Global Indian Scientists & Technocrats Forum

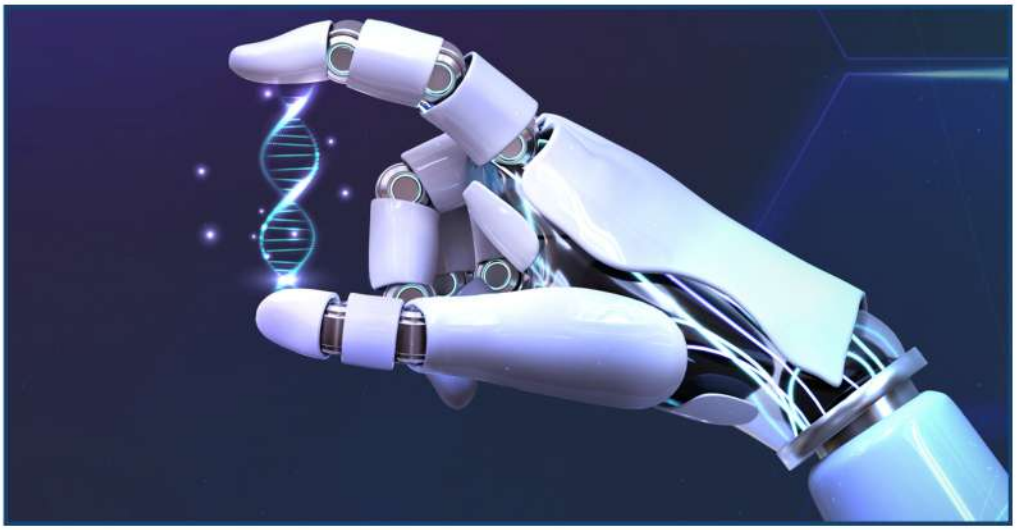
GIST

April 2026

The true wealth of a nation consists not in the stored-up gold but in the intellectual and physical strength of its people.

- Sir Chandrasekhara Venkata Raman

TABLE OF CONTENTS



"Where Global Indian Minds Converge, Sustainable Nations Emerge."

In a world increasingly shaped by science, technology, and innovation, the power of collective intellect has never been more vital. Across continents, Indian scientists and technocrats are contributing to breakthroughs in healthcare, artificial intelligence, climate science, space research, cybersecurity, sustainable development, and beyond. Yet, when these brilliant minds connect, collaborate, and align with a shared purpose, their impact multiplies exponentially.

This is the spirit and strength of the GIST Forum.

GIST is more than a network - it is a movement. A movement that brings together accomplished Indian-origin scientists, researchers, academicians, innovators, and industry leaders from around the globe. United by knowledge and driven by purpose, GIST fosters collaboration that transcends borders, disciplines, and generations.

At its core, GIST believes that science is not merely about discovery - it is about responsibility. Responsibility to society. Responsibility to future generations. Responsibility to use knowledge for the betterment of humanity.

April, a month globally associated with health, sustainability, and environmental consciousness, reminds us that science must serve both people and planet. Whether advancing preventive healthcare, strengthening food and nutrition systems, accelerating clean energy solutions, or shaping ethical artificial intelligence, our community stands at the forefront of transformative change.

The Indian diaspora has long been recognized for intellectual excellence. Through GIST, this excellence becomes organised, collaborative, and mission-driven. It transforms individual success into collective impact.

As we move forward into 2026, GIST renews its pledge to expand partnerships, strengthen scientific dialogue, and amplify innovation that benefits humanity at large. Together, we are not only shaping technologies - we are shaping futures.

Let this edition of our newsletter serve as a testament to what is possible when knowledge meets purpose, and when global collaboration is guided by shared values.

The journey continues. The mission grows stronger. And the future remains bright - because we build it together.

GIST USA Seminar and Grant Proposal Review for Agricultural Development

GIST USA organized an interactive seminar in collaboration with Dr. Venkatramana Pegadaraju, Vice President of Grow Further, to strengthen research collaboration and capacity building among Indian researchers working in agricultural development. GIST USA partnered with the Association of Agricultural Scientists of Indian Origin and the Association of Agricultural and Biological Engineers of Indian Origin in the USA.

The session was moderated by Prof. P V Vara Prasad from Kansas State University, who is an advisory board member of GIST-USA.

The seminar focused on identifying innovative solutions to address challenges in sustainable agriculture, food security, climate resilience, and rural livelihoods.

During the session, participants were introduced to funding opportunities and the grant review process for agricultural development programs. Special emphasis was placed on aligning research proposals with global priorities such as climate-smart agriculture, sustainable food systems, and smallholder farmer resilience.

As part of this initiative, members of GIST USA actively supported Indian researchers and institutions by reviewing multiple grant proposals submitted for agricultural development projects. The review process provided constructive feedback on research design, project objectives, methodology, and potential impact. This mentoring effort helped researchers strengthen their proposals to better align with international funding standards and increase their competitiveness.

The activity reflects GIST USA's commitment to bridging global scientific expertise with grassroots agricultural innovation in India, supporting researchers in developing high-quality proposals that can contribute to sustainable agricultural transformation and improved farmer livelihoods.

Through collaborations such as this seminar with Grow Further, GIST USA continues to promote knowledge exchange, mentorship, and international partnership in agricultural research and development.

Nutrition 360 Initiative - Ongoing Activities and Community Collaboration

Vaidya Rajesh Kanwar
GIST USA, Nutrition360

The Nutrition 360 team continues to make steady progress through a range of activities aimed at strengthening knowledge sharing and professional collaboration within the Ayurveda and integrative health community. These efforts include curriculum planning, development of educational articles and reports, and organizing discussions that support the advancement of nutrition education.

As part of this collaborative process, we recently reached out to practitioners, educators, and wellness professionals for Curriculum Feedback & Participation regarding Nutrition 360. The goal was to gather insights, suggestions, and expressions of interest from individuals who bring valuable real-world experience to the field of nutrition and holistic health.

Over the past few weeks, the team carefully reviewed and consolidated all responses. Based on this collective input, the core topics and subtopics have now been finalized. Each section has been thoughtfully assigned to subject matter experts whose professional backgrounds align with the content areas. These contributors will now begin developing detailed material, ensuring that the curriculum is both evidence-informed and practical for diverse learning environments.

To maintain momentum and collaboration, the Nutrition 360 team holds weekly meetings every Wednesday, where members review progress, coordinate ongoing projects, and plan upcoming activities.

This collaborative, community-driven approach strengthens the foundation of the Nutrition 360 Initiative and supports the broader goal of promoting meaningful nutrition education and dialogue.

We extend our sincere appreciation to everyone who shared feedback or volunteered to participate. Your contributions are invaluable to the success of this initiative.

Further updates will be shared as our activities progress.

