Course Report on

International Training Programme on

"Renewable Energy Management for Cooperatives"

At VAMNICOM, Pune

(22nd – 25th July, 2025)
at VAMNICOM, Pune

(CICTAB – MoC- VAMNICOM)

Centre for International Cooperation and Training in Agricultural Banking

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Background

Cooperative concept and the system of cooperative societies were introduced, to the Indian economy by the British colonial Rule at the outset of the 20th century. In the changing economic environment, Cooperative Business Model remains valid and fully appreciated. The Government of India has set up a separate Ministry of Cooperation in July, 2021.

As climate change accelerates and people become more aware of the impacts of greenhouse gas emissions on environmental and human health, attention turns to the energy sector. Transitioning from traditional fossil fuel energy sources such as coal and oil to renewable energy sources like wind and solar energy has arisen as a possible method to mitigate climate change. RECs provide a bottom-up approach to this by allowing citizens to invest in renewable energy and work to decentralize control from a handful of companies to several local sources.

The purpose of establishing renewable energy cooperatives touches upon environmental, economic, and social issues. They first work to encourage a shift in the energy system to a cleaner and more sustainable line of renewable energy sources, helping to reduce the impacts of climate change

About CICTAB

At the instance of FAO, Centre for International Cooperation & Training in Agricultural Banking (CICTAB) was set up by Ministry of Agriculture & Farmers Welfare, Govt. of India as an autonomous institution with its head quarters at Vaikunth Mehta National Institute of Cooperative Management Campus, Pune in January, 1983.

CICTAB was promoted by Dept. of Agriculture & Cooperation, Ministry of Agriculture & Farmers Welfare and Government of India since 1983. With the establishment of Ministry of Cooperation in July 2021, the Management of CICTAB is vested with Secretary, MoC as President of General Council and Additional Secretary, MoC as Chairman of Managing Committee consisting of representatives from member institutions in member countries.

CICTAB was organised on the lines of the recommendations of FAO Mission on CICTAB (Chairman, B. Venkatapiah, formerly Dy. Governor of Reserve Bank of India and with endorsement of Government consultations held at Pune of four initial member countries of CICTAB, viz. Bangladesh, Nepal, Sri Lanka and India. CICTAB became operational, initially for four countries of the region, viz. Bangladesh, Nepal, Sri Lanka and India.

CICTAB is conducting training programmes for 38 member institutions in SAARC countries without any course fees. CICTAB is conducting all its activities from membership fees of US$ 1000/- OR Equivalent to INR collected from its 39 members every year.

About the Ministry of Cooperation

The Ministry of Co-operation is a ministry under the Government of India which was formed in July 2021. The ministry provides a separate administrative, legal and policy framework for strengthening the cooperative movement in the country. The ministry's creation was announced on 6 July 2021 along with its vision statement of "Sahkar se samriddhi". Before the creation of this ministry, the objectives of this ministry were looked after by the Ministry of Agriculture.
The ministry works in strengthening co-operatives at the grassroot level, working to streamline processes for 'Ease of doing business' for co-operatives and enabling the development of Multi-State Co-operatives (MSCS).

About VAMNICOM

Vaikunth Mehta National Institute of Cooperative Management is a premier National Institute under the Ministry Of Cooperation, Govt of India. It was conceived as an intellectual nerve centre for the co-operative movement. It caters to management development through training, education, research and consultancy needs of various co-operative organizations, government departments and other national bodies.

About the Programme

International Programme on "Renewable Energy Management for Cooperatives" was organized at VAMNICOM, Pune. It was four days programme from 22nd – 25th July, 2025 having classroom sessions and study visits.

Dr. Suva Kanta Mohanty, Director, VAMNICOM & CICTAB inaugurated the programme in presence of Dr. D. Ravi, Programme Director, CICTAB and CICTAB team.

In his inaugural speech Director shared that as we stand at the crossroads of climate change and energy transformation, the role of cooperatives in driving sustainable development has never been more crucial. This training is not just about learning new technologies, but about empowering cooperative leaders to harness clean, affordable, and decentralized energy solutions for their communities. By integrating renewable energy into cooperative operations—whether in agriculture, dairy, housing, or rural industries—we can not only reduce dependence on conventional power sources but also create resilient, self-reliant ecosystems. He urges all participants to actively engage, share experiences, and take back actionable insights to implement in their cooperatives. Let us collectively take a step toward a greener, more inclusive future.
Dr. D. Ravi shared the idea behind the conduct of Renewable Energy Management for Cooperatives and Rural Financing Institutions programme.

