



सत्यमेव जयते



सशक्त पंचायत सतत् विकास



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Iconic week celebrations

Technological Interventions Through UBA for Empowering Gram panchayats

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उन्नत भारत अभियान
UNNAT BHARAT ABHIYAN



Unnat Bharat Abhiyan



UBA launch workshop, 2014

- A flagship program of the MoE, GoI launched in 2014 by Shri Pranab Mukherjee, the then President of India
- **Inspired by the vision of transformational change in rural development processes by leveraging knowledge institutions to help build the architecture of an inclusive India.**



Launch of UBA 2.0, 2018



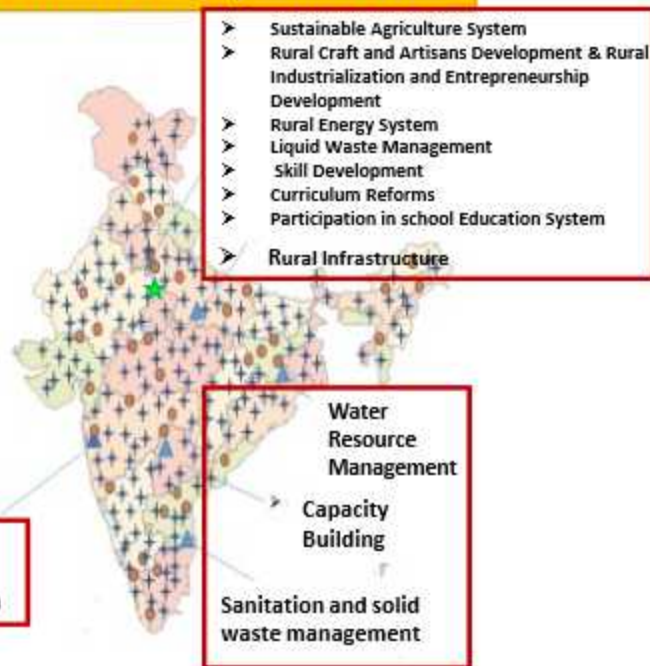
Mission

- **Development of mechanisms for coordination among educational institutions, implementation agencies, and grassroot stakeholders**
- **Holistic and sustainable development of village clusters through utilization of local resources and technological interventions, leading to livelihood generation**
- **Reorientation of academic curricula and research programs in alignment with the local needs**

Opportunity to enable faculty and students of higher educational institutions to work with the people of rural India in identifying development challenges and evolving appropriate solutions for accelerating sustainable growth of villages

Unnat Bharat Abhiyan has a pan-India network of Higher Education Institutions and villages

Unnat Bharat Abhiyan in 2022



- ★ National Coordinating Institute (NCI)
- Regional Coordinating Institute (RCI)
- ★ Participating Institute (PI)
- ▲ Subject Expert Group (SEG)

1 National Coordinating Institute – IIT Delhi

45 Regional Coordinating Institutes

2981 Participating Institutes

13 Subject Expert Groups

~ 15,000 villages

Unnat Bharat Abhiyan



Supporting GPs through its initiatives

Rural Immersion and Technology Interventions

Village Adhhayan

Need
Identification

Appropriate
Interventions

KNOWLEDGE - SHARING

COMMUNITY PARTICIPATION

CONVERGENCE

GPDP/VDP



Tech4Seva



Tech4Seva is a tool to bring corporates, research agencies, NGOs, voluntary organizations and grass-roots level practitioners on a common platform to address the national developmental challenges

TECH4SEVA 2019



UBA & VIBHA Initiative for Technology Outreach as an Enabler for Inclusive & Sustainable Development-A three-day national workshop



THEMES

- AGRICULTURE
- ENVIRONMENT
- LIVELIHOOD
- SCHOOL EDUCATION
- SUSTAINABLE ENERGY SOLUTIONS FOR DECENTRALISED APPLICATIONS
- SWASTH BHARAT

TECH4SEVA 2021



Four-day virtual exhibition was organised as part of the programme. Various technologies developed by prestigious organisations, start-ups, industries and individuals were demonstrated and showcased during this Expo.