GIST Forum Meets Ambassador of India to Advance Aahaar Kranti & Nutrition-360

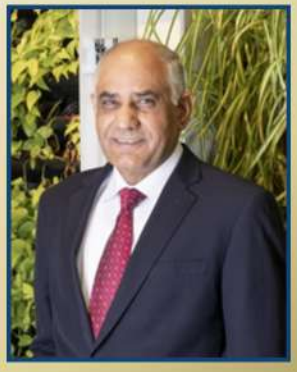
On March 13, 2026, Dr. Yelloji-Rao Mirajkar met with Shri Vinay Kwatra, Ambassador of India, to introduce the GIST Forum, the Aahaar Kranti movement in India, and the Nutrition-360 Campaign in the USA.

Shri Vinay Kwatra expressed strong appreciation for these initiatives and conveyed his support on behalf of the Embassy. He also graciously agreed to host a Nutrition-360 event at the Consulate, marking an important step in expanding the campaign's reach and visibility.

During the meeting, Dr. Mirajkar presented the Ambassador with a copy of the book "Hindu Culture and Dharmic Traditions", along with the GIST brochure and the January 2026 Newsletter, offering a comprehensive overview of the Forum's ongoing work and vision.

This engagement reflects the growing recognition of Aahaar Kranti and Nutrition-360 as impactful initiatives promoting positive nutrition and holistic well-being.

Congratulations!



Dr. Prakash Kumar Jha

He has been awarded the early career award by the Mississippi Academy of Science.

Dr. Om Parkash Dhankher

Elected as an American Association for the Advancement of Science Fellow, an incredibly well-deserved recognition of your outstanding contributions to science and agriculture

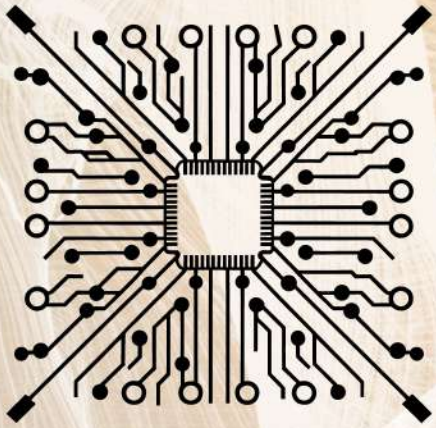
QUANTUM TECHNOLOGY

Seesion presenter: Dr. Sachin Kinge
GIST Europe, Feb 2026

Context and Objectives

The session was convened to address the "Lab-to-Fab" gap in quantum technology. With the 2026 European Quantum Act and India's National Quantum Mission in full swing, the discussion focused on synchronizing European industrial capacity with India's massive scientific talent pool to build a resilient, sovereign quantum stack.

In the session, quantum technology and its impact, applications and theoretical foundations were presented and discussed with European diaspora.



Strategic Pillars of Discussion

- **The Foundations and prospects of Quantum Technology:** Current research trends in the fields such as Quantum Sensing, Computing.
- Transition to **"Quantum 2.0"**: Moving beyond pure research into the "Industrialization Phase." This involves the creation of **Quantum Chips Pilot Lines** and specialized design facilities to turn prototypes into market-ready products. A critical focus on cybersecurity. Experts highlighted the urgency of migrating.

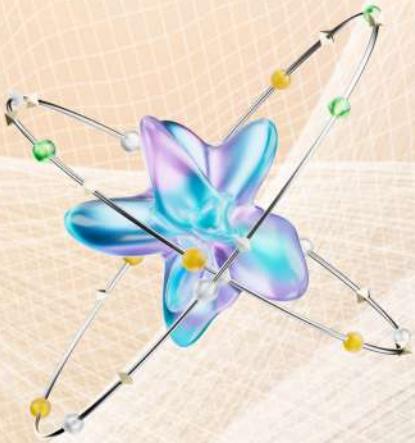
Key Technical & Policy Needs

Area	Needs
Manufacturing	Shift from noisy (NISQ) machines to **Fault-Tolerant systems** using surface code error correction.
Sovereignty	The need for a "Sovereign Tech Stack" to reduce dependence on non-EU/Indian supply chains for diluting refrigerators and specialized lasers.
Talent	Need for **Quantum Skills development** to bridge the global shortage of quantum engineers (currently 3 vacancies for every 1 candidate).

Dissemination Strategy

The discussion emphasized that "Science Diplomacy" is the primary vehicle for knowledge dissemination. This includes:

- **Open Access Testbeds:** Allowing Indian and European startups to test algorithms on shared quantum hardware via the cloud.
- **Lab-to-Land Applications:** Prioritizing quantum sensing for real-world impact, such as using Quantum Gravimeters for underground water mapping and earthquake early warning systems.



Final Conclusion

The session concluded that 2026 is the "Year of Execution." The focus has moved from proving if quantum works to establishing where it will be manufactured and how it will be secured. The GIST Europe platform can serve as the essential bridge for this bilateral industrial collaboration development.

Profile: Dr. Sachin Kinge is a distinguished scientist and technocrat recognized for his extensive work in materials science, nanotechnology, and renewable energy. He currently plays a pivotal role in both the industrial and academic sectors in Europe.

Professional Biography

Dr. Kinge is currently the Technology Head of Materials Engineering at Toyota Motor Europe in Brussels. His career is characterized by a "triple-helix" model, where he maintains deep ties across industry, research institutes, and universities.

Academic Background: He earned his Ph.D. through the Max Planck Institute and RWTH Aachen University in 2004, specializing in advanced materials and nanotechnology.

Academic Appointments:

- Industry Visiting Professor at the University of Twente (BRAINS - Center for Brain-Inspired Nano Systems).
- Industry Visiting Professor at TU Delft, where he collaborates on future energy and material solutions.
- Assiociate Editor: EPJ Quantum Technology Journal

Major Scientific Achievements

With over 5,600 citations and an extensive list of publications >125, in top-tier journals like Nature, Science, and ACS, RSC, Angewandte Chemie. . He was also recognized in 2022 with Best researcher award by Toyota Engineering Society. He has filed > 70 Patents.

Prof. Dr. Kinge's work has significantly advanced the following fields:

- **Perovskite Solar Cells & Modules:** He is a leading figure in the development of high-efficiency perovskite photovoltaics, focusing on improving their stability and scalability for industrial manufacturing.
- **Quantum Dot Technology:** His research has pioneered the use of colloidal quantum dots for infrared light-emitting diodes (LEDs) and high-sensitivity photodetectors.
- **Nanomaterials for energy:** He has contributed foundational research to how nanoparticles self-assemble at surfaces, which is critical for creating the next generation of electronic and energy-harvesting devices.
- **Future Mobility:** At Toyota Motor Europe, he leads efforts in materials engineering that directly impact the development of hydrogen fuel cells, next-generation batteries, and sustainable automotive materials.
- **Quantum Technology:** He initiated and estblished Quantum Technology Research in Toyota Group. Has been leading key projects developing advanced quantum sensors, quantum key devices and algorithms.

AI - BIOLOGY - MEDICINE

AI is reshaping biology from the ground up: solving the protein-folding puzzle that earned the 2024 Nobel Prize, decoding the 98% of our DNA once called "junk," and acting as a clinical copilot in hospitals - from virtual biopsies to detecting hidden heart conditions. Biology is rapidly shifting toward a world that is more predictive, precise, and data-driven.

