

ACCESS TO ENERGY FOR THE POOR

Practical Action: Energy service for the poor

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INTRODUCTION

- Energy is a basic need and necessity in human life
- Energy is key for relieving poverty (motive power)
- Energy is essential for sustainable economy, increased employment opportunities
- Energy contributes to a clean environment
- Energy impacts on health - indoor air pollution
- Energy has a gender- and age-related implications

ACCESS TO ENERGY SERVICES

- Nearly 1.6 billion people do not have access to electricity
- Worldwide, nearly 2.4 billion people use traditional biomass fuels-wood, agricultural residues & dung (for cooking & heating)
- Four out of five people are without access to electricity live in rural areas

In Kenya

- 15% of the hhs have access to grid electricity (national)
- Only 2% access for the rural households
- Estimated that households spend 10% of their income on energy
- The poor spend a larger proportion of their income on energy

TECHNOLOGY DEVELOPMENT

- Practical Action initiatives:
 - Rural domestic stoves (Upesi project) – efficient use of biomass & employment creation for increased incomes
 - Capacity building – women groups to produce and market
- In door air pollution monitoring and interventions (smokehood, rocket stove – under development)
- Pico and small hydro (lighting / motive)

TUNGU-KABIRI COMMUNITY MICRO-HYDRO PROJECT

- Owned and managed by community
- Electricity used at business center: lighting, welding, joinery, battery charging, entertainment and other uses
- Potential uses – water pumping, lighting homes, tobacco curing, refrigeration
- Users pay flat rate – further work necessary on tariffs and safety issues
- Funded by UNDP Global Environment Facility Small Grants Programme (GEF/SGP)

PICO-HYDRO POWER PROJECT

- Less than 5kW, smaller rivers can be used
- Kathamba Springs and Phillips Falls in Kirinyaga District
- Partners - Practical Action, the Nottingham Trent University and the Ministry of Energy
- Funded by EC

GVEP PROJECT IN KENYA

- The goal of GVEP - To enhance access to modern energy services while improving economic, social development and reducing poverty
- A UNDP/WB partnership to promote the activities of GVEP in Kenya and coordinating the Anglophone countries as they implement their action plans. Practical Action is the implementing agency.
- GVEP seeks to reduce poverty and enhance socio-economic and sustainable development through the accelerated provision of modern energy services to those un-served or under-served.
- GVEP M&E support service in Eastern Africa aims at tracking energy services and their impacts on poverty reduction, socio-economic and sustainable development at project, national and global levels, while enhancing partners monitoring and evaluation (M&E) capabilities and accountability.

GENDER & ENERGY

- Mainstreaming gender into energy policy planning, programmes and projects for poverty reduction & sustainable development.
- Gender integration into energy issues in Africa by strengthening the human & institutional capacity.
- Funded by the European Union.

Opportunities for SCALING UP

- Viable opportunities presented by micro and pico-hydro, wind, biomass and solar (new renewables) as most rapid & cost-effective solutions for expanding access to energy services
- Practical Action is working with other partners to support the adoption of scaling up strategies for energy within the East Africa Community
- Pico and small hydro have great potential for replication in Kenya - continuous dialogue with MoE and other stakeholders on policy
- Have piloted IAP interventions in Uganda, Tanzania
- National Smoke Forum to raise awareness on the dangers of smoke in the kitchen (IAP)
- Improved cook stoves potential in rural areas

Partnerships – Capacity enhancement - EAETDN

- Development of networks and database creation of agencies to improve the flow of information and expertise on energy in Eastern Africa.
- Building capacity on sustainable energy service and exploring the potential for replication of proven technologies within Eastern Africa.
- Funded by EC, the Ashden Trust and DFID SCF.

Practical Action – Beyond Kenya : NEPAL

- Assessment of information sharing techniques at community level in Nepal and Kenya.
- Identification of ways the 'traditional' printed outputs of development organizations can be adapted to local mediums.
- Aimed at providing development organizations with a methodology to convert written or electronic outputs into sound, newsletter, audio-visual, graphic or spoken outputs, whichever is locally appropriate.
- Funded by DFID.

DISSEMINATING APPROACHES TO ENERGY & SUSTAINABLE LIVELIHOODS (SL) IN KENYA

- To produce a case study that can be used as a training tool to disseminate the Sustainable Livelihoods approach to energy projects and to disseminate the SL approach to key stakeholders in Kenya.
- A consultancy with IT Consultants.

FINANCING MECHANISMS

- Pico- and small hydro - community contributions (labour, materials, funds)
- Donor funding
- Practical Action - technical support
- Collaboration & involvement of the Ministry of Energy

POLICY CONSIDERATIONS

- Meeting developing countries energy needs is both an urgent & difficult challenge which requires domestic policy development & change.
- The HH energy needs of those living in poverty rarely feature in national energy policies, development plans or poverty reduction strategies.
- Essential for developing countries to review their national policies; incorporate energy service agenda; & improve coordination between sectors and actors.
- A key issue energy policy is the diversification of generation sources to ensure minimal disruption to energy supply during shortfalls.
- Integrating gender and energy concerns into development policies, programmes and projects at all levels so that energy systems can more effectively contribute to poverty reduction and sustainable human development

POLICY ACTIONS ARISING FROM SESSIONAL PAPER NO. 4 OF 2004

Policy objectives in regards to energy access

- provide sustainable quality energy services for development;
- utilize energy as a tool to accelerate economic empowerment for urban and rural development;
- improve access to affordable energy services and enhance security of supply;
- provide an enabling environment for the provision of energy services;
- promote development of indigenous energy resources; and
- promote energy efficiency and conservation as well as prudent environmental, health and safety practices.

CHALLENGES TO WIDER ADOPTION

The main issues for micro-hydro development:

- Policy guidelines in place but implementation strategy still being discussed
- Limited working infrastructure for hydro power development
- Lack of standards and safety regulations in terms of equipment manufacture.
- Financing mechanisms for small hydro power.
- Quality assurance for the product.

Others:

- Enforcement of standards e.g. Practical Action & KEBS set standards for improved cookstoves.
- Though proven, penetration rates for improved cookstoves is still very low.

THE END

Thank you for your attention