





# State-Level Conference on Clean Energy Solutions Under Rural Access to Clean Energy

Venue: Hotel AVN Grand, Ranchi

Date: 21.03.2023 No. of participants 93

One day training was conducted in Hotel AVN Grand. The training was organized by the LEADS organization. The training was conducted in due presence of AK. Singh Director of LEADS, Mahendra Kumar Project Coordinator, N.Rath. Sprogramme manager, Madukar Ji- Sr Journalist, Atul Nigam – JREDA.

# **Background**

Nonrenewable energy comes from sources that will run out or will not be replenished in our lifetimes—or even in many, many lifetimes. Most non-renewable energy sources are fossil fuels: coal, petroleum, and natural gas. Burning fossil fuels is harmful to the environment. When coal and oil are burned, they release particles that can pollute the air, water, and land. Some of these particles are caught and set aside, but many of them are released into the air. Burning fossil fuels also upset Earth's "carbon budget," which balances the carbon in the ocean, earth, and air. When fossil fuels are combusted (heated), they release carbon dioxide into the atmosphere. Carbon dioxide is a gas that keeps heat in Earth's atmosphere, a process called the "greenhouse effect." The greenhouse effect is necessary to live on Earth, but relies on a balanced carbon budget. The carbon in fossil fuels has been seguestered, or stored, underground for millions of years. By removing this seguestered carbon from the earth and releasing it into the atmosphere, Earth's carbon. This contributes to temperatures rising faster than organisms can adapt. Coal Coal is a black or brownish rock. We burn coal to create energy. Coal is ranked depending on how much "carbonization" it has gone through. Coal is a reliable source of energy. We can rely on it day and night, summer and winter, sunshine or rain, to provide fuel and electricity. Using coal is also harmful. When coal is burned, it releases many toxic gases and pollutants into the atmosphere.

LEADS in Collaboration with European Union under RURAL Access to clean energy is looking for an alternative solution so instead of nonrenewable energy transition phase has started so instead of non renewable energy we have started using renewable energy. Renewable resources are resources that are replenished naturally in the course of time. The use of these resources corresponds with the principles of sustainability because the rate at which we are consuming them does not affect their availability in the long term. Renewable resources are solar energy, wind energy, geothermal energy, biofuels, cultivated plants, biomass, air, water and soil.

# **Objectives**

- To acquaint the participants regarding clean energy
- Awareness was generated about the schemes like KUSUM Yojana, GobardhanYojana, BIOGAS
- About Smokeless Chulha
- About the implementation and challenges of Jharkhand Renewable policy.

#### Training methodology:

The training session presents, in brief, the topic or subject for discussion, key objectives or learning points, the time required, materials required, methodology, session outline with the breakdown of timings and key messages. The accompanying facilitation films on RACE were used.

Furthermore, the questions to prompt discussion and key messages were also included to ensure participation of the group members. Powerpoint presentations were used for facilitating the lectures.

# Lighting of the lamp

The programme started with the lighting of lamp after the speakers present in the dice were given plants.

The program proceeded and Mrs **Nisha Tripathy, Communication officer of the RACE project** described the districts in which LEADS is working under Race project – Khunti , Simdega, Gumla , and Ranchi. Race project is working for promotion of clean energy.



#### Session1

# **Context Setting**

A.K.Singh, Director LEADSgave a description about the RACE project; he said that we are working in 4 districts directly and indirectly through advocacy in Jharkhand since 2019. We read in newspapersearth is getting hotter due to carbon dioxide temperature is also increasing because of this. Millennium Development goal was implemented worldwide one component was to ensure environmental sustainability.



Sustainable Development Goal 7 (SDG 7 or Global Goal 7) is one of 17 Sustainable Development Goals. It aims to "Ensure access to affordable, reliable, sustainable and modern energy for all. Till 2030

The G7 summit is also witnessing a time of immense prosperity in 'Investing for a better future: Solar, Climate, Energy, Health', and now independent India is becoming the fastest growing major solar economy in the world.

India is home to 17 per cent of the world's population, but we contribute only 5 percent to global carbon emissions,.