Session Summary:

Artificial Intelligence is rapidly transforming the landscape of medicine and life sciences by acting as a sophisticated lens to decode the "book of life," exemplified by breakthroughs like AlphaFold, a neural network that solved a 50-year-old mystery by predicting how proteins fold into complex shapes. This technology extends to DNA language models which analyze the "dark matter" of the human genome-the noncoding 98% of our DNA-to sift through billions of genetic letters and pinpoint the specific changes that cause diseases such as cancer. In clinical settings, AI serves as a vital "co-pilot" for doctors, with studies showing that AI-assisted clinicians often achieve superior diagnostic accuracy and more precise predictions for cancer treatment outcomes compared to those working unassisted. Despite these advances, the shift toward "explainable AI" remains crucial to ensure that these systems provide logical clinical reasoning rather than operating as "black boxes," thereby guaranteeing that AI remains a safe and reliable partner in medical decision-making.

Profile

Dr. Sanket Desai is a researcher in the field of cancer genomics and early disease diagnosis. He is currently working at the intersection of the application of computational analytical tools and artificial intelligence in the study of the human genome to predict cancer risk.

Professional biography

Dr. Sanket Desai is a computational biologist specializing in cancer genome analysis, pathogen genomics, and germline–somatic interactions. His work focuses on developing algorithms and data-driven approaches to understand cancer evolution, risk prediction, and tumor–microbiome dynamics. With a strong background in bioinformatics and algorithm development, he integrates large-scale genomic datasets to uncover clinically meaningful insights. He aims to advance precision medicine through reproducible, scalable, and population-specific genomic analytics.

Academic background:

- PhD in Life Sciences from ACTREC, Tata Memorial Centre (TMC) India, with specialization in cancer genomics, computational biology, and pathogen detection in tumors
- Expertise in germline variation, somatic mutation modeling, pathogen phylogenomics, and statistical / machine-learning approaches for genomic data

Professional experience

- Marie Curie (LEAD Fellow), Postdoctoral Researcher, BRIC, University of Copenhagen, Denmark (2024 – Present)
- Postdoctoral Fellow, Genome Data Science Laboratory, IRB Barcelona, Spain (2023 – 2024)
- PhD fellow, ACTREC–Tata Memorial Centre / HBNI (2015 – 2022)
- Industry experience as research associate and data analyst (2010 – 2014)
- Has worked as visiting faculty @ MGM-IBT Aurangabad, Sinhagad College Pune during the period of 2014 – 2015

Achievements

- Contributed to viral (COVID) detection and analysis via computational method development (Briefings in Bioinformatics, 2021, BMC Bioinformatics, 2021) and Raman based spectral analysis (Journal of Biophotonics, 2020)
- Built TMC-SNPdb 2.0, a major ethnic-specific germline variant database improving cancer mutation calling in Indian genomes (Database Journal, 2022).
- Publications in distinguished cancer research journals - contributed to high-impact studies including breast cancer (Breast Cancer Research 2022) head and neck cancer (Communications Biology 2023) and brain cancer (Neuro-oncology, 2024)
- Research featured in national science media for societal impact (Nature India; IndiaBioscience; The Hindu).

Rising Antibiotic Resistance

Antibiotics are life-saving medications that treat bacterial infections by killing the bacteria or inhibiting their growth. The first antibiotics were discovered in the 1920s. Over time, many new antibiotics have been discovered and developed. The discovery of antibiotics revolutionized modern medicine. Before antibiotics, people could die from even minor bacterial infections. Antibiotics have saved countless lives. However, overuse and misuse of antibiotics have given rise to antibiotic resistant bacterial strains and infections.

The Science Behind Antibiotic Resistance:

Bacteria replicate fast. Most bacteria have doubling time of just a few hours. When the bacteria multiply, they incorporate spontaneous mutations in their DNA due to DNA replication errors. These mutations can serendipitously provide resistance against an antibiotic to the bacterium. For instance, the mutation can tweak a gene so that the bacterium now starts producing an enzyme that can break down and neutralize certain antibiotics.

Low levels of antibiotics in the body act as selection pressure. At subtherapeutic antibiotic level, susceptible bacteria are killed while bacteria that have evolved antibiotic resistance survive and multiply, giving rise to an antibiotic resistant strain. This is evolution, and bacteria evolve fast.

In addition to transferring DNA to their progeny by reproducing, bacteria can also exchange DNA by horizontal gene transfer with bacteria in their environment. Thus, they can transfer antibiotic resistance genes to one another.

Resistant infections can spread within a human population giving rise to diseases that are harderto treat. This necessitates use of higher generation antibiotics to combat the infection. Higher antibiotics have more side effects, and bacteria can also develop resistance against these antibiotics giving rise to multidrug resistant infections. Delays in finding an effective antibiotic to treat multidrug resistant infections can cause deaths.

Judicious use of antibiotics is very important to combat antibiotic resistance.

Combating Antibiotic Resistance:

In India, lack of awareness leads to self-prescription or failure to follow doctor's advice while taking antibiotics. Antibiotics are a special class of drugs. They should be taken exactly as directed by your physician – at the prescribed dose, frequency and duration – to prevent antibiotic resistance. It is important to complete the doctor prescribed course of antibiotics even if one starts feeling better mid-course. Completing a course of antibiotics ensures that all disease-causing bacteria in your body are killed or sufficiently inhibited, and antibiotic resistance does not emerge.

Continued...

Serious bacterial diseases like tuberculosis and cholera are still prevalent in India. Emergence of resistant strains has made management of these diseases very difficult. Diseases like tuberculosis have long treatment regimens, often extending to several months. If the treatment is not completed or followed properly, resistance can increase.

Over the counter sale of antibiotics should be strictly audited and penalized. Antibiotics should only be available on the prescription of a doctor.

Unnecessary overuse of antibiotics should be avoided. Antibiotics should only be prescribed after judicious evaluation. Higher antibiotics should only be prescribed if resistance to firstline antibiotics is suspected. Antibiotics have no effect on viral infections. So, if just a viral infection is suspected, antibiotics should not be prescribed.

Effluent from hospitals and pharmaceutical industry must be disposed properly to avoid contamination of water bodies. Antibiotics are also used in livestock industry to increase production. This antibiotic use should be regulated to prevent antibiotics from entering the food chain.

Public awareness, judicious prescription and strict regulations can help curb antibiotic resistance.

Author:
Dr. Prajakta Naval
PhD Biotechnology (IIT Madras)
Postdoctoral Researcher,
Chalmers University of Technology, Sweden

Further Reading:

1. Michael CA, Dominey-Howes D and Labbate M (2014) The Antimicrobial Resistance Crisis: Causes, Consequences, and Management. Front Public Health. 2:145. doi: 10.3389/fpubh.2014.00145

2. Taneja N and Sharma M (2019) Antimicrobial resistance in the environment: The Indian scenario. Indian J Med Res. 149(2):119-128. doi: 10.4103/ijmr.IJMR_331_18.

