded as a key architect of India's biotech startup ecosystem, he drives national missions such as Startup India and Make in India, fostering deep-tech innovation across healthcare, medtech, agritech, and industrial biotechnology. With global R&D experience at Daiichi Sankyo (India & Japan), Ranbaxy, Dabur, and the University of Alberta (Canada), Dr. Diwan has contributed to multiple clinical drug developments. Trained at premier institutions like ICGEB, NII, and KAIST (South Korea), he brings together scientific expertise and strategic policy leadership. At BIRAC, he has led transformative initiatives establishing technology clusters, advancing bio-manufacturing capabilities, supporting startups through funding and mentorship, and strengthening India's bioeconomy through international collaborations and innovation-driven policy frameworks.

Building the right partnerships — taking innovations to impact

Dr. Deepanwita Chattopadhyay
Chairman & Managing Director, IKP Knowledge park



Deepanwita Chattopadhyay is the Chairman and Managing Director of IKP Knowledge Park, where she developed India's first Life Science Research Park in Hyderabad and pioneered IKP EDEN, a hardware incubator in Bengaluru. With over two decades of experience in innovation and entrepreneurship, she has supported more than 1,800 startups and projects through national and global collaborations. A former faculty member at BITS Pilani and telecom policy advisor at ICICI Bank, she has played a key role in shaping India's innovation ecosystem. Her leadership has been recognized with the Golden Jubilee Biotech Park Lifetime Achievement Award (2023), FICCI FLO Influential Women Award (2021), and recognition among the Top 10 Enablers of the Indian Incubation Ecosystem (DST, 2022). Deepanwita serves on several national and international boards, including IASP, ABLE, and CSIR-CCMB, and co-founded Support Elders Pvt. Ltd., an age-tech startup advancing elder care in India.

Dr. Neeraj Jain
Country Director, PATH



Dr. Neeraj Jain, Country Director – PATH India, is an

accomplished leader with over 27 years of experience in organizational strengthening, new venture creation, and strategic development across Asia and Europe. Based in New Delhi, he oversees PATH's operations in India, serving as the key link between PATH headquarters, donors, government ministries, and partners. Before joining PATH, he led WaterAid India through a major phase of transition as its Chief Executive, where he helped establish the India Sanitation Coalition and chaired its Engagement with Government Task Force. His prior roles include serving as Head of Asia Region for Vestergaard Frandsen, driving health innovations against vector- and water-borne diseases, and working with the Children's Investment Fund Foundation (CIFF) to advance programs in nutrition, early learning, and child survival. A graduate of Hong Kong Polytechnic University, Mr. Jain holds an MBA in Finance from the Faculty of Management Studies (FMS), University of Delhi, and continues to play a pivotal role in strengthening public health systems and partnerships in India.

Dr. Amit Shah
Country Director, Jhpiego India



Dr. Amit Shah is a public health leader with over two decades of experience across government health systems, international NGOs, academia, UN agencies, and funding organizations. His work reflects a deep commitment to equitable healthcare and systems strengthening. Before joining Jhpiego, he served as Executive Director, India at Resolve to Save Lives, where he established the India office and led national initiatives to improve cardiovascular health through strategic partnerships with the government and key stakeholders. Previously, as Deputy Director, Health Office at USAID/India, he oversaw strategic investments in national health programs, including RMNCH+A, TB, infectious diseases, and health systems reform, and led the U.S. Government's COVID-19 emergency response in India. With a proven record in policy advocacy, partnership building, and large-scale health program

implementation, Dr. Shah combines clinical expertise with public health strategy.

Mr. Vivek Mishra
Founder & CEO, Fibroheal



Vivek Mishra is the Founder and CEO of Fibroheal Woundcare Pvt. Ltd., a pioneering medtech company developing silk protein-based biomaterials for wound management, tissue repair, and regeneration. With deep expertise in the medical device and healthcare industry, he has successfully led innovations from concept to commercialization, addressing critical unmet needs in patient care. Under his leadership, Fibroheal is creating impactful solutions that enhance the quality of life for patients with chronic and acute wounds while advancing biomaterial science in India. His career reflects a strong entrepreneurial vision rooted in healthcare innovation and market creation. Passionate about technology-driven social impact, Vivek strives to build scalable solutions that not only improve healthcare outcomes but also contribute to India's growing medtech ecosystem.

Dr. Manoj Kumar Rupa
Co-founder & Managing Director, Capsber Agrisciences



Mr. Manoj Kumar Rupa, Co-Founder and CEO of Capsber Agriscience, is a agri-biotech entrepreneur driving innovation in sustainable farming. He is currently leading the commercialization of India's first biological weedicide in collaboration with IFFCO,

benefiting over 500,000 farmers. Under his leadership, Capsber operates an 850 KL facility in rural Bangalore, holds 10 patents, and delivers 18 sustainable agri-products. His innovations have earned him top honors, including the National Startup Award (2022), Global Best Innovation Award (2019), and FICCI Agri Startup Award (2022). Mr. Rupa continues to champion regenerative and climate-smart agriculture, making a lasting impact on India's agritech ecosystem.

Masterclass on IP and Technology Transfer

Dr. Malathi Lakshmikumaran
Executive Director, Lakshmikumaran & Sridharan attorney



Dr. Malathi Lakshmikumaran, is the Executive Director and Practice Head of the Life Sciences Group at Lakshmikumaran & Sridharan Attorneys, with over 30 years of experience in biochemistry, molecular biology, and intellectual property law. A registered patent agent, she specializes in pharma, biotech, and chemical patents, advising on patentability, freedom to operate, and plant variety protection in India and abroad. She actively supports startups and incubators such as C-CAMP, BBC, IKP, IISc, and IIT Delhi, guiding innovators on IP strategy. As a long-time collaborator with WIPO, she co-developed global training content, including *"Intellectual Property and Genetic Resources in the Life Sciences,"* and led the WIPO-UNESCO-Republic of Korea Leadership Course for Women Scientists at Geneva. A frequent speaker at national and international forums, Dr. Malathi continues to champion IP awareness and innovation in life sciences.

Dr. Rijuta Garapaty
Senior Manager, Sathguru Management Consultants



Dr. Rijuta Garapaty is a Senior Manager for Lifescience and Innovation Advisory at Sathguru Management Consultants, with over a decade of experience in technology transfer, intellectual property, and innovation management across academia, industry, and international development. She has led major projects funded by USAID, the Bill & Melinda Gates Foundation, and the World Bank, focusing on innovation policy, IP strategy, and technology commercialization in India, Nepal, and Egypt. Before joining Sathguru, she worked with E.I. DuPont, supporting patent portfolio management and licensing due diligence, and has mentored startups and conducted IP training for academic institutions. A Ph.D. in Molecular Biology from Universität Bremen, Germany, Registered Technology Transfer Professional (RTTP), and Indian Patent Agent, Dr. Rijuta specializes in developing technology transfer offices, IP valuation, techno-commercial assessments, and building innovation-driven ecosystems

Scaling Innovations –Assessing the Impact of Social innovations

Prof. Satyajit Majumdar
Managing Director, TISS Incube Foundation



Prof. Satyajit Majumdar has established 'entrepreneurship for societal impact' in academics

and startups in India. He retired as Professor and Dean at School of Management and Labour Studies, Tata Institute of Social Sciences (TISS), Mumbai. With more than 44-years' experience in corporate, academics, research and consulting, Prof. Majumdar mentors social and business entrepreneurs and provides guidance on growth in business and social impact. Currently, he is Managing Director of TISS Incube Foundation (the Incubation Centre of Tata Institute of Social Sciences) and Distinguished Adjunct Professor at Entrepreneurship Development Institute of India (EDII), Ahmedabad. He is Co-Chair of Steering Committees for Biotechnology Based Programme for Societal Development of Department of Biotechnology, Government of India. He was conferred with 'Dr V G Patel Memorial Award 2023' in recognition of his work as Entrepreneurship Trainer, Educator, Mentor for promoting entrepreneurship. Prof Majumdar has many research papers and award-winning case studies to his credit, published in reputed journals and edited volumes.

Mr. Sujay Dixit
CEO, TISS Incube Foundation



Mr. Dixit, an Instrumentation Engineer and distinguished alumnus of XLRI Jamshedpur, has an accomplished career in Marketing and Brand Management across Hindustan Unilever, Hindustan Coca-Cola, and Glenmark Pharmaceuticals. He has led P&L responsibilities across sectors such as Beverages, Consumer Durables, Lifestyle, and Pharmaceuticals, driving successful brand launches and growth. Currently, as CEO of TISS Incube Foundation, he shapes strategy and drives organizational growth while mentoring emerging entrepreneurs in marketing, business modeling, and strategic thinking. A prominent speaker, he shares insights on Entrepreneurship, Marketing Strategy, and Corporate Support for Startups. He also teaches Marketing Strategy at TISS Mumbai and Entrepreneurship at ICT Mumbai. His empanelment with AIC RMP, membership on ICT's Board of Studies,

and advisory role at St. Mira's College, Pune, reflect his deep commitment to nurturing entrepreneurial talent and innovation.

Dr. Jatinder Kaur Arora

**Adviser, Northern Region S&T Cluster (PI-RAHI:
PU IIT Ropar Regional Accelerator for Holistic
Innovation Foundation)**



Dr. Jatinder Kaur Arora is the Advisor, North Region Science & Technology Cluster, established by the Office of the Principal Scientific Adviser, Government of India. Formerly, she served as the Executive Director of the Punjab State Council for Science and Technology, Member Secretary of the Punjab Biodiversity Board, and CEO of the Punjab Research & Innovation Council, where she led several impactful programs promoting women's empowerment, rural development, and climate resilience through technology interventions. Dr. Arora was instrumental in developing the Punjab State Action Plan on Climate Change 2.0 and spearheading Mission Innovate Punjab, a flagship initiative to advance innovation and research in the state. Her exceptional contributions have earned her numerous honors, including the National Award for Women's Development through Application of Science & Technology by the President of India, the Punjab Sarkar Parmaan Patra, and the Gr8 Women Award in Science & Technology.

Dr. Vipin Kumar,
National Innovation Foundation (NIF)



Dr. Vipin Kumar is the Chief Scientist and Former Director of the National Innovation Foundation–India (NIF). With over two decades of experience, he has been a key architect in promoting grassroots and inclusive innovations, focusing on value addition, IP protection, business development, and open-source technologies for societal impact. He has established NIFentreC, a Technology Business Incubator supported by DST, to accelerate grassroots entrepreneurship. Dr. Kumar has contributed to UNESCO's Innovation Management initiatives and served on various national and state committees, playing a vital role in strengthening India's innovation and entrepreneurship ecosystem. His leadership continues to inspire innovators to create solutions that drive inclusive growth and social transformation.

Dr. Kavita Singh
Independent Director, Gennova
Biopharmaceuticals



Dr. Kavita Singh is a healthcare and biotechnology leader with over two decades of experience spanning industry, government, and innovation ecosystems. She has played pivotal roles in shaping India's life sciences landscape—beginning with her work at one of the country's first biotechnology enterprises, Shantha Biotechnics, and later as the Mission Director of the National Biopharma Mission, where

she led large-scale public-private partnerships to advance innovation, manufacturing, and regulatory excellence. Now as an Independent Director on the Boards of Gennova Biopharmaceuticals and Social Alpha, she brings strategic insight into governance, R&D oversight, and sustainable business models that bridge scientific progress with societal impact.

Dr. Avijit Bansal
Medical Director, Orthoheal



Dr. Avijit is a seasoned professional with a robust background in biotech advancement and innovation ecosystems. With a strong focus on translational research and commercialization, he has consistently bridged scientific discovery with strategic implementation in the life sciences sector. Known for his collaborative leadership style and passion for ecosystem building, Dr. Avijit drives industry-academia partnerships, mentors entrepreneurial ventures, and aligns emerging technologies with societal impact. He is Physician-Innovator and strategist.

Dr. Nitin Sisodia
Founder & CEO, Sohumi Innovation Lab



Dr. Nitin Sisodia is the Founder and CEO of Sohumi Innovation Lab, a social enterprise dedicated to developing innovative healthcare solutions that improve the health and livelihoods of people in resource-limited settings. A National Awardee and 2010 Stanford India Biodesign Fellow, Nitin has been

recognized among MIT Technology Review's Top 20 Indian Innovators Under 35 (2013). His pioneering work led to the development of an affordable, non-invasive hearing screening device for newborns, earning him accolades such as the NASSCOM ICT-led Healthcare Innovation Award (2016), Indian Merchant Chamber Inclusive Innovation Award (2015), and Sankalp India Award (2016). An Electrical Engineering graduate from NIT Bhopal and Industrial Design postgraduate from NID Ahmedabad, Nitin's passion lies at the intersection of technology, design, and social impact. Before founding Sohumi, he worked with McKinsey & Company and collaborated with innovation teams in India, Germany, and Japan. He continues to drive user-centered innovations backed by global grants, including those from Grand Challenges Canada, BIRAC, and Siemens, building scalable healthcare solutions for underserved populations.

Mr. Srikant Sastri
Entrepreneur, Investor and Startup Mentor



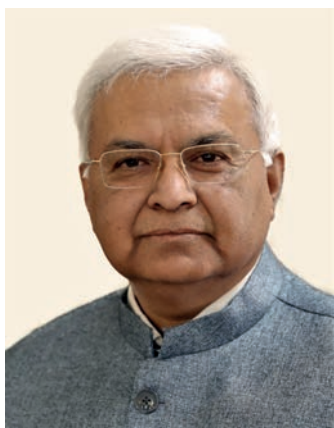
Mr. Srikant Sastri is a leading figure in India's innovation and entrepreneurship ecosystem and serves as Chairperson of the Government of India's Geospatial Data Promotion & Development Committee (GDPDC). A successful entrepreneur and angel investor with the Indian Angel Network (IAN), he has built and exited multiple startups and co-founded Crayon Data, a leading AI company. An alumnus of IIT Kanpur and IIM Calcutta, and a Certified Independent Director, Mr. Sastri actively mentors startups and advises premier innovation hubs such as IIM Calcutta Innovation Park, FIRST at IIT Kanpur, and Venture Center Pune, while contributing to national committees under BIRAC and NSTEDB. A strong advocate for entrepreneurship, he also runs the *Chalo Startup* YouTube channel and co-authored the

best-selling book *The Ventilator Project*, highlighting India's innovation response to the COVID-19 pandemic.

Session: Tapping grassroots knowledge, institutions, and technologies for rural transformation.

Dr Sanjay Kumar
Chair ASRB

Dr. Sanjay Kumar, Chairman of the Agricultural Scientists Recruitment Board (ASRB), New Delhi, is an eminent plant scientist known for his contributions to high-altitude biology, stress physiology, and Himalayan bioresources. He holds a Master's degree from G.B. Pant University of



Agriculture and Technology, Pantnagar, and a Ph.D. from the Indian Agricultural Research Institute, New Delhi. He received post-doctoral training at Texas Tech University (USA), Rothamsted Research (UK), and Kansas State University (USA).

Dr. Kumar joined the CSIR-Institute of Himalayan Bioresource Technology (CSIR-IHBT), Palampur, as Scientist in 1990 and superannuated as its Director in 2023, also holding additional charge as Director of CSIR-IGIB, CSIR-CSIO and Head of CSIR-HRDG. His landmark scientific contributions include the discovery of a novel carbon fixation pathway to reduce photorespiration, characterization of an autoclavable superoxide dismutase, and significant advances in understanding high-altitude plant adaptation, prickly formation in rose, winter dormancy and drought stress in tea, and plant-microbe interactions. He has also led major efforts in genome and transcriptome sequencing of Himalayan plants and microbes.

An accomplished mentor and scholar, Dr. Kumar has guided 29 MSc/PhD students and authored over

220 research articles, reviews, patents, and book chapters. He is a Fellow of INSA, NASI, and NAAS, and a recipient of prestigious honors including the VASVIK Award, INSA Young Scientist Award, CHAI-Honoured Fellow Award (2024), and Outstanding Alumnus Awards from Pantnagar and IARI.

As Director of CSIR-IHBT, he catalyzed major agricultural and biotechnological initiatives, introduced high-value crops to Indian mountain regions, promoted aromatics-based farming, strengthened bioeconomy-linked entrepreneurship, and positioned CSIR-IHBT among the top CSIR institutions.

Dr. Ranjay Kumar Singh

Astt. Director General of Agriculture Extension at the Indian Council of Agricultural Research (ICAR)



Dr. Ranjay Kumar Singh (b. 20 April 1974, Sonapur, Azamgarh, U.P.) is a Principal Scientist in Agricultural Extension at ICAR-Central Soil Salinity Research Institute, Karnal. He holds degrees from BBS Purvanchal University, Allahabad University, and Jawaharlal Nehru Krishi Vishwa Vidyalaya, along with a Diploma in IPR (WIPO, Switzerland). He completed postdoctoral work at the University of Michigan (USA), Charles Darwin University (Australia), and jointly at the University of Oxford and University of Reading (UK).

Previously, he served at SRISTI-IIM Ahmedabad, Central Agricultural University (Arunachal Pradesh), and the Division of Technology Evaluation & Transfer at CSSRI. Dr. Singh has received several prestigious awards, including ICAR Rewards (2001 & 2003), the Lal Bahadur Shastri Outstanding Scientist Award (2013), the Lansdowne Distinguished Professor Award (University of Victoria), and the US Fulbright Alumni Award. He is also a member of the UN-led

Commission on Ecosystem Management and serves on multiple national and international journal boards.

A Commonwealth, Fulbright, and Endeavour Fellow, he is also a Fellow of the Linnean Society of London and an Honorary University Fellow at CDU, Australia. His research focuses on human–environment interactions, community-based natural resource conservation, ecosystem and livelihood sustainability, and plural knowledge systems.

Prof. Laxuman Sharma

**Dean, School of Life Sciences, Sikkim University
Registrar (i/c), Sikkim University**

Prof. Laxuman Sharma is a distinguished horticultural scientist currently serving as Dean, School of Life Sciences, and Registrar (i/c) at Sikkim University. A faculty member in the Department of Horticulture since 2018, he holds a PhD from the



Indian Institute of Technology, Kharagpur (2006) and an M.Sc. in Horticulture from Dr. YS Parmar University of Horticulture and Forestry, Solan (1997).

With over two decades of research and academic experience, Prof. Sharma has made significant contributions to strengthening organic farming systems in the Himalayan region. His early research explored the use of cyanobacteria for biodegradable plastic production, and his subsequent work has focused on biofertilizers, pest and disease management, characterization of local germplasm, and value addition of indigenous crops. He has also pioneered the development of Internal Control Systems (ICS) for organic certification in Sikkim and played a key role in capacity-building programs for farmers, extension workers, and rural youth. Recently, he has initiated efforts to introduce organic saffron cultivation in Sikkim.

Prof. Sharma has successfully implemented 15 extramural research projects worth over ₹7 crores, guided 25 M.Sc. and 6 PhD scholars (with 6 more

currently pursuing), and published 68 research papers, 13 book chapters, 1 policy book, 2 technical reports, and over 20 extension bulletins. His work has earned 1696 citations, with an h-index of 18 and an i10-index of 25.

His notable technological contributions include the development of two microbial consortia for nutrient and pest management, standardization of year-round vegetable cultivation in low-tunnel structures, and value-addition technologies for local fruits and vegetables.

Tapping Grassroots creativity and frugal innovations- an international perspective

Serge Rohmer- Professor and a Research Engineer/Scientist (Enseignant chercheur) at the University of Technology of Troyes (UTT) in France



Serge Rohmer is a lecturer and researcher at the University of Technology of Troyes (UTT), specializing in ecodesign, sustainable engineering, frugal innovation, and community-based innovation. His work focuses on developing methods and tools that help designers rethink traditional R&D approaches by integrating environmental, social, and territorial sustainability.

He leads several participatory and socially engaged research projects. Among them is the Urban Permaculture Micro-Farm Experiment (2022–2023), conducted in priority neighborhoods of Troyes to promote environmental awareness, urban territory reappropriation, and citizen participation. He also coordinated an ANR project in Lebanon dedicated to managing COVID-19-related medical waste (2022–2023).

Since 2022, Serge Rohmer has been directing an ongoing agricultural co-development initiative in a village in Togo, supporting the design and implementation of

farming systems using local resources while fostering international academic–community partnerships. In 2021, he undertook a 1000 km walking journey across organic farms to study their resilience strategies.

During the COVID-19 pandemic, he launched a support program for nursing homes in the Aube region, notably by providing digital tablets to reduce social isolation among residents.

His current research interests include ecodesign of products and industrial processes, frugal engineering, and grassroots innovation.

Nigel Collin

Australian business and creativity expert, author



Nigel Collin is a leading authority on mindset, innovation, and adaptability, known for helping organisations achieve sustainable growth through practical, incremental change. As the founder of the trademarked Game of Inches® methodology, he empowers leaders and teams to build adaptive cultures by aligning bottom-up ingenuity with strategic goals. His work draws on insights from his long-running Ingenious Oz research initiative, where he travels across Australia uncovering exceptional business and professional success stories.

An entrepreneur from an early age, Nigel launched his first business at 20, sold it a year later, and went on to build one of Australia's most prominent creative design companies in the business events sector. He is the author of several books, including Game of Inches, and is renowned for his engaging, evidence-based storytelling.

Nigel holds the designation of Certified Speaking Professional (CSP)—the highest accreditation in the speaking industry—and is a member of AITD, MAICD, and the Golden Key International Honours Society. A past chair of Meetings and Events Australia, he is also the only speaker to receive MEA's

Outstanding Contribution to Meetings and Events award. He is an alumnus of the Disney Institute and a TEDx presenter.

Innovation through Enterprises, Markets & Institutions

Sunil Khairnar

Founder & Director, Indigram Group



Sunil Khairnar is an agribusiness professional with over 32 years of experience in agriculture, social entrepreneurship, and venture development. An Agricultural Engineering graduate with a management degree from IIM Ahmedabad, he has been a key force in shaping India's agribusiness ecosystem through innovative, collaborative, and impact-driven initiatives.

He founded and advised notable social ventures such as Agriwatch, ISAP India Foundation, and Indigram Labs Foundation, all of which continue to operate sustainably under professional leadership. A recipient of the Ashoka Fellowship (2002), Sunil's organizations have collectively earned 22 awards over the last 25 years.

Sunil evaluates nearly 1,000 startups annually, engages with 500 entrepreneurs, and has guided investment decisions in around 80 ventures addressing critical challenges in agriculture and rural development. He currently mentors over a dozen Indian and international startups. He also created Indian Agriculture Professionals (IAP)—a digital community of nearly 1 million stakeholders across LinkedIn and Facebook—serving as a vibrant platform for agricultural dialogue and knowledge exchange.

Driven by a vision to strengthen rural livelihoods through entrepreneurship and technology, Sunil is especially passionate about empowering Children of Farmer Entrepreneurs (COFE). He welcomes engagement from innovators and startups working to transform the agricultural sector at sunil@indigram.in

Brigadier Ganesham Pogula
Founder, Palle Srujana



Brigadier P. Ganesham, VSM (Retd.) is an engineering graduate, MBA, and distinguished Armoured Fighting Vehicle specialist from Telangana. He served the Indian Army for over 35 years, including commanding a battalion in Kashmir during intense counter-insurgency operations and contributing significantly to Project Gulmohar. He developed the Army's multi-role weapon platform "Windy", showcased in the Republic Day Parade 2004 and awarded the first-ever Indian Army patent. For his service, he received the Vishisht Seva Medal (2005).

After retirement, he served as Director (Production), Bharat Dynamics Ltd (2006–09) and sits on several advisory and governing boards in Telangana and Andhra Pradesh. In 2005, he founded Palle Srujana, a voluntary movement promoting grassroots creativity and traditional knowledge. Over 18 years, the initiative has built a 3,000-member network, identified 500+ innovators, documented 1,000+ traditional practices, and facilitated 13 President of India awards, 36 patents, and multiple national and international recognitions for rural innovators.

Through activities such as Chinna Shodha Yatra, rural internships, and student outreach, Brig. Ganesham has walked 8,000+ km, visited 2,000+ villages, and addressed over 100,000 students, inspiring future changemakers. Palle Srujana's innovations have benefited over 1 million rural families and created employment for more than 200 people.

He pioneered a Grassroots Entrepreneurship model, enabling village-level production of 100+ innovations with a combined turnover of ₹18 crore (2018–23). Under Palle Srujana Pennidhi, he mobilized zero-interest financial support of ₹40 lakh for innovators with near-100% repayment. Even during the pandemic, his team conducted weekly innovation webinars featuring 300+ innovations.