He explained in brief about the planning of four days training programme. He also explained the session plan to participants.

A total of 37 participants were attended the programme from- Indian Member Institution- NCUI (16), NFSCF (2); Sri Lanka - SANASA Federation (12) and Nepal -NCBL (7).

For detailed List of Participants refer Annexure A.

Dr. Suva Kanta Mohanty, Director, VAMNICOM & CICTAB inaugurated the programme in presence of Dr. D. Ravi, Programme Director, CICTAB.

Objective of the Programme

On successfully completing the programme, the participants should be able to acquire the

- To create awareness of Renewable energy sources and energy saving methods
- To create awareness about the programmes of Ministry of New and Renewable Energy, Govt. of India on improved cook stoves (IC), and bio-gas
- To promote alternative energy devices like biogas, solar devices (solar lanterns and solar street lighting)

Coverage of the Programme

The training programme was for Senior / Middle level officers of Cooperative and Rural Financial Institutions (RFIs) in the countries of the SAARC Region

The four-day long programme comprised of 12 in-house sessions of 1 hour 15 minutes duration each. The in-house sessions covered on the following broad topics:

- Challenges in Renewable Energy Management & Solar Energy by Mrs. Sanjeevani Gogawale, Management Consultant, Pune
- Presentation on Samuchit Enviro Tech, Pune by Dr. Priyadarshini

Karve, Samuchit Enviro Tech, Pune

- Renewable Energy Management for Cooperatives: Harnessing Livestock Waste for Sustainability by Dr. Dhananjay Gaikwad, Faculty, VAMNICOM
- Renewable Energy & Green Energy Concepts by Mr. Dattatraya Patil - Dy. Technical Adviser (Engg.), National Federation of Co-operative Sugar Factories Ltd
- Biogas Generation in Sugar Factories by Mr. Aswin Joshi, Director, Ecodhara, Pune
- Community Bio Gas Plants- Urja Bio System Pvt. Ltd by Mrs. Arati Gajare, Bio Energy, Pune
- Digital platform Experience of Biofuelcircle on Biomass and Biofuel - Connecting Rural and Industrial Economies (online) by Mr Ashwin Save, BiofuelCircle, Pune
- Bio-mass and waste management by Mr. Sandeep Mandilik, Hi-Tech Agro Energy Pvt. Ltd., Pune
- Bio-MobilityTM - Key Contributor to Bioeconomy by Dr. Tushar Patil, Praj Industries
- Country Paper Presentation by By the participants

Three field visits were arranged for participants.

1) Bipsun Engineers Pvt. Ltd., Shirval
2) Katraj Dairy, Katraj, Pune
3) Visit to KVK Baramati for Technology Assessment and Demonstration for its Application and Capacity Development

PROGRAMME CONTENT

- Renewable Energy sources and its management
- Schemes of Ministry of New and Renewable Energy, Govt. of India – Use of Improved cook stoves and biogas to save trees
- Biomass briquette as energy source for industry
- Waste to energy – power generation through household waste

For detailed Programme Schedule refer Annexure B.

CLASSROOM SESSIONS:

SESSION -1& 2:

Topic	Faculty/Resource person
Challenges in Renewable Energy Management & Solar Energy	**Mrs. Sanjeevani Gogawale, Management Consultant, Pune**

Mrs. Sanjeevani Gogawale briefed that the Renewable energy management faces several challenges despite the growing global emphasis on sustainable power. Key issues include the intermittent nature of sources like solar and wind, which makes balancing supply and demand complex. Integrating renewables into existing power grids requires significant upgrades in infrastructure and smart grid technologies. Additionally, high

initial investment costs, limited energy storage solutions, regulatory hurdles, and a lack of skilled workforce further complicate large-scale deployment. Effective management thus demands coordinated policy support, technological innovation, and stakeholder collaboration to ensure reliability, affordability, and sustainability.

Solar energy harnesses the sun's rays to generate electricity and heat, making it one of the cleanest and most abundant renewable resources available. Photovoltaic (PV) panels convert sunlight directly into electricity, while solar thermal systems use mirrors or lenses to concentrate sunlight for water heating, space heating, or even power generation via steam turbines. Rapid technological advances have driven down costs and improved efficiencies, expanding solar adoption from rooftop installations on homes and businesses to large-scale utility farms. Beyond reducing greenhouse gas emissions and dependence on fossil fuels, solar energy offers scalable solutions from off-grid rural electrification to urban microgrids empowering communities worldwide with sustainable, low-maintenance power.