3. Gheewalla N, Karthikeyan V, Jadhav Y et al. (2026) Genomic landscape of antimicrobial resistance in India: findings from a multi-species surveillance study. npj Antimicrob Resist. 4(13). https://doi.org/10.1038/s44259-026-00185-9

Participation and Presentation at the 3rd International Ayurveda Conference and Expo

Dubai The 3rd International AYUSH Conference & Exhibition 2026, held from 15–17 February 2026 at the Dubai World Trade Centre, brought together global experts, researchers, practitioners, and industry leaders to advance dialogue on traditional systems of medicine - Ayurveda, Yoga, Unani, Siddha, and Homeopathy - and their integration with modern healthcare. The event served as an important international platform for promoting collaboration, innovation, and the global adoption of holistic health systems.

Among the distinguished international participants were GIST Leaders including Dr. Yelloji Rao Mirajkar and Dr. Mahadevan Seetharaman, who attended the conference as special international delegates representing the United States. Their participation reflected the growing interest in integrative health approaches and the expanding role of Ayurveda and nutrition-based preventive healthcare in addressing modern lifestyle diseases.

Dr. Mahadevan Seetharaman, Dean of the California College of Ayurveda (CCA) and the Hindu University of America (HUA), spoke about the growing burden of cardio-metabolic disorders in the United States, including obesity, diabetes, hypertension, and cardiovascular disease. He highlighted how these conditions have become a major public health challenge due to sedentary lifestyles, processed diets, and chronic stress. Dr. Mahadevan emphasized that addressing these diseases requires a shift from treatment-focused healthcare to prevention-centered strategies. In this context, he introduced the Nutrition 360 program as a practical and scalable framework designed to address cardiometabolic health through integrative nutrition, Ayurvedic principles of metabolism, and lifestyle modification. He explained that Nutrition 360 integrates modern nutritional science with traditional Ayurvedic insights such as digestive health (Agni), balanced dietary patterns, and personalized lifestyle interventions to support long-term metabolic wellness.

Continued...

Dr. Yelloji Rao Mirajkar, who leads the GIST USA (Global Indian Scientists & Technocrats) group, also highlighted the importance of collaborative, science-driven approaches to healthcare innovation. Through the GIST network, Dr. Mirajkar has been actively promoting partnerships between scientists, technologists, and healthcare leaders to develop sustainable solutions to global health challenges. During the conference, he emphasized how programs like Nutrition 360 can serve as a bridge between traditional knowledge systems and modern research frameworks.

Both speakers underscored that Nutrition 360 offers a comprehensive 360-degree approach to health, integrating dietary guidance, metabolic health monitoring, lifestyle interventions, and culturally relevant nutrition education. The program aims to prevent and manage lifestyle diseases by focusing on food as medicine, personalized nutrition, and sustainable behavioral changes. Their participation strengthened academic and professional collaboration between the United States and the global Ayurveda community. By presenting initiatives such as Nutrition 360, Dr. Mahadevan and Dr. Yelloji demonstrated how integrative nutrition and Ayurveda-based preventive care can contribute meaningfully to addressing the global epidemic of lifestyle diseases.

During the conference, both delegates also held productive offline meetings with several key leaders of the global AYUSH community, including Dr. Rajesh Kotecha, Secretary, Ministry of AYUSH, Government of India, and other senior stakeholders, discussing opportunities for collaboration, education, and expanding integrative nutrition and Ayurveda-based preventive healthcare initiatives internationally.

Dr. Somesh Kaushik, ND, BAMS, MPH, MPA
President, National Certification and Credentialing Board for Ayurvedic Medicine (NCCBAM)

At the 3rd International AYUSH Conference and Exhibition 2026 (Feb 15–17, 2026), I delivered two presentations. The first focused on Ayurvedic Integrative Oncology, highlighting a case study on stage-3 colon cancer and the role of Ayurveda, naturopathy, immunity, and gut health in supportive care.

The second presentation at the IDA session addressed AYUSH interventions for lifestyle disorders, emphasizing prevention through diet, lifestyle, and integrative care, and the need for stronger collaboration between Ayurvedic practitioners and oncologists, especially in the United States.

Vaidya Jayagopal Parla

I had the opportunity to attend and present at the 3rd International AYUSH Conference and Exhibition 2026 held at the Dubai World Trade Centre, a global platform bringing together experts from over 35 countries to promote evidence-based traditional medicine. The presentations covered Charakokta Ganas in autoimmune disorders and AYUSH interventions for metabolic disorders, highlighting the integration of classical Ayurvedic knowledge with contemporary clinical evidence. The conference provided a valuable forum for academic exchange, global networking, and showcasing the role of Ayurveda in integrative and preventive healthcare.

Manju Kolli
President, California Association of Ayurvedic Medicine
https://www.ayurveda-caam.org/
Ayurvedic Practitioner, Ayurhitam

I had the honor of participating in a speaker panel at the 3rd International AYUSH Conference and Exhibition Dubai, where experts from around the world discussed the future of traditional medicine. I presented on AYUSH interventions for mental well-being, highlighting holistic approaches for resilience and balance.

As President of the California Association of Ayurvedic Medicine, I also shared insights on the growing interest in Ayurveda in California and ongoing efforts to promote awareness, preventive healthcare, and professional recognition for practitioners.

Vaidya Anupama Kizhakkeveettil

The Dubai AYUSH Conference brought together experts from over 30 countries under the theme Evidence-Based AYUSH Interventions for Mind and Body Health, promoting scientific validation and global collaboration in integrative healthcare.

Vaidya Anupama chaired the IDA session, delivered the welcome address, and supported the launch of key initiatives including thematic panel discussions, a White Paper on mind-body health, and a global practitioners' survey. She also spoke on Ayurvedic Rasayana and cellular aging, linking traditional rejuvenation concepts with modern aging research, and moderated a panel on AYUSH interventions for mental well-being, highlighting the role of traditional medicine in holistic health.

Vaidya Sushma Jakkula
Founder of Ojas Ayurveda, Florida
President-Elect NAMA
Advancing Ayurveda in USA

Attending the 3rd International AYUSH Conference and Expo 2026 at the Dubai World Trade Centre was a truly inspiring and enriching experience. I felt honoured to be part of a global gathering that brought together experts, practitioners, and policymakers dedicated to advancing Traditional Medicine and integrative healthcare.

The conference offered a vibrant environment for learning, collaboration, and meaningful dialogue through workshops, plenary sessions, exhibitions, and public programs. Connecting with distinguished leaders and peers from around the world was deeply rewarding and reaffirmed the growing global recognition and impact of Ayurveda and holistic medicine.

Collaboration

MoU Signed

The Grand Tribal Farmer Meet: February 27th, 2026

On February 27, 2026, the hills of Jawhar, Maharashtra, hosted a powerful convergence of tradition, technology, and trade. Shop for Change Fair Trade NGO organized a Grand Tribal Farmer Meet, bringing together a massive assembly of 850+ tribal and rural farmers. Notably, more than 50% of the participants were women tribal farmers, marking a new era of gender-inclusive agricultural leadership.

