



Outcome-Based Approach for the Dissemination of Renewable Energy Technologies in Developing Countries

GTZ Lessons Learnt from the "Energising Development Programme"

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Poverty-oriented Basic Energy Services (HERA)





What is the Energizing Development Programme (EnDev)?

Partnership on Energy Access

Netherlands Minister for Development Cooperation (DGIS) & German Federal Ministry for Economic Cooperation and Development (BMZ)

Provide 6 Mio people with sustainable energy until 2014







What is the Energizing Development Programme (EnDev)?

• According to the needs & desired impacts...



EnDEV provides:

- Energy for Households
- Energy for social infrastructure
- Energy for productive use / income generation





Page 3





What have we done so far?

So far (2005-2009), EnDev has provided over 5 Million people with sustainable energy







5 Million people - What does that mean?

■ Each of these 5 Million people...

Either owns an improved stove





Or has a Solar Home System on his roof

Or has been connected to

- the national grid
- or a local grid powered by a biogas or a small scale hydropower plant







How did we achieve this?

• We devide the programme in countries & use different technologies Benin Burkina Faso Bangladesh Mali Indonesia Ghana Mongolia Senegal 🧮 Nepal Ethiopia Honduras Kenya Nicaragua Bolivia Mozambique 🔀 Rwanda Solar Solar Peru P Uganda SADC Malawi, Mozambique, Biogas Tanzania, Zambia Cooking energy Ongoing EnDev Projects Currently 18 countries (10 Africa, 4 Latin America, 4 Asia) Finalized EnDev Projects Page 6





How did we achieve this?

Ownership of the partner country and stakeholders involved

Expected cost efficiency (low transaction costs per beneficiary)

Expected sustainability (structures are in place that secure access for decades to come)

Scaling up potential (approach that has the potential to reach a high number of people)

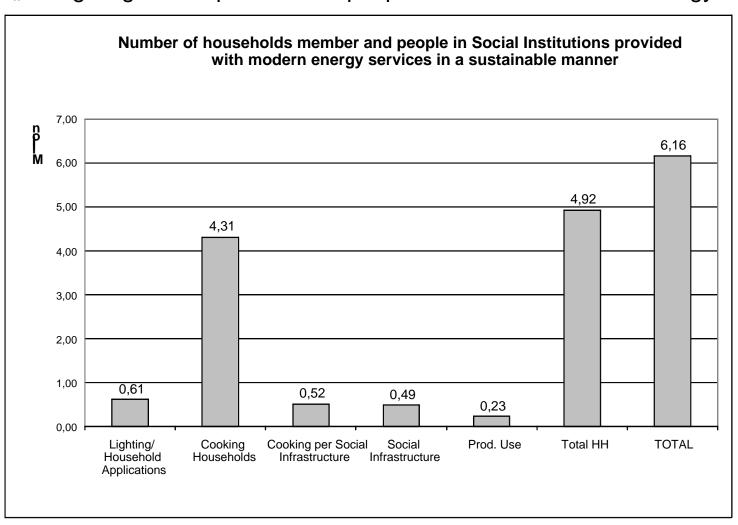
Accountability (people with new access are clearly the consequence of the EnDev intervention – and not of any other's donor intervention)

Complementarity (the interventions are most efficient if they are complementary to other project supported by BMZ or other donors).





"Energising Development": People provided with access to energy

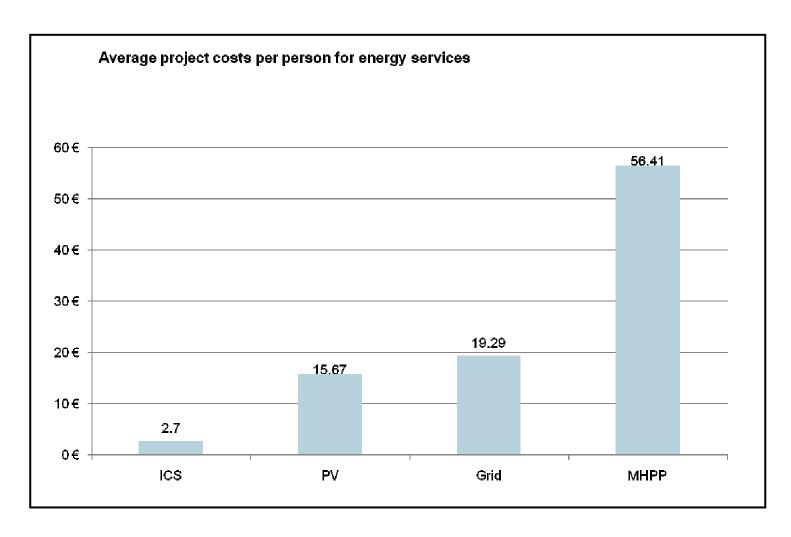


Outcome data consider the <u>sustainability</u> of the achieved access as well as <u>windfall gain effects</u> and a so called <u>double energy effect</u>.





"Energising Development": Costs per person provided with access to energy







Impacts on quality of life and poverty

- Saving work load and time of women and children: Improved cooking stoves reduce HH fuel consumption by 40-80% and consequently the time to collect firewood.
- Improved Indoor air quality and improved safety and hygiene in the kitchen
- More time to study or to do work at home through electric light
- More intensive use of information and communication technologies
- Increase of income for producers and retailers of energy technologies







Structural Impacts

- Improved political framework for renewable energies and access activities (e.g. feed in law, national access campaigns)
- Enhanced private sector for energy technologies and services
- Creation/Promotion of markets through increased demand
- Emerging financial services for energy technologies (producers, retailers, customers)
- Quality Inspection Agency established/strengthened





Thank you for your attention









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HERA – Poverty-oriented basic energy services

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