Mrs. Sanjeevani Gogawale, Management Consultant, Pune delivered session on Challenges in Renewable Energy Management & Solar Energy

SESSION -3:

Topic	Faculty/Resource person
Presentation on Samuchit Enviro Tech, Pune	**Dr. Priyadarshini Karve Samuchit Enviro Tech, Pune**

Dr. Priyadarshini Karve delivered session on Samuchit Enviro Tech, founded in 2005 and based in Pune, is a pioneering social enterprise dedicated to advancing renewable energy management and sustainable living. Initially focusing on clean cooking solutions for rural households, the organization has expanded its scope to include a variety of sustainable technologies and practices. These encompass biomass-based cooking devices, biogas systems, and biochar kilns, all aimed at reducing indoor air pollution and promoting efficient energy use. Beyond product development,

Samuchit offers consultancy services, conducts green audits, and provides training programs to empower communities and institutions in adopting environmentally sustainable practices. Their holistic approach addresses both rural and urban challenges, contributing significantly to India's renewable energy landscape and climate resilience efforts.

Dr. Priyadarshini Karve Samuchit Enviro Tech, Pune delivered presentation on Samuchit Enviro Tech, Pune

DAY-2

SESSION-4:

Topic	Faculty/Resource person
Renewable Energy Management for Cooperatives: Harnessing Livestock Waste for Sustainability	**Dr. Dhananjay Gaikwad, Faculty, VAMNICOM**

Dr. Dhananjay Gaikwad explained that Livestock-waste-based cooperative biogas systems enable smallholders and rural communities to transform cattle slurry and organic residues into renewable energy and organic fertiliser. Through Anaerobic Digestion (AD), such initiatives capture methane-rich biogas that can be used for cooking, lighting, electricity and even compressed bio-CNG, while the digestate becomes nutrient-rich slurry for agriculture. In India, NDDB-supported manure cooperatives such as the all-women cooperative in Zakariyapura, Gujarat installed household-scale biogas units for each livestock-owning family, aggregating surplus slurry for branded biofertiliser like PROM, and providing clean fuel, income and soil fertility benefits. Effective community planning, training, and ongoing technical support are vital for long-term adoption and system durability. Together, these models illustrate a circular economy approach that improves rural energy access, reduces greenhouse gas emissions, and boosts livelihoods through cooperative collaboration and resource valorisation.

Dr. Dhananjay Gaikwad, delivered session on Renewable Energy Management for Cooperatives: Harnessing Livestock Waste for Sustainability

SESSION-6:

Topic	Faculty/Resource person
Renewable Energy & Green Energy Concepts	**Mr. Dattatraya Patil - Dy. Technical Adviser (Engg.), National Federation of Co-operative Sugar Factories Ltd**

Mr. Dattatraya Patil briefed that Renewable energy refers to power derived from naturally replenishing resources such as solar, wind, hydropower, geothermal, and biomass that are continually renewed and virtually inexhaustible on a human timescale. In contrast, green energy is a narrower subset: it includes only those renewable sources and systems, like solar, wind, and geothermal, that have minimal environmental impact throughout their lifecycle. While all green energy is renewable, not all renewable energy is green biomass or large-scale hydropower may be renewable but aren't always green due to emissions or ecological harm. Broader still is the concept of sustainable energy, which integrates environmental, economic, and social dimensions with a focus on long-term viability and equitable energy access even when non-renewables like responsibly-managed nuclear may contribute under specific contexts

AMr. Dattatraya Patil - Dy. Technical Adviser (Engg.), National Federation of Co-operative Sugar Factories Ltd delivered session on Renewable Energy & Green Energy Concepts

SESSION-7:

Topic	Faculty/Resource person
Biogas Generation in Sugar Factories	**Mr. Aswin Joshi, Director, Ecodhara, Pune**

Mr. Aswin Joshi briefed that Sugar mills in India are increasingly leveraging pressmud the residual filter cake from sugarcane juice clarification, typically comprising 3–4% of the cane processed as a premium feedstock for anaerobic digestion to generate biogas, which can be purified into compressed biogas (CBG) for use as clean fuel or power generation. Pressmud offers multiple advantages: it's available in consistent quality directly at sugar factories, requires no pretreatment owing to low lignin content, and is significantly more conversion-efficient about 25 tonnes of pressmud yields 1 tonne of CBG, compared to around 50 tonnes of cattle dung for similar output. Economically, it is far cheaper priced around ₹0.4–0.6/kg versus ₹1–2/kg for dung or crop residue and eliminates complex logistics associated with sourcing decentralized biomass. In the 2022-23 season, India produced approximately 11.4 million tonnes of pressmud, with the potential to generate some 460,000 tonnes of CBG, valued at over ₹2,400 crore under government-supported pricing schemes like SATAT. However, challenges remain rising pressmud prices (recently surged to ₹500–600/tonne), competition from alternative uses like composting or brick kilns, and seasonal storage issues due to decomposition during off-season periods. Governments and sugar mills are exploring long-term procurement agreements, improved storage technology, and streamlined policies to fully harness this low-cost, high-impact resource and turn sugar mill waste into green fuel and organic fertilizer.