Event Highlights

- **Cultural Celebration:** The program began with the traditional Tarpa dance, celebrating tribal heritage.
- **Strategic Partnership:** An MOU was signed with the GIST Forum (Global Indian Scientists and Technocrats Forum) to strengthen digital literacy and sustainable agriculture in the presence of Shri Nandkumar Palkar, Secretary, GIST.
- **Visionary Speakers:** Insights were shared by Chief Guest Mr. Mandar Phanse (Editor, News18 Lokmat), Hon. Justice Ambadas Joshi (Retd.), Dr. Sudhirkumar Goyal (Retd. IAS), and Mrs. Deepa Raut (Agriculture Dept).

Recognizing Champions of Change

A defining moment of the event was the recognition of five progressive farmers whose leadership serves as a beacon for the entire community. These "Champions of Change" were celebrated for milestones ranging from facilitating international exports to London to successfully cultivating diverse orchards and large-scale fruit plantations. By honoring these success stories, we aim to spark peer-to-peer motivation and demonstrate that through sustainable practices and direct market linkages, every tribal farmer can achieve financial dignity and a thriving livelihood.

Collaboration

MoU Signed

What is Shop for Change Fair Trade NGO?

Shop for Change Fair Trade NGO (incubated in 2009 by the European Union) is a transformative movement dedicated to the philosophy of "Trade, Not Aid". We serve as a vital bridge between the "Last Mile" of rural India—our tribal farmers and artisans—and the global conscious market. Since our inception, we have evolved from a certification label into a full-scale engine for rural prosperity, ensuring that marginalized producers receive fair compensation, dignity, and direct access to urban and international value chains.

Our Mission and Strategic Goals

Our mission is to ensure that every farmer and artisan receives their true value worth. We achieve this by:

- Direct Connectivity: Linking traditional and indigenous creators directly to global and urban markets.
- Digital Inclusion: Creating digital marketplaces and learning hubs for Tribals to sell their wares and build capacity.
- Brand Building: Developing GI-tagged brands for tribal districts and providing packaging solutions to meet modern consumer standards.
- Sustainable Livelihoods: Initiating transparent dialogue and respect for marginalized producers to ensure long-term financial stability.

Overall Achievements and Impact

Shop for Change Fair Trade NGO has achieved significant milestones in its journey toward systemic change:

- 50,000+ Lives Impacted: Our footprint is supported by a robust Pan India presence reaching farmers in Maharashtra, Gujarat, Madhya Pradesh, Rajasthan, Andhra Pradesh, Telangana, Karnataka, Tamil Nadu, Kerala, Odisha, West Bengal, and Himachal Pradesh, complemented by our concentrated work in Pivoted Geographies such as Palghar (Maharashtra), Jashpur (Chhattisgarh), and Ri-Bhoi (Meghalaya).
- ₹10 Crore+ Revenue: Directly generated by farmers through our structured market linkage programs.
- 75,000+ Trees Planted: Promoting regenerative farming and creating "Green Income" clusters in the Palghar region.
- JashPure Tribal Brand: The creation of a nationally recognized brand for tribal products in Chhattisgarh.
- Export Excellence: Successfully facilitating a tribal farmer's first-ever green chilli export to London, resulting in a six-fold income increase.

Collaboration

MoU Signed

What is Shop for Change Fair Trade NGO?

Case Study: From Farm to Villa

TPallavi and Ganesh Hande demonstrate how structured supply chains can transform lives. By connecting directly to Mumbai markets (D2C & B2B) with support from Shop for Change Fair Trade NGO, they eliminated middlemen and scaled their impact.

They have empowered 30+ rural women, generated ₹3.5+ crore in revenue, and achieved complete financial independence. Their journey culminated in building their own villa—symbolizing dignity, prosperity, and the power of fair trade.

Innovation: New Ways to Help Farmers

We leverage modern technology to solve challenges:

- **AI-Enabled Villages:** Introducing ChatGPT and AI tools to tribal youth to bridge the digital divide.
- **Digital Marketplaces:** Platforms like GraminBaazar.com allow farmers to sell directly to corporate buyers.
- **Geo-Tagging:** Using geospatial tools for real-time monitoring of plantations to ensure high survival rates and auditable ESG outcomes.
- **GramKushal.com:** A video-based digital learning hub providing repeatable, trackable training modules in local languages.

Leadership & Governance

Shop for Change Fair Trade NGO is led by CEO Sameer Ravindra Athavale, a production engineer and social entrepreneur with over 20 years of experience in business growth and rural development. His vision and commitment to the "Trade, Not Aid" philosophy have been key to building strong market linkages and expanding the organization's impact.

The NGO is supported by a diverse Board of Advisors, including retired IAS officers, legal experts, and social activists, ensuring transparency, ethical governance, and alignment with the UN Sustainable Development Goals (SDGs).

Contact:
1504 Shree Mauli Prabha, Tandon Cross Road, opp. IDBI Bank, Ramnagar, Dombivli East, Maharashtra 421201.
Phone: +91 93722 46669
Email: sameer@shopforchange.ngo
https://shopforchange.ngo

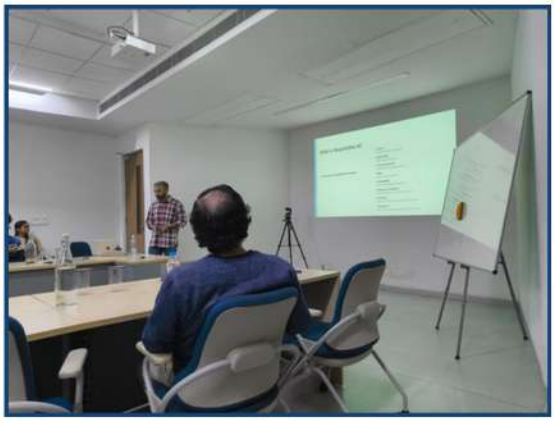
Diaspora Visiting Bharat

Dr. Rahul Gupta
GIST USA, AI Verticle

Indraprastha Vigyan Bharati, in collaboration with GIST, organized a lecture titled **"From Research to Production: AI Safety in Practice"** on 18 February at IIIT Delhi. The session was delivered by Dr. Rahul Gupta, Senior Manager and Researcher at Amazon, USA, and was attended by PhD scholars and faculty members.

This talk presented practical approaches for evaluating the safety and alignment of modern large language models as they become widely integrated into search, coding, healthcare, and education. It introduced FLIRT, an automated red-teaming framework that uses models to generate increasingly effective adversarial prompts, enabling scalable detection of safety vulnerabilities. The session also examined the application of the Frontier Model Safety Framework to Amazon's Nova 2.0 Lite, assessing its performance against stringent safety requirements in high-risk domains. Finally, it highlighted D-REX, a benchmark designed to identify deceptive reasoning by analyzing internal model processes rather than outputs alone. Together, these efforts illustrate the importance of rigorous, multi-layered evaluation for the responsible deployment of advanced AI systems.

