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उन्नत भारत अभियान
Unnat Bharat Abhiyan

UNNAT BHARAT ABHIYAN

A flagship program of Ministry of Education, Government of India

National Coordinating Institute- IIT Delhi

Success Stories:

- UBA initiative got place under 'One District One Product' scheme.

- Flames of Change- Innovative thinking for biogas technology.

- Soak Pit installation in a tribal village.

- Bamboo shoot processing- new prospects for tribal livelihood.

- Biofilter for Kitchen Wastewater.

Programs & Activities:

- UBA to develop template, and resource materials for students.

- Faculty development program planned with UGC.

- Five day residential program to strengthen Panchayats.

- Workshops by RCIs for the new participating institutes.

- Workshop for Earning Carbon Credits.

Testimonials

UBA has been instrumental in creating sustainable technological solutions in the villages. Many needy people are benefited extensively in remote villages of our country.

~ **Dr. S. Kanagaraj**
Coordinator, Unnat Bharat Abhiya
Amrita Vishwa Vidyapeetham

Our journey under UBA has been filled with impactful experiences that have not only brought positive change at the grassroots level but also shaped our own perspectives as socially responsible citizens.

~ **Aditya**
Student coordinator, UBA
National Institute of Technology, Rajpur

Message from the
National Coordinator

I am pleased to share with you the launch of the fortnightly newsletter of Unnat Bharat Abhiyan (UBA)—a platform envisioned to connect, inform, and inspire our growing community of participating institutions, faculty members, students, practitioners, and well-wishers across the country.

Unnat Bharat Abhiyan was conceived with a simple yet powerful idea: that institutions of higher education can play a transformative role in addressing the real challenges of rural India. Over the years, UBA has evolved into a vibrant national movement, with thousands of institutions engaging directly with villages, learning from communities, and co-creating sustainable solutions rooted in local needs, modern science, and participatory approaches.

A distinctive strength of UBA lies in experiential learning. Through direct engagement with

villages, students and teachers move beyond classrooms to gain first-hand understanding of rural realities. This process enriches academic learning while nurturing empathy, problem-solving skills, and social responsibility. Equally important is the documentation of Indian knowledge systems, heritage, culture, and traditional wisdom, especially the lived experiences and insights of elderly community members, which are invaluable yet rapidly disappearing. UBA seeks to preserve this knowledge and integrate it with contemporary academic and technological frameworks.

This newsletter aims to bring together these diverse experiences and voices. It will regularly share programme updates, success stories from network villages, innovative practices, and examples of technical, societal, and managerial interventions of PIs. It will also highlight the dedication of faculty coordinators and the energy and creativity of students who remain at the heart of UBA's mission.

As we move forward, let us reaffirm our commitment to participatory, inclusive, and sustainable development, and to building a self-reliant and resilient rural India through knowledge, collaboration, and service.

-Virendra Kumar Vijay
National Coordinator, Unnat Bharat Abhiyan

UBA initiative got place under 'One District One Product' scheme

मशरुम तोड़ते किसान

Agriculture in Gaindikhata, Haridwar had collapsed due to elephant raids and seasonal unemployment. Since 2017, IIT Delhi's Unnat Bharat Abhiyan (UBA) team adopted a participatory approach across four villages, co-creating a Village Development Plan with locals.

Lemongrass cultivation revived abandoned land, deterred elephants, and generated steady income for farmers with institutional and CSR support. To address off-season livelihood gaps, mushroom farming was introduced as a climate-resilient, indoor enterprise, scaling rapidly and creating employment for rural youth and women. Crucially, 10 students from IIT Delhi were involved in every step — designing compost supply chains, building cost-efficient grow

houses, developing training materials, and tracking market data. The experience transformed their academic journey into one of applied, ethical engineering rooted in real-world rural dynamics. The initiative's success was acknowledged by the district administration under the One District One Product (ODOP) scheme for Haridwar.