Mr. Aswin Joshi, Director, Ecodhara, Pune delivered session Biogas Generation in Sugar Factories

SESSION-8 :

Topic	Faculty/Resource person
Community Bio Gas Plant	**Aarti Gajare, Business Development Manager, Urja Bio System, Pune**

Mrs. Aarti Gajare first briefed about the Urja Bio System Private Limited, headquartered in Pune, Maharashtra, is a leading provider of sustainable waste-to-energy solutions in India. Established in 2012, the company specializes in designing and implementing biogas plants, compressed biogas (CBG) systems, and biogas-to-power projects on a turnkey basis. With over 200 installations nationwide, Urja Bio System has been instrumental in promoting renewable energy and efficient waste management practices.

A notable example of their work is the community-based biogas plant in Thikekarwadi village, Pune. This facility processes 4 tons of food and cow dung waste daily, generating 200 cubic meters of biogas. The produced biogas supplies energy to 35 households and supports a 10 kW electricity generation system for the village temple and school. Additionally, the plant produces 8,000 liters of liquid manure daily, benefiting local agriculture.

Urja Bio System actively collaborates with organizations such as UNIDO and the Ministry of New and Renewable Energy (MNRE) and participates in initiatives like Swachh Bharat Mission (SBM) and GOBARDHAN, aiming to enhance rural sanitation and energy self-sufficiency.

Aarti Gajare, Business Development Manager, Urja Bio System, Pune delivered session on Community Bio Gas Plant

FIELD VISITS:

Field Visit 2	Place	Date
	Bipsun Engineers Pvt. Ltd., Varve, Pune	23rd July, 2025 Wednesday

Bipsun Engineers Pvt. Ltd., headquartered near Varve in Pune, is a well-established ISO 9001:2015 and BIS-certified manufacturer and engineering firm with over three decades of experience in renewable energy systems. Under the BIPSUN brand, they have delivered over one crore LPD (liter per day) capacity of solar water heating installations across India—including large-scale systems for clients such as Indian Railways, NDA Pune, and Magarpatta City, setting a Limca Book of Records with the country's largest single-site system (~1 million LPD) . Beyond thermal applications, they also design and install Solar PV rooftop systems, with cumulative installed capacity exceeding 6 MW, serving residential, commercial, and industrial customers. Their offerings span from solar water heaters and solar street lighting to complete EPC design consultancy for MW-scale ground-mounted or rooftop installations, including feasibility studies, energy yield analysis, liaising with regulatory bodies, and long-term performance support. Bipsun's alignment with national initiatives such as the MNRE's National Solar Mission and partnerships with agencies like MEDA, IREDA, and NSIC further reinforce their role in promoting clean energy solutions across the region.

Study visit to Bipsun Engineers Pvt. Ltd., Varve, Pune

Field Visit 2	Place	Date
	Katraj Dairy	23rd July, 2025 Wednesday

Katraj Dairy was incorporated in 1960 with an intention of providing an organized facility of milk collection for the village-level farmers situated in Pune district. Katraj Dairy started with milk collection of about 0.30 lakh (30.000) liters per day in the first year of operation and today has steadily

grown to over 2.00 lakh (0.20 million) liters per day and has a financial turnover of over Rs.250 crores.

Katraj Dairy with its nine chilling plants and 131 BMC spread almost all over the district has an installed milk handling capacity of over 5 lakh liters per day. The main plant of Katraj is equipped with a modern Pasteurizer, homogenizer, Cream separator, Ghee processing, Milk Clarifier, Condense Milk Plant, Automatic packing of milk and milk products and other quality testing devices and well-equipped labs. Katraj Dairy has an installed processing capacity of 2 lakh (0.2 million) liters per day.

