

Workshop Report

Understanding Rural India and Evolving Strategies for Engaging with Rural Communities in Unnat Bharat Abhiyaan (UBA)

Organized by: CTARA, IIT Bombay, in collaboration with the Yojak Centre for Research and Strategic Planning and Vishwakarma University

Date: 22 June to 23 June 2023

Venue: Vishwakarma University, Pune

Attended by following Faculty members of SPCE:

1. Prof. D.N.Jadhav, Mechanical Engg. Deptt., SPCE
2. Prof. B.B.Pimple, Electrical Engg. Deptt., SPCE
3. Prof. N.G. Bhitre, Electrical Engg. Deptt., SPCE
4. Prof. N.W. Kinhekar, Electrical Engg. Deptt., SPCE
5. Prof. Reshma Raskar-Phule, Civil Engg. Deptt., SPCE

The workshop on "Understanding Rural India and Evolving Strategies to Engage with Rural Communities in Unnat Bharat Abhiyaan" was successfully conducted at Vishwakarma University, Pune, from June 22 to June 23, 2023. The event, organized by the Centre for Technology and Rural Development (CTARA) at IIT Bombay, in collaboration with the Yojak Centre for Research and Strategic Planning and Vishwakarma University, aimed to foster a deeper understanding of rural India's complexities and develop strategies for effective engagement within the framework of Unnat Bharat Abhiyaan. The workshop featured a diverse range of sessions, discussions, and interactive activities led by experts and practitioners in the field of rural development.

Objectives of the Workshop:

The key objectives of the workshop were:

1. To exchange our mutual understanding about rural areas
2. To discuss the protocol for the fieldwork such as grassroots-level problem statements and success stories within rural areas
3. To discuss the strategies for implementing development-related activities with limited or no funds
4. To understand how 'Apna Parisar Apna Vikas' helps towards achieving sustainability goals
5. To demonstrate various technical inventories developed by different NGOs in fostering connections with the local community

The above objectives were overall mapped or focused to 3 main outcomes:

1. **Understanding Rural Dynamics:** The workshop aimed to provide participants with insights into the diverse social, economic, and cultural aspects of rural India, helping them gain a comprehensive understanding of the challenges and opportunities in engaging with rural communities.
2. **Evolving Engagement Strategies:** The primary focus was on developing innovative and contextually relevant strategies for effective engagement and collaboration with rural communities, particularly within the framework of Unnat Bharat Abhiyaan.
3. **Networking and Collaboration:** The workshop aimed to create a platform for networking and collaboration among participants, experts, and organizations working in the field of rural development.

Workshop Highlights:

Day 1 - June 22, 2023:

The inaugural session set the tone for the workshop, emphasizing the significance of Unnat Bharat Abhiyaan and its role in holistic rural development. Distinguished speakers, including academicians, policymakers, and practitioners, shared their insights on rural challenges and the need for collaborative efforts.

The subsequent sessions delved into topics such as rural livelihoods, education, and technology adoption presented by the Principal Investigators (PIs) from various institutes under the UBA initiative. The presentations offered a diverse and enlightening view of the impactful work being carried out across rural India. PIs shared insights into their projects, highlighting innovative strategies to promote sustainable development and uplift rural communities. Case studies from successful projects were presented, highlighting innovative solutions and best practices. Breakout sessions encouraged participants to brainstorm and share ideas on addressing specific challenges.

Session by Dr. Bhaskar Gaikwad, Ex-Chief Scientist at Krishi Vigyan Kendra (KVK) on “Role of Krishi Vigyan Kendra for Sustainable Rural Livelihood Security”.

Krishi Vigyan Kendra (KVK), also known as the Farm Science Centre, is a pivotal institutional project initiated by the Indian Council of Agricultural Research (ICAR) in 1974. Its primary objective is to address the challenges faced by rural communities in the agricultural sector and promote sustainable development in rural areas. KVKs act as knowledge and resource centers that bridge the gap between agricultural research and field-level implementation, playing a crucial role in rural sustainable development through:

1. **Dissemination of Agricultural Knowledge:** KVKs serve as intermediaries between research institutions and farmers, translating scientific knowledge into practical and applicable

information. They provide farmers with the latest advancements in agricultural techniques, crop management, pest control, and livestock management. This dissemination of knowledge leads to increased productivity, reduced risks, and improved income for rural households.