Flames of Change- Innovative thinking for biogas technology

PI: IIMT University | RCI: IIT Roorkee | State: Uttar Pradesh | District: Meerut | Faculty: Dr. Shubha Dwivedi, Dr. Ritu Batra|Time Period: 2020–Ongoing | Villages Covered: 5 (adopted for scale-out) | Students Involved: 2 | Rural Beneficiaries: 30+ (pilot users + staff)

At IIMT University, Meerut, the Unnat Bharat Abhiyan Cell transformed abundant organic waste into sustainable energy through a campus-based biogas initiative. Beginning with dialogue and participatory village engagement in 2020, faculty and students identified the link between waste management and energy needs. A medium-scale biogas plant now converts cow dung and kitchen waste into cooking fuel and organic manure, reducing LPG use and

improving soil health. Students played a key role in system design and analysis. The project benefits campus stakeholders, boosts crop yields, cuts emissions, and serves as a scalable model for rural deployment.

# Community Soak Pit installed in a tribal village

PI: AJK College of Arts & Science, Palakkad, Coimbatore Coordinator: Dr. M. Jasmine Priya; Project Investigator:

Dr. R. Sridhar, SEG: Liquid Waste Management

Puthupathi village in Coimbtore, home to about 54 households, faced serious health and environmental risks due to the open discharge of untreated household greywater. Through surveys and consultations, a community-level wastewater solution was identified under Unnat Bharat Abhiyan. A porous-walled soak pit connected to a closed drainage system was constructed, enhanced with beneficial microbial cultures for effective

treatment. Faculty and students led the project from assessment to monitoring, with strong community and Panchayat involvement. The initiative reduced health and environmental risks, improved sanitation, enabled reuse of treated water for a medicinal garden, and created a scalable, replicable model for rural and tribal sanitation while strengthening experiential student learning.

Bamboo shoot processing- new prospects for tribal livelihood
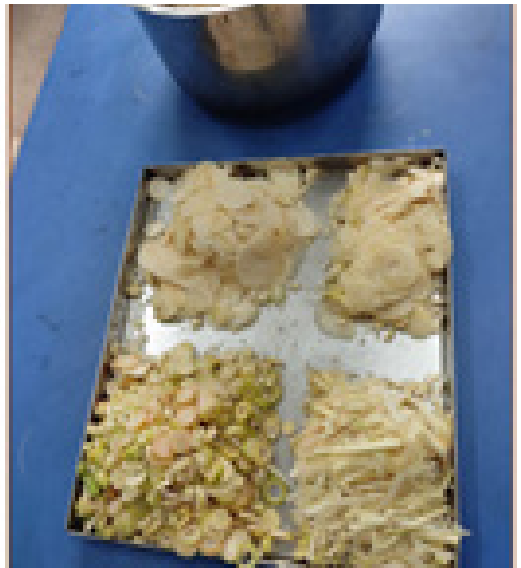
PI: North Eastern Regional Institute of Science & Technology (NERIST), PI Coordinator: Dr. Thaneshwer Patel, SEG: Sustainable Agriculture System

This project addressed the challenge of high post-harvest losses of bamboo shoots due to their seasonal availability and perishability, despite their cultural and nutritional importance among tribal communities. The intervention introduced a low-cost,

village-level processing model using simple equipment such as a cutting machine, weighing scale, and hand sealer. At the same time traditional practices—washing, peeling, etc., were standardized to produce value-added items- fermented bamboo shoots, sun-dried shoots, pickles, and packaged sliced products, improving shelf life and marketability. While working on the project, indigenous knowledge was integrated with scientific inputs, ensuring ease of adoption and community acceptance. As a result, seasonal bamboo shoots were transformed into year-round income-generating products, significantly reducing wastage and enhancing tribal livelihoods.

Bio-filter for kitchen waste water

PI: R.M.K. Engineering College, RSM Nagar, avaraipettai, Thiruvallur, PI Coordinator: Dr. M. Meena, SEG: Liquid Waste Management: Beneficiary- Two rural schools.

The developed solution under this project is a gravity-based biofilter using activated carbon prepared from locally available dry leaves

and shells. This eco-friendly bio-absorbent (activated carbon) removed oil, organic matter, and suspended impurities from waste water. The treated water was safely reused for floor cleaning and gardening.