Katraj dairy manufactures / Distributes milk and milk products like Pasteurized / Homogenized-Cow milk, Toned milk, Double toned milk, Standardized Milk, Full cream milk, Cow & Buffalo Cream and Ghee, Shrikhand, Amrakhand, Malai Paneer, Dahi, Flavoured Milk, Lassi, JeeraTak, Table Butter, Milk Powder, Softy Ice cream, Pedha, Khoa, sterilized milk in 200 ml bottle and hard Ice-cream with different flavours in different pack sizes and Mango, Anjeer & Malai Burfi, Kalakand & KajuKatali.

All these products are available at Katraj-owned parlors at various locations in Pune City and through appointed distributors and retailing circuits. Very soon, Katraj plans to introduce an online ordering system for its distributors/ retailers and consumers.

Katraj products have been in use in thousands of homes in Pune since 1961. Katraj Milk, Katraj Ghee, Katraj Shrikhand, Katraj Amrakhand, Katraj Lassi, Katraj Jeeratak (buttermilk), Katraj cream have made Katraj a leading food brand in Western Maharashtra. Today Katraj is a symbol of high-quality milk products sold at reasonable prices, the genesis of a vast co-operative network triumph of indigenous technology, the marketing of a farmers' organization.

Katraj Dairy visit with the participants

DAY-3: STUDY VISIT TO KRISHI VIGYAN KENDRA BARAMATI

Field Visit 3	Place	Date
	KRISHI VIGYAN KENDRA BARAMATI	24th July, 2025 Wednesday

Krishi Vigyan Kendra (KVK), Baramati, plays a versatile role in promoting renewable energy management at the community level through research-backed demonstrations, farmer education, and on-farm technology showcases. As a district-level ICAR farm science centre under Agricultural Development Trust, KVK Baramati combines wind solar hybrid systems, solar water pumping, and renewable energy-powered fertigation setups across its 44 ha demonstration farm which includes a 1.6 ha dairy unit and hi-tech polyhouses to model sustainable farm energy integration.

KVK actively organizes training programs and capacity-building sessions to introduce farmers and extension officers to technologies like solar-powered drip irrigation, solar pumps, and hybrid renewable systems tailored for water and energy-efficient agriculture. These activities support the ICAR mandate of technology dissemination, shortening the innovation-to-field lag for sustainable energy adoption in rural settings.

Through these initiatives, KVK Baramati helps farmers reduce dependency on grid electricity and fossil-fuel-based pumps, enhancing resilience against power outages and fuel price volatility. By integrating renewable energy into practical demonstrations and extension work, KVK fosters a shift toward clean, decentralized farm energy systems, particularly benefiting resource-limited and water-stressed regions of Pune district

Dr. D. A. Shinde. Senior Scientist and Head and Mr. Godase, Subject Matter Specialist, KVK, Baramati briefed all the participants about the activities of the KVK Baramati

Hi-Tech technology used at KVK, Baramati	
	
Poultry Farming	**Goat Farming**
	
Honey bee keeping	**Indo Duch project**
	
Millet processing unit	**Fishery**
AI Technology in Sugarcane	

Group photo at KVK Baramati

DAY:4

SESSION-9:

Topic	Faculty/Resource person
Digital platform Experience of Biofuelcircle on Biomass and Biofuel - Connecting Rural and Industrial Economies (online)	**Mr Ashwin Save, BiofuelCircle, Pune**

Mr Ashwin Save explained that BiofuelCircle is a digital platform that enables end-to-end supply chain solutions for biomass and biofuels, connecting rural producers like farmers, FPOs, and aggregators with industrial buyers across India. The platform provides services such as digital trading, logistics, quality assurance, and financing making biomass commerce more efficient, transparent, and scalable. By digitizing the biomass ecosystem, BiofuelCircle supports income generation in rural

areas, promotes circular economy practices, and helps industries transition to sustainable, renewable energy sources. It plays a key role in bridging rural and industrial economies for a greener future.

Mr Ashwin Save, BiofuelCircle, Pune delivered session on Digital platform Experience of Biofuelcircle on Biomass and Biofuel - Connecting Rural and Industrial Economies (online)

SESSION-10:

Topic	Faculty/Resource person
Bio-mass and waste management	**Mr. Sandeep Mandilik** **Hi-Tech Agro Energy Pvt. Ltd., Pune**

Mr. Sandeep Mandilik Biomass and waste management play a crucial role in the renewable energy sector by converting agricultural residue, organic waste, and other biodegradable materials into clean energy sources like biogas, biofuel, and bio-CNG. This not only reduces dependence on fossil fuels but also helps manage waste sustainably, lowering greenhouse gas emissions and preventing environmental pollution. By tapping into locally available resources, biomass energy supports rural economies, promotes circular economy practices, and contributes to a more sustainable and decentralized energy system.

