



Unnat Bharat Abhiyan

(A Movement for Progressive India)

Report
On

**National Program for Demonstration and Dissemination of select Technologies of
Unnat Bharat Abhiyan Institutions**

MAHOTSAV & EXPO

“UNNATI”

**Unnat Bharat Abhiyan Networking for National Atmanirbhar
Technological Intervention**

On 17th-18th March 2023

Organized By- Unnat Bharat Abhiyan, National Coordinating Institute, IIT Delhi.



Organic
Farming



Water
Management



Renewable
Energy



Artisans, Industries
& Livelihood



Basic
Amenities



Convergence

Regional Coordinating Institute (RCI)

Unnat Bharat Abhiyan

Indian Institute of Technology Roorkee

Roorkee-24767 (Uttarakhand)

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ABOUT UNNAT BHARAT ABHIYAN

Unnat Bharat Abhiyan (UBA), a flagship program of the Ministry of Education, coordinated by IIT Delhi, envisions a transformation in the rural development processes by leveraging knowledge institutions to help build the architecture of an inclusive India. The idea is to enable the faculty and students of HEIs to work with the people of rural India in identifying development challenges and evolving appropriate solutions for accelerating the sustainable growth of villages. Presently Unnat Bharat Abhiyan has a vast network of 3471 Participating Institutes and ~17000 Villages. IIT Delhi coordinates as a National Coordinating Institute of UBA with the support of 45 Regional Coordinating Institutes (RCI) and 14 Subject Expert Groups (SEG).

“UNNATI” (Unnat Bharat Abhiyan Networking for National Atmanirbhar Technological Intervention)

“UNNATI” Mahotsav & Expo is an initiative to showcase the knowledge based solutions which resulted from continuous interactions among knowledge institutions through their students and faculty members and primary stakeholders through Gram Sabhas of respective villages, for the purpose of identifying ground level challenges and designing their appropriate & sustainable solutions.

These technology and management based solutions which have evolved through participatory approach & knowledge sharing aim to ease the lives and improve the standard of living of a specific village. However, through this expo, we aim at wider review of these solutions by academicians & researchers and representatives of community, and proliferation in other areas. We also aim to create an ecosystem for commercialization of these solutions, through start-ups, CSR support, and organization of entrepreneurs.

Inaugural session

The “UNNATI” Mahotsav & Expo commenced on 17th March 2023, 11.00 am with the inaugural where the about “UNNATI” Mahotsav & Expo by Prof. V.K. Vijay, National Coordinator, Unnat Bharat Abhiyan, IIT Delhi. Welcome Address by Prof. Sukumar Mishra, Associate Dean, R&D IIT Delhi. Keynote by Shri Harsh Chouhan, Chairman, National Commission for Scheduled Tribes. Address by Chief Guest Dr. Subhas Sarkar, Hon’ble Minister of State for Education on "How to proceed to empower villages through Unnat Bharat Abhiyan and urged all higher education institutions affiliated to the scheme to make villages living laboratories, where many fundamental and research problems can be identified and solved. can be resolved. Found with the help of knowledge-based skills and Launch of new Website - Unnat Bharat Abhiyan. Vote of Thanks by Prof. Pooja Ghosh, Coordinator, RCI-NCR, Unnat Bharat Abhiyan. Inauguration of “UNNATI” Mahotsav & Expo followed by visit to unnati technology demonstration by chief guest.

Technical Session

Our PI's technology "Portable Manual Briquetting Machine for Converting Forest Bio Residue to Low Cost Energy Briquettes" has been selected for demonstration in "UNNATI" Mahotsav and Expo. The technology is very useful for Himalayan regions. Portable Manual Briquetting Machine for Converting Forest Bio Residue to Low Cost Energy Briquettes. A manually operated, horizontally aligned, dual plunger based briquetting machine is designed for pine needles. Machine works on the principle of Pascal's fundamentals and has two levers that provides the necessary displacement of different scale to the hydraulic piston. In order to assist the dying pressure applied to the machine, a foot pedal is also attached with one of the levers. Hopper is provided to feed the machine with crushed pine needles. Piston presses the pine needles against the metallic wall provided in the machine and finally the briquette comes out from the die with the help of an ejector. The machine is capable of producing one briquette of 20-25 gm at a time and takes 40-45 seconds to produce the same. The presented machine is less bulky and hence portable in nature. The machine is completely manual in nature and requires minimal running and installation cost. Such a machine is suitable for the production of the briquettes at local level. Thus, the fabricated machine can prove to be a better alternative to the existing machine setups that are bulky, runs on electricity and requires heavy investments & semi-skilled labour for their operation.

OUTCOMES OF THE WORKSHOP

"UNNATI MAHOTSAV" aims to put in place a mechanism to ensure knowledge, technology and information exchange among different stakeholders. This platform will provide: -

1. Excellent opportunities for Participating Institutes under scheme Unnat Bharat Abhiyan to showcase their innovations which are relevant to the society and gradual movement towards holistic development of the chosen cluster - using modern scientific and technological knowledge.
2. Ecosystem for commercialization of the identified solution through startups, CSR support & entrepreneurs.
3. Advanced technological solutions after thorough analysis by the academicians, researchers and community representatives.
4. Excellent opportunities for Higher Educational Institutes of Unnat Bharat Abhiyan for gradual movement towards holistic development of the chosen cluster - using modern scientific and technological knowledge.