The project involved 15 engineering students and 4 faculty members, providing hands-on exposure to real-time rural water management challenges. Installation of the biofilters improved hygiene and sanitation conditions in the schools and created awareness about sustainable water reuse practices. This low-cost, energy-free, and easy to maintain solution demonstrates a replicable and sustainable model for greywater management in rural areas.

Programs & Activities

UBA to develop template, and resource materials for students

The SEGs' Coordinators' Meeting organized by UBA NCI, IIT Delhi on 13 December 2025 at IIT Delhi in hybrid mode. The meeting focused on deliberations regarding

the UBA Village Adhyayan Pool, the Technology Appropriateness Template, and development of resource materials to reorient HEI curricula. The Pool documents will comprise a structured set of community engagement activities across multiple disciplines, including humanities, sciences, social sciences, management, law, and engineering etc. With the University Grants Commission (UGC) introducing a 2-credit course namely "Fostering social responsibility and Community Engagement" for students of Higher Educational Institutions (HEIs), this document is expected to serve as a key resource, enabling students to select suitable activities aligned with their academic disciplines as well as geographical contexts.

Faculty Development program planned with UGC

UGC has launched a 2 Credit course namely "Community Engagement and Fostering social responsibility" under UBA. In continuation to the efforts, 6 day Faculty Development Programs on community based participatory reserach are organized by UGC in collaboration with UBA. The FDP aims for:-

   1.Provide in depth training on CBPR principles, PRA and other community engagement methodologies.

   2.Sensitize faculty members towards social responsibility and sustainable community

partnerships.

3.Equip participants to act as mentors and master trainers for cascading knowledge within institutions and regions.

4.Strenthen academic linkages with panchayati raj institutions, local governance structures and grassroot innovations, in alignment with UBA objectives.

Five day residential program to strengthen Panchayats

Unnat Bharat Abhiyan, through its Regional Coordinating Institute at IIT Jodhpur, conducted a Five-Day Residential Management Development Programme for Rajasthan Administrative Service officers from 02–06 December 2025 in collaboration with the Panchayati Raj Department, Government of Rajasthan. The programme trained 30 senior officers from all districts to strengthen Panchayat-level governance aligned with Viksit Rajasthan and Viksit Bharat @2047. Using expert lectures, village immersion, and participatory tools such as design thinking, the MDP enhanced evidence-based planning, community engagement, and institutional convergence. It established a replicable national model linking higher education institutions with state administration for sustainable rural development.

Workshops by RCIs for the new participating institutes (PIs)

Regular orientation workshops are being organized by RCIs for the PIs to orient the institutes on mandates, Working methodology under Unnat Bharat Abhiyan. The RCIs along with NCI share the experience and the learnings from the field. The key administrative policies are also explained for ease of working and submission of documents.

Workshops organised for the earning of carbon credits

A Regional Workshop under Unnat Bharat Abhiyan, organized by RCI NITTTR Chandigarh on 18 December 2025, focused on strategies for earning carbon credits through sustainable agriculture and forestry in north-western India. The workshop brought together 26 participants from NABARD, Forest Departments, academia, and UBA institutions. Expert sessions simplified carbon market mechanisms, MRV systems, and climate-smart practices such as agroforestry, AWD, DSR, and bio-char. Case studies demonstrated scalable, farmer-centric models. The workshop strengthened institutional convergence and highlighted UBA's role as a catalyst for climate-resilient, income-generating rural development with strong replication potential.

Current Status
Unnat Bharat Abhiyan

4666 Participating Institutes.

17006 Gram Panchayats and ~22000 network villages.

35 states/Union Territories.

605 Districts.

13 Collaborations and MoU.

15 Subject Expert Groups (SEGs) to provide subject-specific technological solution.

543 Technological Interventions being made/ implemented by the Participating Institutions in village.

50 Regional Coordinating Institutions (RCIs) (at least 1 or more in each state) to mentor PIs.

Collaborations include-
Ministry of Rural Development,Govt. of India
Ministry of Panchayati Raj, Govt. of India
Council of Scientific and Industrial Research
NECTAR, YOJAK, etc.

Thanks