Mr. Sandeep Mandilik, Hi-Tech Agro Energy Pvt. Ltd., Pune delivered session on Bio-mass and waste management

SESSION-11:

Topic	Faculty/Resource person
Bio-Mobility - Key Contributor to Bioeconomy	**Dr. Tushar Patil, Praj Industries**

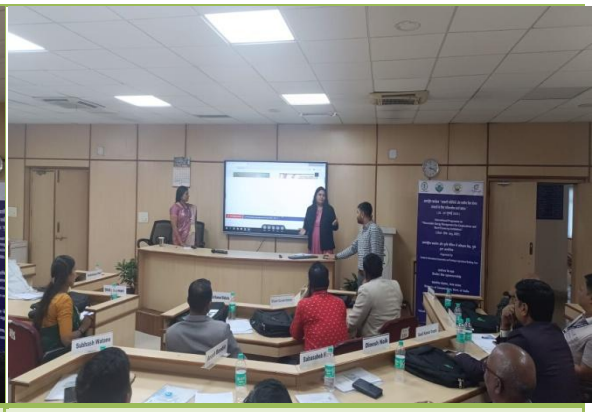
Dr. Tushar Patil explained that Praj Industries plays a leading role in advancing Bio-Mobility™ and renewable energy management by offering innovative, sustainable solutions for the production of biofuels such as ethanol, biodiesel, compressed biogas (CBG), and aviation biofuel. Through its Bio-Mobility™ platform, Praj promotes the use of renewable biofuels across various modes of transport road, air, and marine reducing carbon emissions and enhancing energy security. The company also contributes to circular economy practices through its expertise in waste-to-energy technologies and industrial biotechnology. With a strong focus on research and development, Praj is at the forefront of India's transition to a low-carbon, sustainable energy future.

Dr. Tushar Patil, Praj Industries delivered session on **Bio-Mobility - Key Contributor to Bioeconomy**

COUNTRY PAPER PRESENTATIONS:

Participants nominated by the Indian Member Institutions from NCUI (16), NFSCF (2); Nepal Member Institutions - NCBL (7) and Sri Lanka Member Institution SANASA Federation (12) represented about their organisations. Dr. D. Ravi, Programme Director moderated the country paper presentation session. Glimpses of the country paper presentations as below:

Representative of Sri Maheshwaramma Credit Coop Society Ltd., Karnataka



Representative of Gujarat Co-operative Union, Gujarat

Representative of Maharashtra State Cooperative Board

Representative of Chhattisgarh State Coop Union Ltd. Raipur

Representative of NFCSF, New Delhi

Representative of NCBL, Nepal

Representative of SANASA Federation, Sri Lanka

VALIDICTION AND CERTIFICATE DISTRIBUTION:

Dr. D. Ravi, Consultant, CICTAB & Jt. Programme Director, VAMNICOM delivered his sincere thanks to the director, participants, their sponsoring organizations and CICTAB secretariat. He distributed the certificates to participants.

Certificate distribution to the participants by Dr. D. Ravi, Consultant, CICTAB

LEARNING OUTCOME OF THE PROGRAMME:

- To keep the knowledge upgraded with the current thoughts and newer
- Technology options along with their advances in the field of the utilization of different types of wastes for energy production.
- To understand the various waste generation sources and their management.
- To know the various waste to energy conversion technologies.
- To understand various impacts like health and environment issues and significance of different technologies.
- To get acquainted with commercial aspects of waste to energy.

GROUP PHOTO OF THE PROGRAMME:

CICTAB Secretariat

1. Dr. Dr. Suva Kanta Mohanty, Director
2. Dr. D. Ravi, Consultant
3. Ms. Smita Kadam, Research Officer
4. Mrs. Usha Kulkarni, Stenographer
5. Mr. J.B. Gaikwad, Asst. Accountant
6. Mr. Shivsagar Patil, Jr. Clerk
7. Mr. Suraj Parihar, Jr. Clerc
8. Mr. Suresh Salvi, MTS
9. Mr. Nitin Koli, MTS

Annexure A

CENTRE FOR INTERNATIONAL COOPERATION AND TRAINING IN AGRICULTURAL BANKING, PUNE

International Programme on "Renewable Energy Management for Cooperatives and Rural Financing Institutions" 22nd - 25th July 2025 at VAMNICOM, Pune (CICTAB – MoC- VAMNICOM)