Currently serving on multiple government and institutional boards—including the Telangana State Innovation Cell and Rajya Sainik Board—Brig. Ganesham continues to champion grassroots ingenuity as a driver of equitable national development. He was also invited to speak at TEDx Hyderabad 2023.

Shri P. Vivekanand
SEVA, Madurai



P. Vivekanandan is the Founder of SEVA (Sustainable Agriculture & Environment Voluntary Action), a Tamil Nadu-based NGO committed to empowering marginalized farming and pastoral communities. Under his leadership, SEVA has championed the documentation and promotion of indigenous knowledge, grassroots innovations, and the conservation of India's agricultural and livestock biodiversity.

With a focus on Gandhian principles, Vivekanandan has led initiatives in training traditional healers, supporting grassroots innovators, strengthening self-help groups, and promoting community-led conservation of local livestock breeds. SEVA's collaborations—including its long-standing association with the Honey Bee Network and the National Innovation Foundation—have enabled widespread knowledge networking and innovation support.

Vivekanandan also spearheads the coordination of NGOs and institutions for recognizing livestock keepers through the Breed Saviour Award, supported by national agencies such as the National Biodiversity Authority and NABARD. His work continues to play a pivotal role in preserving traditional knowledge systems and fostering sustainable rural livelihoods.

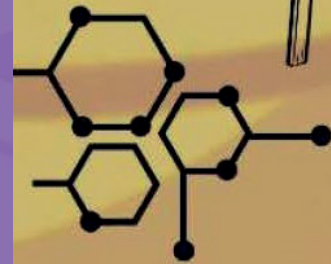
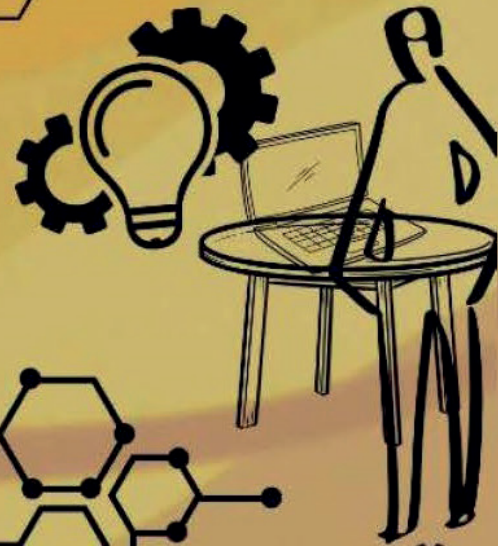
Shri Sundaram Verma

Padma Shri Awardee



Shri Sundaram Verma is a progressive farmer and environmentalist from Rajasthan, celebrated for pioneering “dryland agroforestry,” a breakthrough technique that enables trees to grow in arid regions using just one liter of water per sapling by tapping into natural soil moisture. Through this method, he has helped grow over 50,000 forest, fodder, and fruit trees, making significant contributions to sustainable agriculture and water conservation.

Awarded the Padma Shri in 2020, Verma has received multiple honors for his work in agriculture and biodiversity. He is also widely respected for mentoring grassroots innovators across India, nurturing local talent and environmental stewardship.



Deep-tech Innovations



PEOPLE'S FESTIVAL OF INNOVATIONS 2025



INTEELABS
VALOR FOR INVENTION

INTE-E-LABS PVT LTD

Problem Addressed

17.9 Million

Deaths per year due to cardiovascular diseases (CVDs)



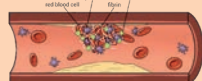
Leading contributors—Acute Myocardial Infarction (AMI) and ischemic stroke



Time to treatment is critical—every 30-minute delay **increases mortality by 7.5%.**

Thrombolytics: The First Line of Defense

- Agents like reteplase can dissolve clots and restore blood flow.



- Preferred in emergency settings due to bolus dosing, no infusion pump, and ease of administration.



Complex Production **\$480–\$700 per vial** **Limited production capacity**

India's Challenge

- 30 million at risk** — CVDs prevalence rising sharply
- Most Tier 2/3 and rural centers **Lack Access** to thrombolytics.
- Government schemes are unable to procure at current price points → **Missed Intervention Windows.**

Current thrombolytics are unaffordable and inaccessible in LMICs

Technology

Our Solution: Recombinant Reteplase: RecPlase™

The First Soluble, Yeast-Expressed Biosimilar Reteplase

Innovation	Impact
Expressed in <i>Pichia pastoris</i> instead of E. coli	Avoids costly and complex refolding steps
Extracellular, soluble expression	Yields high-purity, bioactive protein directly in culture
Scalable, fermentation-based production	Ideal for low-cost, large-scale manufacturing
Filed IP using Inteelabs' FYSECTM platform	Strong IP moat + licensing potential

Why It Matters



Reduces COGS by **>5x** vs commercial Reteplase



65–70% gross margins while enabling 60–70% price reduction



Makes thrombolysis accessible in Tier 2/3 hospitals, public health schemes, and LMICs



Ready for regulatory advancement (proof-of-concept validated, preclinical studies funded)

Structural Characterisation



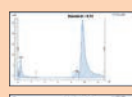
Intact mass data
Theoretical mass: 39.564 kDa
Observed mass: 39.569 kDa



Peptide mapping analysis: Sequence confirmation

Peptide	Sequence	Score	Identified
1	GRGQDQYFQNGAIPK	100	Yes
2	GRGQDQYFQNGAIPK	100	Yes
3	GRGQDQYFQNGAIPK	100	Yes
4	GRGQDQYFQNGAIPK	100	Yes
5	GRGQDQYFQNGAIPK	100	Yes
6	GRGQDQYFQNGAIPK	100	Yes
7	GRGQDQYFQNGAIPK	100	Yes
8	GRGQDQYFQNGAIPK	100	Yes
9	GRGQDQYFQNGAIPK	100	Yes
10	GRGQDQYFQNGAIPK	100	Yes
11	GRGQDQYFQNGAIPK	100	Yes
12	GRGQDQYFQNGAIPK	100	Yes
13	GRGQDQYFQNGAIPK	100	Yes
14	GRGQDQYFQNGAIPK	100	Yes
15	GRGQDQYFQNGAIPK	100	Yes
16	GRGQDQYFQNGAIPK	100	Yes
17	GRGQDQYFQNGAIPK	100	Yes
18	GRGQDQYFQNGAIPK	100	Yes
19	GRGQDQYFQNGAIPK	100	Yes
20	GRGQDQYFQNGAIPK	100	Yes
21	GRGQDQYFQNGAIPK	100	Yes
22	GRGQDQYFQNGAIPK	100	Yes
23	GRGQDQYFQNGAIPK	100	Yes
24	GRGQDQYFQNGAIPK	100	Yes
25	GRGQDQYFQNGAIPK	100	Yes
26	GRGQDQYFQNGAIPK	100	Yes
27	GRGQDQYFQNGAIPK	100	Yes
28	GRGQDQYFQNGAIPK	100	Yes
29	GRGQDQYFQNGAIPK	100	Yes
30	GRGQDQYFQNGAIPK	100	Yes
31	GRGQDQYFQNGAIPK	100	Yes
32	GRGQDQYFQNGAIPK	100	Yes
33	GRGQDQYFQNGAIPK	100	Yes
34	GRGQDQYFQNGAIPK	100	Yes
35	GRGQDQYFQNGAIPK	100	Yes
36	GRGQDQYFQNGAIPK	100	Yes
37	GRGQDQYFQNGAIPK	100	Yes
38	GRGQDQYFQNGAIPK	100	Yes
39	GRGQDQYFQNGAIPK	100	Yes
40	GRGQDQYFQNGAIPK	100	Yes
41	GRGQDQYFQNGAIPK	100	Yes
42	GRGQDQYFQNGAIPK	100	Yes
43	GRGQDQYFQNGAIPK	100	Yes
44	GRGQDQYFQNGAIPK	100	Yes
45	GRGQDQYFQNGAIPK	100	Yes
46	GRGQDQYFQNGAIPK	100	Yes
47	GRGQDQYFQNGAIPK	100	Yes
48	GRGQDQYFQNGAIPK	100	Yes
49	GRGQDQYFQNGAIPK	100	Yes
50	GRGQDQYFQNGAIPK	100	Yes

SEC-HPLC Profile



2D Electrophoresis

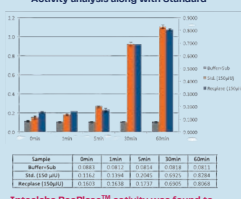


IEF of Reteplase in single dimension showed identical PI as Standard Reteplase

Functional Characterisation

Chromogenic Substrate Assay

Activity analysis along with Standard



Inteelabs RecPlase™ activity was found to be at Par when compared with Standard

Dot Blot Assay



Clot Lysis Assay

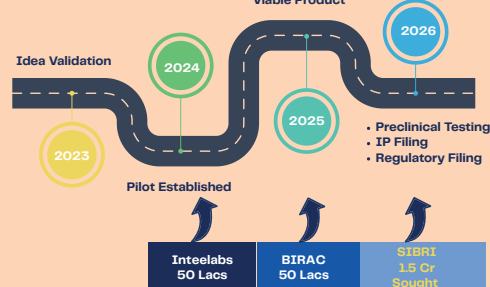


Societal Impact

- Cardiovascular diseases claim one valuable life every 33 sec. Limited access to affordable thrombolytic drugs, especially in underserved communities, highlights a critical gap in care. RecPlase™, a biosimilar of Reteplase, is a life-saving thrombolytic drug designed to address rapid reperfusion, ease of administration (bolus injection), prolonged half-life, and increased fibrin specificity;
- A Life-Saving Solution Accessible to Underserved Communities
- RecPlase™ will offer affordable thrombolytic therapy in underserved countries, targeting a growing market projected at \$3491.5 million by 2027

Current status

Commercially Viable Product



PEOPLE'S FESTIVAL OF INNOVATIONS 2025

PHOTO OF FOUNDER



Mr. Abhinav Thakur

Accurex Biomedical

Startup Logo



Problem Addressed

- 1) High cost and limited accessibility of imported glucometers in India.
- 2) Lack of locally manufactured, reliable glucose monitoring systems.
- 3) Need for affordable diabetes monitoring solutions suitable for Indian climatic and healthcare conditions.

Technology

1. Utilizes advanced electrochemical biosensor technology for accurate glucose measurement.
2. Strip-based detection system calibrated for enhanced sensitivity and stability.
3. Compact, battery-efficient handheld device with rapid response time.
4. Designed and manufactured under ISO 13485 and NABL-guided quality systems.



Images of Product



Societal Impact

1. Promotes "Make in India" by providing an indigenous diagnostic solution.
2. Enables early and affordable diabetes screening in rural and urban areas.
3. Reduces dependency on imported glucometers, supporting healthcare self-reliance.
4. Improves accessibility for low-income and government healthcare programs.

Current status

1. Successfully validated by **National Institute of Biologicals** and **Apes Quality Certification Services Pvt. Ltd.**
2. Commercially available in Indian market through Accurex distribution network.
3. Actively expanding in government and institutional tenders via GEM portal.
4. Scaling up production to meet national demand.

Website: <https://accurex.net/>
Email ID: help@accurex.net

QR Code of Startup



PEOPLE'S FESTIVAL OF INNOVATIONS 2025

Visual diagnostic kits for cervical cancer screening and confirmatory detection for low-resource Indian healthcare settings



CERVICAL CANCER

- 2nd Common cancer type with high Incidence & mortality
- ~520 million females aged ≥ 15 require routine screening for prevention.
- Current HPV diagnostics are resource intensive, costly, slow with low specificity and Sensitive.

Cervical cancer IVD KIT

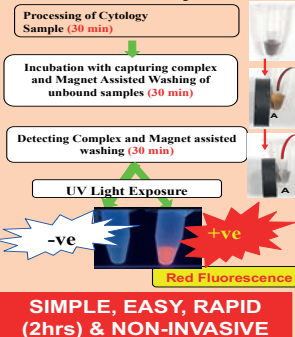
- For screening and confirmatory test from cytology/biopsy for Cervical cancer
- Early Detection (from CIN2 stage) with very high sensitivity (~2000 cervical cancer cells)
- Cost-Effectiveness and Affordability, onsite detection
- 100% Diagnostic performance with gold standard at AIIMS New Delhi (Histopathology/IF)
- Simple and quick (max 2 hour/per test) detection system
- No capital investment for customers (Pathology Lab), easy data interpretation
- Scalable (100K/ day in a small incubator setup)

Technology

An alternate technology platform for Immuno-fluorescence/ Histopathology for Cervical Cancer Cell diagnosis

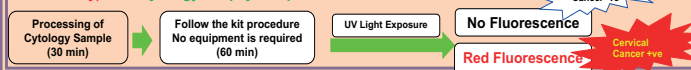
- Screening (Cytology) and Confirmatory (biopsy) test for direct detection of cervical cancer cells detection
- Effective detection in the pre-cancerous stage (CIN2 stage) to the cancerous stage
- Simple (2-step process), Rapid (2 hours), Scalable (100K test per day in a small setup)
- No capital investment required for the customers (no setup required)
- Onsite Detection, Visual Readout System
- Self-explanatory detection, like point of care

Detection Assay



SIMPLE, EASY, RAPID (2hrs) & NON-INVASIVE

Cervical Cancer Detection (Screening and Confirmatory) from Cytology/ Biopsy Samples

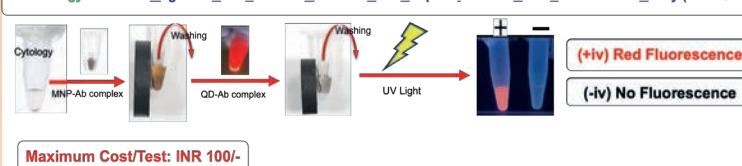


MAGNETIC NANOPARTICLE QUANTUM DOTS COUPLED IMMUNO-NANO FLUORESCENCE ASSAY (MNPQDCINFA)



Market Projected Global market: 10 billion \$ in 2035 from the current global market: 5 billion \$ in 2025

Technology Platform: Magnetic NanoParticles Quantum Dots Coupled Immuno Nano Fluorescence Assay (MNPQDCINFA)



- Onsite detection, Visual readout system
- Self-explanatory detection like point of care
- Screening (cytology) & confirmatory (biopsy)
- Pre-cancerous stage (CIN2) to cancerous stage
- 100% diagnostics sensitivity and specificity
- Simple (2step), Rapid (2hr) & Scalable (100K/day)
- Minimal capital investment for customers
- Affordable, Cost effective (~INR 100)

Societal Impact

- MNPQDCINFA will be useful in rapid diagnosis of cervical cancer in poor and developing countries with low low-resource health care systems.
- An affordable screening platform enabling the design of a screening program available to a large population, thereby reducing the socioeconomic burden and global cervical cancer burden



Current status

- Patent and manuscript published.
- TLR-5 (In-house-prototype designed, In-house diagnostic performance tested on 500 samples).
- High Diagnostic accuracy in AIIMS hospital settings.

MNPQDCINFA Assay	Gold Standard		Positive Predictive Value TP/(TP+FP) = 1
	HPV + (380)	HPV - (205)	
Positive	True Positive (TP) 380	False Negative (FN) 0	Negative Predictive Value TN/(TN+FN) = 1
Negative	False Positive (FP) 0	True Negative (TN) 205	
	Sensitivity TP/(TP+FN) = 1	Specificity TN/(TN+FP) = 1	Diagnostic Accuracy (TP+TN)/(TP+FP+FN+TN) = 1



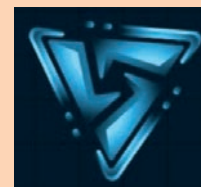


PEOPLE'S FESTIVAL OF INNOVATIONS 2025



Aventiq Innovations Private Limited

Swapna Dasoju



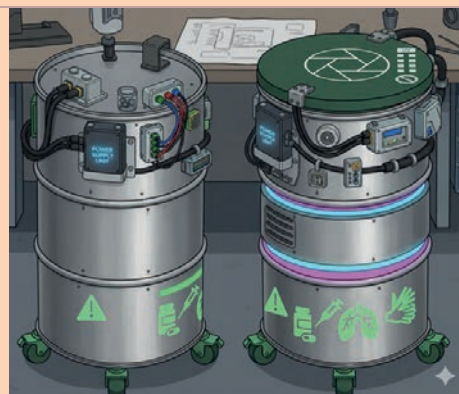
Problem Addressed

- India generates over 600 metric tonnes (mt) of biomedical waste (BMW) each day.
- A substantial portion of this waste is not managed in compliance with prescribed protocols and is often co-disposed with municipal solid waste.
- Improper Biomedical waste Handling leads to Healthcare-Associated Infections (HAI's), affecting nearly 30% of patients.
- Globally, unsafe biomedical waste disposal practices are estimated to result in 33,800 HIV infections and 1.7 million Hepatitis B cases annually.

Technology

Our flagship product ABIOT-E-SAFE encompasses the following:

- **Dual technology:** Combines UV-C radiation and hydrogen peroxide (H_2O_2) for on-site waste disinfection.
- **Smart control:** IoT-enabled monitoring ensures safe, efficient, and eco-friendly sterilization.
- **Eco-friendly:** Produces only water and oxygen as by-products.
- **Minimal touch:** Reduces human exposure and enhances safety.



Societal Impact

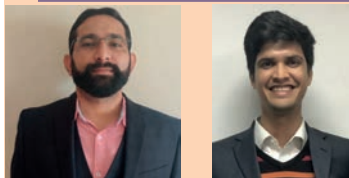
- **Reduces healthcare-associated infections:** Safely treats harmful biomedical waste at the source.
- **Protects the environment:** Prevents soil, water, and air contamination.
- **Promotes sustainability:** Encourages safer and more sustainable healthcare practices.

Current status

Our product, ABIOT-E-SAFE, is currently in the prototype development stage, and we also hold a patent for its design and technology.



PEOPLE'S FESTIVAL OF INNOVATIONS 2025



Biowall Agrihealth Pvt Ltd
presents
MicroMagic



Manohar Malani, Biowall Agrihealth Pvt Ltd.

Problem Addressed

Journey of sustainable agriculture starts with soil biology with microbes playing vital role.

Availability of top-quality microbes at affordable cost remains a challenge. Commercial supplies are expensive and perpetual free distribution is not sustainable.

BRC (Bio-Resource Centre) model is promising. The current BRC relies on raw methods with inconsistent outcome. It also requires lot of efforts. Efforts to make microbiologists at farmer/farmer group level has predictably failed.

MicroMagic is designed for production of quality microbials, without any lab-coats at low price with minimum infrastructure requirement.

Technology

Micro-Fermentation System for Bio-Resource Centre including:

- All in one Standalone Bio - Fermenter with sterilization, aeration and smart fermentation program mode running on just 1 HP connected load. Leverage inbuilt ozone generator for sterilization. In loop air mixing through venturi for dissolved oxygen management. Smart program modes to address fermentation cycle of various types of microbes.
- Specialised nutrition media for different types of microbes & consortium with auto-pH adjustment and excellent fermentation.
- A combination of both enables mass deployment at rural level without much training need.



Societal Impact

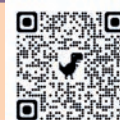
1. Availability of quality microbials for farmers.
2. Better Fertilizer utilization. Reduction in use of Fertilizer.
3. Reduction in Fertilizer Subsidy, due to efficient use.
4. Improvement of Soil biology. Increase in Soil Organic Carbon.
5. Reduction in use of Fungicide & Pesticides.
6. Increase in Farmer Profitability.
7. Availability of non-toxic food for consumers.
8. Local Employment. Increase in Local Level GDP.

Current status

Technology stabilized and already being rolled out.
Deployed at National Institute of Plant Health Management (NIPHM) and PDKV, Akola.

Produce from MicroMagic tested & validated by NIPHM, Tea Board, 3rd party labs.

Over 30 machines deployed across Maharashtra, Telangana, West Bengal, Assam, Andhra Pradesh and Madhya Pradesh.



PEOPLE'S FESTIVAL OF INNOVATIONS 2025

BONJI

BONJI

Ruchi Singh, Mehak Kapoor

World's 13 most polluted cities in India.

yet *not* talking about it's impact on the largest organ.



Urban dwellers are exposed to a 20% increase in OXIDATIVE STRESS-related skin damage.



Of India's Water Supply, is contaminated, leading to immense HARD WATER exposure.

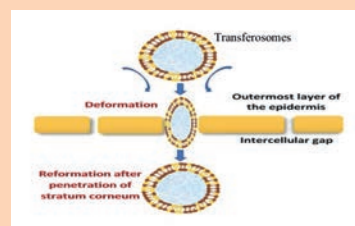
Nanoshield Technology

Cutting edge solution that combines advanced delivery technology with powerful actives, allows deeper penetration through amphiphilic vesicular technology. to effectively combat pollution effects and promote skin and hair health.



3+

years spent in Research and Development of our products.



Making Beauty for India ki Sadkon wali life

Indian beauty markets have long been flooded with unreal beauty standards, but never with solutions made for our harsh, pollution-exposed reality. Bonji was built to change that, giving India real science for real everyday problems. Because our skin doesn't need perfection; it needs protection that truly understands it.

Early Traction

Bonji is now live with 6 products on our D2C website, Amazon, and Flipkart, already trusted by 300+ customers.



PEOPLE'S FESTIVAL OF INNOVATIONS 2025

Caare Healthtech Services Private limited



Chandramouli Samatham



Problem Addressed

India's urban migrants face critical healthcare barriers: 72% pay out-of-pocket, 58% delay treatment, and slums suffer from doctor shortages (1:11,000) and fragmented care. Overcrowded public hospitals and reliance on unqualified providers worsen outcomes. This leaves millions without affordable, trusted, and continuous care—especially low-income migrants. These systemic gaps necessitate a scalable, integrated healthcare model that delivers quality primary care efficiently and affordably to this underserved population.

Technology

Caare's technology platform delivers a comprehensive healthcare solution combining physical consultations, specialist telemedicine, pharmacy services, and diagnostic collection centers. Integrated via an ABDM (Ayushman Bharat Digital Mission) compliant digital health platform, it leverages AI-powered screening and telehealth apps to ensure affordable, accessible, and continuous care for urban migrants. This hybrid "phygital" model enhances healthcare delivery by offering seamless care coordination, reducing access barriers, and improving patient outcomes through technology-enabled, end-to-end healthcare services at scale.



Societal Impact

Caare creates significant societal impact by improving healthcare access, affordability, and quality for underserved urban migrants. It reduces financial burden and travel time for patients while increasing early disease detection and chronic care management. By empowering communities with trust and awareness, Caare helps transform health outcomes and economic well-being, fostering healthier, more productive populations and narrowing healthcare disparities.

Current status

Caare operates 10 rural and tribal clinics, generating pilot revenue through NGO partnerships and completing over 20,000 consultations. Its first urban flagship clinic in Burari, Delhi, certified under Ayushman Bharat Digital Mission and the Delhi government, has been operational since November 2025. The growth plan targets 10 clinics in Year 1, 50 clinics by Year 3 with ₹35 Cr projected revenue, and 200+ clinics nationwide by Year 5, ensuring scalable, sustainable healthcare access for underserved communities.



PEOPLE'S FESTIVAL OF INNOVATIONS 2025

DeepMouli Innovations Private limited



Chandramouli Samatham

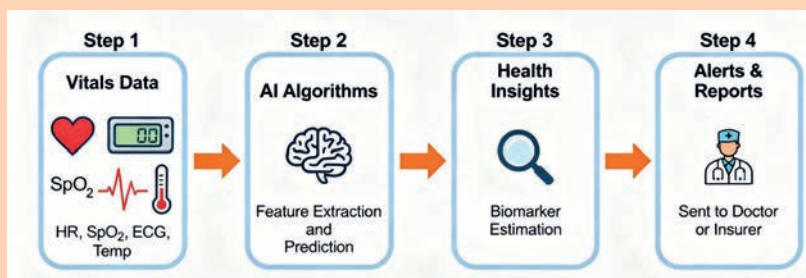


Problem Addressed

The problem addressed by Deepmouli Innovations' Bionn wearable is the widespread lack of affordable, continuous health monitoring for chronic conditions like hypertension and diabetes in underserved Indian populations. Many remain undiagnosed due to costly diagnostics and limited healthcare access, especially in rural areas. This leads to high mortality from cardiometabolic diseases. Bionn offers an AI-powered, cuffless wearable that continuously captures vital signs and predicts key biomarkers to enable early risk detection and timely interventions, reducing disease burden and improving health outcomes.

Technology

Deepmouli Innovations' Bionn uses advanced multi-sensor wearable technology to continuously capture vital signs like blood pressure, ECG, SpO2, heart rate, and temperature. Integrated AI algorithms analyze this data on-device and in the cloud to estimate critical biomarkers such as cholesterol and HbA1c, enabling early risk detection and proactive health management in underserved populations.