THEMES

- Affordable Healthcare
- Environment Friendly and Sustainable Technologies
- Atmanirbhar Bharat: Promotion Applied Research into Employment & Entrepreneurship
- Innovation & Technology for Health & Wellness

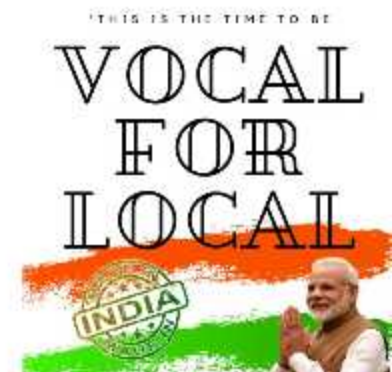


Unnat Bharat Abhiyan resonates with the UN 2030 Agenda and Atmanirbhar Bharat Abhiyan



S&T interventions – technology development and customization – 300 projects guided till date through UBA-SEGs

- Transforming rural livelihood through S&T interventions
- Women empowerment and gender equality
- Sustainable food and water production and management
- Natural resource management and protection



“ If we have to build a nation, we should start from the villages ”

SHRI NARENDRA MODI,
HONORABLE PRIME MINISTER OF INDIA



DECENT WORK AND ECONOMIC GROWTH



REDUCED INEQUALITIES



NO POVERTY



GENDER EQUALITY



PEACE, JUSTICE AND STRONG INSTITUTIONS



Thematic Areas



Organic Farming



Water Management



Renewable Energy



Basic Amenities



Artisans, Industries and Livelihood



Synergy between Unnat Bharat Abhiyan and Panchayati Raj subjects & SDGs



Organic Farming

Sustainable agricultural system

- Agriculture including agricultural expansion
- Animal husbandry, dairying and poultry
- Land improvement, implementation of land reforms, land consolidation and soil conservation



ZERO HUNGER



RESPONSIBLE CONSUMPTION AND PRODUCTION



Water Management

Water resource management

- Minor irrigation, water management, and watershed development
- Safe water for drinking



CLEAN WATER AND SANITATION



CLIMATE ACTION



Renewable Energy

Rural energy systems

- Fuel and fodder
- Rural electrification including distribution of electricity
- Non-conventional sources of energy