About the Speaker: Dr. Rahul Gupta is a senior manager and researcher specializing in AI safety and the responsible deployment of large-scale generative models. His work focuses on evaluating and stress-testing frontier systems through red teaming, safety benchmarks, and alignment diagnostics, with emphasis on detecting hidden failure modes such as deceptive reasoning. He publishes in leading venues including ICLR, NeurIPS, and ACL, and currently works at Amazon, where he bridges cutting-edge research with production-scale AI while actively engaging with the academic community through collaborations, workshops, and student talks.



Dr. Senthil Srinivasan
International Convenor - Europe (Ireland)

Building Semiconductor Talent in Tier-II Cities: Collaboration with PSG Group of Institutions

Semiconductor Advisory Committee Meeting at PSG College of Technology & MoU Signing

Dr. Senthil Srinivasan recently visited PSG College of Technology, Coimbatore, Tamil Nadu, to coordinate a meeting of the Semiconductor Forum Advisory Committee, which brought together distinguished experts from IMEC, Belgium, IIT Roorkee, and IIT Madras.

The committee discussed the critical need to develop semiconductor expertise in Tier-II colleges and cities across India. A key outcome of the meeting was the decision to launch a course on semiconductor devices and technology, designed to prepare students for careers in this high-demand field.

During the visit, the committee also reviewed the Materials Science laboratory at PSG College and recommended enhancements to support the new semiconductor lab course. The course syllabus is currently being finalized, and once complete, GIST will provide industry and academic experts to teach and mentor students. To formalize the collaboration, a Memorandum of Understanding (MoU) was signed between PSG College of Technology and GIST, ensuring long-term engagement and support.

Expanding the Semiconductor Initiative to PSG Institute of Technology & Applied Research

Dr. Srinivasan was also invited to PSG Institute of Technology and Applied Research, a sister concern of PSG College of Technology, to advise on creating semiconductor technology-related courses.

Discussions focused on building a comprehensive semiconductor ecosystem, with insights shared with Prof. P. Vijayakumar, Dean – Electrical and Computer Engineering, and Prof. Maruthamuthu, HoD of Physics. This collaboration aims to develop academic programs and lab infrastructure to nurture skilled professionals capable of contributing to India's semiconductor industry.

This initiative reflects GIST Europe's broader mission to strengthen science and technology education, foster industry-academia collaboration, and mentor the next generation of Indian scientists and technologists, wherever they are located.

आहार क्रांति
Aahaar Kranti
उत्तम आहार, उत्तम विचार
UTTAM AAHAAR, UTTAM VICHAAR

Aahaar Kranti
5th Anniversary

sewa International

The **Aahaar Kranti** initiative proudly marks its **5th anniversary**, completing five years of dedicated efforts to promote awareness about positive nutrition, health, and immunity among citizens. Launched as a nationwide movement, Aahaar Kranti continues to inspire individuals and communities to adopt informed food choices for a healthier and stronger society.

On this occasion, we appeal to Indian citizens, educational institutions, research bodies, NGOs, schools, colleges, and social organizations to actively participate in this mission. By organizing awareness programs, workshops, lectures, and community activities, we can together strengthen the vision of **"Uttam Aahaar - Uttam Vichaar - Uttam Swasthya."**

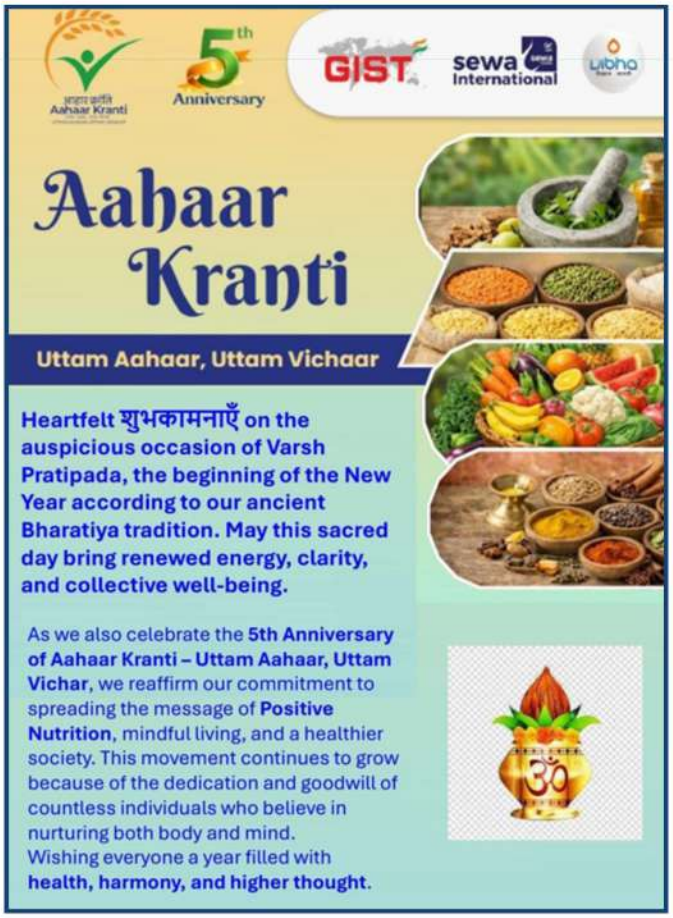
Let us unite to make nutrition awareness a people's movement and contribute towards building a healthier Bharat.

Aahaar Kranti
5th Anniversary
CELEBRATION

sewa International

A National Movement Strengthening India's Nutritional Future

The Aahaar Kranti movement, celebrated on Varsh Pratipada 2026, marks its fifth anniversary with an inspiring virtual gathering that brought together scientists, technocrats, health experts, and thought leaders from around the world. The event underscored the rising national and global relevance of nutrition literacy, sustainable food practices, and the revival of India's traditional wisdom on health and wellbeing.



Over these five years, the movement has touched countless individuals - many of whom have evolved into practitioners, ambassadors, and active contributors. Their personal transformation has fuelled a growing community committed to spreading the message of mindful nutrition, balanced diets, and holistic living. These individuals now champion the cause in their homes, workplaces, and communities, extending the movement's reach far beyond its origins.

At the institutional level, organizations across sectors have begun to embrace Aahaar Kranti as partners, integrating its principles into their programs, outreach efforts, and internal cultures. Schools, universities, research bodies, healthcare institutions, and civic organizations are not only endorsing the movement but also actively contributing to amplify its message - both within their immediate spheres of influence and across broader networks. Their participation has strengthened the movement's impact, enabling its message to travel extensively across regions, disciplines, and generations.

Together, these individual and institutional efforts reflect a powerful collective shift - one that continues to propel Aahaar Kranti toward a healthier, more nutritionally aware future for all.