Societal Impact

Deepmouli Innovations' Bionn wearable drives societal impact by improving healthcare equity in India. It enables affordable, continuous monitoring and early detection of chronic diseases like hypertension and diabetes, especially in underserved rural and semi-urban areas. By bridging healthcare access gaps, it empowers individuals, reduces hospital burden, and promotes proactive disease management, leading to healthier communities.

Current status

Deepmouli Innovations' Bionn wearable has recently achieved a significant milestone with the granting of the FORM MD-13 license by the Central Licensing Authority (August 2025) for manufacturing the wearable device for testing and clinical evaluation. The project is advancing with backing from the MeitY GENESIS Grant and partnerships like Analog Devices. Clinical validation and regulatory compliance are ongoing, focusing on creating an affordable, AI-powered, continuous health monitor tailored for low-resource settings in India, with plans for phased rollout and broader commercialization.



PEOPLE'S FESTIVAL OF INNOVATIONS 2025



ECOVEER RECYCLERS PRIVATE LIMITED

Plastic waste sorting innovations employ advanced AI and sensor technologies to improve recycling accuracy and efficiency while complementing existing systems. These collaborative solutions promote a sustainable circular economy by enhancing material quality and supporting shared environmental goals.



VINAYAK DODAWAD

Problem Addressed

Recycling facilities today face significant challenges in efficiently sorting contaminated plastic waste, often containing composite materials or hidden items such as batteries. These impurities degrade the quality of recycled granules, leading to lower market value and reduced profit margins by 30–40%. To address this, our team is developing an advanced sorting solution that enhances material purity and operational safety using technology. This system enables non-invasive detection of invisible contaminants and identifies combustible objects before shredding, thereby improving product quality and increasing recyclers' profitability by 30–40%.

Technology

Our solution integrates an advanced material detection system based on sensing to enhance the efficiency of plastic waste sorting. This technology enables non-contact, real-time identification of various plastics and hidden contaminants, including composite materials and potentially hazardous items. By detecting impurities that traditional methods often miss, it helps maintain high material purity, improves recycler safety, and optimizes profitability.



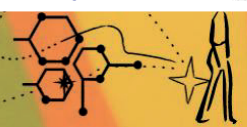
Societal Impact

The proposed technology contributes to a cleaner and safer environment by improving the quality and efficiency of plastic recycling. By enabling accurate sorting and contamination detection, it reduces landfill waste, minimizes environmental pollution, and promotes the circular economy. Additionally, the solution supports sustainable livelihoods by enhancing profitability for recyclers and encouraging broader adoption of responsible waste management practices across communities.

Current status

The project is currently in the prototype development stage, with encouraging early results in accurate material and contamination detection. We are also engaging with industry and academic partners to refine the design and move toward pilot-scale implementation.





PEOPLE'S FESTIVAL OF INNOVATIONS 2025

GFRESH AGROTECH PVT LTD



Shubham & Naman G Dungarwal



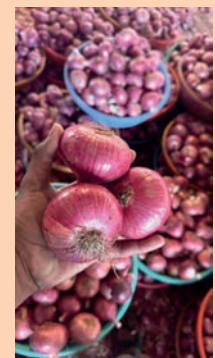
Problem Addressed

India's fragmented agri-supply chain often leaves farmers underpaid and disconnected from transparent buyers. GFresh Agrotech bridges this gap using digital platforms that provide transparency, reduce post-harvest losses, and ensure fair pricing for farmers.

Technology

GFresh Agrotech's technology ecosystem blends AI, machine learning, blockchain, and agricultural logistics innovations to modernize India's produce supply chain, especially in onions. The company integrates digital platforms and solutions to streamline the farm-to-market process and empower farmers.

Product



Societal Impact

GFresh Agrotech creates a powerful social impact by connecting farmers directly to markets. It has helped over 1,80,000+ farmers earn fair prices via transparent trade, reduces onion wastage by improving logistics, and generates rural employment through agri-platforms.

Current status

GFresh Agrotech is a fast-growing agritech enabled B2B marketplace for onions. It supports over 180,000+ farmers of Nashik and connects them with 300+ buyers, including export clients. The company plans to leverage AI, blockchain, and advanced supply chain technology to empower farmers, reduce waste, and ensure fair pricing. Recognized for its innovation and social impact, We continues to expand market reach, create rural employment, and improve agricultural sustainability.



PEOPLE'S FESTIVAL OF INNOVATIONS 2025

GoodLives



Lawrance Bamanian &
Sakshi Shah

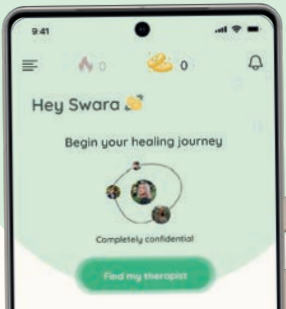


Problem Addressed

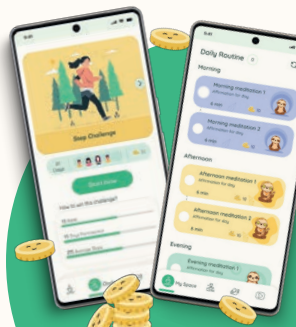
- Lack of measurable and personalized mental health solutions
- One-size-fits-all approaches fail to engage users effectively
- Organizations lack data-driven tools for early intervention

Technology

- AI-powered engine using NLP & ML for real-time well-being tracking
- Adaptive recommendations based on user behavior and mood
- Predictive dashboards for burnout alerts
- Secure, privacy-first architecture with continuous learning



Your Personal Space for Mental Well-Being

Societal Impact

- Aligned with UN SDG Goal 3 – Good Health & Well-being
- Educated 5M+ people through awareness programs
- Offer 15 free therapy sessions/month to those in need
- Conduct free college workshops on mental health

Current status

- Supporting thousands of active users across India
- Partnered with enterprises for workplace wellness
- Continuously refining AI models through live data
- Expanding globally for sustainable mental health impact



PEOPLE'S FESTIVAL OF INNOVATIONS 2025

Growdea Technologies Pvt Ltd



Dr. Avinash Mishra, CEO



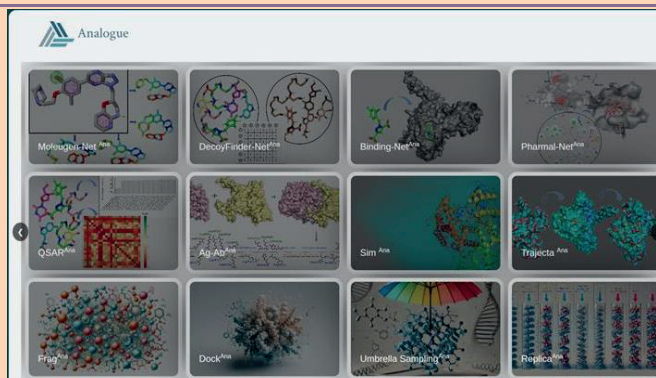
GROWDEA
Grow An Idea!

Problem Addressed

1. Drug discovery is extremely **slow and expensive** — early-stage discovery alone can take 3–5 years, making the full process last 10–15 years and cost billions.
2. **High failure rate** in clinical pipelines — many candidate molecules fail late because early predictions of efficacy, toxicity, and binding are inaccurate.
3. Traditional screening methods (wet-lab HTS) are **time-consuming, resource-heavy, and limited** in scale, restricting how many compounds can realistically be tested.
4. Barrier for smaller labs and biotech startups — advanced computational drug discovery tools are **costly and inaccessible**, restricting innovation to large pharma only.

Technology

1. **Designs and optimizes novel therapeutic molecules** using **LLM + Reinforcement Learning** (MolugenNet) for virtual library expansion and **hit-to-lead optimization**.
2. Determining the **pharmacokinetic properties** and fine-tune to fall under **FDA-approved drugs** characteristics.
3. Applying **graph neural network** and comprehensive **embedding techniques** to capture experimental **binding affinity** between protein and drug/ligand.
4. Leveraging all the **advanced techniques** in form of easy **graphical interface** for the final user.



Societal Impact

1. By accelerating the early stages of drug discovery, **ANALOGUE** aims to **reduce the time and cost** of bringing new therapeutics from bench to bedside.
2. Helps potentially address unmet medical needs more rapidly, especially for **novel diseases** or **drug-resistant targets**.
3. It may democratize access to **advanced drug-design** capabilities for smaller labs/companies who can't otherwise afford large wet-lab QSAR / HTS pipelines.

Current status

1. As of recently, **ANALOGUE** is commercialised — i.e., available to clients/licensing (5-10 licences sold).
2. Growdea has collaborations with research institutes (IITs, AIIMS etc.) and pharma companies.
3. The company website lists the platform and its features, signalling an active public presence.
4. Further enhancements (AI models, data, simulation modules) are ongoing.



PEOPLE'S FESTIVAL OF INNOVATIONS 2025

HUMBLE BEE- Building a Golden Revolution in India



Monika Shukla, Vaibhav Trimukhe, Varun Kashyap

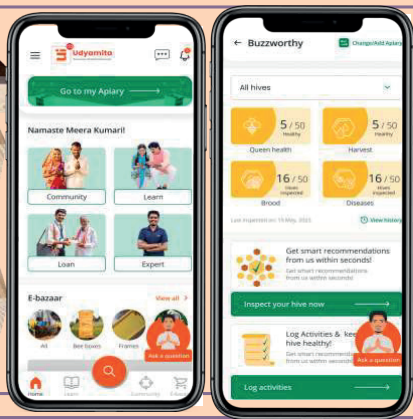


Problem Addressed

- **BEEKEEPERS Lack Scientific Capacity:** Fragmented Beekeepers, Lack of scientific techniques. Scarce Training. Missing Support Structures.
- **Accessibility Gap** for precision-engineered bee-boxes, equipment and bee colonies
- **Migratory Nightmare** (during lean flora seasons): No knowledge of where, when, & how to migrate colonies.
- **Poor price realization for honey:** Middlemen, Production of other hive products is negligible.

Technology

- **BEEKIND App:** For capacity building, scientific beekeeping practices, disease diagnosis, hive inspection, peer and expert connect.
- **AI-chatbot:** In vernacular language for instant help and support
- **High-quality beekeeping supplies:** Precision-engineered beehives, hive tools and equipment
- **Fair prices of honey and hive products:** Under **HUMBLE BEE™** brand



Societal Impact

- Improved incomes of beekeepers
- More livelihoods (youth and women) generated
- Better bee-managed crop pollination leading to better yields->Increase in agricultural GDP
- Reduced use of pesticides
- Increased biodiversity
- Improved food security => Climate resilience

Current status

- A community of 1500+ beekeepers across 6 states
- **Winners:**
 - Gates Foundation Grand Challenges,
 - BIRAC BIG 2023,
 - Mastercard AI4AI Awards,
 - CGIAR ICTforAg Inspire Challenge,
 - AKF & GIZ Climate Smart Business Challenge
 - 2025 WE Empower UN SDG Challenge (UN Women, Vital Voices
 - Startup Maharathi award (Climatetech+Agtech)

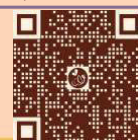


www.thehumblebee.co

[humblebeekind](https://www.instagram.com/humblebeekind)

team@thehumblebee.co

+91-8898752416, +91-7204024529



PEOPLE'S FESTIVAL OF INNOVATIONS 2025

Hydrogen Innovation Pvt. Ltd.



Dr. Krishna Kumar

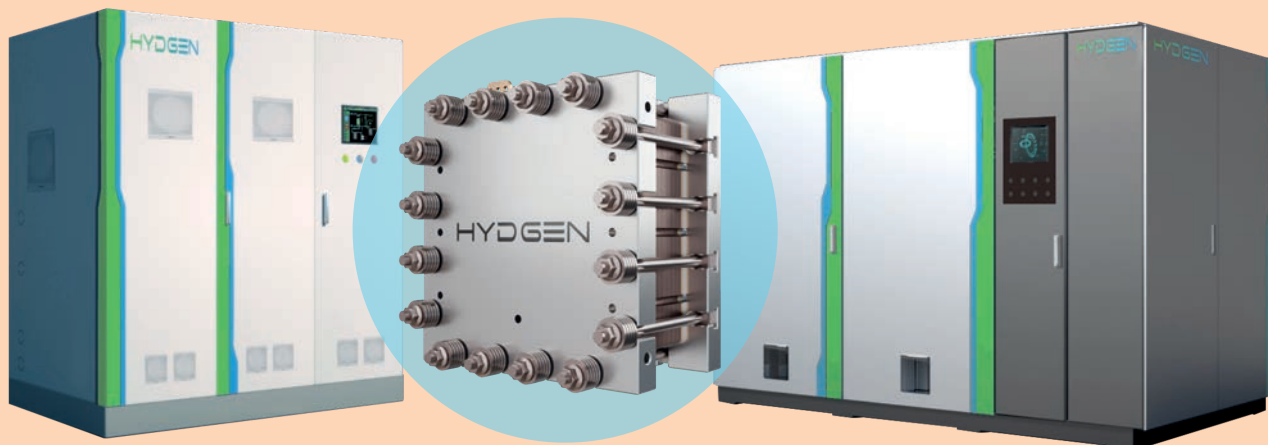
HYDGEN

Problem Addressed

High cost and inefficiency in traditional hydrogen production methods. HYDGEN addresses this through scalable AEM and PEM electrolyzers that reduce energy consumption, eliminate rare-earth materials, and ensure high purity hydrogen

About the Technology

HydGen specializes in cutting-edge AEM and PEM electrolyzers. We deliver efficient, scalable, and emission-free hydrogen production. Our systems, built for purity and plug-and-play flexibility, serve critical, real-world use cases. From clean mobility to high-precision labs, we help decarbonize industries worldwide.



Societal Impact

They reduce reliance on fossil fuels and imports, cut logistics emissions, and enhance energy security. By supplying ultra-pure hydrogen for industry, mobility, and research, HYDGEN fosters innovation and a low-carbon future.

Current status

HYDGEN has validated its AEM and PEM electrolyzer platforms and is deploying pilot systems across India and Southeast Asia. Its technology delivers 99.97% pure hydrogen, lowers supply-chain costs, and scales seamlessly from small to industrial capacities.



PEOPLE'S FESTIVAL OF INNOVATIONS 2025



MOMMYDEARS / 24/7 AI –Platform for New Mothers

FOUNDER: UTKARSA MALKAR
CO-FOUNDER: AARYAKE PANDEY



Problem Addressed

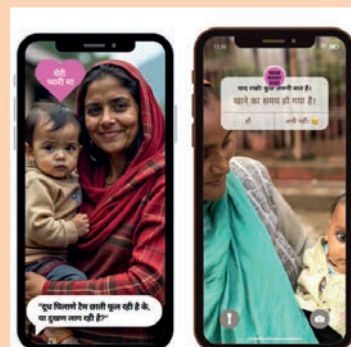
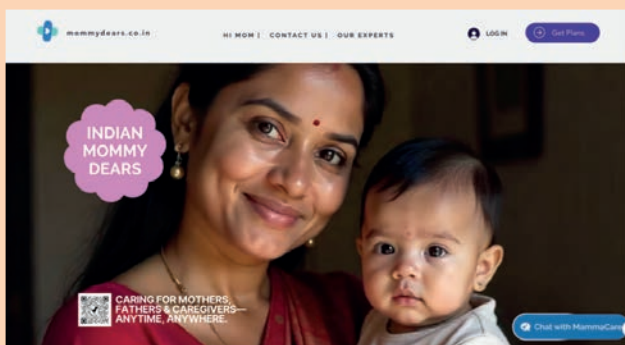
90% of Indian mothers lack structured postpartum recovery guidance.

- 1 in 3 women suffer from postpartum depression but don't seek help due to stigma.
- With limited professional support, urban working moms struggle to balance career and baby care.
- Traditional postnatal care is fading, leaving new mothers confused, anxious, and exhausted.

Technology

24/7 mental health tracking & lactation support.

- Smart Recovery Coach – Tracks Indian postpartum traditions + modern medical science.
- AI-Powered Mood Tracker – Identifies depression, stress & emotional burnout early.
- Conversational AI in Regional Languages – Making expert guidance accessible to all.
- Data-Driven Personalization – AI adapts care based on health history & symptoms.



Societal Impact

Grassroots aspects:

Targets new mothers at the community level, especially in tier-2/3 towns and rural India, where access to postpartum care is limited.

Designed for accessibility in local languages (Hindi, Marathi, Gujarati, etc.), addressing the last-mile health gap.

Focuses on affordability and inclusivity, not just high-tech users.

Aims to integrate with public health systems (NHM, ASHA workers, government hospitals) to make impact at scale.

Current status

We're currently validating our MVP through research, expert input, and real mother feedback. Focused on mental health, recovery, and community care.

Running live campaigns, contests and podcasts.

We are also reaching out to National-Level Women's Welfare Initiatives

CLINICAL TRIALS- MUMBAI – 100+ onboarded.



www.mommydears.co.in
moms2025official@gmail.com

PEOPLE'S FESTIVAL OF INNOVATIONS 2025



Nitin Shrotri, Annu, Bhargavi

A startup in Organic and Industrial Products, AI Applications



Problems Addressed

- **Health Crisis:** 59% Indians suffer from Insufficient sleep < 6 hours and 70% from chronic neck and back pain due to hectic lifestyles and poor-quality, non-ergonomic pillows.
- **Environmental Crisis:** Improper disposal and open burning of 30–50% of farm waste (Crop Production-2024: Rice-4300MT and Sugarcane-83000MT) and dry leaves (Neem, Peepal) increase carbon footprint, leading to severe air pollution and global warming.
- **Economic Drain:** Municipal Corporations spend ~20% of their total revenue (approx. ₹160-170 Cr p.a.) on solid waste management, which still results in significant land and water pollution.
- **Poverty:** Only 32% women are in work, ₹260 average daily wage of farmers, 1 in 2 tribal homes face economic hardships

Technology

- **Core Innovation:** Made from recycled and repurposed natural (agro and domestic) waste — Eco-friendly, lightweight, recyclable, reusable, and biodegradable.
- **Sustainable Design:** Three-layer eco-friendly, ergonomic structure with customized thickness (70–30 mm) for ideal comfort and pain relief.
- **Smart Features/USPs:** Firm yet soft, Flexible, Fragrant, Season-friendly, Pain-relieving, and Pro-sleep.
- **Future Tech:** AI-based waste source mapping to optimize supply chain and link with local pillow makers.



Societal Impact

- **Jobs created-2 Full Time, 16 Part Time, Self Help Women Group of 1200 ready for scaling**
- **Carbon Footprint Reduction- 556 Pillows ~477 kgs, , 0.6443 Tons**
- **Pain reduction, Sleep Improvement – 500+ Users**

Current status

- **Market:** TAM ₹ 8148 Cr, projecting to double by 2030 (9% CAGR), SAM ₹1105 Cr, SOM ₹33.15 Cr
- **Status:** Product developed, user validated, and traction begun 556 users, 230 buyers, revenue-₹98k,
- **Seeking:** Partners for **Research & Clinical Validation** (prove sleep/pain relief), **scaling** and **AI-driven supply chain**.





PEOPLE'S FESTIVAL OF INNOVATIONS 2025

PHOTO OF FOUNDER



Name of Startup / Innovation

Niramai Health Analytix Pvt Ltd.

Startup Logo



Name of Innovator : **Dr. Geetha Manjunath**

Problem Addressed

Breast cancer is a leading cause of death among women, with over 680,000 lives lost globally each year. In India, more than 220,000 new cases and 80,000 deaths were reported in 2023. Early detection greatly improves survival, yet existing screening methods are often costly, inaccessible, or unsuitable for large sections of the population.

Younger women and those with dense breast tissue remain especially underserved, as current options fail to detect early changes in these groups. There is a pressing need for an affordable, accessible, and accurate breast screening solution that can be scaled widely to enable early detection and save lives.

Technology

Thermalytix is Niramai's patented AI-based breast health screening platform that enables early and accurate detection of breast cancer through automated thermal image analysis. It combines a high-resolution thermal sensing device with a cloud-hosted analytics engine to process images and generate detailed reports for radiologist review.

Designed as a portable, point-of-care solution, Thermalytix can be deployed in hospitals, community health centers, and outreach camps. It can be operated by frontline health workers with minimal training, ensuring scalability and accessibility. The test is non-contact, radiation-free, and privacy-aware, promoting higher comfort and acceptance among women while making early detection available to all.

Images of Product



Societal Impact

Niramai's Thermalytix has enabled early breast health screening for over 3,00,000+ women, with availability across 250+ healthcare centers in India and presence in 22+ countries.

More than 10,000 screening camps have been conducted, expanding access to breast health screening and awareness at scale.

Current status

Thermalytix is a clinically validated, commercially deployed, and regulatory-cleared technology, backed by 54+ peer-reviewed publications (niramai.com/publication).

Niramai holds 39 granted patents and is regulatory-cleared and internationally certified, including ISO 13485, ISO 27001, CE approval (Europe, Africa, and Asia), and CDSCO clearance in India.

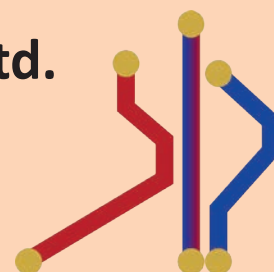


PEOPLE'S FESTIVAL OF INNOVATIONS 2025



Tanmayee Sathe

PraanPravah Innovations Pvt. Ltd.



Problem Addressed

One of the major challenges in drug development, is the unreliability of animal models, as more than 80% of the validated drugs often fail during human trials. The main reason behind this failure is the lack of translational accuracy. Moreover animal trials are expensive and raise ethical concerns.

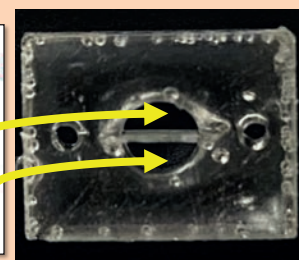
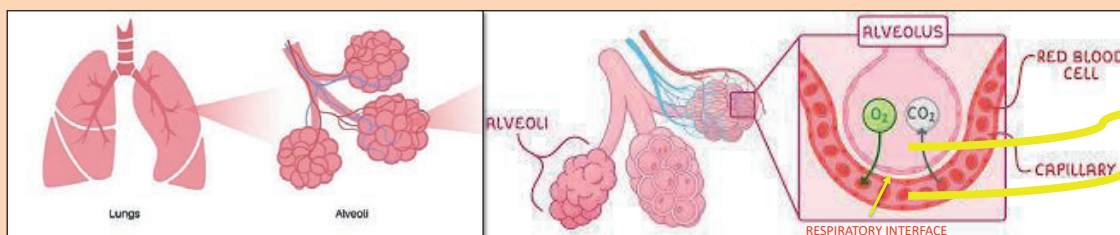
In case of respiratory disease drugs, animal testing is even more difficult owing to the complex nature of the lungs. Thus, there is dire need to have alternative in vitro models that can recapitulate the organ physiology, architecture and environment for reliable drug screenings and testing.

We have addressed this problem by developing an alveoli-on-chip device that accurately emulates the alveolar region. The device offers a reliable, reproducible, cost- and time-effective alternative to animal testing for efficient and ethical prediction of human responses.

Technology

We offer an alveoli-on-chip platform that mimics the physiology, 3D architecture and environment of the lung alveolar region. The microfluidics-based perfusion enabled device integrates an elastic, biocompatible membrane mimicking the air-liquid interface. The growth of epithelial and endothelial cells on either sides of the membrane mimic the alveolar and vascular regions. Moreover, continuous air and liquid perfusion emulates the breathing and blood flow, while the lateral stretching of the membrane simulates the expansion of alveoli during breathing, along with shear stress generated by the flow.

Our model recapitulates the lung alveolar region complexity in vitro. This enables easy screening with a reproducible, consistent analysis of drug molecules for absorption, toxicity or inflammatory response, modeling as a powerful tool for respiratory disease-drug research.



Lung-on-chip device

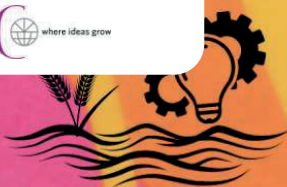
Societal Impact

The alveoli-on-chip platform holds a significant societal impact by redefining the study and treatment of respiratory diseases. It delivers reliable, human-relevant data for faster and accurate assessment of drug efficacy, enabling safe and timely therapies to cope up with respiratory diseases such as COPD, asthma, and other infectious diseases. By reducing the reliance on animal testing, it minimizes the ethical concerns while lowering late-stage clinical trials failures, thus reducing the cost and time required for the drugs to reach the market. Its compact size, user-friendly design further reduces the space and labour cost, making it scalable and accessible. Most importantly, the platform supports rapid evaluation of therapies for emerging respiratory threats, strengthening preparedness for future health challenges.