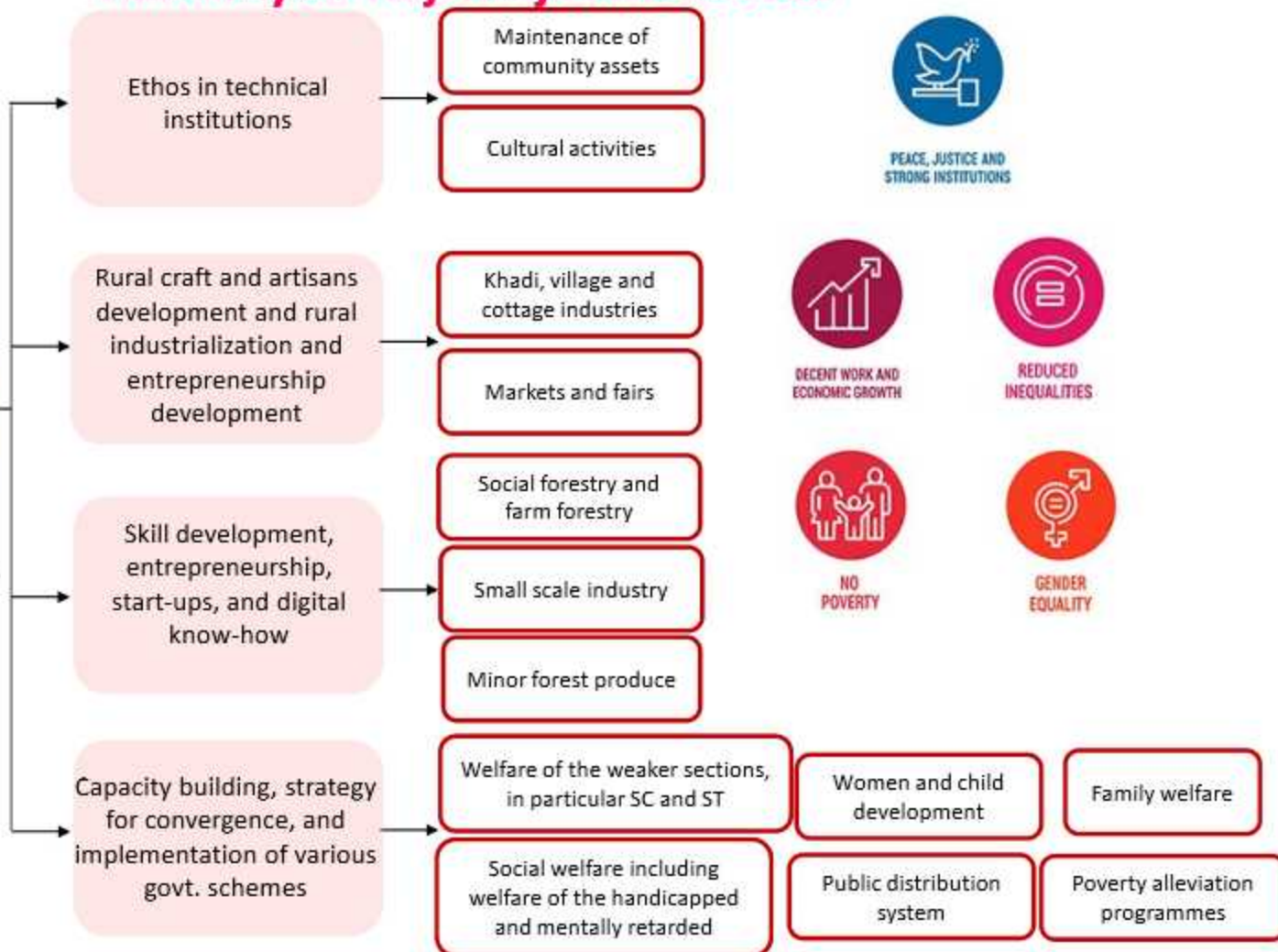


AFFORDABLE AND CLEAN ENERGY

Synergy between Unnat Bharat Abhiyan and Panchayati Raj subjects & SDGs



Capacity Building Artisans, Industries and Livelihood

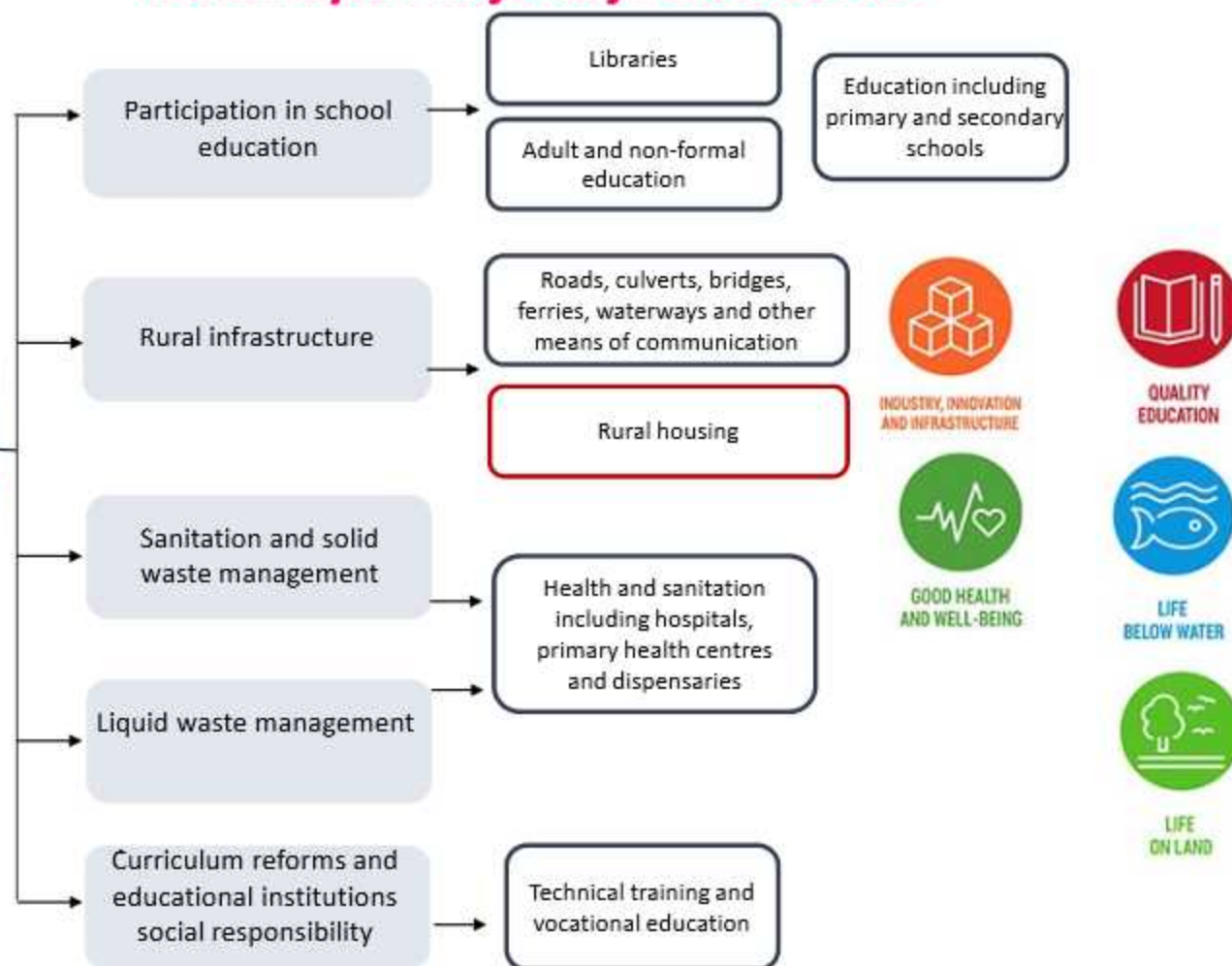




Synergy between Unnat Bharat Abhiyan and Panchayati Raj subjects & SDGs



Basic Amenities





8 Gram Sabhas organised



Survey conducted through PRA and identified problems

VDP made with Gram Panchayat and worked on it

Participatory Rural Appraisal



Convergence with Maharashtra Government



Design and development (in process) of Sewage Treatment Plant



Development of rigid pavement road network and underground drainage system



Design and survey for plan for water supply system



Knowledge sharing

Women empowerment through livelihood generation using S&T intervention based on locally-available resource material



20 Gram Sabhas for community engagement and made village development plan as per need identification

Participatory Rural Appraisal



Provided agriculture seeds as per geographical location

Funding through institute and Convergence with KVK



Mushroom cultivation training



Machine for Baria, Seviyan, Pickle, Murabba, Cotton Razai

Knowledge sharing



Pattal making machine (13 SC/ST women)

Interventions for the tribal community, Kuriotumala



Survey, Gram Sabha and PRA



Identification of problem and possible solutions

Convergence with Life Mission (programme of Kerala Government)



Development of innovative and economically feasible house design capable of overcoming natural calamities



Skill Training



Cloth Bag Preparation



Rain Water Harvesting



Organic Farming: Kudumbashree members of tribal colony

Project CARE (Collective Action for Rural Empowerment) for Kani tribe



Preparation of VDP



Mission Marg Darshan



Cloth bag manufacturing unit

Participatory approach

Knowledge sharing



Making bamboo products
CARE- Vanajyothis (SHG)



English Coaching at Maruthamala
LP School



Coaching/ Skill
Development program



Gram Sabha



Survey through PRA



Problem identified and worked on sanitation