5. Opportunities for networking of community, voluntary social organizations and NGOs working on convergence of Science & Technology and social relevance as implementers of change in New India.
6. In the process, a bank of unaddressed technological needs of society will be created which may become a dynamic source of live projects for the students, research scholars and faculty in the professional institutes. A compendium of 75 technologies has also been prepared which may be fruitful for achievement of the objective.

UNNAT BHARAT ABHIYAN, NCI, IIT DELHI ORGANIZES
Mahotsav & Expo
“UNNATI”
(Unnat Bharat Abhiyan Networking for National Atmanirbhar Technological Intervention)
DAY – I
PROGRAM SCHEDULE – 17th March’ 2023
VENUE: DOGRA HALL - IIT DELHI
HAUZ KHAS, NEW DELHI, DELHI 110016

TIME	SUBJECT
10:00 AM - 11:00 AM	Registration and Tea
11:00 AM - 11:05 AM	Lighting of Lamp
11:05 AM – 11:15 AM	About “UNNATI” Mahotsav & Expo by Prof. V.K. Vijay, National Coordinator, Unnat Bharat Abhiyan, IIT Delhi
11:15 AM – 11:30 AM	Welcome Address by Prof. Sukumar Mishra, Asso. Dean, R&D IIT Delhi
11:30 AM – 11:50 AM	Keynote by Shri Harsh Chouhan, Chairman, National Commission for Scheduled Tribes
11:50 AM – 12:00 PM	Address by Sh. K Sanjay Murthy, Secretary, Ministry of Education
12:00 PM - 12:30 PM	Address by Chief Guest Dr. Subhas Sarkar, Hon’ble Minister of State for Education <i>Launch of Website - Unnat Bharat Abhiyan</i>
12:30 PM – 12:35PM	Vote of Thanks by Prof. Pooja Ghosh, Coordinator, RCI-NCR, Unnat Bharat Abhiyan
12:30 PM – 01:00 PM	Inauguration of “UNNATI” Mahotsav & Expo followed by visit to UNNATI TECHNOLOGY DEMONSTRATION
01:00 PM - 02:00 PM	LUNCH
02:00 PM - 03:30 PM	Discussion/Presentation on Technologies demonstrated in Expo (Energy theme)
03.30 PM – 03.45 PM	TEA
03:45 PM – 5:30 PM	Discussion/Presentation on Technologies demonstrated in Expo <i>(Artisan and Livelihood theme)</i>

DAY – 2

PROGRAM SCHEDULE – 18th March' 2023

VENUE: DOGRA HALL - IIT DELHI

HAUZ KHAS, NEW DELHI, DELHI 110016

TIME	SUBJECT
09:00 AM – 10:30 AM	Discussion/Presentation on Technologies demonstrated in Expo (Water and Sanitation theme)
10:30 AM – 10:45 AM	TEA
10:45 AM – 12:15 PM	Discussion/Presentation on Technologies demonstrated in Expo (<i>Basic Amenities theme</i>)
12:15 PM – 1:30 PM	Discussion/Presentation on Technologies demonstrated in Expo (<i>Agriculture theme</i>)
01:30 PM – 02:15 PM	LUNCH
02:15 PM - 04:30 PM	Panel Discussion on Technology Dissemination
Way Forward	
04:30 PM - 04:50 PM	Launch of Technology Compendium of 75 identified Technologies through “UNNATI” and Way forward by Prof Vivek Kumar, National Co-Coordinator, Unnat Bharat Abhiyan.
04:50 PM - 05:05 PM	Address by T G Sitharam Chairman, All India Council of Technical Education (AICTE) (Guest of Honor)
05:05 PM - 05:20 PM	Recognition and Certificate Distribution
05:20 PM - 05:30 PM	Vote of Thanks by Prof. Pooja Ghosh, RCI Coordinator, Unnat Bharat Abhiyan, IIT Delhi

Photo Gallery



Lamp-Lighting by the Cheaf guests in the inaugural function



Dignitaries on the dais



Prof. V.K. Vijay, Coordinator NCI-UBA IIT Delhi Welcoming
Dr. Subhas Sarkar, Hon'ble Minister of State MoE



Prof. Vivek Kumar, Co-coordinator, NCI-UBA, IIT Delhi
addrssing the participants



Prof. V.K. Vijay, Coordinator NCI-UBA IIT Delhi addrssing
The"UNNATI" Mahotsav & Expo



Prof. Sukumar Mishra, Asso. Dean, R&D IIT Delhi
Welcoming the participants



Mr. Harsh Chouhan, Chairman, National Commission for
Scheduled Tribes. addrssing the participants



Dr. Subhas Sarkar, Hon'ble Minister of State MoE,
addrssing the participants



Vote of Thanks by Prof. Pooja Ghosh, Coordinator, RCI-NCR, UBA



The "UNNATI" Mahotsav & Expo was inaugurated by the chief guest.



Participants during Inaugural session



Participants during Inaugural session



Mr. Gajendra Goswami Making a Presentaion during technical session.



Mr. Gajendra Goswami Making a Presentaion during technical session.



Team UBA IIT Roorkee and other participants



Demostration Machine in Stall



During technical session.



Prof. V.K. Vijay presenting the Memento to Dr. Subhas Sarkar,
Hon'ble Minister of State MoE



Prof. V.K. Vijay presenting the Memento to Mr. Harsh Chouhan,
Chairman, National Commission for Scheduled Tribes.



Prof. V.K. Vijay presenting the Memento to Prof. Sukumar
Mishra,



Group photo of all the participants and guests