Innovate and Integrate, Low Carbon, Green Technologies (LCGTs) with in EVD Program of INSEDA in India

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inseda

INTEGRATED SUSTAINABLE ENERGY AND ECOLOGICAL DEVELOPMENT ASSOCIATION

Integrated Sustainable Energy and Ecological Development Association (INSEDA) is a national Indian organization formed by the NGOs and individuals who had been involved in the promotion of renewable energy programs with special focus on the implementation of biogas development, as well as natural resources development in India, since 1980. INSEDA is a membership organization, at present having about 30 active Indian NGOs and individuals as its Members, Associate Members and Partners.

The area of operation of INSEDA is entire India, as well as South Asia and other development countries through the network of NGO members of INFORSE, who are involved in renewable energy and low carbon, pro-poor, green technologies. For the last 15 years its has been promoting and implementing, sustainable energy-based eco-village development (EVD) and evidence-based climate change advocacy programmes

INSEDA has been hosting the Regional Secretariat of the International Network of Sustainable Energy (INFORSE) since 1995. It is also a member of Climate Action Network South Asia (CANSA), a regional advocacy Network.

INSEDA is an observer organization under the United Nations Framework Convention For Climate Change (UNFCCC) since 2016.

INSEDA, till date has participated in 11 COPS, namely, COP-8 (Delhi), COP-11 (Montreal), COP-14 (Poznan), COP-15 (Copenhagen), COP-16 (Cancun), COP-17(Durban), COP18 (Doha), COP19 (Poland), COP-21 (Paris), COP-22 (Marrakech) and COP-23 (Bonn).

INSEDA'S WORK:

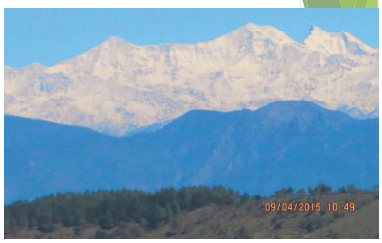
LOW CARBON, GREEN TECHNOLOGIES FOR CLIMATE RESILIENT SUSTAINABLE DEVELOPMENT, AIMING AT POVERTY REDUCTION

- Gold Standard Carbon Credits Project based on household biogas plants
- Design and Implementation of two kinds of biogas plants: Grameen Bandhu Plant and Biphasic Plant on Wheels
- Innovators in low-carbon, green technologies
- Active in the United Nations Climate Change Process
- Leader of an Active and Vibrant Climate and Renewable Energy Network and Community (INFORSE)
- Projects Committed to Fulfilling the Sustainable Development Goal and Low Carbon Development Agenda
- Innovator of the Eco Village Development (EVD) Model for Climate Resilience

ECO-VILLAGE DEVELOPMENT (EVD) PROGRAM OF INSEDA

- INSEDA (Integrated Sustainable Energy and Ecological Development Association) and Eco-Village Development Project is a joint project of WAFD (Women's Action For Development) being implemented in 6 villages of the Rani Chauri area in two blocks (Chamba and Narendra Nagar) in the Tehri Garhwal district (now New Teri district) of the state of Uttarakhand in India.
- All the villages are situated at a height of 5,000-6,000 feet and above.

AREA OF OPERATION OF THE ECO-VILLAGE DEVELOPMENT (EVD) PROJECT OF INSEDA AT RANICHAURI CENTRE (CHAMBA BLOCK), TEHRI GARHWAL DISTRICT OF UTTARAKHAND STATE IN THE SUB-HIMALAYAN REGION OF INDIA



LOCATIONS OF THREE OF THE ECO-VILLAGES AROUND RANI CHAURI CENTRE, TEHRI DISTRICT OF UTTARAKHAND STATE

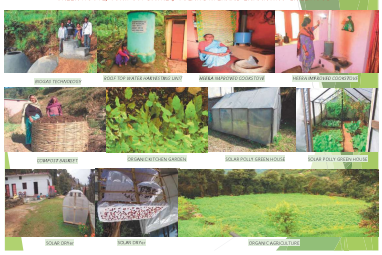
WOMEN FARMERS WITH CATTLE FROM TWO OF THE SIX TARGET VILLAGES SELECTED BY INSEDA AND WAFD FOR EVD PROJECT IN THE HIMALAYAN SUB REGION OF INDIA

(Villages located around Rani Chauri (New Tehri District) at a height ranging from 5,000 to 6,500ft)

BASED ON SOCIAL MAPPING AND DISCUSSIONS WITH THE LOCAL WOMEN FROM THE TRAGET VILLAGES, THE INSEDA SOCIO-TECHNICAL TEAM SUGGESTED THE FOLLOWING IMPLEMENTATION OF LOW CARBON GREEN TECHNOLOGY (THAT COULD ALSO UTILISE LOCAL MANPOWER AFTER SKILLS TRAINING & UPGRADTION) FOR SOLUTIONS TO THE PROBLEMS RELATED TO WATER , FOOD, DOMESTIC ENERGY, NUTRITION, HEALTH, LIVELIHOOD, ENVIRONMENT AND CLIMATE CHANGE MITIGATION & ADAPTATION.