Participatory approach

Knowledge sharing



Water Management by making Check Dams



Road making by the students



Organic Farming

Gram Sabhas



Khurampur Cluster



Vrindavan Cluster



Resource mapping at Agra cluster
by students through rural
internship



Easy accessible clinic at
Khurampur Cluster

Convergence in Khurampur

- IREDA funded street solar lights
- **National Backward Classes Finance & Development Corporation (NBCFDC)** funded for Improved Pottery Kiln for livelihood generation
- **Ministry of Ayush**

Convergence

Participatory
Rural
Appraisal



24 Gov. schools and 10 villages in Vrindavan cluster with 12 interventions in School Education

Gram Sabha



Resource mapping at Gandikhata by students through rural internship

Participatory Rural Appraisal

Gaindhata cluster

Convergence

Through ONGC Project



1. Smokeless cookstove



2. Lemon grass cultivation



3. Mushroom cultivation
4. Family size biogas (in process)
5. Spice Processing (in process)

Pandit Deendayal Upadhyaya Gram Sankul Pariyojna (DST)

1. Model nursery
2. Amla and lemon Plantation
3. Lemon grass cultivation
4. Essential Oil extraction (Lemon Grass and Neem) (In Process)
5. Seed distribution to farmers



Other activities:

1. Capacity Building of Govt. school by IITs students and UBA staff
2. SHG formation and bring into NRLM folder
3. Farmer interaction along with District Agriculture/ Horticulture and dairy development officials with help of Surabhi Foundation/ local NGO



Key Impact

Under the one district one product scheme of the Government of India, *mushroom* is the product chosen for Haridwar district

Two big Enterprises and 10 small Enterprises





Initiatives for strengthening rural India against COVID-19



UBA funded 21 technology intervention projects under COVID-19 Subject Expert Group



VOC College

Enterprise of domestic Incinerator for the safe disposal of CORONAVIRUS MASKS



IIT Jodhpur

Personal Use facial fit trials of reusable ceramic respirators being manufactured at Bhopalgarh for use towards preventing spread of air borne diseases.