Develop countries do not utilize this thing they do not want to stop industrialization, carbon dioxide will not be stopped. Since 2022 it will achieve 3,800 megawattelectricity is almost achieved,14.21 gigawatt will be achieved till 2030 through renewable energy. 4 position in terms of usage of renewable energy promotion. We will provide solar energy to Bangladeshnand gas also.

Flooding and rain as the temperature is increasing.. 15 Panchayat finance fund- utilization in solar street light, He also mentioned that we should decrease our dependency in fossil fuel. Promotion of solarenergy. 70% of High courts in Jharkhand are already solarized. First state judiciary solarized. VidhanSabha 80%solarized.LEADS is Jharkhandis workingin 24 blocks-. He also mentioned about energy credit. A hotel is established in Dubai with zero carbon emissions.In Ranchi also there is the proposal to solarized the hotel. Today we are working very fast in the field of solar energy.

# Initiatives of LEADS on Clean Energy Solution in Jharkhand and its impact

LEADS organization is working in four districts of Jharkhand state in collaboration with European Union, Government of India is also helping a lot in this work.

**Mahendra Kumar**, **the project coordinator**of the Race project, mentioned a smallinitiative of LEADS, the changes that have happened in the last 4 years, were presented through PPT.

Community forum was formed, school children were made aware through eco club, farmers and media person were sentizied. A study on clean energy was conducted to know the conditions regarding clean energy- so according to this solar cold storage was established, multiple uses of Kusum 's solar plants in home lighting, processing unit, home light, power selling through grid, training of youths, awareness creation among PRIs members so that they can promote clean energy.

Mahendra Kumarsaid that today we have installed more than 1000 tubewell in all four districts under the Kusum Yojana, in which Jareda also supported, and awareness regarding assembling units, and solar-powered ragi mills districts.

36 CSOs have also joined this campaign, and many more institutions are being added for the benefit of the community by including more people, now the community has become aware that through clean energy Our problem can be solved, 1500 youths have been trained so far through this project. Application for the solar lamp, application for solar street light, solar water head tank, solar water pump under Kusum Yojna, LPG connection, electricity connection, transformer repair, bio gas plant, solar powered potter's wheel, cooking fuel-efficient stove with home light, JSTCDC for entrepreneurship subsidized loan.

#### Key learning

- Community efforts towards resolving their issues in the one of the best ways to real realization of entilements.
- Continues raising the voice brings changes.
- Community demand creates ownership when it is fulfilled.
- Convergence is the best way to build relationships with different stakeholder.
- Creating models make work easier to facilitate and sensitize stakeholders.
- District/State Level CES Network bring solutions to resolve CES issues through sharing and exchange ideas and best practices.
- School Level intervention is the best to approach to sensitize the children, teachers, SMCs and parents too.

Convergence of more than 10 crore.

Further proceeding **AwadheshJha**of HomeBiogas, carbon is causing a lot of damage to ozone layers, due to which condition is deteriorating, now the time has come to save it.

The usage of LPG should reduce and we should use biogas instead of LPG. Through the initiative of Ministry of renewable development in states of Kerala, Assam and Harayana they are promoting the usage of Biogas. The usage of LPG cylinder has reduced.

It should be promotedJharkhand also we promoting this. The cost varies from 50,000 to 70,000. In cities 2 cubic system can be used1-2 Kg kitchen waste we can use biogas daily for 1 to 2 hours This system should be kept in sun. Big system 7 cubic daily 30 to 40 kgsgobar in big system that produces 6 kg gases. The waste emitted from biogas can be utilized as fertilizers.

**Amit Kumar, WRI** said that various arrangements are being made to protect the environment, in today's time, solar energy has been expanded to the level through solar energy, and the government is also working fast. Government, and non-governmental organizations are also working fast for

improvement in the field of clean energy at the ground level. To protect the environment we are working at ground level. He mentioned about Carbon credit. He also spoke about Kyoto protocol.