LIST OF PARTICIPANTS

Sr. No.	Name of the participant & Designation	Name of the organization
	INDIA	
1.	Shri. Pal Chand Dhruw, CEO,	NCUI: Chhattisgarh State Cooperative Union Ltd. Raipur
2.	Shri. Rajesh Kumar Sahu, Lecturer	NCUI: Chhattisgarh State Cooperative Union Ltd. Raipur
3.	Mr. Sidda Gangappa, Director	NCUI: Sri Maheshwaramma Credit Cooperative Society Ltd.
4.	Mr. Shashidhara RG., Director	NCUI: Sri Maheshwaramma Credit Cooperative Society Ltd.
5.	Mr. N Siddagangappa, Director	NCUI : Sri Gurumallikarjuna Swamy Multipurpose Cooperative Society
6.	Mr. Shivaprakash, Director	NCUI : Sri Gurumallikarjuna Swamy Multipurpose Cooperative Society
7.	Shri. Anant.D. Bomble, Lecturer	NCUI: Cooperative Training Centre Mumbai
8.	Shri. Subhash.B. Watane, Lecture	NCUI: Cooperative Training Centre Pune
9.	Shri. Vilas.N. Limble, Co-op. Development Officer	NCUI: District Co-op. Board Pune
10.	Shri. Dinesh.S. Naik, Co-op. Development Officer	NCUI: District Co-op. Board Pune
11.	Shri. Babasaheb .D. Kale, Co-op. Development Officer	NCUI: District Co-op. Board Thane
12.	Shri.Yuvraj .S. Bhosale, Co-op. Training Instructor	NCUI: District Co-op. Board Pune
13.	Shri. Arunachala. H. Shastry, President	NCUI: Karnataka Grameena Setu Souharda Co-operative Limited
14.	Mr. B.C. Gitte, Dy. Technical Adviser (Engg.)	NFCSF: National Federation of Co-operative Sugar Factories Ltd
15.	Mr. Dattatraya Patil - Dy. Technical Adviser (Engg.)	NFCSF: National Federation of Co-operative Sugar Factories Ltd
16.	Ms. Vaishaliben Raval, Lecturer	NCUI: Shri Chotalal Vyas Co-operative Management Centre, Nadiyad, Kheda, Gujarat
17.	Ms. Deepshikha Thakur, Assi Officer	NCUI: Gujarat State Co-operative Union, Ahmedabad, Gujarat
18.	Mr. Ronak Patel, Lecturer	NCUI: Gujarat Co-operative Management Centre, Ahmedabad, Gujarat
	Sri-Lanka	
19.	Mr. U. G. Chandana Thilaka,	SANASA : Director of SANASA Union

20.	Mrs. Y. D .P .C. Ariyathilaka, Banking Services Manager	SANASA Union
21.	Mr. L. G. Dimuth Chathuranga, Director of Primary Society	**SANASA :** Galle District Thrift and Credit Cooperative Society Union Ltd
22.	Mr. D. Chaminda Darshana, Chairman of Primary Society	**SANASA :** Galle District Thrift and Credit Cooperative Society Union Ltd
23.	Mr. D. E. Senewirathna, Chairman of Primary Society	**SANASA :** Galle District Thrift and Credit Cooperative Society Union Ltd
24.	Mrs. K. W. Chanika Malshani, Secretary of Primary Soceity	**SANASA :** Galle District Thrift and Credit Cooperative Society Union Ltd
25.	Mr. Sarath Pushpakumara, Member of Primary Society	**SANASA :** Galle District Thrift and Credit Cooperative Society Union Ltd
26.	Mr. P. Nilanthi Renuka, Chairman of Primary Society	**SANASA :** Galle District Thrift and Credit Cooperative Society Union Ltd
27.	Mrs. O. H. Nimal Weerasingha, Chairman of Primary Society	**SANASA :** Galle District Thrift and Credit Cooperative Society Union Ltd
28.	Mrs. K. Dinushika Madushani, Manager of Primary Society	**SANASA :** Galle District Thrift and Credit Cooperative Society Union Ltd
29.	Mr. P. G. Jayantha, Treasurer of Primary Society	**SANASA :** Galle District Thrift and Credit Cooperative Society Union Ltd
30.	Mr. W. G. Sharmal Hasaranga, Vice Secretary	**SANASA :** Galle District Thrift and Credit Cooperative Society Union Ltd
	Nepal	
31.	Mr. Chandan Kumar Karn, Board Member	**NCBL :** Chetana Saving and Investment cooperative society limited
32.	Mr. Mukesh Kumar Jayswal, Board Member	**NCBL :** Chetana Saving and Investment cooperative society limited
33.	Mr. Devraj Mahato, Chairman	**NCBL :** Shree Janasewa Agriculture Cooperative limited
34.	Mr. Shyam Sundar Mahato, Vice Chairman	**NCBL :** Triveni saving and Credit Cooperative limited
35.	Mr. Sunil Kumar Gupta, CEO	**NCBL :** Sahara Multipurpose Cooperative limited
36.	Mr. Tulasi Kumar Mahato, Board Member	**NCBL :** Sana Kishan Krishi Cooperative limited
37.	Mrs. Shila Kumari, Board Member	**NCBL :** Sana Kishan Krishi Cooperative limited