The reusable facial device from Jodhpur village



in close with ceramic



Vivekanand Institute of Technology Jaipur

Design and Development of Personal Hygiene Equipment for Public gathering places in rural, sub-urban and urban areas



Jamia Hamdard, Delhi

Water Sanitation and Hygiene Education (WASH) training in Suburb Camp Region (Gurgaon) through installation and utilization of Portable Outdoor Water Station (POWS) based Sanitation drive and I-WASH App in Covid-19 Pandemic Scenario



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CMRIT Bangalore

UV disinfection chamber for Micro & pop (Kangal) used for community level disinfection post COVID-19 lockdown



Vignan Institute of technology & science

Tele Health Monitoring System in Rural Areas through Primary Health Center using IOT to keep track of Covid-19



Area Worker Mrs. P. Parvathi

Handing over of IOT kit to PHC in presence of Village Sarpanch



Convergence initiatives for Knowledge Management



Fast-tracking rural livelihood opportunities



Catch the Rain campaign

Promotion of van-dhan yojana

Sustainable development of natural resources in Uttarakhand

Knowledge management, capacity building



Field implementation





Convergence with CSIR for livelihood creation in rural areas through the diffusion of CSIR rural technologies



MoU signing ceremony; July 28, 2020



Technology demonstration event; March 19, 2021

To boost livelihood with little and moderate skill sets, especially for rural set-up

Diffusion of rural technologies developed by CSIR for societal benefits through UBA network

Technology pitching and demonstration events for garnering stakeholder interest

Planning, implementation, capacity-building monitoring and evaluation through UBA network

Conceptualization of National Rural Technology Demonstration Centers

Conceptualization of National Rural Innovation Facility for Skills and Rural Entrepreneurship Development

- Over 40 CSIR technologies demonstrated
- In Pilot Phase large number of technology seekers across the states of Gujarat, Uttar Pradesh, Uttarakhand, Manipur, and West Bengal exploring the implementation of one or more CSIR technologies in villages they operate in
- Design of technology implementation plans for 16 CSIR technologies

Key Impact

CSIR Technologies for Rural Livelihood

Building Atmanirbharta with Science and Technology

A Joint Initiative of CSIR, UBA and VIBHA



NIScPR
National Institute of Science Communication and Policy Research



VIBHA BHARATI



CSIR-National Institute of
Science Communication and Policy Research
(CSIR-NIScPR)
Vigyan Sanchar Bhawan, New Delhi

Launched by Shri Jitendra Singh, Hon'ble Union Minister of State of the Ministry of Science and Technology and the Ministry of Earth Sciences on January 14, 2022

Framework for assessment of the suitability of CSIR technologies for deployment in select geographies (work in progress)

Basic Information		Salient Features of Process/Technology	
1	Title of the technology	Tentative supply chain (source of raw material, machinery to possible market) Can it be a part of circular economy? How can the end product(s) be utilized? Is/are the end product(s) biodegradable? What about the waste products obtained in the process? Possible chain of value addition Can the complete value chain be made locally? How everything from top to bottom can be made in the village itself (circular and local)? How to implement the technology (from root to tip)? Can the technology be implemented at family-level or is external manpower required? Training days or months required to learn the technology properly	
2	Describe the technology (salient features)		
3	Objective of development/ purpose of the technology		
4	Equipment and machinery required		
5	Duration to the first output after installation		
6	Is the product output seasonal or continuous?		
7	Quality and stability of the obtained product(s)		
8	Market demand of the product(s)		
9	Resources required (raw material, energy, water etc.) for operationalization of the technology		
10	Climatic and geographical conditions required (temperature, rainfall, humidity, winds, terrain, soil condition etc.)		
11	Area footprint of the process		
12	Gestation period of the project		
13	Minimum economic unit size		
14	Indicative investment (please provide separately for minimum-sized unit and for larger units)		
15	If the technology is a plant/ crop etc., <ul style="list-style-type: none"> What is the shelf life of the crop? Compared to the parent variety, what diseases is it prone to and the incidence of infection? 		
16	Advantages of the indicated technology over other similar commercially-available technologies (please share supporting data)		
		Additional Information	
		Manpower required to run the technology	
		Status of commercialization of the technology. Please provide details;	
		Scale of funding required	
		Budget with breakage	
		Type of certification(s) required for the product	
		Risk(s) involved with the technology/ process/ product	
		Technology photos	



