



**“Energy enterprises for development in rural areas:  
the case of clean cooking fuel”**

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## **Abstract**

*IEI's Regional Initiative for Asia, located in Bangalore is promoting rural co-operative enterprises that integrate income-generation with improved household energy-services. The main aim of this model is to enable people in villages to use cleaner and more efficient energy services for domestic purposes that do not yield direct financial returns and also to stimulate economic growth and development.*

*This Report describes the implementation of a project that demonstrates this approach and was selected for funding by the Wuppertal Institute at the through the 3<sup>rd</sup> Round of their Sustainable Energy Project Support Programme. The demonstration was carried out in a village (Chikkana Devara Hatti, Tumkur district, Karnataka State), where a dairy and biogas-plants have been constructed. The dairy employs the local people, its waste fuels biogas generation, in turn delivering fertilizer, and its milk and manure sales financially support the operations. Biogas is supplied to all homes, increasing efficiency and avoiding fuel-gathering, indoor pollution, and carbon emissions. This model is unique because improved (clean and efficient) energy services reach even the poorest in the community (rather than only those who can afford cattle/biogas plants), is financially feasible (due to the revenue earned), stimulates village-based development (by providing employment and value-addition within the village/cluster of villages), is environmentally sustainable (because it is based on waste rather than competing for land), and uses proven indigenous technology.*

*Replication of such village enterprises with extension of services – such as generation and distribution of electricity, for household as well as income-generating services, is being considered. More importantly, public-private partnership for the replication of this energy-development model in other villages is intended. The successful demonstration of the feasibility of the enterprise could expand the opportunities for replication of such village-based energy-development enterprises elsewhere – reducing fuel-wood and fossil-fuel use and the consequent environmental impacts, and stimulating economic development in rural areas.*

**Keywords: village energy system, village dairy, clean cooking fuel, biogas, waste to energy**

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