Annexure B

CENTRE FOR INTERNATIONAL COOPERATION AND TRAINING IN AGRICULTURAL BANKING (CICTAB), PUNE

International Programme on

"Renewable Energy Management for Cooperatives"

22nd – 25th July, 2025

(CICTAB -MOC-VAMNICOM)

TIME TABLE

Date	Time	Topics	Resource Person
22nd July, 2025 Tuesday	9.30 AM – 10.00 AM	Registration & Climate Setting	Dr. D. Ravi Programme Director
	10.00 AM – 11.00 AM	Interaction and Inauguration	Dr. Suva Kanta Mohanty Director, VAMNICOM & CICTAB
	11.00 AM – 11.30 AM	Group Photo & Tea	
	11.30 AM – 12.45 PM	Challenges in Renewable Energy Management	Mrs. Sanjeevani Gogawale Management Consultant, Pune
	12.45 PM – 2.15 PM	Lunch Break	
	2.15 PM – 3.45 PM	Solar Energy	Mrs. Sanjeevani Gogawale Management Consultant, Pune
	3.45 PM – 4.00 PM	Tea Break	
	4.00 PM – 5.15 PM	Presentation on Samuchit Enviro Tech, Pune	Dr. Priyadarshini Karve Samuchit Enviro Tech, Pune
23rd July, 2025 Wednesday	9.15 AM – 9.30 AM	Recap	
	9.30 AM – 10.00 AM	Renewable Energy Management for Cooperatives: Harnessing Livestock Waste for Sustainability	Dr. Dhananjay Gaikwad, Faculty, VAMNICOM
	10.00 AM -11.15 AM	Renewable Energy & Green Energy Concepts	Mr. Dattatraya Patil - Dy. Technical Adviser (Engg.), National Federation of Co-operative Sugar Factories Ltd
	11.15 AM – 11.30 AM	Tea Break	
	11.30 AM – 12.30 PM	Biogas Generation in Sugar Factories	Mr. Aswin Joshi, Director, Ecodhara, Pune

	12.30 PM – 1.30 PM	Community Bio Gas Plants- Urja Bio System Pvt. Ltd	Mrs. Arati Gajare, Bio Energy, Pune
	1.30 PM – 2.30 PM	Lunch Break	
	2.30 PM – 6.30 PM 3.45 PM – 4.00 PM	Visit to Bipsun Engineers Pvt. Ltd., Shirval & Katraj Dairy	
24th July, 2025 Thursday	**7.30 AM – 6.30 PM**	Visit to KVK Baramati for Technology Assessment and Demonstration for its Application and Capacity Development	
25th July, 2025 Friday	9.45 AM – 10.00 AM	Recap	
	10.00 AM – 11.15 AM	Digital platform Experience of Biofuelcircle on Biomass and Biofuel - Connecting Rural and Industrial Economies (online)	Mr Ashwin Save, BiofuelCircle, Pune
	11.15 AM – 11.30 AM	Tea Break	
	11.30 AM – 12.45 PM	Bio-mass and waste management	Mr. Sandeep Mandilik Hi-Tech Agro Energy Pvt. Ltd., Pune
	12.45 PM- 1.30 PM	Bio-Mobility - Key Contributor to Bioeconomy	Dr. Tushar Patil Praj Industries
	1.30PM– 2.30 PM	Lunch Break	
	2.30 PM – 3.45 PM	Country Paper Presentation	By the participants
	3.45 PM – 4.00 PM	Tea Break	
	4.00 PM – 5.15 PM	Action Plan	
	5.15 PM – 5.45 PM	Evaluation / Feedback & Valediction	Dr. Suva Kanta Mohanty Director, VAMNICOM & CICTAB

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