Aahaar Kranti
5th Anniversary
CELEBRATION

A Vision Rooted in India's Civilizational Knowledge

Shri Praful Krishna opened the event by reflecting on the origins of Aahaar Kranti. He emphasized how modern science is increasingly validating what Indian traditions have known for millennia - that sleep, diet, and exercise form the foundation of health. He also noted the paradox of India's nutritional landscape: despite abundant food production, lifestyle diseases and malnutrition persist due to shifts toward ultra-processed foods.

A Movement of Simplicity, Science, and Social Impact

A short documentary and the popular Aahaar Kranti jingle set the tone for the celebration, showcasing the initiative's mission to build a nutrition-aware India through education, community engagement, and sustainable food ecosystems.

Insights from the Panel

The event featured a diverse panel representing spiritual wisdom, scientific research, and modern entrepreneurship.

Dr. Srinivas Rao (Dr. Quinoa)

Dr. Rao presented a compelling reflection on India's food landscape, noting that the country does not lack food - it lacks wise consumption. He proposed three simple, scalable actions that can transform national health outcomes:

- One seasonal fruit daily
- Half a plate of fruits and vegetables in every meal
- Replace one packaged snack each day

He emphasized that big health transformations come from small, repeatable daily actions.

Dr. Rashmi Kulkarni

Speaking from a war zone, Dr. Kulkarni delivered a powerful talk on the gut microbiome, calling it the "invisible organ" essential to human health. She highlighted how modern lifestyles - excessive sanitization, antibiotics, and processed foods - are destroying beneficial microbes, contributing to chronic diseases and mental health challenges. Her message was clear:
Return to traditional, microbiome-friendly living.

Swami Advaitanand Giri
A Himalayan Monk aka Laughing Monk

Swami Advaitanand Giri brought a fresh, youth-centric approach to the movement—opening with a rap song on junk food to show how ancient wisdom can meet modern culture. He emphasized that despite technological progress, attention spans and mental well-being are declining.

To reverse this trend, he is leading large-scale training programs for psychologists and teachers in Delhi, aiming to integrate mindful eating (Aahaar Kranti) and mental wellness into school curricula. He stressed rebuilding the teacher-student bond, involving parents through weekend retreats, and collaborating with influencers to reach young audiences.

Citing rising global anxiety and depression rates, he called for policy-level action and collective effort, noting that transforming India's habits can influence nearly one-fifth of the world's population.

Vivekananda Pai (VIBHA)

Pai ji underscored the global challenge of fast-food culture, noting that no society has successfully reversed it once adopted. He emphasized the urgency of Aahaar Kranti's mission in this context.

Professor Pradeep Kumar Prajapati

Director-All India Institute of Ayurveda (AIIA)

Professor Prajapati highlighted the need to pair traditional Ayurvedic dietary wisdom with modern scientific validation. He emphasized regional and seasonal diets, mindful eating, and personalized nutrition based on Ayurvedic principles.

He called for rigorous clinical studies across national research institutions to build evidence that resonates with today's youth. He also stressed the importance of school-level interventions, community nutrition programs, and preserving traditional recipes.

Professor Prajapati concluded that India has the knowledge and resources to lead a global shift toward preventive health—provided research, policy, and public engagement move together.

Dr. Mangi Lal Jat

Indian Council of Agricultural Research (ICAR)

Theme: Agriculture for Health & Biofortification

Dr. Mangi Lal Jat emphasized that the future of agriculture must be rooted in human health, not just crop yield. As he noted, "56.4% of chronic diseases... are because of the food we eat and our lifestyle" (from the transcript). He highlighted ICAR's work on biofortified crops, sharing that 45% of wheat varieties grown in India are already biofortified.

He stressed the need to revive local food systems, recalling how even farm households now rely heavily on market-based foods. He explained the direct link "from the soil to the gut microbiome", arguing that healthy soil leads to healthier people.

Dr. Jat also described national initiatives such as natural farming, One Health, and ICAR–ICMR collaborations like the SEHAT program (Science Excellence for Health Through Agricultural Transformation). He called for a holistic food-system approach that integrates agriculture, environment, nutrition, and public health.

Dr. Yelloji Rao
Nutrition 360 & Global Perspective
GIST-International Convener

Theme: Universal Nutrition Challenges & Evidence-Based Ayurveda
Dr. Rao connected Aahaar Kranti to global health trends, noting that issues like ADHD, autism, obesity, and early-onset non-communicable diseases are rising worldwide. He referenced research showing how maternal diet affects child behavior, quoting findings that mothers who consumed more junk food had children with *"more behaviors such as aggression and tantrums."*
He explained the **Nutrition 360** initiative, launched in the U.S., which promotes food as medicine, reduced processed foods, fasting for detoxification, and using spices and traditional dietary principles for immunity.

To build global trust, he outlined four pillars:

- Modern scientific data
- Evidence-based clinical studies
- Validated Ayurvedic principles
- Direct adoption of time-tested Ayurvedic concepts

He emphasized that if wellness ideas succeed in the U.S., *"they can happen everywhere in the world."*

Closing segment

Dietician Sumeet ji Gupta offered heartfelt gratitude to the many contributors who helped elevate Aahaar Kranti from a small initiative to a national-and now international-movement. He noted that after presenting the program in Dubai, he issued a call for every country with an Ayurveda community to adopt and expand the mission.
He highlighted the exceptional quality of the educational modules, sharing that when these were reviewed by the Ministry of AYUSH, officials described them as *"the best models we have"* and formally partnered with the team as a knowledge collaborator. The Ministry of Women and Child Development also endorsed the work, and former AYUSH director Dr. Tanuja Nesari supported the initiative by providing institutional space and encouragement.
Sumeet ji emphasized that the project's strength comes from its global volunteer base, with nearly 100 contributors from India, the U.S. East and West Coasts, Europe, Germany, and the Middle East. He expressed deep appreciation for everyone involved and welcomed future partners who will carry the mission forward.
The session concluded with acknowledgments to the speakers, organizers, and supporters, followed by warm closing remarks and thanks from the panel.

Unwrapping the Truth: The Unspoken Risks of Packaged Food and the Promise of Aahaar Kranti

"Annam Brahma" - Food is God.
-Taittiriya Upanishad

By Dr. Shallu, Assistant Professor, Department of Chemistry,
LBS Govt. College, Saraswati Nagar, Jubbal, Shimla-171206 (H.P.)

Behind every colourful, glossy food wrapper lies a truth majority of us never read, long lists of preservatives, artificial flavours, and harmful chemicals. In India packaged food industry is booming, but so are the lifestyle diseases like diabetes, obesity, and hypertension, particularly among our young people. What are we actually eating? It's time to inquire.

The Aahaar Kranti movement, led by organisations the Global Indian Scientists & Technocrats Forum (GIST), is addressing this call, urging every Indian to return to fresh, regional, and home-cooked food rooted in our own rich traditions.