Proceeding further ,Satyam Abhishek ji from CEED told that we learned a lot by coming here, I feel



very proud of the way LEADS is working today, so far Jharkhand has a total capacity of 18 thousand MW, solar policy now only 4000 MW has been installed 2098 megawatt installed, we have to work on this. Where we are creating energy and it should be consumed there, along with energy, many jobs can also be available, which is a challenge. is

also there, and it is useful for all people.

Jharhand- potentials of Solar hydro no wind

- Obstacles- unavailability of lands due to CNT act. 29.1% Forest cover, 40 % agriculture land
- Decentralized renewable energy challenges only through energy it should be seen in term of agriculture, health, education too.
- Elecricity bill net and gross and net meter but not implemented.
- The department should work together.

#### **Solutions**

- Using of mines.
- Solar village concept-1000 villages. LEADS can promote the solar village.
- Green Hydrogen
- Through the help of JREDA GIS, we can use land mines record.

Tea Break followed by next session

#### **Second session**

The speakers of next session were Atul Nigam , JREDA, MLINDA Gaurav, Rani Enterprise –Sumit, Nayan-Business Group , Karan Toppo

**Gaurav, MLinda 450** villagers solarized of Bihar. Through the help of MLinda in 50 villages they are getting electricity for 24 hours so they can practice farming.

Nayan (Business Group)

Opened 2000 offices and is providing loan . Due to a lack of problem people faces issues so they help them

**Atual Nigam from JREDA** explained that JREDA is not only working with solar but urja dakista, energy conservation.

Queries were raised to Atul Nigam of JREDA regarding the Kusum pump

He cleared the queries and mentioned they can contact on toll free number or a special team is looking into this so they can visit the office.

Kuldeep Mehta, discussed about aspirational descript.

**Sumit Kumar from Rani Enterprise** 

Objectives of the enterprise

Harness Nature's Energy for the well being of mankind, solarizing ..transforming the livelihood of people amazingly. Solar Energy Equipment Rani Enterprise Deals in solar power generation system, solar water heaters, luminaries/lightings, module mounting structures. Their Initiatives for sustainable energy and financing for livelihood system in Jharkhand. Solar-powered pottery wheel system with LEADS in Khunti and Ranchi. Solar powered rice processing unit with Pradhan Beneficiaries. Poultry lighting with CINI and Sustain Plus. Solar Powered Rope making machine with LGSS self help group in Gumla. Solar-powered lac pruning machine in Murhu Block of Khunti. Solar power dryer machine in Giridih.

#### Their Clients

- SELCO Foundation
- PRADAN
- SUSTAIN PLUS
- LEADS
- LGSS
- NBJK
- MISSION OF CHHARITY
- BADLAO FOUNDATION

**Karan Toppo**: He mentioned about the initiative like solar water pump, solar cold storage.

#### **Third Session**

#### Mani Khashyap Ranchi

The staffs under the Race project is creating awareness about smokeless chulha use.

# Kalpna Devi(Simdega)

 Govt Knowledge about govt Schemes. Got information about irrigation, HarGharJalNalYojana. Irrigation facilities. Through the help of panchayat level workshop creating awareness.

# MahimaLakra (Mukhiya)

• LEADS is creating awareness regarding clean energy in rural areas. Through Gobardhan Yojana awareness is being created. Soak pit, Nadep tank Kolebira

# Nishal Tigga (Khunti)

• LEADS staffs under the Race project is providing training and creating employment. Presently work as Electrician

### Roshni Tidu (Khunti)

Through the help of Kusum yojana we are running a rice mill.

#### **UshaKumari (Panchayat Samiti)**

- Through the help of gobar how we can use bio gas
- Discussed about drip irrigation

#### **KuldeepMehta**,CESC of LEADS in nutshell covered all the points

- Smokeless Chulha
- Biogas
- Nadep
- Solar Light

At Last **Shalini Lakra, DPM of Race Ranchi** said thank you to the participants and this was followed by lunch.

# Conclusion

One day state level programme was held under project project. The importance of clean energy utilization was discussed. The initiatives of clean energy was discussed by LEADS organization , Rani Enterprises, JREDA .

#### Annexure1

# **Photos**