Current status

We have a validated proof-of-concept of the lung-on-chip device. The device has a functional, elastic membrane with cell growth on either side. A continuous perfusion of air and liquid in the alveolar and vascular chamber ensures mimicking of the in vivo flow, while the lateral stretching simulates cyclic expansion and contraction of the membrane during breathing.

The device is incubated in a specially designed incubation setup, that incorporates perfusion and stretching while maintaining the physiological conditions of temperature, humidity, CO₂.



PEOPLE'S FESTIVAL OF INNOVATIONS 2025



Debarati Paul

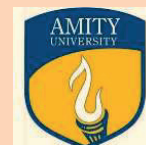
Professor

Amity University Uttar Pradesh



RevOILution:

Waste Valorization for Customized Oil Production



Problem Addressed

Today's beauty products largely (70%) rely on ingredients derived from petrochemicals, plants, and animals

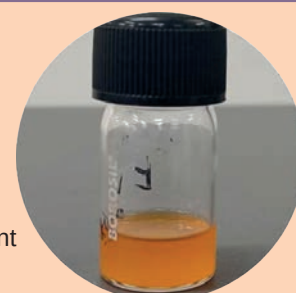
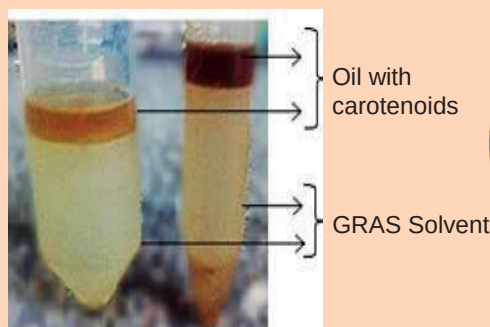
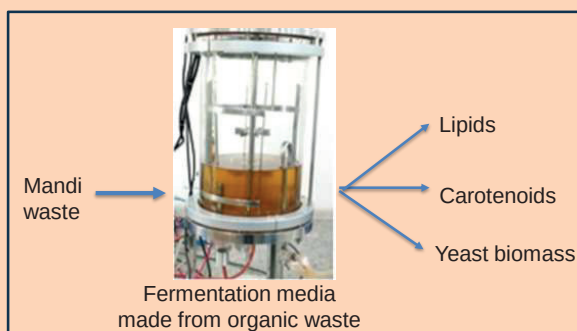
- Vegetable oil causes: loss of land, biodiversity; deforestation
- Petroleum-derived oils causes: Release of CO₂ (1.5B tons), toxic gases
- EUDR LAW : 100% deforestation free products recommended

Beauty shouldn't cost our Planet

Technology

WORKING SOLUTION/ PROTOTYPE

- Innovative, Scalable, Cost-competitive fermentation for yeast oil production at lab scale with high titres
- Use of Agro and Industrial waste as feedstock
- Biorefinery mode for concomitant production of oils, carotenoids, feed and biofertilizer
- Biomass reused as fertilizer/feed



Extracted carotenoid

Societal Impact

Customized oil for the **under served cosmetic** segment

Other applications:

Odd-chain fatty acids and unsaturated fatty acids for edible oil additives

Biofertilizer for acidic soils

Sustainable + Traceable Sourcing

Clean label, non-toxic, and minimalist formulations

Current status

- Technology and prototype is ready at 10L fermentation scale
- To be scaled up to 50 and 100L
- Patents awaited

Funding by ANRF (CRG/2022/003411) is acknowledged



PEOPLE'S FESTIVAL OF INNOVATIONS 2025



HAAL-CHAAL PRAVARTAK:

A Voice-note Based Digital Gym for Heart & Lung Wellness

Innovators: Tarun Adarsh & Sanya Mishra

Affiliation: Tech Atriocare Private Limited



"Breathing is Life—But Millions Struggle Silently"

Unaddressed Heart & Lung Health Risks:



- **30+ million** Indians with asthma and COPD*

*Indian Chest Society

- **4 million** heart attacks a year**

**Indian Heart Association.

- Limited access to quality health & wellness services, particularly for elder ones

- Existing screening & management solutions lack **user engagement & adherence**

- Often **invasive, expensive, or ineffective.**



HAAL-CHAAL

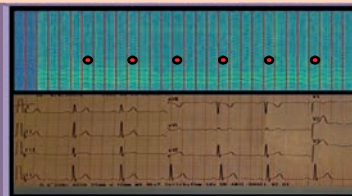
PRAVARTAK

Breathe Strong

Live Strong

A heart & lung wellness monitoring platform based on proprietary voice-notes signal processing technology:

- **Personalized** heart & lung wellness assessment, monitoring treatment effectiveness & management recommendations
- **Ayurveda-inspired** humming voice-notes analysis
- **Wellness insights** comprising airway patency, breathing efficiency, and cardiac indicators
- **High convenience & adherence** through WhatsApp voice-notes



TEST RESULT SUMMARY	On 4 th August (before using NOVICULE-TA):
Heart Rate Variability (HRV)	Low
Respiratory Rate (RR)	High
Heart Rate (HR)	High
Respiratory Volume (RV)	Low
Heart Rate Variability (HRV)	Low
Respiratory Rate (RR)	High
Heart Rate (HR)	High
Respiratory Volume (RV)	Low

TEST RESULT SUMMARY	On 22 nd August (after using NOVICULE-TA):
Heart Rate Variability (HRV)	High
Respiratory Rate (RR)	Low
Heart Rate (HR)	Low
Respiratory Volume (RV)	High
Heart Rate Variability (HRV)	High
Respiratory Rate (RR)	Low
Heart Rate (HR)	Low
Respiratory Volume (RV)	High



Social Impact:

- ❑ **410 Haal-Chaal reports** generated in **8 pilot cohorts**
- ❑ **Projected reduced healthcare costs** for families (approx INR 50,000 per patient)
- ❑ **Preliminary screening** of respiratory conditions, improving quality of life (**SDG 3**).
- ❑ **Accessibility** for rural and underserved populations.

Current Status:

- **TRL-8 stage**
- **GTM Strategy** is **D2C**
- Launched **Haal-Chaal Pravartak 1.0**, a structured immunity challenge with exciting cash rewards



techatriocare.com
novicule.techatriocare.com
[tech.atricare](https://www.techatriocare.com)
[tech-atricare](https://www.tech-atricare.com)

Mob.: 8826381283
Email: office@techatriocare.com

PEOPLE'S FESTIVAL OF INNOVATIONS 2025

Name of Startup / Innovation



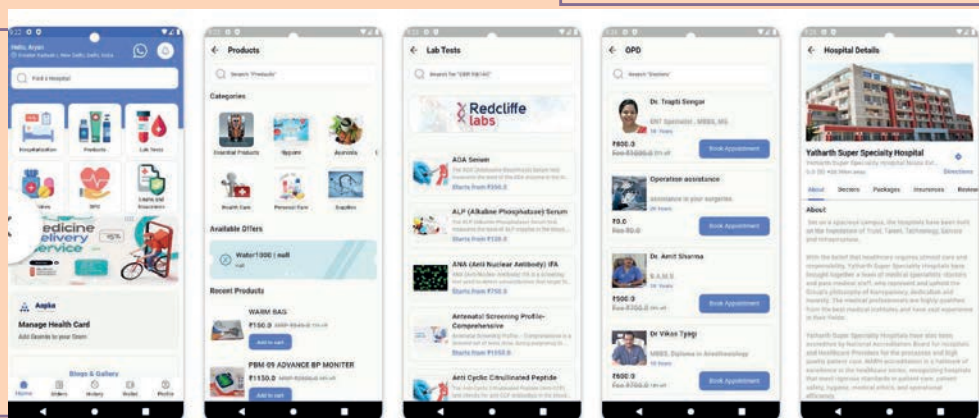
Name of Innovator

Problem Addressed

Millions in rural and semi-urban India face critical barriers to healthcare—long distances to hospitals, unaffordable diagnostics, lack of awareness, and social stigma around tests and surgeries. Patients often delay or avoid treatment, worsening outcomes and risking lives. Local labs and small hospitals struggle with credibility, limited services, and low patient reach. Our startup bridges this gap by providing end-to-end healthcare support: connecting patients to hospitals, diagnostic labs, insurance, and health products while guiding them through every step.

Technology

hybrid healthcare platform that integrates ICT (Information and Communication Technology) with on-ground human support to make healthcare in rural and semi-urban India more accessible, affordable, and efficient. The system combines a mobile application, web dashboard, and cloud-based backend with a trained Gram Mitra network to deliver end-to-end healthcare support.



Societal Impact

Aapka is bridging the healthcare gap for rural and low-income families by making diagnostics, hospitalization, and health products accessible, affordable, and dignified. We are reducing medical neglect caused by lack of awareness and affordability, creating health-conscious communities, empowering local youth as Gram Mitras, and ensuring that no one delays treatment because of confusion, distance, or cost. Our impact goes beyond healthcare — it's about restoring trust, dignity, and equality in how India experiences healthcare.

Current status

Working in more than 550 villages. Helping 100 people in surgery every month .

Served more than 10,000 patients in their health journey till now.



PEOPLE'S FESTIVAL OF INNOVATIONS 2025



Dr Gaurav Kharya



Dr Tanveer Ahmad

CELLOGEN THERAPEUTICS PVT LTD

Cellogen
Therapeutics

Problem Addressed

- CAR-T therapy costs ₹3–4 Cr per patient.
- Gene therapy for thalassemia & SCD costs ₹25 Cr per patient.
- 99% of Indian patients cannot access these cures.
- India: >120k new blood cancer cases/year + >140k children with
- thalassemia/SCD annually.
- Heavy dependence on imported components

Technology



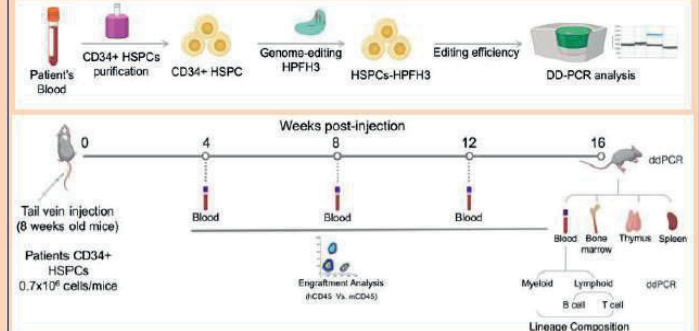
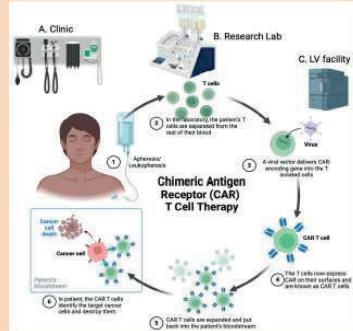
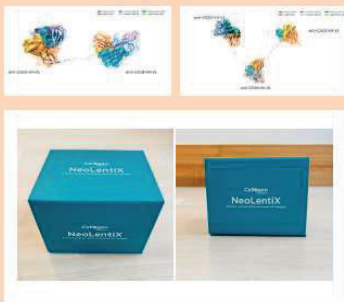
Cell Therapy Division



Gene Therapy Division



AI-Designed CAR molecules



Current status

Societal Impact

- Patient-first model achieving up to ~90% cost reduction compared to global standards, enabling access to life-saving therapies for wider populations.
- Indigenous innovation and AI-driven biomanufacturing to make cell and gene therapies affordable and scalable in India and similar regions.
- Collaborations with hospitals and academia to accelerate clinical translation and establish sustainable local infrastructure.
- Equitable healthcare ecosystem focused on curative treatments for cancer, autoimmune, and genetic disorders.
- Empowering local talent and creating biotech jobs, positioning India as a global hub for advanced therapeutics.
- Long-term goal: to make personalized and regenerative medicine accessible, sustainable, and socially transformative.

Roadmap For Gene Therapy



PEOPLE'S FESTIVAL OF INNOVATIONS 2025

Dasson Consumer Healthcare Private Limited

OrthyX- Plant-Based Clean Orthopedic Nutrition for Men and Women

Dr. Soumyakant Das



Problem Addressed

- Approximately 1.71 billion people have musculoskeletal conditions worldwide
- Musculoskeletal Nutrition is hazy** and not comprehensive
- Elderly population growth in India will be high and in the next 10-15 years, we will see a rise in musculoskeletal conditions and morbidities
- Musculoskeletal conditions are the leading contributor to disability worldwide

Technology

- We are building plant based Orthopedic Nutrition
- Plant based collagen builder and AcuJoint with PNS technology helps reduce inflammation and protect joint health
- Boswellia and Cissus is added in scientific proportion for maximum pain reduction
- We are adding Veg Glucosamine and Veg Chondroitin which have successful clinical trial results
- We are building a supportive AI-powered platform that enhances Orthopedic patient engagement through personalized nutrition, symptom-based recommendations, and doctor-led education.
- Additionally, our health-tracking module and orthopedic exercises provide a comprehensive musculoskeletal disease management education



Societal Impact

- Osteoarthritis cases in India rose from 23.46 million (1990) to 62.35 million (2019).
- Osteoporosis affected 26 million (2003), projected to reach 36 million (2013).

India's poor population is heavily affected due to nutritional deficiencies, and most treatments fail to address the root causes. OrthyX targets bone and joint health naturally through plant-based ingredients, creating value from farmers to elderly patients.

By improving mobility and reducing morbidity, we aim to lower DALYs and disease burden.

Current status

Revenue & Impact: ₹20+ lakhs generated in the last 6 months; 1000+ patients benefited.

Current Sales: Active across Delhi NCR, Gujarat, Maharashtra, Odisha, and other regions.

Future Target: Aim to achieve ₹5 crore in sales within 6-12 months.

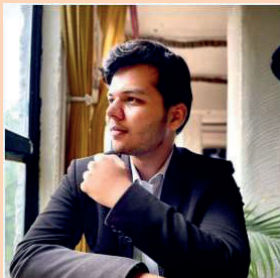
Recognition: Acknowledged by Orthopedic Associations, Arthroscopy & Arthroplasty events, and other healthcare forums.

Incubation & Awards: Incubated with a-IDEA NAARM; semi-finalist at the World Food Forum.

Endorsements & Partnerships: Recommended by 50+ specialists; 5 hospitals recently started partnerships



PEOPLE'S FESTIVAL OF INNOVATIONS 2025



DIAGNOVATE PVT. LTD.



Achyut Agrawal
Founder and CEO

Problem Addressed

Over 100 million Indians are diabetic or pre-diabetic, and the number is steadily increasing.

Existing glucose monitoring methods are **painful, invasive, and inconvenient**, requiring frequent finger pricks or costly devices.

This results in low testing compliance, as many **avoid regular monitoring** due to discomfort and expense.

Limited access and affordability in rural and semi-urban areas hinder effective diabetes management.

Technology

Kaere uses an **AI-powered breath analysis** system to estimate blood glucose levels non-invasively.

It detects **volatile organic compounds (VOCs)** in the user's breath that correlate with glucose concentration.

The device combines **advanced gas sensors and machine learning** algorithms for accurate glucose estimation.

Bluetooth connectivity links it to a mobile app for real-time, painless, and accessible monitoring.



Societal Impact

Enables painless and accessible glucose monitoring for everyone.
Promotes early detection and encourages consistent disease management.
Offers an affordable solution for rural and low-income communities.
Reduces biomedical waste and supports India's digital health mission.

Current status

- A functional prototype has been developed and tested with promising results.
- Clinical validation is ongoing with healthcare partners.
- Patent process initiated for the core AI technology.
- Preparing for seed funding and wider pilot testing.



PEOPLE'S FESTIVAL OF INNOVATIONS 2025



Development of Chemo-selectively Tailored Biopolymers for Enhanced Oil Recovery from Non-Producing Oil Reservoirs

Central University of Rajasthan

- Energy & Environment Research Laboratory (EERL)
- Ecoprotek Polymer Pvt. Limited



Mr. Abhishek Tyagi Dr. Akhil Agrawal

Problem Addressed

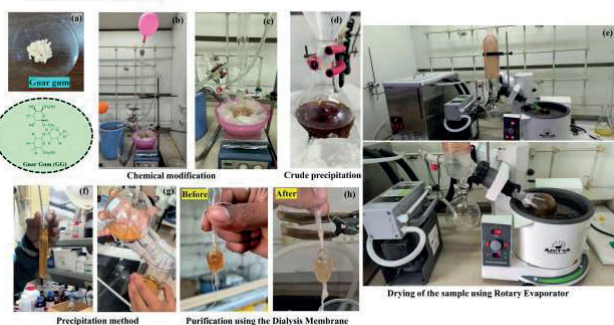
The World's Energy Challenge: After traditional oil recovery methods, billions of barrels of oil remain stubbornly trapped underground in matured or non-producing reservoirs.

- ✓ **50% of oil left:** Conventional Enhanced Oil Recovery (EOR) is ineffective in **harsh reservoir conditions**, leaving massive amounts of oil trapped.
- ✓ **Polymer instability:** Traditional polymers (HPAM, xanthan gum) fail due to **high heat, salinity, and shear stress**.
- ✓ **Low return:** Current EOR methods only recover 3-5% additional oil, making them inefficient.

Technology

- ✓ **Novel Biopolymers:** Developed from natural backbones with **chemo-selective modifications**.
- ✓ **Enhanced Stability:** Tailored via Graft Copolymerization, Esterification, and Nanocomposite functionalization.
- ✓ **Multifunctional:** Acts as **Viscosifier, Wettability Modifier, and Emulsifier** simultaneously within a single framework.
- ✓ **High Recovery:** Demonstrates **10-12% additional oil recovery (3x better)** than conventional polymers).

Chemical Modifications:



Societal Impact

- ✓ **Energy Security:** Supports **Atmanirbhar Bharat** by maximizing domestic recovery and reducing crude oil imports.
- ✓ **Economic Strength:** Even **1-2% incremental recovery** translates into millions of barrels of oil and massive economic value.
- ✓ **Green & Sustainable:** Adheres to **Green Chemistry** principles; supports **SDG 7 (Clean Energy)** & **SDG 12 (Responsible Production)**.
- ✓ **Make in India:** This is a **100% indigenous, high-tech manufacturing product** designed for local production and deployment.

Current status

- ✓ **TRL 4-5: Lab-validated** with **10-12% incremental recovery** confirmed under reservoir-mimicking conditions.
- ✓ **IP Protection:** Patent application **under preparation** to safeguard novelty and industrial relevance.
- ✓ **Next Step:** **12-18 months** to pilot transition (TRL 6).
- ✓ **Recognition:** Winners of **SMART India Hackathon 2023** and **YUKTI Innovation Challenge 2.0, 2024**.

LinkedIn: Abhishek Tyagi CURAJ

Email ID: abhityagi12141@gmail.com, ecoprotek.polymer@gmail.com

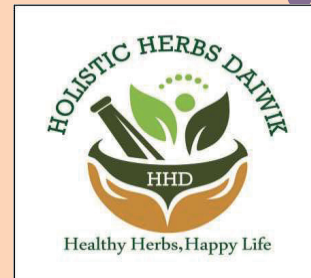
Contact: 9760567694

PEOPLE'S FESTIVAL OF INNOVATIONS 2025



DiabeTreats[®] INNOVATION IN EVERY BITE

NAME of the Innovator/team: Ms. Priyanka Sharma
(Founder of Holistic Herbs Daiwik LLP)



Problem Addressed

- 1. Managing Blood Sugar:** Provides low-glycemic food options to help control blood sugar levels naturally.
- 2. Healthy Snack Alternative:** Fiber-enriched products replace refined snacks, reducing risk of sugar spikes.
- 3. Supports Satiety and Metabolic Health:** High fiber content curbs hunger, aiding in diabetes and weight management.
- 4. Safety and Quality Assurance:** Products are rigorously tested and free from harmful substances.
- 5. Holistic Wellness:** Promotes balanced health by supporting blood glucose, cardiovascular, and digestive health.

Technology

- 1. Controlled Hydrolysis:** Slows starch digestion, minimizing post-meal blood sugar spikes.
- 2. In-Vitro Starch Analysis:** Scientific testing confirms the products' blood sugar control benefits.
- 3. Certified Safety:** NABL, ISO, and BIS lab certifications ensure quality and safety.
- 4. Patented Formulation:** Unique blend of guar gum and curry leaves is patent-protected.
- 5. Nutrient-Dense and Safe:** High in fiber, protein, and free from contaminants for safe, balanced nutrition.



Societal Impact

- 1. Health Awareness:** Promotes natural diabetes management.
- 2. Affordable Support:** Accessible diabetic-friendly options.
- 3. Healthy Snack Alternative:** Reduces reliance on refined foods.
- 4. Quality of Life:** Aids in balanced, active lifestyles.
- 5. Community Focus:** Engages in health events and partnerships.

Current status

- 1. Expanding Product Line:** Cookies, soups, gummies; teas and infused water in progress.
- 2. Patent Secured:** Unique formulations for diabetes.
- 3. Market Presence:** Growing recognition in India.
- 4. Certified Safety:** NABL, ISO, BIS verified.
- 5. Active R&D:** Enhancing efficacy and exploring new solutions.

Website: www.holisticherbsdaiwik.com
Phone: +91 8865899226
Email: info@holisticherbsdaiwik.com
Follow Us: [LinkedIn](#) | [Instagram](#) | [Facebook](#)

Name: Priyanka Sharma (Founder)
Phone: +91 9910621497
Email: sharmapriyanka21992@gmail.com
Follow Us: [LinkedIn](#) | [Instagram](#) | [Facebook](#)



PEOPLE'S FESTIVAL OF INNOVATIONS 2025

Air Conditioner with Desert cooler



Manoj Kumar
Delhi



Problem Addressed

It saves electricity, provides respectively cool air from outdoor, can be utilized as an evaporative cooler, it addresses the urban heat island effect caused by traditional air conditioners by not releasing heat into the environment-essentially functioning as an AC without emitting heat, It also blows cool air from both sides-one from the AC unit itself and the other from a cooler that converts the heat normally emitted by the AC into cool air, The system doesn't require additional energy to run the cooler; it operates within the same energy consumption as a standard air conditioner, It also utilizes the wastewater produced by the AC, which would otherwise be discarded, The system creates an optimal environment for the AC to operate, allowing it to perform more efficiently, consume less energy than a standard AC, and ultimately reduce electricity bills.

Technology

Basically the innovation is a combination of air conditioner and evaporative cooler. It uses heat of condenser for evaporation of water to reduce the temperature of outlet air. Sets of honey comb pads are arranged beside the condenser and water produced as a byproduct of refrigeration cycle or from stored water is dripped over them (over honeycomb pad). Water dripped over the honeycomb pad gets evaporated and waste heat is utilized which results into greater efficiency of air conditioner and cooled air at outside also.



Societal Impact

This innovation enhances cooling efficiency while reducing environmental harm. By reusing condenser heat and wastewater for evaporative cooling, it cuts electricity use and eliminates hot air emissions that contribute to the urban heat island effect. The system delivers cool air indoors and outdoors without extra energy, promoting sustainable cooling practices. Its adoption can lower energy bills, reduce grid load, and support eco-friendly urban development.

Current status

The National Innovation Foundation (NIF) funded about ₹83,000 for the initial model, which was tested and verified successfully. For the new, compact "Air Conditioner cum Cooler," NIF granted another ₹85,000. They have also submitted it for the National Biennial Competition and are covering the annual patent fees. The Patent is granted.

Recently, an Innovation Evaluation Meeting was held during Hackathon 5.0, where MSME and NIFentreC officials reviewed my innovation and forwarded it for further process.



PEOPLE'S FESTIVAL OF INNOVATIONS 2025



Nirmal Kumar
Co-Founder

Medlarks Private Limited



Problem Addressed

Hospitals are meant to heal, yet **Catheter-Associated Urinary Tract Infections (CAUTIs)** remain a leading cause of Hospital-Acquired Infections, accounting for over 34% of cases. CAUTIs lead to prolonged hospitalization of up to **15 additional days, high morbidity, 359,000 deaths globally, and a \$31 billion economic burden** annually- highlighting a critical need for an effective prevention solution.

Technology

This novel add-on device targets both **extraluminal and intraluminal infection routes** by preventing endogenous and exogenous bacteria from ascending to the bladder. It uses UV irradiation for disinfection and low-frequency ultrasound/surface acoustic waves to inhibit biofilm formation **without causing antimicrobial resistance (AMR)**. Easily attachable between catheter and drainage tube, it could prevent up to 80–100% of CAUTI.



