

MANKULAM 110 kW POWER PROJECT COMMISSIONED

The first off-grid 110 kW micro hydel project and connected Community development centers in Mankulam Panchayath in Idukki District in Kerala is Commissioned. The Hon'ble Minister for Power, Government of Kerala Shri. Aryadan Muhammed inaugurated the project on 28th October 2004 at 1600 hrs at Mankulam. *Community Development Centre was inaugurated by* Mr. A. J. J. Rwenderie (Managing Director, UNIDO, Vienna, Austria).

The UNIDO Regional Centre for Small Hydro Power (UNIDORC) initiated such an endeavour in Mankulam, the only unelectrified panchayat and an agricultural resource rich village in the Idukki district of Kerala, devoid of communication facilities. This is done in association with the local self Government of this Panchayat.

More than 6 waterfalls are available in this panchayat, all of them having power generation potential. During 2001, with the objective of generating power for the lighting needs of the local community, the Panchayat initiated implementation of a 110 kW micro hydropower scheme at Pampunkayam, with a catchment area of 8 sq.km. After the construction of the penstock line by around 2002, this project was held up due to various reasons, including want of finance for purchase of turbine sets.

It was in this context that, the UNIDORC identified this scheme as the potential power source for its Community Development Initiatives to be made in this Panchayat. The RC stepped in and brought two turbogenerators of 55 kW each from China through UNIDO's International Centre – the ICSHP. The Panchayat raised resources and created a 4 km stretch of 11 kV line and the RC completed the distribution network to provide power to about 250 families and other 50 establishments including the upcoming telephone exchange, in the first phase. Limit switches are provided to help optimize the power usage within 150 Watts to 175 Watts, which is sufficient enough to provide the basic lighting and entertainment service to the local community. The total cost of this project is about Rs 6.7 million and the power generation cost works out to be Rs 1.63 per unit without transmission and distribution network. In addition, the RC has provided 10 computers, VSAT internet link and computer publications to help create a computer education centre as part of the CDC programme. UNIDO supported the establishment of 5 CDCs in the panchayat. The RC will also be involved in facilitating creation of cottage/tiny industrial units in this panchayat as its second phase, followed by further expansion of the electrical system.

In fact this symbiotic association between a worldwide gov.inanisation and a local self-government made possible through the RC has given a great model to the developing world. Also this CDC program driven by environmentally benign power utilising local resources has rekindled the once fgov.inotten but still relevant concept of self-sustenance of our rural villages, as envisioned by our Father of the Nation.



The Hon'ble Minister for Power, Government of Kerala Shri. Aryadan Muhammed



Mr. A. J. J. Rwenderie (Managing Director, UNIDO, Vienna, Austria)



Mr. Alexander Varghese,
Industrial Development officer, UNIDO



Mrs. Lizie Jacob, Principal Secretary to Govt. of Kerala



110 kW Power Station.



55kW x 2 Turbines



Water fall near the Project



Water fall near Power Station



Distribution Transformer



Road to Power Station



One section of road to Mankulam



Another section of road to Mankulam