GOOD PRACTICES ON ENERGY ACCESS IN SOUTH ASIA

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Theme
GREEN ENERGY FOR GREEN ECONOMY

“SIDE EVENT ORGANISED AT RIO+20
ON JUNE 19, 2012

Jointly Organised by
HELIO INTERNATIONAL AND INFORSE
RIO DE JANEIRO, BRAZIL
Sustainable Energy Solutions for Sustainable Development in South Asia

- Energy efficient fuel wood Stoves (EEFWS) and/Improved Cook Stoves (ICS) for efficient utilization of biomass as fuel
- Biomass Briquettes as fuel for cooking
- Hay box or “Retained-heat” Cooking
- Biogas plants for cooking, lighting and off-grid village level power generation
- Solar cooking
- Solar drying of vegetable, fruits and herbs
- Low cost solar water heating
- Low cost solar space heating & cooling for human and animals
- SPV with LED’s Lights (Efficient and long-life)
- Solar Photovoltaic for home and community lighting
- Solar water pasteurization/Water purification units/system
- Solar Greenhouse (SGH) for growing off season vegetables
Five Examples for promoting Green Economy and Poverty reduction through Sustainable Energy by members of INFORSE South Asia (INSA)
1). ANAGI stove-Commercialization by IDEA in Sri Lanka

2). Solar Photo Voltaic implementation using Micro Credit by Grameen Shakti in Bangladesh

3). Promotion and implementation of Improved Water Mill by CRT in Nepal

4). Implementation of household biogas plant using Carbon Credit by INSEDA in India

5). Promotion of sustainable energy based eco-village development in Himalayan Sub-Region of Uttarakhand state India, jointly by WAFD and INSEDA
ANAGI Improved Cook Stove Commercialization by IDEA in Sri Lanka
ANAGI Improved Cook Stove (ICS) promotion and commercialization in Sri Lanka
Fabrication of ANAGI improved stoves in Potters village in Sri Lanka
Different stage of fabrication of ANAGI Stove at one of the families in the Potters’ village.
INFORSE Southern Voices project national meeting in Potters Village in May 2012
Promotion and Implementation of Solar Photo Voltaic through Micro Credit by Grameen Shakti in Bangladesh
Solar PV home power system for lighting and mobile charging in Bangladesh
Solar PV Home Lighting System in an Indian village

Operates two lights and one DC fan or black and white TV
Promotion and implementation of Improved Water Mill by CRT in Nepal
Improved Water Mill for Multiple Applications (Operation for Grinding on the right) in Nepal
Implementation of household biogas plant using Carbon Credit under the Gold Standard VER project by INSEDA in India
Recycling of dung through biogas plant (Better and most efficient method for processing & utilization of dung)

Recycling of dung through biogas plant for getting twin benefits:

(1) **Clean and convenient fuel** and (2) **Enriched organic manure**
Recycling dung from domestic farm animals through biogas plant gives:

(Biogas as clean & convenient energy and enriched organic manure)

Domestic cooking fuel
(60% efficient fuel using appropriate burner)

Organic manure for eco-farming
(improves soil health while giving good yield)
POSSIBLE APPLICATIONS OF BIOGAS AND BG PLANT DIGESTED EFFLUENT (SLURRY)
Generation of local rural employment by building/constructing fixed dome household BGP

*One 2 $M^3$ fixed dome BGP, generates employment in rural areas as follows:

- Skilled person (Masons) 22 man days
- Semi-skilled person 11 man days
- Un-skilled person 10 man days

*20 million fixed dome ($2 M^3$ capacity) BGP, would generate employment as follows:

- Skilled (Masons) 440 million man days
- Semi-skilled 220 million man days
- Un-skilled 200 million man days
Carbon Credit Biogas Project of INSEDA under the Gold Standard

- Project initiated by INSEDA in 2007-2008
- Collection of data on biogas built by INSEDA members/partners, using standard form and creating database
- Out of information of over 8,000 BGP collected/pre-surveyed, shortlisted over 4,000 plants built from June 2006 up to Dec 2008 for consideration under Gold Standard VER project
- Over 2,000 of INSEDA members/partners from 12 districts of Kerala state; and
- Over 2,000 BGPs of INSEDA members/partners from 5 districts in MP state
Major Process involved in Project Development and Registration by the GSF

- About 20 steps were involved since initiation of project in 2007 till the project was registered by the Gold Standard Foundation (GSF) in September 2011
- Development of Project Design Document (PDD) and Passport and submitted to the GSF for pre-feasibility assessment in February 2009
- Received positive response from GSF in Sept 2009
- Process of validation was started by DOE accredited by UNFCCC with the visit to project sites in two states - Kerala & MP in May 2010
- Validator’s report was submitted to GSF in June 2011
- GSF registered INSEDA project in September 2011
- INSEDA is currently going through the process of verification which could take another month before the issuance of VER by the Gold Standard Foundation (GSF)
Promotion of sustainable energy based eco-village development in Himalayan Sub-Region of Uttarakhand state India, jointly by WAFD and INSEDA
Sustainable eco-village development (SEVD) project in four villages in Himalayan sub region of India

(Villages located in Rani Chauri area (New Tehri District) at a height ranging from 5,500 to 6,500ft)
Promotion of organic farming through local women in one of the eco-villages in Rani Chauri Area of Uttarakhand state
Construction and filling of Grameen Bandhu Plant and Solar Cooker demonstration to village women
Training of women in the fabrication of Grameen Bandhu plant using bamboo strips
Fabrication of Roof Water harvesting structure by village women using bamboo in Rani Chauri
Solar Cooker and Simple household Solar dryer for demonstration in cooking and drying vegetables, fruits and herbs to women in Eco-villages in Rani Chauri
Training of rural youth on assembly of Solar PV Lantern
Household solar passive heated Poultry shed proposed in the project area
Let us promote Sustainable Energy (SE) for environment protection, Livelihood, Happy Family, Food for All, and for Brighter Future of our Children
Sustainable Energy for Better Future for All
For More information Contact:

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Thank You

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