2. Technology Demonstration: KVKs play a vital role in demonstrating new agricultural technologies, practices, and innovations directly on farmers' fields. This hands-on approach helps farmers understand the practical aspects of these techniques and encourages them to adopt sustainable practices that enhance productivity while minimizing negative environmental impacts.

3. Capacity Building: KVKs organize training programs, workshops, and awareness campaigns for farmers, agri-entrepreneurs, rural youth, and women. These capacity-building initiatives enhance the skills and knowledge of rural communities, empowering them to make informed decisions and adopt sustainable agricultural practices.

4. On-Farm Trials: KVKs conduct on-farm trials to test the feasibility and effectiveness of new agricultural technologies and practices under local conditions. These trials provide evidence-based recommendations that are tailored to the specific needs of the region, thereby promoting sustainable agricultural practices that are suited to the local ecosystem.

5. Farmer-Scientist Interaction: KVKs facilitate regular interactions between farmers and agricultural scientists. This dialogue allows scientists to gain insights into farmers' challenges, aspirations, and traditional knowledge, while farmers benefit from scientific expertise and solutions tailored to their needs.

6. Livelihood Diversification: KVKs promote diversification of rural livelihoods by introducing alternative income-generating activities such as horticulture, animal husbandry, fisheries, and agri-based enterprises. This approach not only improves rural incomes but also reduces the dependency on single-crop agriculture, leading to better resilience against market fluctuations and climatic uncertainties.

7. Empowerment of Women and Youth: KVKs actively involve women and youth in various training programs and skill development activities. By equipping them with agricultural and entrepreneurial skills, KVKs contribute to women's empowerment and the engagement of youth in sustainable rural development.

8. Natural Resource Management: KVKs emphasize sustainable natural resource management practices that conserve soil, water, and biodiversity. They promote techniques like organic farming, crop rotation, and integrated pest management, leading to healthier ecosystems and reduced environmental degradation.

9. Knowledge Exchange and Networking: KVKs facilitate the exchange of knowledge and experiences among farmers, agri-entrepreneurs, and experts through farmer field days, seminars,

exhibitions, and study tours. This networking fosters a collaborative approach to addressing rural challenges and promoting sustainable development.

10. Policy Advocacy: KVKs provide evidence-based insights to policymakers and government agencies, influencing the formulation of agricultural policies that are conducive to sustainable rural development and farmers' welfare.

KVKs play a multifaceted role in rural sustainable development and their efforts contribute significantly to improving rural livelihoods, enhancing food security, conserving natural resources, and ensuring the overall well-being of rural communities.

Session by Dr. Prasad Deodhar, Bhagirath Gram Vikas Pratishthan, Sindhudurg on “Rural Sustainable Development” at Sindhudurg

Bhagirath Gramvikas Pratishthan (BGP) is a Non-Governmental Organization (NGO) working among villages of Sindhudurg in setting up biogas units, training Sindhudurg farmers in organic methods, assisting in setting up layer poultry farming (LPF), etc.

The idea of Bhagirath was planted in 2004, by Mr. Deofhar with the dream of sustainable development at its core. The organization is known to be “One that delivers at given time and fulfils promises.” Over the years BGP have delved into various sustainable tools such as biogas, poultry, goat keeping, dairy products, irrigation systems, SHGs, Producer Companies and educational activities.

BGP with the help from the CSR funding by Bharat Gears, Mumbai, lend a hand to 40 farmers for the construction of biogas units. Over the years they have built 8,540 units. They are heading towards the goal of smoke free village and district. Biogas not only produces clean fuel, but its slurry is proving useful to the farmers for vermi compost. Biogas which produces fuel and fertilizer is like a magic tree for farmers. The Biogas needs cow dung and gomutra of a single cow to feed three people. This can make villages self-reliant regarding fuel.

For success of biogas and Ujjwala yojana, they found that the efficiency of the fuel is crucial and a pressure cooker is important for increasing its efficiency. Navin Malvankar and Vikas Dhuri from Bhagirath conducted practical in villages and gave detailed scientific information about the pressure cooker, its components, its functions, and the safety measures to be taken. Till date, they have conducted 58 sessions and BGP have distributed pressure cookers to 2,260 women. The women can utilize the saved time for other constructive work. . It does not only save time, but also has made cooking a joyful chore for these women Women from various self-help groups are actively participating in these practical.

Henhouse project conceptualized by Bhagirath keeps the hens safe. It is portable and very easy to assemble. The experiment of semi closed poultry was successful. Bhagirath assisted young

villagers through earn and learn scheme. They plan to expand this initiative at other venues where textbook learning is coupled with source of employment.