- Roof top Rain Water Harvesting System (RWHS)
- Household Biogas for families having enough animals and willing to install such units for meeting their cooking needs
- Improved Cook Stoves for cooking and meeting warm water needs thoughout the year
- Solar Poly Green House for growing vegetables and cash croops throughout the year as well as raising nursaries of fruit trees etc
- Household Compost unit for scientific composting for use in improved organic farming and organic kirtchen gardening
- Household Solar Dryer for drying of vegetable, fruits & herbs
- Training of women farmers in improved organic farming for better yield and improved kitchen garden for vegetable growing through out the years
- Capacity building of artisan in repairs of technologies and for women users in the day-to-day care and maintenance of designed and innovated green technologies

SOLUTIONS FOR ENERGY ACCESS, WATER, COOKING ORGANIC FARMING, SOLAR POLY GREEN HOUSE, COMPOST BASKET, SOLAR DRYERAND ENHANCING LIVELIHOOD

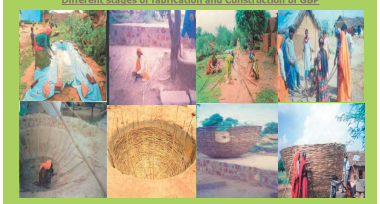


WEAVING OF STRUCTURES FOR BAMBOO REINFORCED CEMENT MORTAR (BRCM) BIOGAS PLANT

GRAMEEN BANDHU BIOGAS PLANT (GBP)

(Built using bamboo reinforced cement mortar-BRCM)

Different stages of fabrication and Construction of GBP



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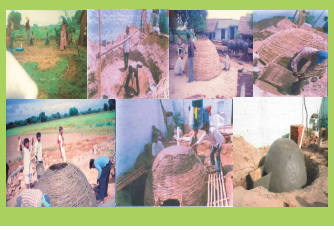
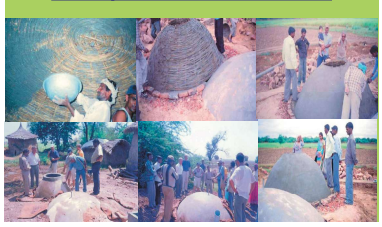


GRAMEEN BANDHU BIOGAS PLANT

Different stages of fabrication and Construction of the Plant

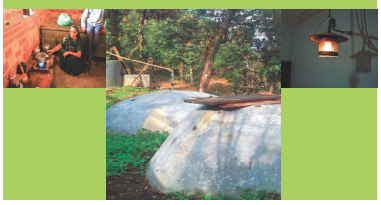


CONSTRUCTION AND OPERATION OF GRAMEEN BANDHU PLANT (GBP)

GRAMEEN BANDHU BIOGAS PLANT

(Built using bamboo reinforced cement mortar-BRCM)

Completed Grameen Bandhu Plant (GBP) in operation at farmers house



CONSTRUCTION OF HEERA, A MULTIPURPOSE HYBRID IMPROVED COOK STOVE (HICS) INTEGRATED WITH WATER TANK FOR WARMING OF WATER AND SOLAR PANEL FOR CHARGING BATTERY FOR OPERATING AN EXHAUST FAN TO REMOVE SMOKE FOR PREVENTING INDOOR POLLUTION AND FOR REDUCING CERTAIN PERCENTAGE OF OUTDOOR POLLUTION

OPERATION OF HEERA, A MULTIPURPOSE IMPROVED COOK STOVE (HICS) INTEGRATED WITH TANK FOR WARMING WATER AND SOLAR PANEL FOR CHARGING BATTERY FOR OPERATING AN EXHAUST FAN FOR REMOVING SMOKE FROM KITCHEN FOR PREVENTING INDOOR POLLUTION AND FOR REDUCING CERTAIN PERCENTAGE OF OUTDOOR POLLUTION

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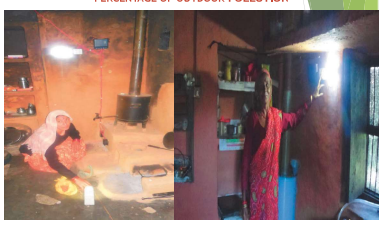

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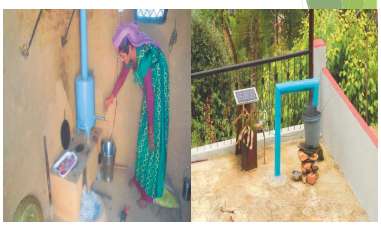

DIFFERENT STAGES OF CONSTRUCTION OF BRCM ROOF TOP RAIN WATER HARVESTING UNIT

DIFFERENT STAGES OF CONSTRUCTION OF BRCM ROOF TOP RAIN WATER HARVESTING UNIT

SOLAR TUNNEL DRYER MADE FROM BAMBOO FOR EFFICIENT DRYING OF CROPS, FRUITS, VEGETABLE AND HERBS

BAMBOO COMPOST BASKETS WOVEN BY LOCAL WOMEN FROM THE EVD VILLAGES FOR MAKING COMPOST FOR ORGANIC AGRICULTURE AND ORGANIC KITCHEN GARDENS

(1 basket can make compost for 1 Nalli (220 Sq. Yd.) land in 4 months)

ORGANIC AGRICULTURE BEING DONE BY LOCAL WOMEN IN ONE OF THE ECO-VILLAGES IN RANI CHAURI AREA IN CHAMBA BLOCK OF TEHRI GARHWAL DISTRICT OF UTTARAKHAND STATE

SOLAR POLY GREEN HOUSE (SPGH) BUILD USING BAMBOO AND UV STABILISED POLY SHEETS

BUILDING AND USE OF BAMBOO SOLAR POLY GREEN HOUSE (SPGH)

SMALL SIZE HYBRID WIND TURBINE FOR POWER GENERATION INSTALLED BY INSEDA FOR A SMALL LOCAL HOSPITAL WITHIN THE AREA OF OPERATION OF ECO-VILLAGE PROJECT IN UTTARAKHAND

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THANK YOU