Societal Impact

UROVIB can significantly reduce the burden of CAUTI, lowering patient morbidity, mortality, and emotional distress. By preventing infections, it minimizes prolonged hospital stays and financial strain on families and healthcare systems. Improved patient outcomes enhance trust in healthcare services and free up hospital resources. Its ease of adoption ensures widespread use, promoting safer care practices and contributing to a healthier, more resilient society.

Current status

The **UROVIB** device has successfully progressed into the **clinical validation phase**. We have initiated clinical studies and installed the device on catheterized patients in the **ICU at AIIMS, New Delhi**. Initial observations are underway to assess safety, usability, and preliminary efficacy in real-world conditions.



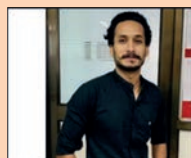
Website: www.medlarks.com

Email id: medlarks2022@gmail.com



PEOPLE'S FESTIVAL OF INNOVATIONS 2025

NanoTherapX Innovation Pvt. Ltd.



Dr. Roshan Keshari, Bioengineer
CTO, PhD and Post-Doc in BSBE
IIT Bombay



Prof. Rohit Srivastava Principal
Advisor, Himanshu Patel Chair
Professor BSBE IIT Bombay



Prof. Shamik Sen
Principal Co-Advisor
BSBE IIT Bombay



**Nano
TherapX**
INNOVATION PVT. LTD.



Problem Addressed

- ✓ **Psoriasis** is a chronic autoimmune disease that affects **125 million** people around the globe and over **20 million** in India.
- ✓ Current therapies include **corticosteroids** and **biologics**, which have significant limitations. **Corticosteroids**, for instance, can cause skin thinning, immune suppression, and treatment fatigue with prolonged use.
- ✓ **Biologics** are also very expensive and require clinical supervision, making them inaccessible to the majority of patients, especially in rural and underserved regions.
- ✓ This **creates a gap** that leaves millions without sustainable care, and leads to chronic discomfort, loss of productivity, social stigma, and significant economic burden.

Technology

- ✓ **Next-generation, smart, safe, non-steroidal, patient-friendly nanogel formulation that bridges the divide between efficacy, safety, and affordability.**
- ✓ The phytonanogel system is based on eugenol-filled lipid nanoparticles within a hydrogel matrix.
- ✓ It allows the drug to penetrate deeply into the skin and also provides its **controlled and sustained release** in the areas affected by psoriasis.
- ✓ A **non-steroid, hypoallergenic, and herbal product** that guarantees safety even in long-term applications.
- ✓ It directly interferes with the interaction between keratinocytes and immune cells to activate the anti-inflammatory process at the molecular level.
- ✓ A **scalable and low-cost platform (<₹10 per dose)** that can be used for other chronic skin diseases as well.

Recognition & Awards

- Prix Galien Nomination-2025
- CAS Future Leaders Top 100- 2025
- Outstanding Contribution to Pharmaceutical Research- Informa Market- (2024)
- Gandhian Young Technological Innovation Award-SRSTI, Govt Of India- (2024)
- Visiting Ph.D. Scholar-Max Planck Institute, Supported by DAAD Germany – 2023
- DAAD In-region Ph.D. Scholarship based on this Project-(2020-25)



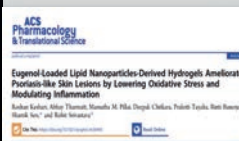
IIT Bombay PhD scholar Roshan Keshari bags innovation award for psoriasis care

Roshan Keshari, a PhD scholar, won the Gandhian Young Technological Innovation (GYTI) Award-2023 for his project "Phytonanogel Shield," offering precision care for psoriasis patients.

Gandhian Young Technological
Innovation Award-SRSTI, Govt Of
India



CAS Future Leaders Top 100



Societal Impact

- ✓ It provides an **affordable, steroid-free, and nanotechnology-based alternative** for over 20 million Psoriasis patients in India.
- ✓ It improves the quality of patient care by reducing pain.
- ✓ It provides healthcare access for rural and underserved people.
- ✓ **Lowers the treatment cost by almost 90%.**
- ✓ It also supports **Atmanirbhar Bharat** and **Make in India** through accessible nanomedicine innovation.

Current status

- ✓ **In vitro studies completed:** confirmed safety, antioxidant, and anti-inflammatory efficacy on keratinocyte and immune cell models.
- ✓ **In vivo validation completed:** demonstrated significant healing in Imiquimod-induced psoriatic mouse model.
- ✓ **Patent granted (No. 53382) and results published in a leading ACS journal.**
- ✓ Preclinical (GLP) studies for toxicity, PK/PD, and safety: ready for initiation.
- ✓ Clinical dossier preparation (CT-11/Form 29) underway for Phase I/II trials with CDSCO.

Dr. Roshan Keshari, PhD & Post Doc- IIT Bombay

Email ID: roshankeshari220@gmail.com

Website: <https://nanotherapx.com>



**Nano
TherapX**
INNOVATION PVT. LTD.



PEOPLE'S FESTIVAL OF INNOVATIONS 2025



DON: Diet Optimized Nutrition Bot

Radhika Rastogi

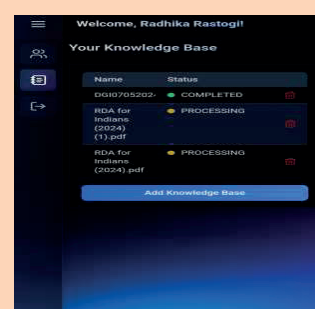
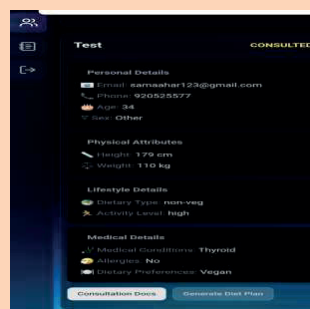
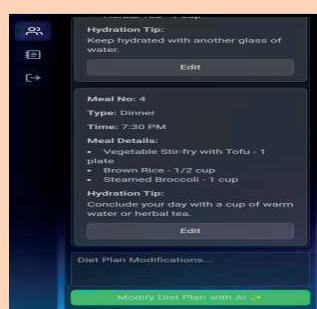


Problem Addressed

Access to personalized, scientific, and affordable diet consultancy remains limited, particularly for individuals managing chronic conditions like kidney disorders, PCOD, and hypertension. Conventional diet consultations lack scalability and continuous guidance.

Technology

DON (Diet Optimized Nutrition Bot) is an AI-powered diet optimization assistant built on Natural Language Processing (NLP) models. It understands user queries in natural language and generates personalized, condition-specific dietary recommendations. The system integrates Samaahar's validated clinical nutrition data, AI-driven analysis, and conversational intelligence to deliver real-time, adaptive diet support.



Societal Impact

DON will democratize access to professional dietary guidance, empowering individuals across all socio-economic and geographic segments. It can aid in managing chronic diseases, will promote preventive healthcare, which will enhance nutritional and diet awareness through intelligent and inclusive AI technology.

Current status

Alpha Testing Phase – Initial group testing was conducted to analyze system accuracy, conversational effectiveness, and user interaction flow. The feedback from these tests is being used to refine DON's functionality, improve its personalization accuracy, and enhance user experience for the next testing phase.



PEOPLE'S FESTIVAL OF INNOVATIONS 2025



FOUNDER

ReNovaTiss

Team: Saumya Dash & Sujata Mohanty



Need of Bone Implants

- The increasing incidence of bone diseases
- Road accidents, sports injuries are driving the bone grafts and substitutes industry

The market size is increasing with a CAGR 6.6% from 2025 to 2030

Challenges with Current implants

Bone Grafts (Auto/Allo grafts)

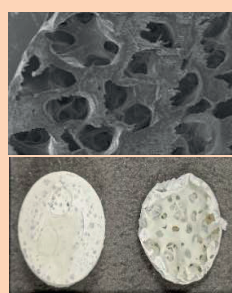
Current Bone Substitute

- | | |
|--------------------------------|------------------------------------|
| ❖ Limited supply | (Metallic/composite) |
| ❖ Donor site morbidity | ❖ Poor Osseo-integration |
| ❖ Immunogenicity | ❖ Infection |
| ❖ Risk to disease transmission | ❖ Post-implant discomfort/pain |
| | ❖ Requirement of secondary surgery |

Our Technology

- Novel composition with easy manufacturing
- FDA-approved starting materials
- Moldable shape, Size, Properties
- Available in multiple forms
- Broad application
- Bioactive and efficient carrier of Biomolecule
- Accelerated bone regeneration
- Inherent antimicrobial property

Natural ECM component and Bone mineral reinforced, Biomolecule loaded, Bio-compatible, Bio-degradable, Bio-Active, Osteo conductive, Osteo inductive, Osteo-integrative, Radio Opaque, MRI Compatible implant



Porosity: 60 to 75%



Shape: As per need



Mechanical Strength: 12 to 21MPa



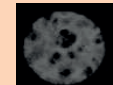
Suturable



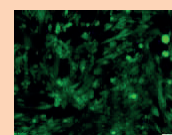
Available as bioactive filler powder



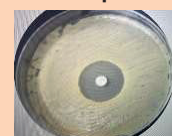
Biodegradable



Radio opaque



Biocompatible



Antimicrobial

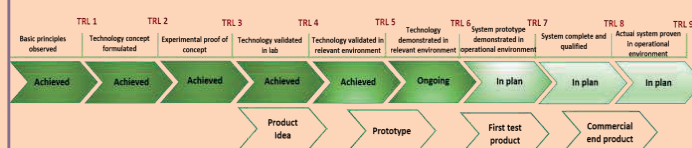


Pre-clinically tested

Societal Impact

- Reduced need for **secondary surgery**
- Lower rates of **implant-associated infection**
- Improved **patient outcomes and mobility**
- Enhanced access and equity: a cost-effective indigenous solution
- Economic benefits
- Strengthening India's medical device/biomaterials ecosystem
- Environmental and sustainability benefit

Current status



PEOPLE'S FESTIVAL OF INNOVATIONS 2025



SHASHVI BIOTECH PVT LTD
MAMOSURE® - Patented Phyto-Therapeutic Oral
Product for Breast Cancer Care & Prevention

ASHVANY BANSAL
INNOVATOR, FOUNDER & CMD



Problem Addressed

Breast Cancer:

The Leading Cause of Female Cancer Mortality Worldwide.

- 670,000 deaths annually
- One death in every 47 seconds
- 30% of all female cancers in India
- Growing at 11% annually
- High recurrence create massive burden.

Technology

Mamosure® – A Patented Phyto-Therapeutic Oral Innovation for Breast Cancer Care & Prevention.

- Scientifically validated for anti-proliferation, apoptosis induction, and metastasis inhibition.
- Safe and non-toxic.
- Standardized Phyto-based bioactive.
- Globally patented in 12 countries.

Mechanism of Action:

- It has proved cyto-protective activity.
- It shows to enhance non-toxicity in pre-clinical oncology assays.
- It boosts innate & adaptive immunity
- It improves appetite and metabolic function.
- It may reduce oxidative stress, and restores hematopoietic levels post-therapy.
- It may restores neurological and metabolic balance during recovery.
- It may promote faster cellular healing and systemic restoration.



**Prevention is
Better
Than Cure**

Societal Impact

- Bridges diagnostics with prevention.
- It may enhance life expectancy & post-therapy quality of life.
- Promotes women's health empowerment.
- Supports Make in India healthcare vision.

Current status

- Patented globally
- Pre-clinical trials done at ACTREC & HI
- Breast Cancer Care Product - ready to launch
- FSSAI registered & ISO Certified



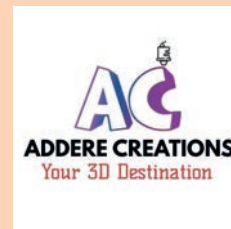
PEOPLE'S FESTIVAL OF INNOVATIONS 2025



ROHAN R
Founder & CEO

Addere Creations Pvt. Ltd.

3D Printed Casts for Limb Fractures



Problem Addressed

Traditional plaster or fiberglass casts come with several significant drawbacks that a 3D-Printed solution aims to solve:

Hygiene and Comfort: Traditional casts are often itchy, smelly, non-breathable, and can't get wet, making bathing and daily life difficult for the patient. They can also cause skin irritation and pressure sores.

Weight and Bulk: They are heavy and cumbersome, limiting mobility and making it harder to wear certain clothes.

Imprecision in Fit: They are hand-applied, which can lead to a less-than-perfect fit, potentially causing discomfort or not providing optimal support for healing.

Monitoring Difficulty: The injured area is completely obscured, making it hard for doctors to check on skin health or for patients to apply creams or treatments.

Technology

3D Scanning: The patient's injured limb is precisely scanned using a **3D scanner** or even a high-end smartphone camera to create an exact digital model of the arm or leg. This ensures a **perfect, custom fit**.

Computer-Aided Design (CAD): The digital model is imported into specialized software. A technician then designs the custom cast around the limb model, often using a **latticework** to maximize breathability while maintaining structural integrity.

Additive Manufacturing (3D Printing): The final digital design is sent to a **3D Printer** (typically using Fused Deposition Modeling (FDM) technology) to build the cast layer by layer. Common materials used are **biocompatible, durable plastics** like Poly Lactic Acid (PLA).

The final product is lightweight, breathable, water-resistant, and compatible with sterilization processes.



Societal Impact

The widespread adoption of 3D-Printed casts can lead to several positive impacts:

Improved Patient Quality of Life: Patients can shower, swim (if the material allows), and experience significantly less itching and odor, leading to better compliance with treatment and a more comfortable recovery.

Sustainable Healthcare: The process can potentially reduce waste compared to traditional casting materials and may be more cost-effective in the long run due to a streamlined fitting process and reduced need for re-casting due to poor fit.

Personalized Medicine: It's a prime example of **personalized medicine**, where treatment is tailored exactly to the individual's anatomy, leading to better therapeutic outcomes.

Current status

Prototype developed and validated for fit, alignment, and comfort.

Functional testing completed to assess strength, usability, and performance.

Orthopedic experts consulted for design and clinical feedback.

Pilot studies are being conducted for real-world testing in healthcare settings.

Preparing for **partnerships** with hospitals and private clinics.

Website: www.adderecreations.com

Email: adderecreations@gmail.com





Ananya Madhav
Founder & CEO

DripStop: An automated intravenous drip monitoring and controlling device



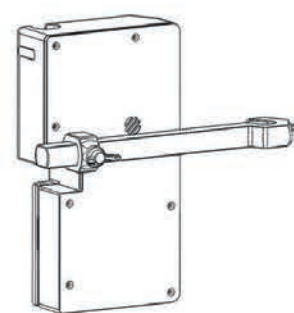
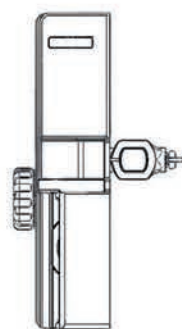
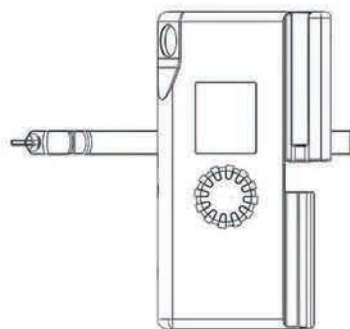
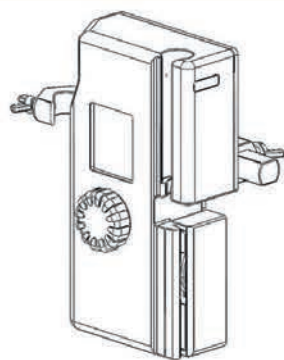
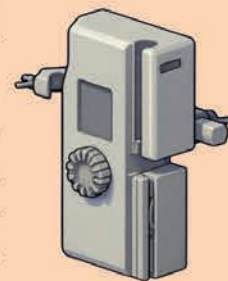
Problem Addressed

Intravenous(IV) drug administration remains one of the most efficient and reliable methods of drug delivery. In India, IV therapy continues to rely on manual monitoring by healthcare staff, which increases the risk of errors and patient complications.



Technology

DripStop is an automated intravenous drip monitor and control device that can assist nurse to manage multiple IV therapy flows simultaneously from her nursing station or smartphone.



Societal Impact

India faces a 2-million nurse shortage, with just 1.96 nurses per 1,000 people against the WHO's recommended 3. DripStop doesn't solve the staffing gap, but it makes every nurse more effective through smart, affordable automation.



Current status

At a technology readiness level of 4, For All Health is gearing up for clinical trials, the next milestone on our path to market launch.



PEOPLE'S FESTIVAL OF INNOVATIONS 2025



Dr Mahantesh Sajjan

EXCEL INNOVATIONS

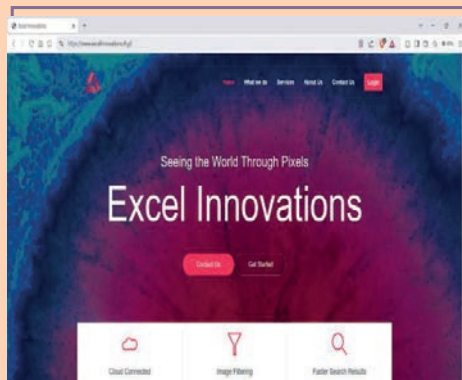


Problem Addressed

- Manual chilli grading is inconsistent and subjective, causing biased quality assessments and inaccuracies in farmers' and traders' evaluations.
- Laboratory-based chemical testing is slow and expensive, delaying chilli quality analysis and reducing efficiency in meeting high oleoresin industry standards.

Technology

- **Quick Chilli Grade SaaS Platform:** A cloud-based AI system for real-time chilli grading, analytics, and data management, accessible to farmers, traders, and processors via web interface.
- **Handheld Device:** An on-premise, portable vision-based grading unit enabling instant, offline chilli quality evaluation directly at farms or markets.
- **Mobile App:** A smartphone application that connects with both SaaS and handheld systems, providing users instant grading results, reports, and traceability features.



Societal Impact

- **Farmer Empowerment:** Provides smallholder farmers with reliable, objective chilli grading, ensuring fair pricing and reducing dependence on intermediaries.
- **Income and Market Access:** Enables better market positioning and premium pricing for high-quality produce, improving livelihoods.
- **Waste Reduction and Quality Compliance:** Minimizes post-harvest losses and supports adherence to export quality standards, strengthening the overall agricultural economy.

Current status

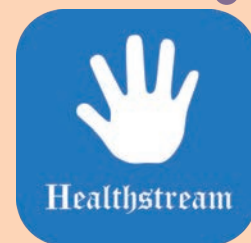
- **Developed and Tested:** Vision-based grading models and handheld device are fully functional.
- **Field-Proven:** Successfully tested at FPOs, trading centres, and processing facilities with demonstrated ~90% accuracy and usability.
- **Deployment-ready:** The SaaS platform, mobile app, and on-premise device are in the prototype stage and will be prepared for scalable commercial rollout.



PEOPLE'S FESTIVAL OF INNOVATIONS 2025



HEALTHSTREAM Pvt Ltd



Abhishek Rhisheekesan

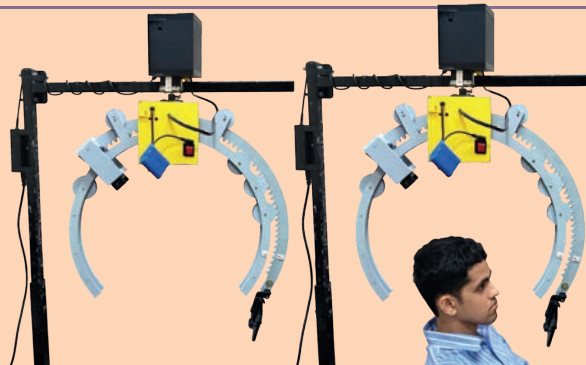
Problem Addressed

Assessments of hand & craniofacial disorders

- lack a standard objective measure
- require direct clinical contact
- not archived
- focus on 2D images and lack 3D details

Technology

An AI-driven, contactless 3D imaging tool, uses computer vision to convert 2D hand & face videos into 3D models, enabling assessment of severity of hand & craniofacial disorders, offering a cost-effective, archivable, remote monitoring solution using mobile phones.



Societal Impact

For every specialist visit to Bangalore Hospital, manual laborers/patients spend ₹1700 on travel, food, and a missed day's wages.

With Healthstream, we can diagnose their condition from home for just ₹350. That's ₹1350 saved—money back in their pocket—and only a fraction of their day's wage lost, if any at all.

Imagine the ripple effect of that savings across millions of patients—we're not just improving healthcare; we're making it financially sustainable for patients.

Current status

We have deployed our Hand turntable at

- St John's Medical College, Bengaluru
- Christian Medical College, Vellore

We have deployed our craniofacial turntable at

- Sanjeev Gandhi Institute of Medical Science (SPGIMS)
- St John's Medical College, Bengaluru

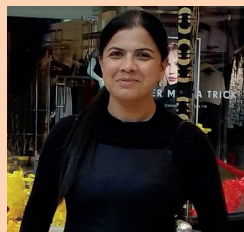
One patent filed for Turntable design for capturing images/videos of hand disorders

Our paper is accepted in "Hand surgery and Rehabilitation" journal .



PEOPLE'S FESTIVAL OF INNOVATIONS 2025

MAMMA MILLS



ANITHA SADANAND



PROBLEM ADDRESSED

In today's busy lifestyles, parents struggle to find healthy, preservative-free, and natural food options for their families. Most instant mixes and baby foods in the market contain additives and refined ingredients. Mamma Mills addresses this by offering 100% natural, millet-based, ready-to-cook and ready-to-eat foods that are nutritious, convenient, and completely free from preservatives and artificial additives.

TECHNOLOGY

Mamma Mills combines traditional recipes with modern, hygienic processing. Using cold grinding, solar drying, and air-tight packaging, the brand ensures long shelf life without preservatives while retaining maximum nutrition and authentic taste. All products are made in small batches for consistent quality.



SOCIETAL IMPACT

Mamma Mills empowers local women and farmers by creating rural employment and encouraging sustainable farming. The brand promotes millet consumption as part of India's return to healthy, traditional food systems, contributing to improved community nutrition.

CURRENT STATUS

Mamma Mills is operational and expanding with strong product demand across multiple channels. The team is focused on scaling production, strengthening retail networks, and expanding into institutional and export markets.



PEOPLE'S FESTIVAL OF INNOVATIONS 2025



P.K. Faisal
Founder / CEO

Mob: +91 9731602860
Email: faisal@neofysis.com
www.BioTraptor.com

**Bio
Traptor**
BY NEOFYSIS BIOTECH PVT LTD

Problem Addressed

The growing resistance of mosquitoes to commonly used insecticides such as Transfluthrin and DEET poses a significant challenge to vector control. Simultaneously, the widespread use of these chemical repellents has raised concerns about their adverse impacts on human health and environmental safety. Our idea addresses the urgent need for an effective and eco-friendly alternative to conventional mosquito control methods.

Technology

BIO-SMART TECHNOLOGY: Mosquitoes searching for human blood are instinctively drawn to specific signals like our body odour, heat, humidity, and the carbon dioxide we exhale while breathing. These natural cues guide them to their target blood meal host. Bio-Traptor harnesses this natural behaviour by mimicking all the key attractants mosquitoes seek, luring them into the trap for effective elimination.

BIO TRAPTOR - INDOOR



BIO TRAPTOR - OUTDOOR



Societal Impact

Bio Traptor provides a safe, sustainable, and health conscious solution to mosquito control. By eliminating mosquitoes without the use of toxic chemicals or harmful emissions, it helps reduce the incidence of mosquito-borne diseases such as dengue, malaria, and chikungunya. This leads to improved community health and reduced healthcare costs.

Current status

Bio-Traptor (indoor) has progressed beyond the prototype stage and is making a strong market impact. With over **1,000 paid customers**, many continue to repurchase our consumable **"Catch Boosters,"** which mimic human body odor to attract mosquitoes. We have also completed **prototyping the outdoor version**, now ready for **production design**. Bio-Traptor stands as a **trusted, innovative mosquito control solution**, combining **proven performance** with **growing consumer confidence**.

PEOPLE'S FESTIVAL OF INNOVATIONS 2025



Dr. Varun Prabhuji

Roots to Cusps® Private Limited PriciGuide® System



Problem Addressed

Tooth structure is irreplaceable — once drilled away, it's gone forever.

The need of the hour is a guided, conservative, predictable approach that preserves anatomy instead of sacrificing it during treatment.