In addition to the above projects, BGP has carried out several sustainable projects such as Goat school, Bee keeping, White revolution, thread and needle, Ganesha idol making from local clay and cowdung, and many more.

From the brain storming session by Dr. Deodhar, we learnt the actual work and impact of an individual like Dr. Deodhar, when it comes to rural sustainable development in Sindhudurg or similar regions.

Session by Dr Yogesh Kulkarni, Vigyan Ashram, Pune on “Rural Development through Education System”.

A scientist turned educationalist Late Dr. S. S. Kalbag started Vigyan Ashram at Pabal, a drought-prone and truly representative of a template Indian village, in 1983 to find out solution to the problems in education. “Vigyan” means ‘Search of Truth’ and “Ashram” symbolises ‘Simple living and High thinking.

Vigyan Ashram runs a fabrication laboratory to teach use of various tools, machines and produces locally made technological gadgets. Dr. Kulkarni and his team at Vigyan Ashram focus on promoting experiential learning methodologies. This involves learning through practical hands-on experiences rather than traditional classroom teaching. Such an approach can be particularly effective in rural areas where students can directly apply what they learn to real-world situations. Recognizing the importance of vocational skills in rural development, initiatives led by Dr. Kulkarni could emphasize skill development among students. This could involve offering training in areas like agriculture, handicrafts, rural entrepreneurship, and technology. To encourage self-reliance and economic growth in rural areas,

Dr. Kulkarni work on programs that inspire and equip students with the skills and mindset needed to start and manage their own enterprises. One such program is DBRT (Diploma in Basic Rural Technology), which is a one-year residential diploma course recognized by the National Institute of Open Schooling. It is a multi-skill program in which training is given in the areas of: Engineering - fabrication & construction, basic carpentry, engineering drawing & costing, Energy & Environment - electrical, Motor rewinding, survey techniques, solar/biogas, etc., Home and Health - sewing, food processing, and rural lab, Agriculture and Animal Husbandry playhouse, poultry, goat farming, dairy nursery techniques. Some of the projects carried out by students from 8th to 10th standard are biogas plant construction, solar dryer, house plumbing, cultivation of one field crop, estimation of animal age and weight, nursery techniques, and more.

Hence, Vigyan Ashram is an organization where all are equal; it’s a modern version of old Gurukul system. Vigyan Ashram and Savitribai Phule Pune University collaboratively started ‘Design Innovation Center’ at Pabal. The center is funded by MHRD as part of National Design

Network. DIC will incubate ideas which are useful for society. DIC wants to promote culture of design at college level. Our rural areas are facing with various development problems. These problems are great opportunities for creative minds. DIC aims at training youth to take on these challenges and come out with useful ideas and solutions. Efforts will be made to convert these ideas into products.

Day 2 - June 23, 2023:

Session by Ms. Jui Pethe, Project Lead & Biodiversity Expert, Research in Environment, Education and Development Society (REEDS), Nashik.

REEDS is a registered NGO established in 1992 to work on the concept of CDD (Community Driven Development), as shown in Fig.1. Its core team comprises of experienced development professionals, social scientists, planners, environmentalists and administrators. Small NGOs and individuals at grassroots have distinctive advantages during the implementation of development projects as they understand the local social structures and have good networks in the local communities.

The need for REEDS arises from the fact that most of the time, they lack the connect with professional organizations having technical expertise, project management experience, documentation skills and the ability to reach out to funding agencies for financial support. Many of them cannot collaborate with other NGOs and leverage government programs. This impacts the sustainability of the development projects and in turn, affects the community. REEDS envisage bridging this gap and supporting such small development start-ups and leaders who are already working in their native areas on development initiatives.

