

National Training Programme On

community based

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units

30 AUG - 5 SEP 2010



INTRODUCTION

Ladakh Ecological Development Group (LEDeG) in collaboration with Bremen Overseas Research Development Agency (BORDA), Germany, has been promoting environment friendly decentralized Micro Hydro Power Units (MHPU) for the last 20 years in the Western Himalayas. Under this successful collaboration 57 community based MHPUs ranging from 500 watts to 30 kVA has been successfully installed in the remote villages of Ladakh, Western Himalayas.

Micro Hydro Power has tremendous potential to solve the rural electrification problems in India. However, at present not many organizations in India have the capacity and necessary skills for implementation, installation and management of community based Micro Hydro Power Units.

LEDeG, in collaboration with Consortium of DEWATS Dissemination (CDD) Society, Bangalore and Bremen Overseas Research Development Association (BORDA), Germany, for the second time is organizing a 7 days residential training programme to transfer skills necessary for planning, implementation and management of community based micro hydro power units.

OBJECTIVE

The training aims at systematic transfer of knowledge and skills required for planning, implementation and management of successful community based Micro-Hydro Power Units.

Organized by



Ladakh Ecological Development Group

In collaboration with



Consortium for
DEWATS
Dissemination
Society

and



BORDA



EXPECTED OUTCOMES

- Familiarization with the basic principles of MHPU implementation
- Make base line measurements (use of equipment) including report preparation
- Make feasibility measurements (use of equipment) including report preparation
- Design a hydro unit, canal, penstock support, power house (civil engineering)
- Design a hydro unit in terms of sizing penstock, selection of turbine (hydraulic engineering)
- Design a hydro unit in terms of selection of generator, governing system, transmission line, house installation (electrical engineering)
- Determining if a site is (economical) feasible
- Familiarization with an energy demand/supply assessment
- Operate, maintain and find fault, as well as become capable of training an operator on site
- Familiarization with Standard Operation Procedures (SOP) for quality control

PARTICIPANTS

The number of participants will be a maximum of 25 persons representing Government Departments/ Nodal agencies, Non Governmental Organizations and private firms working in Micro Hydro Power Units.

TARGET GROUP

Project Managers, Project Coordinators, MHPU Supervisors, Technicians and Promoters of MHPU.

ELIGIBILITY CRITERIA

Able to read and write in English

Able to understand drawings and prepare sketches (site, layout)

Able to make calculations on general (engineering) level

Medical fitness for a high mountainous area

PROGRAMME OVERVIEW

The total course duration is 7 days, scheduled from 30th Aug. to 5th of Sep. The training involves lectures, presentations, practical workshops, and site visits.

Medium of teaching: English
(Hindi can be incorporated if necessary)

TRAINERS

1. Field experts from LEDeG,
2. Experts/ Resource persons from reputed agencies

CERTIFICATION

The certificate of participation will be provided on completion of the training.

VENUE

Main training venue: LEDeG Campus at Leh
Site visits: Leh/ Kargil Districts of Ladakh Region

APPLICATION FOR TRAINING

This training programme has been carefully designed to train a maximum of 25 participants. The application forms should be filled in all respects and be sent to LEDEG Office, Leh either through post or E-Mail. The last date for acceptance of application form is **15th of August, 2010.**

PROGRAMME FEE

The course fee is **Rs. 12,000/- (Rupees Twelve Thousand only/-).**

The course fee includes the local travel expenses within Ladakh, accommodation, lunch, dinner, refreshments, and course materials.

This does not include participants travel expenses to/ from the venue.



LEDeG (Ladakh Ecological Development Group) is a non-governmental organisation, founded in 1983. Its goal is to promote ecological and sustainable development of Ladakh. Since its formation, it has been consistently dedicated towards serving the under privileged people residing in structurally disadvantaged areas of Ladakh and has been striving to address the environmental and cultural issues affecting the people in the region. One of its activities is decentralised renewable energy systems including solar- and hydro power units which have been promoted for more than twenty years now.

CDD (The Consortium for DEWATS Dissemination) Society is a non-governmental organization registered in Bangalore, India. DEWATS stands for decentralized waste water treatment systems and is promoted through a network approach of 20 like-minded organizations seeking to improve the social, economic and environmental conditions of the less privileged, disadvantaged and marginalized sections of the Indian society through the provision of Decentralized Basic Need Services (DBNS). Beside DEWATS, CDD is also involved in community based sanitation, decentralized solid waste management, city wide planning of DBNS as well as decentralized water and energy supply.

BORDA (Bremen Overseas Research & Development Association) was founded in 1977 as a non-profit organisation in Bremen, Germany. Since 1979, BORDA has been working in India with local partners to implement and disseminate sustainable solutions to the related problems of poverty and environmental degradation. Through integration of appropriate eco-friendly technology into a holistic framework including technical, social, economic and environmental components, BORDA facilitates provision of basic need service to urban, peri-urban and rural populations, and technical support to small and medium sized enterprises, institutions, settlements and communities.