Technology

Image-based Navigation and Robotics

CBCT based, custom 3D-printed templates guide the bur with pinpoint precision, reducing time, errors, and excessive tooth removal.



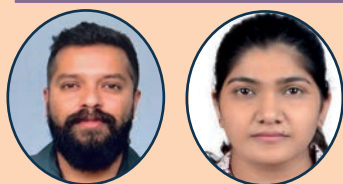
Societal Impact

- Faster and safer treatments
- Fewer complications
- Preserves natural tooth structure
- Ensures standardization
- Benefits patients, and clinicians

Current status

- 1 granted patent
- 8 institutional collaborative case studies completed
- 8 peer reviewed publications
- 2 innovation awards received

PEOPLE'S FESTIVAL OF INNOVATIONS 2025



VAPAC BIO-PLASTICS PRIVATE LIMITED



Innovator: Vikas Shetty

Problem Addressed

The automotive, electronics, home appliance, construction industries rely heavily on **LDPE-based transparent films** for internal packaging — protecting products from dust, moisture, and abrasion during transport. However, these LDPE materials are **non-biodegradable**, generate **massive landfill waste**, and contribute to **microplastic contamination** in manufacturing ecosystems.

There is a pressing industrial need for a **drop-in, transparent, and compostable alternative** that can deliver the same mechanical performance as LDPE without compromising sustainability or cost-efficiency.

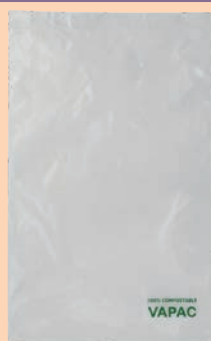
Technology

VAPAC Bio-Plastics Pvt. Ltd. has developed an **advanced transparent compostable film** that replicates the physical and functional properties of LDPE while remaining **fully biodegradable and compostable**.

Key Technological Features:

1. **Calcium-free formulation** offering **LDPE-equivalent tensile strength, elongation, flexibility, and optical clarity**.
2. **High-temperature resistance and tear durability** suitable for packaging **automotive spares, electrical wires, lighting accessories, electronics, and kitchenware appliances**.
3. **Proven biodegradability:** >93% aerobic degradation in 105 days with 95% plant germination and 96% earthworm retention, ensuring full soil safety.

This innovation combines **material science and environmental engineering** to deliver a **cost-effective, high-clarity, sustainable packaging solution** for industrial and consumer sectors.



LAY FLAT LINERS



Societal Impact

- Enables OEMs, component suppliers, and construction brands to **replace LDPE packaging without operational changes or cost penalties**.
- Reduces **post-industrial and post-consumer plastic waste** at source, supporting India's transition toward a circular packaging economy.
- Aligns with **CPCB compostable certification norms** and **EPR obligations**, aiding manufacturers in achieving compliance effortlessly.
- Demonstrates an **indigenous alternative** to fossil-based polymers, advancing India's material sustainability and green manufacturing goals.

Current status

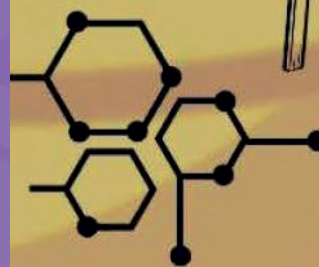
- **Pilot-scale production (400 kg/day)** established using monolayer blow film machine, DD bottom sealing machine, Hot Sealing Machine, 62.5 KVA DG, 2477 Industrial Power Line, 24/7 Water Source.
- **Validated under ISO 17088** for compostability and eco-toxicity.
- **Industrial trials** underway with automotive, electrical, and packaging converters.
- **Scale-up ready** for co-development with OEMs and packaging manufacturers.
- **Funded** : C-CAMP under Agri Grand Challenge III, BIRAC SIIP, TDB Ministry of Science & Technology, Government of Karnataka (Subsidy)

Website : www.vapac.in

Email ID : info@vapac.in, sales@vapac.in

Address : Unit 1, Sy. No. 92, Lakya Village, Chikkamagaluru 577168





Grassroots Innovations



PEOPLE'S FESTIVAL OF INNOVATIONS

2025



Cow-Dung Pot Making Machine

Gopalsinh Suratiya
Vadodara, Gujarat



Innovation Video

Problem Addressed

Plastic bags are frequently used in nurseries to grow plant saplings. However, they have several disadvantages, including being non-biodegradable, lacking porosity, and being environmentally unfriendly. Additionally, after germination, the bag must be torn open to allow root growth; if not torn properly, it can harm the plant. Therefore, innovators decided to create pots from cow dung.

Technology

Gopalbhai Suratiya handcrafted a simple clay pot, while Pareshbhai designed a machine for this purpose. Both of them have been associated with the Honey Bee Network for a long while. Cow dung, wheat flour (20:1 ratio), and agricultural residues such as wheat husk were used as the primary raw materials for preparing the pot. To protect the pot from termites, spoiled bajra flour or powdered castor shells, or neem leaves can be added to the material, as they have insecticidal properties.



Societal Impact

The pot is biodegradable and fertile, and its manufacturing process is non-polluting. Its slow water absorption rate prevents nutrient leaching. Plants grow faster in cow dung pots, which can also be used to sow costly seedlings directly in the field, ensuring faster growth. Employment is generated through local manufacturing and sourcing of cow dung for making cups.

Current status

Pareshbhai has sold over 3,500 units of their innovative product. In 2017, Gopalbhai and Pareshbhai filed a patent for this machine (Application No. 201721021475 A). The innovation was also displayed at the Festival of Innovation at Rashtrapati Bhavan, organised by HBN and NIF. He was discovered during third Shodhayatra in 1999 by Honey Bee Network anchored by SRISTI and supported by GIAN.



PEOPLE'S FESTIVAL OF INNOVATIONS

2025



Combi Tillage Equipment

Maharaj Singh Lodhi
Raisen, Madhya Pradesh



Innovation Video

Problem Addressed

In traditional farming, multiple tools are used for ploughing, levelling, and tilling, increasing time, labour, fuel costs and operational costs. Small and marginal farmers, in particular, face challenges due to the high cost and complexity of using multiple tools for land preparation.

Technology

Maharaj Singh Lodhi developed the Combi Tillage Equipment, a multifunctional implement that combines ploughing, tilling, and soil levelling in a single operation. Easily attachable to a tractor, it suits various soil types, enhances aeration, and improves productivity while saving time and resources.



Societal Impact

The innovation reduces farming costs and labour, making mechanised tillage accessible to small and marginal farmers. It saves fuel and time, enabling greater cultivation area and efficiency. This sustainable and affordable technology improves rural livelihoods and productivity.

Current status

Demand for the equipment is strong across regions, but production remains limited due to insufficient funds. Maharaj Singh Lodhi has sold around 70 machines so far and plans to scale up production to 300 to 400 machines with financial support or investment. He has not yet received external funding, but his innovation is locally recognised and appreciated by farmers for its cost-effectiveness and usefulness. Also see <https://www.nif.org.in/innovation/combi-tillage-implement/1064> honoured by NIF at 10th Award function 2019.



PEOPLE'S FESTIVAL OF INNOVATIONS

2025



3-Tank Hybrid Biogas Digester System

Aman Manojbhai Vasoya
Amreli, Gujarat



Innovation Video

Problem Addressed

Traditional biogas plants are inefficient and costly to operate. Mechanical mixing consumes about 50% more power and is time-consuming. Slurry jams and scum cause frequent downtime, while wide tanks waste land and 'short circuit digestion' leads to a loss of 12–20% of potential methane (CH_4). Diverse feedstocks also require external pre-treatment.

Technology

The system is a compact hybrid setup featuring high-height, low-diameter underground digesters. It employs Gas Recirculation Mixing (GRM) through a custom non-blocking nozzle, requiring only 10–15 seconds of mixing per 1,000 litres. This process saves about 50% power and 60% time. Multi-stage, valve-controlled digestion ($\approx 15 \rightarrow 20 \rightarrow 50$ days) eliminates short-circuiting and enhances methane (CH_4) yield by 12–20%. The plan now includes integrating a heating coil at the nozzle to ensure uniform heat distribution.



Societal Impact

The innovation converts bio waste into clean fuel and bio-fertiliser. It reduces land and energy use, creates rural jobs and enterprises, and improves plant reliability and output quality.

Current status

The working prototype achieves 10–15 seconds of mixing and demonstrates a 12–20% gain in methane yield. It has received a Rs 20,000 Top Ideator Award from GETCO and GIAN. The team is now moving toward its first commercial LOIs and seeking funds to build a commercial-scale demo with integrated heating. Also see <https://gian.org/gujarat-energy-idea-awards-2024-25/>



PEOPLE'S FESTIVAL OF INNOVATIONS

2025



Semi-automatic Solar Panel Recycling Technology

Amit Gupta
Gaziabad, Uttar Pradesh



Innovation Video

Problem Addressed

With the rapid adoption of solar energy, many solar panels are nearing the end of their lifecycle. Their disposal poses a major environmental challenge, as they contain glass, silicon, aluminium, and toxic elements such as lead and cadmium. India currently lacks an efficient, cost-effective, and eco-friendly recycling system for these end-of-life solar panels, resulting in growing waste and pollution.

Technology

Amit Gupta has developed a 'Semi-Automatic Solar Panel Recycling Technology' that efficiently recovers valuable materials such as Copper, glass, aluminium, Silicon, Plastic from discarded panels. The semi-automated dismantling, separation, and purification process reduces manual effort, maintains high recovery efficiency, and minimises environmental impact and energy use compared to conventional methods.



Societal Impact

This innovation supports India's commitment to sustainable energy and circular economy by providing an eco-friendly solution for solar waste management. It reduces landfill burden, prevents toxic leakage into the environment, and recovers materials that can be reused in new panels or other industries. The technology has the potential to create new 'green jobs' and build a sustainable recycling ecosystem, supporting both environmental and economic resilience.

Current status

Amit Gupta has successfully demonstrated the semi-automatic recycling process at pilot scale, achieving efficient material recovery. The project has received positive feedback from solar industry stakeholders and recycling units. While external funding is yet to be secured, interest from potential partners is growing. With adequate financial or institutional support, Amit plans to scale up production and deploy full-scale units. Also see <https://gian.org/gpcil-gujarat-energy-innovation-awards-2024-25/> for the energy innovation award he got sponsored by GPCIL in partnership with GIAN.



PEOPLE'S FESTIVAL OF INNOVATIONS

2025



Chandan (Sandalwood) Paste Making Machine

Subhash Vasantrao Jagatap
Jalgaon, Maharashtra



Innovation Video

Problem Addressed

Sandalwood paste is still made by hand, a slow and labour-intensive process that is often unhygienic and inconsistent. Meanwhile, rising demand from temples, Ayurveda, and cosmetics requires higher volume, uniform texture, and purity. Manual rubbing wastes costly wood, depends on scarce skilled labour, and lowers yield, increasing overall costs.

Technology

The 'Chandan Shreejan Yantra' is a low-RPM, controlled-pressure grinder that replicates hand rubbing without heat damage, preserving the wood's natural aroma and oils. Variable controls allow operators to adjust speed and pressure based on wood hardness and oil content. Designed with a stone or food-grade ceramic surface, a direct-drive motor, adjustable speed and pressure, and a stainless-steel enclosure, the device offers overload and temperature protection for hygienic, uniform output.



Societal Impact

This innovation enables clean, scalable, and standardised paste production while preserving traditional methods. It promotes micro-enterprises and job creation, especially among women's self-help groups (SHGs). A closed, food-grade process enhances hygiene, improves public health, and builds consumer confidence. It also increases yield by reducing sandalwood waste and lowers operating costs for temples and small producers.

Current status

The enterprise has sold over 150 units across regions, with around 22 units sold in the last fiscal year. The product line includes four variants: Jumbo (1 HP, ~2.5 kg/h), Mini (0.5 HP, ~1 kg/h), Nano (0.25 HP, ~200 g/h), and a specialised Ayurvedic Herbs Grinding model for botanical materials beyond sandalwood. Strong demand and efficient production underpin growth. Near-term priorities include expanding service coverage, enhancing training, and formalising SOPs for institutional buyers. He was awarded by Honey Bee Network and NIF in 2005 at third award function, see <https://nif.org.in/innovation/chandan-paste-making-machine/1099>



PEOPLE'S FESTIVAL OF INNOVATIONS

2025



Tractor Mounted Multi-Crop Harvester

Jhabarmal Khokhar
Sikar, Rajasthan



Innovation Video

Problem Addressed

Farmers growing small-seeded, low-height crops like isabgol, cumin, and pulses lack affordable and efficient harvesting machines. Traditional cutters leave stubble, cause grain loss, and rely on heavy manual labour-8 to 10 workers per bigha, raising costs and risking rain damage. Jhabarmal Khokhar developed a solution to reduce labour dependency and enable timely, clean harvesting.

Technology

A tractor-mounted rear harvester designed for small-seeded crops, featuring a dual-bar pickup with spring tines for gentle crop lifting and a wide serrated cutter bar for clean, ground-level cutting. Dual hydraulic arms provide height and angle adjustment, while an enclosed trough collects harvested material efficiently. Powered by the tractor's PTO, the machine integrates pickup, cutting, conveying, and collection in one unit-simple, durable, and ideal for small and marginal farmers.



Societal Impact

The machine replaces the work of 40-50 labourers daily, cutting costs and preventing crop loss from rain. It ensures clean harvesting of small-seeded crops like isabgol and cumin, increases profitability, and promotes self-reliance through locally repairable design, acting as a major productivity booster for small farmers.

Current status

Field-tested and widely used, the machine has proven efficient, reliable, and cost-effective. Its demand is growing, and farmers report higher yields, lower costs, and timely harvesting. Innovator Jhabarmal continues to refine the design based on field feedback. He was awarded by NIF in 2019, see Honey Bee, 30(3 & 4) 32-40, 2019 And

<https://share.google/48U5He3J6shuhdM6n>



PEOPLE'S FESTIVAL OF INNOVATIONS

2025



Clove Bud Separator

Shine Joseph
Kozhikode (Calicut), Kerala



Innovation Video

Problem Addressed

Clove bud separation is a manual, labour-intensive, time- and effort-consuming process. This method often leads to operational inefficiency, inconsistent quality, low productivity, and high labour costs, especially during peak harvest seasons when labour is scarce. These challenges hinder scalability and reliability in clove processing.

Technology

Shine Joseph has developed an innovative 'Clove Bud Separator' that efficiently separates clove buds from stems with minimal damage. It uses a simple mechanical system for clean separation, reduces wastage while preserving aroma and quality. The machine can be operated by a single person easily and suits both small and large-scale spice processors.



India's First Clove Bud Separator



Societal Impact

This device reduces manual drudgery and boosts productivity for farmers and spice processors. It enables timely post-harvest processing, improving product quality and income. By mechanising a tedious task, the innovation helps tackle rural labour shortages and supports small-scale agro-processing enterprises in spice-growing regions.

Current status

Shine Joseph has developed and demonstrated multiple working units of the machine. The innovation has received positive feedback from clove growers and processors, leading to increased demand for more units. He has sold several machines and continues to refine the design based on user feedback. With financial support or partnerships, he aims to scale production and expand to major spice-producing states. He was awarded by NIF in 2023 <https://www.nif.org.in/innovation/clove-bud-separator/1149>



PEOPLE'S FESTIVAL OF INNOVATIONS

2025



Compost Aerator

Gurmail Singh Dhonsi
Sri Ganganagar, Rajasthan



Innovation Video

Problem Addressed

Every year, farmers struggle to manage paddy straw and crop residue, often burning it because affordable composting options are unavailable. This practice causes severe air pollution and reduces soil fertility.

Technology

Gurmail Singh Dhonsi developed a 'Compost Aerator' that helps farmers convert stubble, farm waste, and dung into high-quality compost quickly, affordably and directly in the fields. The machine efficiently aerates and mixes organic waste, producing compost at an incremental cost of just Rs. 4 per ton and eliminating the need for stubble burning.



Societal Impact

The innovation reduces stubble burning, improves soil health, lowers fertiliser costs, and supports sustainable organic farming. It helps farmers manage bio waste responsibly while boosting productivity.

Current status

The machine has already been adopted by farmers across Punjab and neighbouring states, earning praise for its simplicity and quick results. Gurmail Singh is now enhancing its capacity and seeking partnerships to expand access to more farming communities. He was awarded by NIF in 2012, see https://nif.org.in/innovation/compost_aerator/598. His innovation was also presented at Indo ASEAN innovation meet <https://share.google/cvmp2dRmK67LS0X0> in 2022.



PEOPLE'S FESTIVAL OF INNOVATIONS

2025



Groundnut Digger and Disc Harrow Seed Drill

Mansaram and Mala Ram Suthar
Churu, Rajasthan



Innovation Video

Problem Addressed

Groundnut cultivation is labour-intensive, particularly during digging and sowing. Manual operations lead to high costs, time delays, and crop losses from pod damage and uneven seed placement.

Technology

Innovators have developed a 'Groundnut Digger and Disc Harrow Seed Drill' designed for small tractors. The digger lifts plants without damaging the pods, while the seed drill prepares the soil and ensures uniform seed placement. The design is affordable, durable, and well-suited for small and marginal farmers.



Societal Impact

The innovation reduces labour, harvesting time, and post-harvest losses, leading to higher yields and lower costs. It also enhances small farmers' incomes, lessens drudgery, and promotes local manufacturing and repair services in rural areas.

Current status

The equipment has been successfully demonstrated and is currently in limited use among local farmers. Additional support and scaling efforts could further promote its adoption across farming communities. He was awarded by HOney Bee Network and NIF 2013 at 9th award function

<https://share.google/JRZPCbYQ0lszuixMk>



PEOPLE'S FESTIVAL OF INNOVATIONS

2025



Onion Variety

Punamchand Patidar
Jhalawar, Rajasthan



Innovation Video

Problem Addressed

Farmers cultivating traditional onion varieties often face challenges such as short shelf life, small bulb size, and storage rot, resulting in significant post-harvest losses and reduced profitability.

Technology

Punamchand Patidar developed the onion variety 'Dkalhi Number 1'. It is known for its uniform bulb size, round shape, and attractive pinkish-red colour. The variety matures within 8–10 months and yields 40–50 quintals per acre. It also has excellent storage quality. SKN Agricultural University, Jobner (2019–2021), tested and validated the variety, reporting an average bulb weight of 63–109 grams and 6–9.5 bulbs per plant. Registered under the PPV&FR Act, it is now cultivated across Rajasthan, Madhya Pradesh, Gujarat, and Maharashtra.



Societal Impact

The improved variety boosts farmers' income by offering higher market value, reduced waste, and longer storage life. It performs well across diverse climatic zones, helping growers maintain supply stability and profitability. The innovation supports sustainable farming and strengthens rural livelihoods through knowledge sharing and local seed multiplication.

Current status

The variety is widely cultivated and in high demand across several states. In 2024, about 70 quintals of seed were sold at Rs 2,500 per kg, generating nearly Rs 50 lakh in revenue. Punamchand Patidar continues to expand seed production with support from the Rajasthan State Seed Corporation. His innovation has won multiple awards. These include recognitions from the Chief Minister of Gujarat (2013), ICAR (2015), NIF at Rashtrapati Bhavan (2023), and the Rajasthan Agro-Industrial Development Board (2025).



PEOPLE'S FESTIVAL OF INNOVATIONS

2025



Bike mounted Pit Making Machine

Syed Hameed Pasha
K.V. Rangareddy, Telengana



Innovation Video

Problem Addressed

Commercially available earth augers, whether handheld or machine-mounted, are restricted to specific functions. Handheld models are often inefficient for large areas, deep holes, or hard soil due to limited depth, low productivity, and high labor intensity. In contrast, machine-mounted augers face operational, logistical, and significant cost challenges.

Technology

A motorbike-mounted earth auger, powered by a 100cc engine, is designed for ease of operation and maneuverability. It efficiently digs a hole of 2 feet deep and 1 foot in diameter in just about 30 seconds. Adapted attachments are also offered with bit diameters of 4 to 12 inches. It can perform a variety of tasks, including planting, digging vegetable post holes, and installing fence posts, signposts, and streetlights.



Societal Impact

- Greatly increases efficiency and speed of digging tasks.
- Reduces labour, effort and time.
- Performs precisely with minimal disturbance.
- Versatile and economical.

Current status

- The final prototype has been completed, and three machines are currently undergoing trial and validation.
- A patent to be filed.
- Need funds and grants for the establishment of a manufacturing facility.



PEOPLE'S FESTIVAL OF INNOVATIONS

2025



Design Marking Machine for Pochampally Ikkat Sarees

Chinthakindi Narender
Nalgonda, Andhra Pradesh



Innovation Video

Problem Addressed

Pochampally is renowned for its eponymous 'IKAT' handloom sarees. Ikat is a resist-dyeing technique where bundles of yarns are tied tightly with bindings to prevent dye penetration; the yarns are then dyed in specific patterns and woven into a saree after the bindings are removed. Preceding the tie-dyeing is the design-marking process, a manual and laborious task that requires significant patience, diligence, and high skill.

Technology

The innovative machine fully automates the entire design-marking process using 12V electrical power; users simply set the parameters and click a button to operate it. Its function relies on electronic components that convert electrical energy into the necessary mechanical motion. The primary characteristic is its capacity for autonomous operation, eliminating the need for direct human oversight by saving 80% of the time.



Societal Impact

- Designs with impeccable elegance and accuracy including complex patterns.
- Capacity to utilize numerous designs reading from a stored memory chip.
- Reduces labour, effort, time and fatigue.
- Increases productivity and profitability.
- Free from occupational health hazards.

Current status

- The final prototype has been completed, and couple of machines are currently undergoing trial and validation.
- A Patent application is filed.
- In pursuit of funds for the establishment of a manufacturing facility.



PEOPLE'S FESTIVAL OF INNOVATIONS

2025



Mobile Aerator for Aqua Farms

Tirumalasetty srinivasarao
Krishna, Andhra Pradesh



Innovation Video

Problem Addressed

Paddle Wheel Aerators are widely used to introduce oxygen into water by mechanical agitation, which helps maintain aquatic life and improve water quality. Despite, these are prone to clogging, damaged shafts, limited oxygen transfer rates, frequent motor failures, high maintenance, and high energy demands. Additionally, aquafarmers are forced to install multiple paddle aerators for uniform oxygen distribution.

Technology

This innovative novel product introduces a self-propelling, motor-based mobile aerator for aqua farms, which offers superior performance to existing stationary paddle wheel aerators. It features a unique design that delivers a superior oxygen transfer rate with streamlined mechanical movement. It reduces a potential for algae blooms by consuming less energy and this positively impacting water quality and fish health.



Societal Impact

- Applicable both in intensive and semi-intensive aqua-farming.
- A manifold increase in dissolved oxygen concentration was observed.
- Saves time, reduces cost, increase yields, provide better productivity, enhances aqua health and conserve energy.

Current status

- The final prototype is completed.
- Basic trials were successfully performed.
- Need to validate at different aquafarms and zones.
- A Patent application is filed.
- In pursuit of guidance for certification or empanelment by NFDB.



PEOPLE'S FESTIVAL OF INNOVATIONS

2025



Paddy Seed Paper Roll

Ramesh Kaliyamoorthi
Thanjavur, Tamil Nadu



Innovation Video

Problem Addressed

Traditional paddy transplantation is labour-intensive, slow, water-demanding, and costly. It often requires large crews and higher seed rates, yet produces uneven stands. These challenges delay operations, increase per-acre costs, and reduce yields, particularly for smallholders with labour shortages and tight planting windows.

Technology

Ramesh's automated device embeds paddy seed in 2.5-inch biodegradable paper and precisely lays it in the field at the push of a button. Made from readily available materials - 3 mm and 4x3 sheets, 0.5-inch square pipes, a conveyor belt, 1x0.25-inch plates, and MS bushings, and powered by a 0.5 HP single-phase motor, it requires just one operator and a helper. Only 5 kg of seed per acre is needed. Preparing seed rolls takes about 4 hours per acre, while field seeding finishes in 2 hours. This method optimises seed-to-land requirement, reduces water consumption compared to puddled transplanting, and typically lowers seeding costs from ₹6,000/acre to ₹4,500/acre.



Societal Impact

The solutions reduce labour, seed, and water use, improve timeliness, and ensure uniform planting, supporting higher yields and profitability for smallholders. Their low cost enables local custom-hiring services, creates more opportunities for women operators, and reduces physical strain. The biodegradable seed-roll approach also promotes better on-farm resource management.