"Eat your food as your medicine, otherwise you have to eat medicine as your food."
-Ancient Saying (Charaka Samhita & Hippocratic tradition)

The Subtle Poison on Our Shelves

Packaged foods are engineered to be addictive, overloaded with salt, sugar, and harmful additives. Frequent use raises the risk of diabetes, heart disease, and even certain cancers. Artificial colouring and preservatives are directly associated with hyperactivity and developmental problems in children. Even worse, labels like 'natural', 'multigrain', or 'low fat' are often misleading marketing strategies. Trans fats, MSG, aspartame, and artificial dyes like Tartrazine, common in Indian snacks, cause long-term organ damage, hormonal imbalance, and brain impairment. We are ingesting a gradual, subtle poison, not merely food.

As part of this movement, my students and I have been running the *"Unwrapping the Truth"* campaign across schools, colleges & communities, making young people aware about exactly what goes into their everyday packaged snacks and motivating them to make informed, healthier choices. The response proves that people are ready to change, they simply need the right knowledge.

How People Can Adopt Aahaar Kranti in Everyday Life

Here is how every Indian household might begin its own silent revolution:

Read food labels carefully and avoid products with more chemicals.

Cook local and eat seasonal as India's diverse agricultural heritage gives us access to a wealth of seasonal fruits, vegetables, and grains that offers far better nutrition than any packaged alternative.

Revive traditional foods like millets, fermented foods, dal, and khichdi are nutritional powerhouses that have sustained generations of Indians and deserve a proud place on our plates again.

Educate the next generation about what they eat, involve them in cooking, and help them understand the connection between food and health.

The revolution begins in our own kitchens not in government policies. Every meal prepared at home is a tiny act of defiance against disease, mis-information, and a food business that thrives on our ignorance. The truth has been unwrapped. It's is the time to act.

“Nutrition is not merely about food - it is about the future of humanity. When communities understand what they eat, they transform how they live.”

Ft. Vrunali Panchal
Scientific Communication & Content Lead, GIST Forum

Celebrating Five Years of Aahaar Kranti: A Call for Action

As Aahaar Kranti approaches its 5th Anniversary, we mark not just a milestone, but a movement that continues to grow in purpose and reach. This occasion is an invitation to educational institutions, universities, civil society organizations, and community leaders to join us in advancing nutrition awareness through meaningful, in-person engagements.

Across regions, institutions are being encouraged to host structured sessions that plant the seeds of informed food choices and inspire measurable behavioural change. These engagements go beyond commemorative events they represent a collective commitment to building healthier communities and future-ready generations.

Rooted in India’s holistic vision of development, Aahaar Kranti integrates the pillars of Ayushman Bharat (Healthy India), Ayurvedic Bharat (Traditional Knowledge Systems), Vidwan Bharat (Knowledge-Driven India), and Krushi Pradhan Bharat (Agriculture-Centric India). Together, these dimensions reinforce a shared global goal: strengthening public health through nutrition literacy and sustainable food systems.

Breaking Language Barriers: Expanding Access Through Vernacular Outreach

True transformation begins with accessibility. To ensure that the guiding principle of “Uttam Aahaar, Uttam Vichar” (Right Food, Right Thought) reaches diverse communities, Aahaar Kranti has significantly expanded its translation initiatives.

Core educational modules are currently being translated into multiple Indian languages, enhancing reach across varied linguistic landscapes. A structured review mechanism including regular technical consultations ensures scientific accuracy, cultural contextualization, and preservation of evidence-based nutritional principles.

This multilingual approach strengthens inclusivity and positions Aahaar Kranti as a scalable model for community-based nutrition education, one that can be adapted globally across cultures and languages.

Empowering with the "Train-the-Trainer" Initiative

Through an intensive “Train-the-Trainer” program, educators are being equipped with comprehensive knowledge on balanced nutrition, food hygiene, dietary diversity, and preventive health practices. This initiative follows a "percolation model" once these trainers are well versed, they become catalysts of change, leading structured outreach efforts across the region, educating students and fostering a grassroots movement toward healthy living. This percolation framework ensures scalability, sustainability, and long-term impact for the next generation.

By embedding this nutrition literacy, we are nurturing a generation that views balanced nutrition not as a short-term intervention, but as a lifelong lifestyle foundation or health, productivity, and national well-being.

Looking Ahead

Five years ago, Aahaar Kranti began as a national awareness movement. Today, it stands as a structured, evolving model for nutrition advocacy, one that integrates science, tradition, agriculture, education, and public health.

As we celebrate this milestone in 2026, we reaffirm our commitment to collaboration across institutions, regions, and nations to build a healthier, wiser, and more resilient global community through the power of informed food choices.

Partnership & Collaboration Appeal

GIST

Global Indian Scientists & Technocrats

Join Hands to Foster Innovation & Growth

Connecting for a Sustainable & Prosperous Future

Dr. Yelloji-Rao Mirajkar
International Convenor-GIST Forum
+1 732-319-1634
yellojirao.mirajkar@gistforum.org

Dr. Senthil Srinivasan
Convenor-GIST Europe
+32 476 96 04 11
senthil.srinivasan@gistforum.org

Shri Nandkumar Palkar
Secretary-GIST
+91 99670 24237
nandkumar.palkar@gistforum.org

Ms. Kartiki Lawate
Program & Operations Coordinator-GIST
+91 88287 00750
kartiki.lawate@gistforum.org

GIST Forum - Collaborations & Partners

Shri Vithal Education & Research Institute, Pandharpur

CMS College of Science & Commerce, Coimbatore

INDIAN DRUGS RESEARCH ASSOCIATION & LABORATORY PUNE

Lal Bahadur Shastri Government College, Saraswati Nagar, Shimla

All India Institute of Ayurveda, Delhi

Walwalkar Hospital And Research Centre, Sawarde, Ratnagiri

CSIR – National Botanical Research Institute (NBRI) Lucknow

NANDHA AYURVEDA MEDICAL COLLEGE AND HOSPITAL, ERODE

MAHATMA GANDHI RURAL DEVELOPMENT AND PANCHAYAT RAJ UNIVERSITY, GADAG
Rural Roots, Global Heights.

PSG College of Technology, Coimbatore

Vivekanand Seva Mandal

Shop For Change Fair Trade

Zogdu Singh Charitable Trust's (Regd.)
THAKUR INSTITUTE OF MANAGEMENT STUDIES & RESEARCH

आयुर्वेद शिक्षण एवं अनुसंधान संस्थान, जामनगर
Institute of Teaching and Research in Ayurveda, Jamnagar
राष्ट्रीय महत्व का संस्थान
Institute of National Importance

ITRA JAMNAGAR

sewa International

AMRITA VISHWA VIDYAPEETHAM
DEEMED TO BE UNIVERSITY UNDER SECTION 3 OF UGC ACT 1956

Vijnana Bharati - Vividha Ayam

https://vijnanabharati.org

VISHWA VED VIGYAN SAMMELAN

BHARATIYA VIGYAN SAMMELAN

VASTUKALA AAYAM
VIJNANA BHARATI

Connecting science and people with an Indian perspective

MANDALA
VIJÑĀNA BHARATI

SHAKTI
(A NATIONAL MOVEMENT FOR WOMEN)

Space on Wheels

Vibha Vani India

WORLD OCEAN CONGRESS

NEED MISSION

Tech4Seva