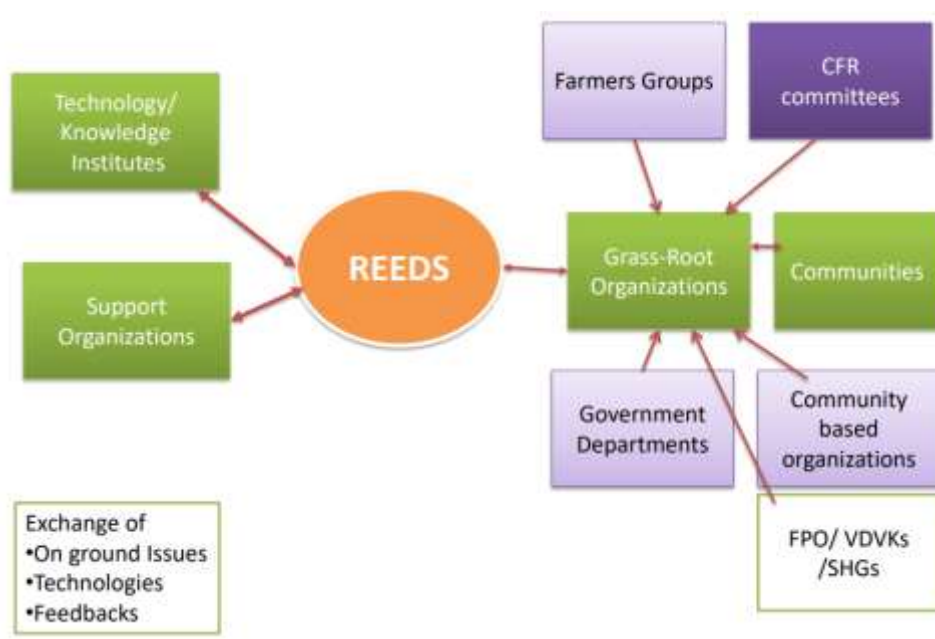


Fig.1 Involvement of REEDS in Community Driven Development

In 2019, REEDS upscaled its work in Maharashtra with the help of YOJAK Center FOR Research AND Strategic Planning FOR Sustainable Development, a registered NGO working passionately to bring positive change in human & environmental well-being. REEDS functions as a knowledge partner during the implementation phase of Madhya Bharat Vananchal Samruddhi Yojana (MBVSY). Keeping people at the center, REEDS provides close handholding and technological support to the grassroot organizations of the MBVSY.

REEDS believe in following strategies: Strengthening the natural resources (Jal, Jungle, Jameen and in turn Janawar and Jan), People's involvement from the beginning and at all stages, Collaborative decision making, Leveraging the existing government set-up/schemes to maximum advantage. Various projects carried out by REEDS are shown in Fig.2.



Fig.2 Work of REEDS on various resources and strengthening Communities
Session by Dr. Gajanan Dange, President, YOJAK and National coordinator for LiFE-
Lifestyle for Environment, on “Samvaad: Dialogue on retrospection of our developmental
journey and the way ahead”.

YOJAK Center for Research and Strategic Planning for Sustainable Development is a not-for-profit organization. It was established in 2012 under the Companies Act 2003, Section 8. Its focus is ‘Bharatiya Vikas Chintan’.

Bharat has had its intrinsic developmental philosophy. Some of the basic foundational principles of this philosophy “Bharatiya Vikas Chintan” on development are,

- i. Development should be based on community consciousness
- ii. Government’s role should be guiding, encourage and providing assistance
- iii. Development strategies should be based on the recognition of human as a part of the ecosystem and not at the centre of the ecosystem
- iv. Use of appropriate technology wherever necessary
- v. Self-reliance and interdependence have to be intertwined in developmental strategies
- vi. Eco-friendly, carrying capacity-based improvement of productivity
- vii. Autonomous community institutions and local decision support systems.

YOJAK undertook extensive action research for ten years in rural Bharat in general and central Indian tribal belt in particular and came out with the tools which can facilitate this realization of carrying capacity-based development. YOJAK aims to promote developmental approach emerged from this Bharatiya Chintan for betterment of socio-ecological sphere. YOJAK emphasizes coordination between local wisdom and appropriate science & technology to develop programs for livelihood enhancement.

YOJAK has organized SAMVAAD to celebrate the 75th year of our independence. SAMVAAD will constitute dialogues with farmers, rural communities, tribal communities, youths, intellectuals, professionals, social influencers, teachers etc.

The session focused on current development philosophy and its effect and how it is different from Bharatiya development philosophy. Elaborating on the current or modern development, Dr. Dange presented the footprints of modern development such as the status of agriculture and edible oil in India, declining fertilizer response, people below poverty line, regions of Bharat affected by climate change, status of natural resources in India.

Dr. Dange suggested that through SAMVAAD whose objectives is to collaborate with different sections of the society, the fundamental principles of Bharatiya philosophy of development such as people’s consciousness, Government’s support and motivation, decentralization, sustainable and restrained use of natural resources, and prioritizing local resources can be adopted for betterment of socio-ecological sphere.

Finally the 2 days workshop was concluded with the Question-Answer session, vote of thanks, feedback of the participants and valedictory function.