Current status

The team is manufacturing the machinery and has sold 25 units, including to buyers in other states. The innovation has received government recognition, namely the Vyavsay Vigyani Award, Pharma Award, and CM Edappadi K. Palaniswami Participation Award. No public or private-sector awards or funding have been received so far, and the enterprise is seeking support. Also see <https://www.thehindu.com/news/cities/Tiruchirappalli/new-paddy-sowing-technique-demonstrated/article30405431.ece>



PEOPLE'S FESTIVAL OF INNOVATIONS

2025



Driverless Tractor

Yogesh Nagar
Baran, Rajasthan



Innovation Video

Problem Addressed

Yogesh observed several challenges his father and other farmers faced while manually operating tractors. Prolonged driving in harsh conditions led to physical strain and back pain. Hiring drivers costs ₹1–1.5 lakh annually. Manual operation caused uneven furrows due to inconsistent speed and braking, affecting crop growth. Dependence on hired labour also made farm operations unreliable during peak seasons.

Technology

Yogesh developed a remote-controlled tractor system that can be retrofitted to existing tractors and operated from up to 1.5 km away. It remotely manages acceleration, braking, and steering through signals integrated with the tractor's control unit. Built at an affordable cost of about ₹47,000, it offers a low-cost alternative to advanced autonomous systems. The system improves ploughing precision, reduces physical strain, and cuts labour costs. Later versions include a 4.5-inch display for real-time field monitoring.



Societal Impact

The innovation reduces physical strain, lowers reliance on hired labour, and improves field accuracy. It enables small and medium farmers to operate machinery efficiently, fostering inclusive and sustainable agriculture.

Current status

The system has been successfully demonstrated and is being refined for wider use. Yogesh's affordable innovation shows strong potential to transform tractor operations for rural farmers. With support and funding, it could move to large-scale production and deployment. Also see

<https://grid.undp.org.in/practices/9a3j0CxnHKAz0#6/25.156/76.734>



PEOPLE'S FESTIVAL OF INNOVATIONS

2025



Potato Harvester

Anilkumar Patel
Modasa, Arvalli



Innovation Video

Problem Addressed

Potato farmers in North Gujarat face labour shortages, high costs, and losses from manual digging and poor post-harvest handling. Traditional plough methods need 20–25 labourers and often cause damage and rotting, making harvesting slow and costly.

Technology

To overcome these challenges, Anil Kumar Ishwar Bhai developed a 'Potato Harvester Machine' for small and medium farmers. Made of stainless steel, filters, and rubber belts, it lifts potatoes and separates debris efficiently. The machine cuts labour from 20–25 workers to 2–3 and works three times faster than manual methods. Tested in black, gorado, and sandy soils, it was refined with farmer feedback. The self-funded project highlights Anil Kumar's determination and technical skill.



Societal Impact

The harvester reduces drudgery, labour dependency, and operational costs. It minimises crop damage, improves efficiency, and helps farmers earn better returns. Demonstrations in over 15 villages received positive feedback, encouraging farmers to adopt mechanised solutions. The innovation also promotes affordable Agri-machinery, self-reliance, and rural entrepreneurship.

Current status

The harvester has been successfully demonstrated and is ready for wider adoption. Anil Kumar plans to work with agricultural departments and incubation centres to scale up and provide subsidy support. Though self-funded, the innovation has attracted interest from farmers and experts for commercialisation and inclusion in government schemes. His innovation was scouted by SRISTI, a Honey Bee Network institution.



PEOPLE'S FESTIVAL OF INNOVATIONS

2025



Portable coconut breaking and water collecting device

Biju Narayanan
Idukki, Kerala



Innovation Video

Problem Addressed

Breaking dry coconuts for copra, oil, or powder is usually done manually. The process is somewhat unsafe, tedious, and time-consuming. Traditional methods cause inconsistent results and increase the risk of worker injuries.

Technology

Biju developed a machine that splits dry coconuts into two halves using a free-falling blade driven by a cam mechanism. It filters the coconut water into a container and can be operated manually or with an electric motor. The machine splits each coconut in seconds, processing 250–300 coconuts per hour manually and 800–900 per hour in motor-operated mode.



Societal Impact

The innovation improves safety and efficiency in coconut processing. It saves time, labour, and physical effort while offering a low-cost solution for small processors and self-help groups. It also promotes value addition and rural employment in coconut-growing areas.

Current status

The machine has been tested and proven to be efficient and reliable. It is now being promoted for wider use among coconut farmers and small processing units. The innovation is being protected under India Patent Application No. 202141011730. He has been awarded by NIF see <https://www.nif.org.in/innovation/portable-coconut-breaking-and-water-collecting-device/1145>



PEOPLE'S FESTIVAL OF INNOVATIONS

2025



Mango Drafting

Kalidas Banarjee
Rautara, Katihar, Bihar



Innovation Video

Problem Addressed

Sri Kalidas Banerjee noticed that while people preferred local mangoes, the widely grown Biju variety often lacked consistent taste and quality. This inconsistency reduced consumer trust and market value. He aimed to develop a superior mango variety with improved taste, aroma, and consistency to benefit local growers.

Technology

Driven by his passion for agriculture, Sri Banerjee experimented with mango grafting and varietal improvement. Over time, he mastered grafting, budding, and crossbreeding techniques. His key innovation was crossing the Biju mango with Kala Bambai to create a new variety, 'Chitrangan'. His 10-acre orchard with 29 varieties served as the testing ground for this work. After years of refinement, 'Chitrangan' emerged as a sweet, mildly aromatic, and vigorous variety.



Societal Impact

'Chitrangan' quickly became a preferred mango variety in local markets for its superior taste and aroma. This success enabled farmers to earn higher prices than other mid-season varieties. This success helped farmers earn better prices than other mid-season varieties. The high-quality, locally developed mango strengthened regional horticulture and created livelihoods through nurseries, orchards, and value-chain growth. Sri Banerjee's innovation increased incomes, boosted farmer confidence, and showcased the impact of grassroots innovation in horticulture.

Current status

The 'Chitrangan' mango variety received PPV&FRA registration in 2024, marking a key milestone in its recognition and protection. With support from KVK Katihar, it has gained wide popularity among farmers. Demand for its saplings has surged, with Sri Banerjee grafting 10,000 in the past year, earning ₹12,50,000. For over 25 years, he has refined and promoted the variety, which has also been submitted for registration through IARI, New Delhi. Today, 'Chitrangan' is one of the most sought-after varieties in the region, strengthening the mango-based economy. Honey Bee Network and SRISTI honoured him during Shodhayatra in Katihar; also see <https://www.livehindustan.com/bihar/katihar/story-agricultural-officers-visit-kalidas-banerjee-s-mango-orchard-in-katihar-201740516545603.html>



PEOPLE'S FESTIVAL OF INNOVATIONS

2025



Samakhya Wool

Perna Agarwal
Bikaner, Rajasthan



Innovation Video

Problem Addressed

'Samakhya Sustainable Alternatives' produces eco-friendly insulation from coarse sheep wool, previously discarded by pastoral communities earning under ₹20 per kilogram. Research showed coarse wool excels in thermal and acoustic insulation. To reduce the construction sector's 40% share of global CO₂ emissions and the 20% pollution from building materials, the team developed wool insulation as a natural alternative to glass wool, rock wool, polystyrene, and thermo-foam. Tests show it provides up to 70% better insulation than conventional materials.

Technology

Samakhya collects wool from pastoralists and transports it to its fibre processing unit, run by 35 women, where it is sorted by quality. The best grade is used for carpets, while the B grade fibre, otherwise discarded, is converted into insulation rolls and felt sheets for the construction industry.



Societal Impact

This organisation has improved rural livelihoods in Rajasthan by converting discarded coarse wool into eco-friendly insulation. It revived sheep rearing for over 500 pastoral families, created jobs for 35 women earning ₹8,000–10,000 a month, and helped pastoralists triple their income. Micro-entrepreneurs earn up to ₹5 lakh annually. Solar-powered shearing and better veterinary care have improved living standards, while youth engagement in community enterprises has grown. By turning waste wool into a regenerative, fire-resistant, and non-toxic alternative to glass wool and polystyrene, Samakhya promotes greener, healthier construction.

Current status

Their products are used in projects such as the ICICI HQ, Brij Munjal Vedic Centre, and SRM Institute. They have been supported by Next Bharat, a Suzuki motors initiative. Also see <https://nextbharat.ventures/portfolio/> It has implications for increasing the income of the poor shepherd.



PEOPLE'S FESTIVAL OF INNOVATIONS

2025



Lac Processing Machine

Sourav Dey
West Singhbhum, Jharkhand



Innovation Video

Problem Addressed

Lac cultivation is largely manual, which is slow and tedious. In one method, farmers sit in a group and scrape lac using traditional tools like a small knife (dauli) or a sickle. In another, they remove lac encrustation by beating lac sticks with a bamboo stick. Scraping on the ground allows sand, soil, and twigs to mix with the lac, lowering its value.

Technology

Sourav designed a manual roller-type lac scraper. The machine uses shear and compressive forces, two metal rollers on a sturdy frame, linked by a chain and sprocket, scrape lac from branches without damaging twigs. This yields cleaner lac with fewer impurities. The cost-effective, easy-to-use design suits small-scale rural use. It reduces effort, improves productivity, and enhances product quality, offering a sustainable alternative to manual scraping.



Societal Impact

Sourav's lac processing machine boosts efficiency, income, and sustainability in rural lac cultivation. Traditional scraping is slow, labour-intensive, and unhygienic, lowering product quality and earnings, especially in tribal areas like Jharkhand. It reduces effort, shortens processing time, and minimises impurities, raising market value. Affordable and locally made, it promotes rural entrepreneurship, skill development, and self-reliance. The machine also supports sustainable harvesting and demonstrates how simple indigenous innovations can strengthen livelihoods and inspire youth-led problem-solving.

Current status

The device filed as 1198/KOL/2015 appears to have been granted, with patent documents and a certificate issued. The invention also received a Consolation Award at the 10th National Grassroots Innovation Awards in 2019.



PEOPLE'S FESTIVAL OF INNOVATIONS

2025



Glucose Coating: Enhancing Shelf-Life and Quality of Litchi Fruits

Bhola Nath Jha
Jhapha, Muzaffarpur, Bihar



Innovation Video

Problem Addressed

Litchi is highly perishable, lasting at most two days, quickly losing colour, freshness, and market value after harvest. Its skin browns rapidly due to enzymatic and microbial activity, reducing quality and consumer appeal. Farmers face significant post-harvest losses as the fruit spoils during transport or sale. Shri Bhola Nath Jha observed these challenges and sought a simple, affordable, farmer-friendly method to extend litchi's shelf life.

Technology

Shri Jha developed a simple technique of applying a thin glucose coating on litchis immediately after harvest. This technique involves soaking cotton in a glucose solution and tying it to the litchi's stem. The layer slows metabolic processes, maintains firmness, and prevents skin browning. It reduces moisture loss and microbial activity, preserving colour, freshness, and texture. The coating also limits Reactive Oxygen Species (ROS) that cause tissue damage. The litchis are then packed in specially designed modified-atmosphere packaging. Using easy-to-source materials and minimal skill, the method can be adopted by farmers at the village level.



Societal Impact

The glucose coating helps farmers reduce post-harvest losses and preserve litchi quality during storage and transport. Longer freshness allows better prices, fewer distress sales, and access to distant markets. The technique improves shelf life, appearance, and consumer demand, strengthening the litchi value chain. Overall, it enhances income stability and reduces wastage in one of Bihar's key horticultural crops.

Current status

The method is successfully used locally. Farmers report that glucose-coated litchis retain colour and market quality longer than untreated fruits. The innovation is recognised as a low-cost, practical, and scientifically sound post-harvest solution with potential for wide adoption in litchi-growing regions. The National Litchi Research Centre has accepted this technology for research, and it will now be studied in detail at the scientific level.

PEOPLE'S FESTIVAL OF INNOVATIONS

2025



Sieving Precision: Indigenous Makhana Grader

Amit Kumar
Supaul, Bihar



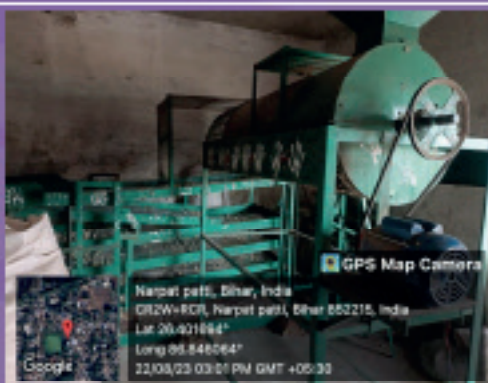
Innovation Video

Problem Addressed

Traditional makhana (fox nut) processing involves repeated manual sieving and sorting to separate unroasted seeds, broken pieces, and size grades. This process is labour-intensive, slow, and inconsistent, often lowering quality and market value. Small processors in Bihar struggle to maintain uniform grading standards, limiting their income.

Technology

Amit Kumar developed a mechanised, multi-layer makhana sieving and grading system to simplify post-roasting separation. Built on a sturdy steel frame, it has a rotating cylindrical drum with perforated sieves of different mesh sizes, powered by an electric motor. The machine separates makhana into large, medium, small, and broken grades, collecting each in separate trays. It efficiently removes impurities, minimises manual handling, and ensures uniform grading. Operating on standard household power, it is ideal for small and medium rural processors.



Societal Impact

The makhana sieving system has boosted processing efficiency and incomes for small-scale producers. Minimising manual labour and ensuring consistent grading helps processors deliver standardised quality that commands better market prices. The innovation reduces the physical strain on women and older workers, enabling larger-scale operations and higher productivity. Overall, it strengthens livelihoods and supports the local makhana value chain in Bihar, one of India's leading makhana-producing regions.

Current status

The machine is currently in operation for makhana processing in Narpat Patti, Bihar. Its practical design, affordability, and suitability for small units have attracted interest from nearby farmers and processors. Amit Kumar continues to refine the system based on user feedback, with strong potential for wider adoption across makhana-producing regions.



PEOPLE'S FESTIVAL OF INNOVATIONS

2025



Heritage Harvest: Championing Traditional Varieties with Seed Museums

Babulal Dahiya & Suresh Dahiya
Satna, Madhya Pradesh



Innovation Video

Problem Addressed

Over time, India's traditional crop varieties —such as indigenous rice, millets, vegetables, herbs, and forest species — have declined due to the use of hybrid seeds, chemical farming, and mechanisation. This loss has weakened local knowledge, ecological resilience, and cultural heritage, reducing farmers' access to region-specific seeds and biodiversity. Recognising these threats, Babulal Dahiya and Suresh Dahiya work to conserve, revive, and reintroduce traditional seeds and preserve disappearing agricultural tools.

Technology

Babulal Dahiya and Suresh Dahiya, through the 'Sarjana Samajik, Sanskritik evam Sahityik Manch', have conserved traditional agricultural heritage by establishing a seed bank comprising approximately 300 indigenous varieties of rice, wheat, millets, vegetables, herbs, and medicinal plants. These are cultivated on small plots and shared freely or through exchanges. His work expanded through the Beej Bachao Yatra, which covered 40 districts, and women-led community seed banks. He also founded a Rural Agricultural Tools Museum with 350 implements. These crops are resilient, require minimal irrigation, and are resistant to pests.

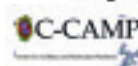


Societal Impact

Their efforts have revived traditional crops, strengthened climate resilience, and promoted seed sovereignty and nutritional diversity among marginalised and tribal farmers. The initiatives empower women, preserve rural heritage, and support better prices for organic and traditional grains. By educating youth on biodiversity and traditional knowledge, their work enhances livelihoods, culture, and ecological awareness.

Current status

The seed banks at Pithaurabad and Kolmajra continue supplying seeds, with over 150 farmers receiving 15-variety vegetable kits last year. Conservation now encompasses approximately 200 rice and 20 wheat varieties, as well as other crops. The Agricultural Tools Museum draws visitors, and campaign leader Babulal Dahiya has been honoured with the Padma Shri. Supported by the MP State Biodiversity Board, UNDP-GEF Small Grants Programme, and CEE Bhopal, Sarjana implements initiatives in biodiversity conservation, SRI training, nursery and bamboo development, women's empowerment, farmer training, environmental education, climate and water conservation, TB awareness, and free distribution of seeds and medicinal saplings.



PEOPLE'S FESTIVAL OF INNOVATIONS

2025



Modified Hydro electricity Turbine

G K Rathnakar
Chikkamagaluru, Karnataka



Innovation Video

Problem Addressed

Many remote and hilly regions of India, including parts of Karnataka, Meghalaya, Sikkim, and Naxal-affected areas, still lack access to electricity. Households rely on kerosene lamps or candles, and small farmers struggle with irrigation and basic needs. Extending the grid is costly and environmentally damaging. There is an urgent need for a decentralised, low-cost, eco-friendly power system that uses naturally flowing village water sources.

Technology

G.K. Rathnakar developed TURBO, a micro-turbine system that generates electricity from flowing water without the need for dams, fuel, or external power. Inspired by his early experiments with a cycle dynamo, he founded Turbo-Turbine Lights, producing eco-friendly, low-maintenance turbines (0.5–25 kV) with a lifespan of up to 25 years. The system requires minimal civil work, uses local water flow, and enables sustainable community-based power generation.



Societal Impact

TURBO turbines have improved energy access in remote areas, enabling households and farmers to generate clean, affordable electricity. They replace kerosene lamps, power irrigation and small enterprises, enhance safety, and support night education. Street lighting has improved women's mobility, while local bodies manage the systems at low cost. By avoiding dams and reducing fossil-fuel use, the technology promotes climate resilience and environmental protection, while training programs prepare future renewable energy innovators.

Current status

Over 570 Turbo turbines are operational in more than 60 villages and hilly areas across Karnataka, Meghalaya, Sikkim, and other states. Installations also include sewage-powered systems for Bengaluru streetlights. The enterprise conducts demonstrations, training, and collaborations with government bodies, engineering colleges, and NGOs. Current projects focus on rural electrification and power generation from drainage water, with plans to expand into other regions. Plans aim to scale the technology nationwide through government partnerships, awareness drives, and technical exhibitions.



PEOPLE'S FESTIVAL OF INNOVATIONS

2025



Eco Drape

Chawla Subham
Ahmedabd, Gujarat



Innovation Video

Problem Addressed

The textile industry is the world's second-largest polluter, contributing 20% of freshwater pollution and 10% of global carbon emissions. Only 1% of textile waste is recycled, and washing synthetic clothes releases microplastics that enter the food chain. The industry causes health issues for workers, such as skin and respiratory problems, and affects consumers, especially children, whose thinner skin is more vulnerable.

Technology

Eco printing is a natural dyeing technique that utilises leaves, flowers, and roots to imprint patterns on fabric through steaming, eliminating the need for chemicals. It is safe for artisans, consumers, and the environment. While conventional dyeing uses 180–200 litres of water per kilogram of fabric, eco printing requires only 80–100 litres or less. The discharged water is non-toxic and even serves as manure, making the process eco-friendly and sustainable.



Societal Impact

By replacing chemical dyes with botanical imprints and halving water use, eco printing reduces freshwater pollution, prevents microplastic runoff, and minimises health risks for workers and users. It offers a natural, premium look with a lower environmental footprint and improved skin compatibility, particularly for children and sensitive individuals.

Current status

The venture has generated Rs. 12 lakh in revenue, created 12 jobs, and was featured in *Divya Bhaskar* on World Environment Day as a sustainable startup, demonstrating strong market traction and public recognition.



PEOPLE'S FESTIVAL OF INNOVATIONS

2025



Sunflower Seed Variety

Surendrapal Singh Chouhan
Jhabua, Madhyapradesh



Innovation Video

Problem Addressed

In many villages, farmers avoid growing sunflowers because parrots and other birds feed on maturing seeds, causing significant yield losses. With small holdings, limited resources, and low margins, they cannot afford protection measures, resulting in low production and a limited availability of quality seed. This discourages sunflower cultivation despite its benefits for biodiversity, soil health, and pest control.

Technology

Surendra Pal Singh Chauhan, a small farmer with three acres of land, developed a special sunflower variety named 'Laliya' through traditional selection and seed conservation methods over 3 to 4 years. By refining local sunflower lines, he created unique plants. Each produces two or more flower heads, significantly increasing seed yield and making sunflower farming more profitable for smallholders. Practising ecological farming, Chauhan grows sunflowers along field borders for natural pest control, reducing chemical use.



Societal Impact

The improved sunflower variety has transformed local farming and rural landscapes. Its dual-flower trait increases yield, making sunflower cultivation viable even on small plots. As a border crop, it controls pests, supports organic farming, reduces chemical use, and enhances biodiversity by attracting pollinators and birds. The vibrant fields restore rural vitality and bring back bird species that had begun to disappear. By widely sharing seeds, Chauhan has raised awareness and inspired farmers to value indigenous crops and adopt sunflower cultivation. The aesthetic appeal of sunflower fields has also instilled a sense of pride among rural communities.

Current status

Surendra Pal continues to refine and distribute his improved sunflower variety through community networks, boosting its adoption as both a border and commercial crop. Farmers report that they have more vigorous plants, better seed formation, and higher yields than with earlier varieties. His work also advances local seed conservation, promotes traditional maize, pulses, millets, and wheat alongside sunflower. Supported by regional organisations, Chauhan has shared native seeds with over 500 farmers, thereby strengthening seed sovereignty and demonstrating that traditional knowledge can drive meaningful innovation, even on small farms.



PEOPLE'S FESTIVAL OF INNOVATIONS

2025



Sunflower Deseeding Machine

Lakhan Lal Patel
Raigarh, Chhattisgarh



Innovation Video

Problem Addressed

Sunflower cultivation is practised in many regions of Chhattisgarh. Extracting seeds from dried sunflower heads is a highly time-consuming and labour-intensive process. The process requires substantial manual effort, so farmers often prefer selling the entire flower without removing the seeds, resulting in lower returns. Recognising this challenge, Mr Patel developed a machine that quickly, easily, and efficiently separates seeds from sunflower heads with minimal effort.

Technology

The machine operates using a 2 HP electric motor connected to a pulley-belt drive system that rotates a central shaft fitted with thick belt strips. As the shaft spins, these strips strike the dried sunflower heads and quickly separate the seeds, which then collect below for easy gathering. Supported by bearings for smooth rotation, the machine is simple, durable, and built from locally available materials, making it easy for farmers to use and maintain. With its semi-automatic operation and minimal upkeep, the technology reduces labour by 60–70% and delivers seed-extraction speeds 3–4 times faster than traditional methods.



Societal Impact

The machine generates significant economic, social, and environmental benefits for rural communities. By reducing labour requirements and saving time, farmers can earn a higher income from selling separated seeds, recover the machine's cost quickly, and improve overall profitability. Socially, it reduces the physical burden on farmers, proves beneficial even for smallholders, enhances technological awareness, and creates potential employment opportunities in the region. Environmentally, the use of locally available materials and the productive utilisation of what was previously considered waste (sunflower heads) contribute to more sustainable farming practices. Overall, the adoption of this technology boosts farmers' earnings, saves time and effort compared to traditional methods, enhances production, and promotes local innovation and technological growth.

Current status

Sold 12 machines till now and developed new model of the machine.



PEOPLE'S FESTIVAL OF INNOVATIONS

2025



Pepper Thresher

Rinoy Sebastian
Idukki, Kerala



Innovation Video

Problem Addressed

Small and marginal pepper farmers rely on traditional threshing methods, often using their feet to separate berries from stalks. The process is slow, labour-intensive, and time-consuming, leading to low productivity, higher costs, and inconsistent quality. Peak-season labour shortages further worsen delays and incomes.

Technology

'The Black Pepper Threshing Machine' is a compact, high-efficiency thresher that separates pepper berries from spikes with minimal human effort. Designed for easy operation and maintenance, it reduces drudgery, cuts labour costs, saves time, and maintains grain quality through gentle handling. The machine suits smallholders and custom-hiring centres.



Societal Impact

The innovation enhances farm productivity and reduces unit costs, allowing small farmers to complete threshing efficiently and safely. It also creates local enterprise opportunities, as owners can rent out the machine to earn additional income. By reducing physical strain and seasonal dependence on hired labour, the solution improves livelihoods and promotes inclusive growth in rural communities.

Current status

K. B. Agri Engineering, registered as an LLP, has delivered over 60 pepper threshing machines to farmers and service providers. The innovation received a National Innovation Foundation (NIF) award and a small grant for initial activities. The team now seeks larger seed funding to scale manufacturing, enhance distribution, and expand after-sales support.