Convergence with DST-NECTAR for livelihood creation in Northeast Region through S&T interventions



MoU signing ceremony; March 3, 2021



To boost livelihood of people in the North East Region

S&T interventions employing local resources relevant for rural population

Planning, implementation, capacity-building monitoring and evaluation through UBA network

Technology conclave; April 9-10, 2021



Brainstorming conclave; December 21-22, 2021



Establishment of National Rural Technology Demonstration Centers

Establishment of National Rural Innovation Facility for Skills and Rural Entrepreneurship Development

Events to promote technology outreach and garner stakeholder interest

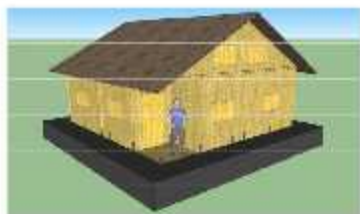
Key Impact

2 startup events and 2 technology conclaves organized in collaboration with NECTAR

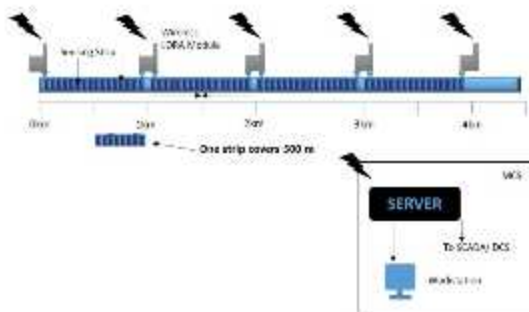
4 startup projects mentored by UBA for implementation in rural areas of Northeast



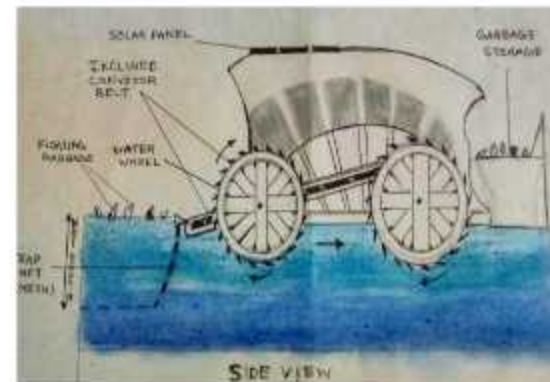
Business plan for up a pork/fish smoking unit with innovative electric smoker



Ban Ghor



Pipeline leakage detection system



Jal - Kabadiwalah (A floating garbage collection system for rivers)



Promotion of Van Dhan Yojana in collaboration with TRIFED



Van Dhan Yojana is a program for value addition, branding and marketing of minor forest produce (MFP) to facilitate creation of sustainable livelihoods for the forest-based tribes

Done by establishing Van Dhan Kendras - an enterprise of around 300 tribal members each involved in collection of forest produce, training of tribal beneficiaries, value-addition and processing, packaging, branding, and marketing of value-added forest products

Training on Apricot and Seabuckthorn Production and Processing in Ladakh

- Entrepreneurship Skill Development Programme (ESDP) training in Ladakh
- Training on Apricot and Seabuckthorn production and processing including value addition, marketing strategy, supply chain management, branding and packaging, and quality assurance



Plan for 10 VDVK

TRIFED Van Dhan Vikas Kendra (VDVK) Training Programme starting from 23rd Nov. 2021
Jointly organised by IIT Delhi and SKUAST-Leh under Unnat Bharat Abhiyan



Natural resource management in village clusters of Shivalik region

Need identification and S&T interventions employing local resources

Diffusion of new technologies or adoption of existing technologies

Internal Resource Generation (IRG) for creating a sustainable model and community ownership

Establishment of model production-cum-training-cum-demonstration centre

Establishment of knowledge transfer network (S&T inputs, marketing, management inputs and quality assurance)

Convergence with state government schemes and programmes

Convergence with the institutions involved – IIT D, IIT R, UCOST, Shivalik Mission, UBA

Beneficiaries will include SC, ST, OBC population esp women, children, unemployed, migrant workers, BPL families etc.

Visit to processing unit, Dwarahat cluster (left) and polyhouse, Kausani cluster (right)



Capacity building workshop, Dwarahat cluster; November 2021



Stakeholder workshop; August 17-18, 2021

The future of India
lies in its villages.



Socially Secured Village

Thank you!