PEOPLE'S FESTIVAL OF INNOVATIONS

2025



Low cost fish dryer and stove

Maibam Deben Singh
Manipur



Innovation Video

Problem Addressed

Traditional fish sun-drying is slow, weather-dependent, and often yields poor-quality products. To solve this, Maibam Deben Singh, a blacksmith from Singjamei from Leirak, developed an innovative fish-drying and cooking device powered by paddy husk or charcoal. It ensures uniform drying in less time using minimal fuel, making it ideal for small-scale fish processors. Concerned for his sister's illness and the need for safer, protein-rich food, he designed a low-emission biomass dryer and stove. Despite technical challenges, his persistence led to the creation of an eco-friendly and time-saving drying system that benefits local fish vendors and households.

Technology

The innovation is a wood- or charcoal-fuelled cooking stove with integrated drying trays beneath the gas top for drying various food items. The self-standing unit features a 75 cm-high, 60 × 90 cm platform with two cooking stoves on top and a central drying chamber below. Made from galvanised sheet metal or aluminium, it emits minimal smoke, dries food efficiently, and radiates heat to keep the surroundings warm. Tested at IIIT Manipur, it demonstrated 10% higher efficiency than conventional charcoal chulhas, thanks to a preheated air intake that recovers waste heat. A ventilation control system and a small fan ensure regulated airflow and even heat circulation. IIIT Manipur has recommended minor design refinements to enhance efficiency and usability.



Societal Impact

The low-cost fish dryer and stove boost small-scale fishers' livelihoods by reducing drying time, improving product quality, and increasing income. Its low smoke emissions and efficient fuel use create healthier cooking environments, while its affordable, locally made design promotes self-reliance and rural entrepreneurship.

Current status

Deben operates under his registered firm, *Kangleipak Fish Dryer*, producing ten innovative, low-cost devices, including the Fish Dryer (Rs 650), Emoinu Leirang (Rs 1,200), Room Heater (Rs 650), Square Punching Machine (Rs 2,800), Pork Dryer (Rs 1,200), Fish Scale Remover (Rs 350), Multi Dryer (Rs 8,000), Multi Diamond Stove (Rs . 2,700), Multi Chulah (Rs 450), and Cooking-cum-Drying Biomass Stove (Rs 13,000)



PEOPLE'S FESTIVAL OF INNOVATIONS

2025



Annapurna Rice Library

Mahan Chandra Borah
Assam



Innovation Video

Problem Addressed

Small and marginal farmers in Assam increasingly rely on commercial hybrid seeds. Hence, local agrobiodiversity is impacted, and input costs are also high. Climate-resilient indigenous rice varieties are disappearing. Younger generations lack traditional agricultural knowledge. These trends threaten seed sovereignty, food security, and resilience in areas prone to floods and droughts.

Technology

The Annapurna Seed Library (ASL) employs a 'seed library' model, in which farmers borrow indigenous seeds and return a portion of their harvest, thereby creating a self-sustaining community seed cycle. It collects, catalogues, and preserves over 500 rice varieties, along with hundreds of vegetables and medicinal plant seeds. ASL also integrates a hands-on school curriculum teaching seed identification, conservation, natural fertiliser preparation, and climate-resilient farming. By combining traditional knowledge with low-input ecological practices, the model offers a practical, community-driven system for conserving and regenerating agrobiodiversity.



Societal Impact

ASL strengthens seed sovereignty, reduces dependence on commercial suppliers, and enhances climate resilience by utilising locally adapted varieties. Over 1,000 farmers participate in workshops on seed conservation and traditional farming practices. The initiative enhances food security, reduces farming risks, preserves cultural heritage, and fosters young biodiversity custodians through ongoing education and community engagement.

Current status

The Annapurna Seed Library conserves over 500 indigenous rice varieties and more than 300 vegetable and medicinal plant seeds. Founded by Mahan Chandra Borah, it initially featured just three varieties and expanded over nearly two decades due to his dedication. Operating on modest agricultural income with minimal external support, ASL does not sell seeds to farmers. The initiative received national recognition with the Plant Genome Saviour Farmers Award (2019) and now seeks broader support to expand seed conservation, documentation, and community outreach.



PEOPLE'S FESTIVAL OF INNOVATIONS

2025



Tractor Operated Blowing Orchard Sprayer

Rajendra Jadhav
Nashik, Maharashtra



Innovation Video

Problem Addressed

In 2000, during interactions with farmers in Satana and nearby areas, Rajendra discovered that conventional sprayers were inefficient, resulting in wastage as most pesticides dispersed into the air. Realising this, he was motivated to develop a device that ensures efficient and targeted pesticide application on crops.

Technology

The tractor-mounted blowing sprayer is designed for orchard crops and operates with tractors of 18 HP or higher. It features two radial fans on both sides to ensure uniform pesticide spraying in all directions. The system includes a mixing chamber that maintains fine pesticide suspension under high pressure, minimising waste and fuel use. The fans rotate in opposite directions to generate intense air pressure, spraying pesticides up to 10–12 feet. Power is supplied from the tractor's PTO shaft via a V-belt connected to the gearbox.



Societal Impact

The tractor-mounted sprayer has significantly improved the efficiency and safety of pesticide application for farmers. By reducing pesticide wastage and ensuring even coverage, it helps lower input costs and minimises chemical exposure, improving farmers' health and environmental safety. The device saves time and labour, allowing farmers to manage larger areas with fewer resources. It promotes sustainable farming practices, increases crop yield and quality, and contributes to higher income and better livelihoods for rural communities.

Current status

The sprayer is successfully used by farmers in and around Satana, Nashik. It ensures uniform coverage, reduces pesticide use and labour, and improves crop quality. The device is commercially viable and gaining wider adoption among orchard growers.



PEOPLE'S FESTIVAL OF INNOVATIONS

2025



Sola Wood Sheet Making Machine (Sheet Slicing)

Dipak Sardar
South Twenty Four Parganas, West Bengal



Innovation Video

Problem Addressed

Artisans in the sola handicraft industry traditionally cut sola wood sheets by hand, a slow, labour-intensive and risky process that often results in finger injuries, low productivity, and high production costs. Only skilled workers can perform the cutting with precision, limiting output and increasing dependence on manual craftsmanship. This created a need for a safer, faster, and more accessible method to produce uniform sola sheets.

Technology

The innovation is a motor-driven sola wood sheet machine with a crank mechanism, replicating manual cutting with greater precision and safety. Weighing 70–80 kg, it runs on a 1440 RPM single-phase motor (220V). Operators place a 12 cm sola log into the roller, producing a sheet in about 30 seconds. The sheets have a consistent surface finish, uniform thickness, and high quality, which are essential for the sola craft industry. This unique technology has no comparable machines in the market.



Societal Impact

The machine reduces drudgery and eliminates the risks of hand injury. It allows unskilled workers, including women and marginalised individuals, to produce sola sheets. It boosts productivity to 450–470 sheets per hour with a single operator, lowering costs and improving artisan livelihoods. By enhancing safety and efficiency, it sustains the sola craft tradition, enabling artisans to scale production and earn more without physical strain.

Current status

The innovation began in 2016 as a single-sheet prototype made from scrap materials, with wooden pinions fabricated manually. In 2020, with support from the National Innovation Foundation–India and VARD, the inventor upgraded it to a four-blade machine for multi-sheet production. The machine is now being prepared for wider dissemination to benefit artisans and strengthen the sola handicraft sector. The Patent Application No. is 202131012322.

PEOPLE'S FESTIVAL OF INNOVATIONS

2025



Mittidhan: Hand Tools for Workers

Hiren Panchal
Valsad, Gujarat



Innovation Video

Problem Addressed

Hiren Panchal identified that most agricultural tools available in the market were designed for large farms, leaving small and marginal farmers, especially those with less than 0.4 ha of land, without suitable, affordable, and efficient options. Traditional tools led to significant productivity losses (20–30%) during operations like weeding, plucking, and ploughing, and also caused physical strain, particularly among women. High costs further burdened smallholders, who were compelled to purchase equipment typically used on larger landholdings.

Technology

Through his initiative, Mittidhan, Hiren Panchal has developed 35 customised hand tools and attachments, priced affordably (with an average price of Rs. 140 per tool), based on continuous feedback from farmers. The tools are lightweight, durable, and ergonomically designed for small and marginal farmers. The initiative also extends to creating horticulture and urban farming tools, as well as educational toolkits introducing children to agriculture. The manufacturing process utilises local welders, blacksmiths, painters, and helpers, with support from collaborations with nearby technical institutes.



Societal Impact

The tools enhance farm labour efficiency by up to three times compared to conventional implements, increasing agricultural yield and reducing physical strain. By minimising occupational hazards, the innovation improves farm workers' health and productivity. Mittidhan generates local employment and empowers rural youth and women, while ensuring last-mile access through haat bazaars, CSR programs, NGOs, and cooperatives. The initiative also promotes awareness by distributing material in local languages.

Current status

Mittidhan operates actively in the rural and tribal belts of South Gujarat (Dharampur, Kaprada, and Bilimora). Its hand tools and washing units are installed in 15 hostels across these regions. The startup was selected as a finalist in the UN SDSN Youth Solutions Report, which highlights youth-led innovations that contribute to the achievement of the UN Sustainable Development Goals. Hiren continues to expand production, training, and outreach with strong grassroots engagement.



PEOPLE'S FESTIVAL OF INNOVATIONS

2025



Polanga Decorticator

Rajesh Sahoo
Puri, Orissa



Innovation Video

Problem Addressed

Polanga is a tropical evergreen tree whose seeds produce tamanu oil, valued for its medicinal, cosmetic, and biofuel properties. Traditional extraction is laborious and inefficient. It involves several days of sun-drying and manually breaking the hard shells with hammers or stones. This time-consuming and physically demanding process limits large-scale production, despite rising demand in the health, wellness, and biofuel sectors.

Technology

Rajesh developed an electric polanga decorticating machine inspired by the roller of a sugarcane juicer. Powered by a 1 HP single-phase motor, it crushes polanga fruits between rollers to efficiently remove kernels. The device is tested at SLFMTTC, Odisha, and it processes 300 kg per hour at 98% efficiency, vastly outperforming manual methods, where one worker processes only 25 kilograms in six hours.



Societal Impact

The machine has greatly improved rural livelihoods. During harvest, villagers now earn Rs. 800–Rs. 1,200 per day, up from Rs. 200. Rajesh leases three machines to farmers, earning Rs. 3,000–Rs. 4,000 daily. The innovation also empowers women by creating income opportunities and challenging traditional social barriers.

Current status

The machine, tested at SLFMTTC Odisha, has shown excellent performance and impact. Three units are currently in use, significantly benefiting local farmers and workers by enhancing productivity and income, especially among women engaged in processing activities.



PEOPLE'S FESTIVAL OF INNOVATIONS

2025



Root-Fusion Nutmeg: Multi-Root Approach Grafted Saplings

Gopi C. M.
Idukki, Kerala



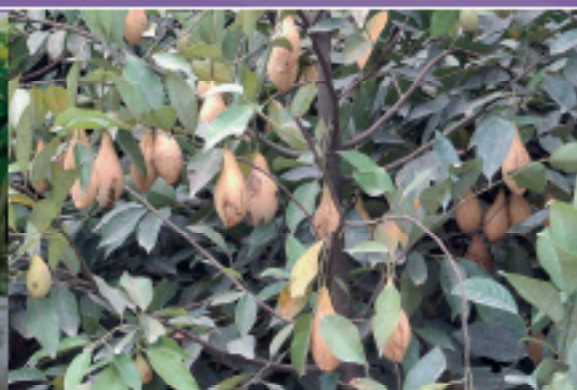
Innovation Video

Problem Addressed

Nutmeg cultivation often faces challenges, including slow growth, low initial yields, and vulnerability to strong winds and soil-borne diseases. Conventional grafting methods offer limited root strength, resulting in lower plant survival and productivity, particularly in hilly terrains such as Idukki.

Technology

Gopi C. M has developed an innovative Root-Fusion Nutmeg propagation technique using a multi-root grafting approach. In this method, multiple rootstocks are grafted onto a single scion, enhancing root volume, nutrient uptake, and overall plant stability. This technique significantly enhances growth rate, early fruiting, and resilience against environmental stress and disease, resulting in healthier and more productive trees.



Societal Impact

The innovation benefits small and marginal nutmeg growers by increasing productivity and reducing crop loss due to climatic and soil-related challenges. The stronger root system ensures better survival and stability of saplings, enabling farmers to cultivate nutmeg successfully in diverse terrains. The method promotes sustainable horticulture and supports livelihood improvement through higher and more reliable yields.

Current status

The technique has been successfully tested and demonstrated in farmers' fields across Idukki district, showing excellent growth performance and survival rates. Several hundred grafted saplings have been distributed to local farmers, and adoption is steadily increasing due to the visible improvement in yield and plant health.



PEOPLE'S FESTIVAL OF INNOVATIONS

2025



HRMN-99 Apple Variety

Hariman Sharma
Bilaspur, Himachal Pradesh



Innovation Video

Problem Addressed

Mr Hariman Sharma, a progressive farmer, developed the HRMN-99 apple variety that bears fruit in warmer regions. Unlike traditional apples, which need 1,000 to 1,500 chilling hours at 5,000 to 8,500 feet, HRMN-99 thrives at altitudes as low as 1,800 feet with minimal chilling, enabling cultivation in lower hills and plains.

Technology

The HRMN-99 variety provides a reliable alternative for farmers in tropical, subtropical, and plain regions, unlike mango and papaya, which are prone to fog and frost damage. It remains unaffected by such conditions, ensuring consistent yields. Evergreen year-round, HRMN-99 supports the environment while providing farmers with a stable and profitable crop.



Societal Impact

The HRMN-99 variety doubles farmers' incomes through intercropping. Planted 15 feet apart, it allows cultivation of vegetables, wheat, maize, and fodder in the same field, maximising land use and income. Its adaptability also makes it suitable for agroforestry, promoting economic and environmental sustainability.

Current status

IF has applied on behalf of Mr Hariman Sharma to register the HRMN-99 variety under the Protection of Plant Varieties and Farmers' Rights Act, 2001. Over four lakh saplings have been distributed to farmers, gardens, and research centres across India, demonstrating their widespread adoption and potential to transform apple cultivation in non-traditional regions.



PEOPLE'S FESTIVAL OF INNOVATIONS

2025



Rice/Grain Sorting Machine

Mohan Sharma
Kabilpur, Birbhum, West Bengal



Innovation Video

Problem Addressed

Manual sorting of rice grains was a slow, tedious, and inefficient process for farmers and small rice mill owners. It required significant time and labour, often leading to inconsistent quality and reduced income. The absence of affordable grain-sorting technology made the task even more difficult for rural communities.

Technology

Mohan Sharma designed and developed a low-cost rice grain sorting machine that efficiently separates broken grains from whole ones. The machine is simple in design, manually operable, and made from readily available materials. It is durable, easy to maintain, and suitable for small-scale farmers who cannot afford expensive industrial equipment.



Societal Impact

The innovation has reduced manual labour and improved productivity in rice processing. Farmers can now save time, ensure better grain quality, and increase their earnings. The machine also encouraged rural entrepreneurship by promoting small-scale fabrication and repair services. It empowered local communities and demonstrated how grassroots innovations can provide practical, low-cost solutions to everyday problems.

Current status

The rice grain sorting machine has been adopted by farmers in Mohan Sharma's village and nearby areas. It has received national recognition from the National Innovation Foundation for its utility and impact. Sharma continues to refine the design to enhance efficiency and spread its use across more farming communities.



PEOPLE'S FESTIVAL OF INNOVATIONS

2025



Tractor-Bund: Precision Bund Maker with Adjustable Settings

Mridupaban Handique
Charaideo, Assam



Innovation Video

Problem Addressed

Manual or improvised bund making is slow, labour-intensive, and dimensionally inconsistent, causing poor compaction and frequent breaches. Peak-season labour scarcity and fragmented holdings delay field prep, compress the sowing window, and raise costs, while repetitive spade work causes ergonomic strain. Small-to medium-sized farmers need an affordable, rapid, and repeatable method to form accurate bunds tailored to different soils and field conditions.

Technology

Mr. Mridupaban Handique designed a tractor-mounted bund maker from high-strength mild or carbon steel. It is designed for seamless compatibility with tractors of 35 HP and above (Category I/II hitch) and operates efficiently via a three-point linkage. The bund width is adjustable from 60–100 cm and height from 25–45 cm. The working width ranges from 1.2 to 1.8 m, and the machine weighs 180–250 kg. It operates up to a depth of 20 cm and covers 0.3–0.5 hectares per hour. The heavy-duty box frame has a rust-resistant coating. Disc or wedge-type wings ensure efficient soil cutting and bund formation.



Societal Impact

The Tractor-Mounted Bund Maker efficiently constructs uniform soil bunds using a tractor, enabling quick bund formation suited for paddy fields. It provides a cost-effective, time-saving solution suitable for dryland and irrigated fields, as well as for farmers with fragmented holdings. This device holds significant promise for expansion across various agroclimatic zones in India, particularly in the rice-growing regions of Assam, West Bengal, and Odisha.

Current status

The Tractor-Mounted Bund Maker has been successfully tested in paddy fields across Assam, showing excellent performance in creating uniform, compact bunds with minimal labour. Farmers report significant time and cost savings during land preparation. The machine is currently in use by several local farmers, with growing demand from nearby districts for wider adoption due to its reliability and efficiency.



PEOPLE'S FESTIVAL OF INNOVATIONS

2025



Fruits and Vegetable Capper

Shaji Varghese
Ernakulum, Kerala



Innovation Video

Problem Addressed

Fruits in orchards often suffer from bird and insect bites, leading to significant quality and price losses, as well as the spread of diseases. Traditional protection methods such as nets or chemical repellents are costly, labour-intensive, and not consistently effective, especially for organic cultivation. Farmers needed a simple, affordable, and eco-friendly solution to protect fruits without affecting their natural growth.

Technology

The Fruits Capper is a simple, lightweight manual tool designed to cover fruits efficiently without the need to climb trees. It helps in applying protective caps or covers around fruits to prevent damage from birds, insects, frost, and excess sunlight. The device can extend to various lengths, making it suitable for tall trees and extensive orchards. It is low-cost, easy to use, and allows fast and uniform covering of fruits.



Societal Impact

The Fruits Capper ensures better quality, size, and colour of fruits by protecting them from external damage and maintaining ideal air, light, and moisture balance. It promotes organic farming by eliminating the need for chemical repellents and pesticides. The tool is user-friendly, making it suitable for small and marginal farmers, women, and even children, thereby reducing labour and increasing productivity.

Current status

The Fruits Capper has been successfully demonstrated among local fruit growers, showing strong acceptance due to its ease of use and low cost. Farmers have reported a noticeable improvement in fruit quality and reduced losses from birds and insects. The innovation is in active use and ready for wider dissemination among horticultural communities and organic farmers.



PEOPLE'S FESTIVAL OF INNOVATIONS

2025



SK4, a High-Yielding Turmeric Variety

Sachin Kamalakar Karekar
Ratnagiri, Maharashtra



Innovation Video

Problem Addressed

Traditional turmeric varieties often suffer from low yield, longer crop duration, and vulnerability to pests and diseases. Farmers in the Konkan region face challenges in achieving consistent productivity and profitability due to these limitations.

Technology

SK4 is a high-yielding turmeric variety developed by Sachin Kamalakar Karekar through a systematic selection process and extensive field trials. The variety demonstrates better rhizome weight, higher curcumin content, and shorter maturity period compared to conventional local varieties. It is well-suited to the agro-climatic conditions of coastal Maharashtra and requires minimal chemical inputs.



Societal Impact

The innovation offers farmers a sustainable and profitable alternative to traditional turmeric varieties. Higher yield and improved quality enhance farmers' income while supporting the regional spice-based cottage industry. The array also encourages eco-friendly farming practices and promotes local seed sharing among smallholders.

Current status

SK4 has been successfully cultivated and adopted by farmers in and around Ratnagiri, resulting in significant yield improvements over traditional varieties. Field demonstrations and feedback indicate strong potential for regional and commercial-scale adoption.



PEOPLE'S FESTIVAL OF INNOVATIONS

2025



Improved Drought Tolerant Dual Purpose Sorghum Variety

Himatbhai Virjibhai Lakkad
Bhavnagar, Gujarat



Innovation Video

Problem Addressed

Farmers in drought-prone regions frequently face recurring crop failures and low yields due to prolonged dry spells and limited access to irrigation facilities. Traditional sorghum varieties often lack drought tolerance and produce subpar fodder, which affects both food and livestock productivity. There was a need for a dual-purpose sorghum variety that could ensure stable grain and fodder yields even under water-scarce conditions.

Technology

Himmatbhai Virjibhai Lakkad developed a high-yielding, dual-purpose sorghum variety called 'AA' through on-farm selection. It matures early (100–110 days), thrives in both Rabi and Kharif seasons, and is tolerant to drought, pests, and diseases. The variety yields 45% more grain and 10% more fodder than existing types, producing sweet, palatable fodder with 10.5–12% protein. Validated by S.D. Agricultural University, it offers farmers a sustainable, low-cost alternative to commercial hybrids.



Societal Impact

The 'AA' sorghum variety has boosted farm incomes and strengthened food and fodder security across Gujarat, Jammu, and Maharashtra. It enables farmers to achieve higher yields and improved livestock nutrition, while promoting community self-reliance through the sharing of local seeds. This innovation has enhanced rural livelihoods, encouraged youth engagement in agriculture, and showcased the power of grassroots innovation in driving sustainable farming practices.

Current status

The Improved drought-tolerant dual-purpose sorghum Variety developed by Himatbhai Virjibhai Lakkad has been successfully cultivated in Bhavnagar and nearby districts, showing excellent drought resilience and higher productivity. The variety is being adopted by local farmers for both grain and fodder purposes and has demonstrated consistently better performance compared to traditional cultivars under limited-water conditions.

C-CAMP Team



Dr. Bhavisha Wala
Programme Lead,
Advancement Programmes
C-CAMP



Dilip Joy T
Programme Manager,
Advancement Programmes
C-CAMP



Dr. Nuzhat Ahsan
Programme Manager,
Advancement Programmes
C-CAMP



Ajish Kumar R
Associate Programme Manager,
Advancement Programmes
C-CAMP



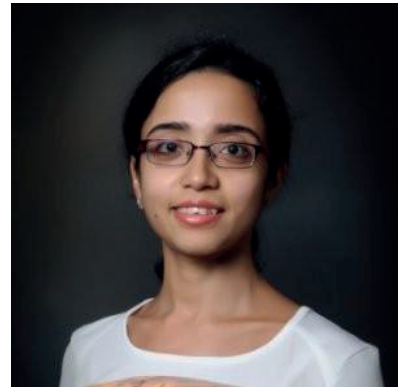
Priyanka S
Programme Executive,
Advancement Programmes
C-CAMP



Arya Anil
Programme Assistant,
Advancement Programmes
C-CAMP



Shruti M K
Programme Assistant
Advancement Programmes
C-CAMP



Dr. Debarshini Chakraborty
Programme Lead,
Communications
C-CAMP



Soma Ghosh
Assistant Programme Manager,
Communications
C-CAMP



Raghul M R
Assistant Programme Manager,
Communications
C-CAMP

GIAN- Team



Prof Anil K. Gupta, Founder



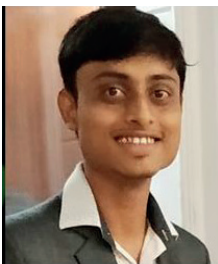
Kishore Solanki, Manager-Sales



Dr. Anamika Dey, CEO



Ankit Somra, Design Engineer



Akshay Shah, Finance & Admin Officer



Unnikrishnan Nair, Design and Publication Head



Rageshri Thoriya, Innovation Manager



Shaikh Mohammad Harun, Research Associate



Dhyanesh Mistry, Computer Trainer



Ramesh Thakor, Field associate cum driver



Bharatbhai, Field associate cum driver



Sanjay Gurung, Field Officer, Sikkim



Mukeshbhai, Field associate cum driver



Dorjee Bhutia, Field officer, Sikkim



Praveenbhai, Housekeeping



Nadeem Syed, General Manager, J&K



Sabzar Wani, Innovation Manager, J&K



Abhijeet Tiwari, Field Officer In-charge, Sikkim

Our addresses

India International Centre

40, Max Mueller Marg, Lodhi Gardens, Lodhi Estate, New
Delhi, Delhi 110003

Centre for Cellular and Molecular Platforms (C-CAMP)

GKVK Campus
Bellary Road
Bangalore 560065

Gujarat Grassroots Innovation Augmentation Network [GIAN]

Bungalow no 1, Satellite complex
Near Mansi Crossroads, Satellite
Ahmedabad-380015

Hosting Partner



Organizing Partner

