



DEA Case Study Fact Sheet: Botswana

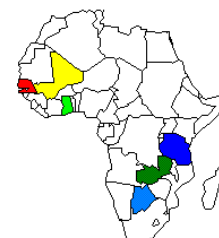
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Development and Energy in Africa (DEA)

Programme area: COOPENER, Community cooperation with developing countries
Target countries: Botswana, Ghana, Mali, Senegal, Tanzania, Zambia
Status: Ongoing

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 ENDA, Senegal
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DEA
Development and Energy in Africa

Case Study: Rural Electrification by Grid Extension

Country: Botswana

Keywords: Rural electrification, grid extension, development, assessment, impact

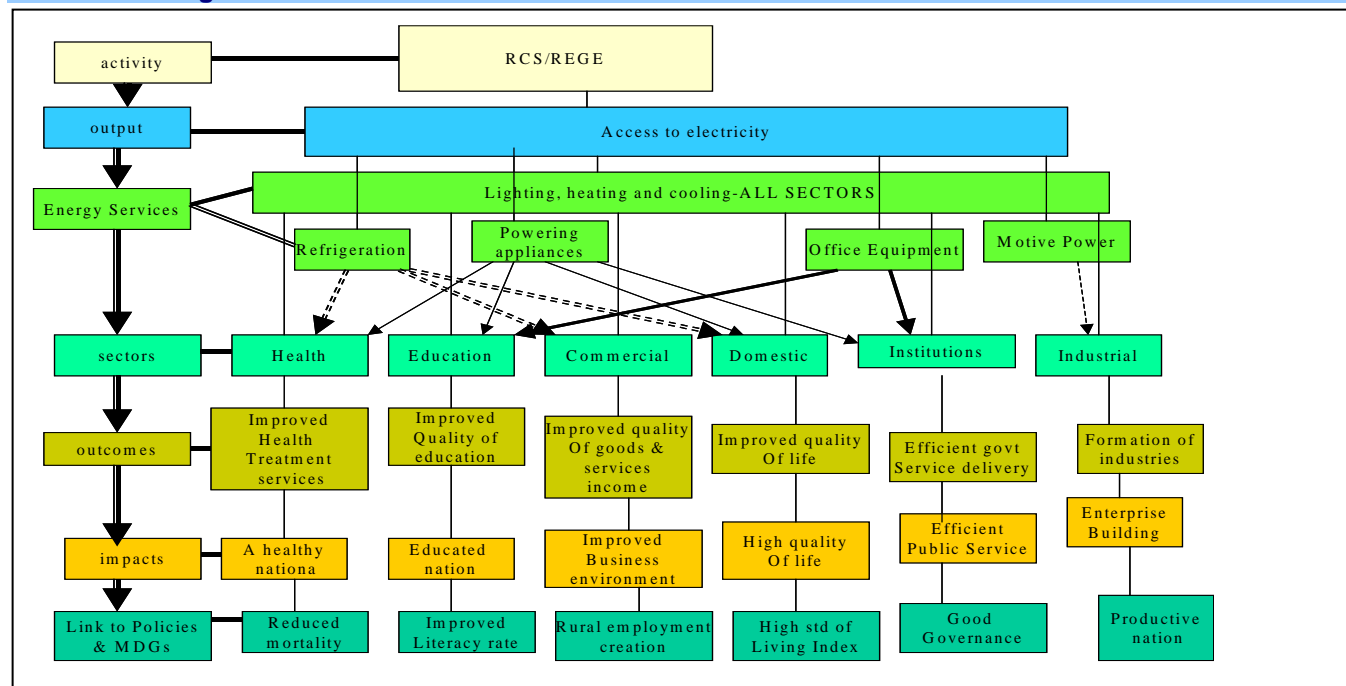
Short description of energy intervention

- Rural Electrification Collective Scheme (RCS) is the intervention in the form of a loan to reduce the burden of up-front costs of connecting to the electricity grid.
- Rural electrification (RE) through RCS covers villages throughout the whole country and as of December 2006, 238 villages (400 still unelectrified) have been electrified and rural electricity access has reached 37% from 3% in 1996.
- The RE programme is funded by the Government of Botswana through a consumer loan scheme, the Rural Electrification Collective Scheme. The RCS has undergone several evolutions since its inception in 1988 with respect to loan deposits, repayment periods and interest rate. There is evidence that the majority (>80%) of the connections in rural areas have been achieved through the RCS.
- The RCS and RE are still on going
- The impact assessment of the RCS/RE on development was conducted in a village at the boundary of peri-urban and rural (Manyana) that has many development sectors operating in the village.

Case study methodology

- Reviewing of relevant literature and statistics on connections
- Meeting village authorities to solicit for support.
- Undertaking informal interviews with village authorities and officials
- Administering semi-structured questionnaires to beneficiaries (domestic, education, health, commercial, industry and government)
- Undertaking a focus group at the Chiefs kgotla consisting of both men and women
- Baseline used was the recall Method
- Data analysis was done using Excel. To yield both quantitative and qualitative indicators

Causal link diagram



Results

Impact assessment shows that

- There is facility for food preservation, increased literacy and informed population in the homes
- Improved teaching facilities and attraction of qualified staff hence quality education provided in the village
- Improved health systems- through new drugs, lit emergency rooms and staff retention in clinics creating a healthy population.
- Commercial businesses has increased their income through introduction of new products and increasing their sales. New SME in form of industries started as a result of electricity being available in the village. Both sectors have increased employment and enterprise building
- The Village (Government) authority is also achieving better service delivery through use of electric office appliances

Lessons learnt

- Full participation of stakeholders is necessary in the design of projects and their Monitoring and Evaluation M & E
- Impact assessment must relate to national development objectives to make sense to stakeholders. Results obtained can be aligned to stipulated objectives & goals in the National Development Plan, Vision and Millennium Development Goals; Poverty Reduction Strategy Papers etc.
- Value judgement of stakeholders, particularly beneficiaries is an important indicator of impact of projects on development.
- Whilst baseline data is required for impact assessment, some indicators can be established using a combination of recall method, past studies and statistics.
- The same assessment framework used for assessment of impact on development can be adopted for project design and M&E.
- There is interest among stakeholders to use the assessment framework but its adoption by stakeholders will require some training.

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From 1 January 2007, Risø National Laboratory, the Danish Institute for Food and Veterinary Research, the Danish Institute for Fisheries Research, the Danish National Space Center and the Danish Transport Research Institute have been merged with the Technical University of Denmark (DTU) with DTU as the continuing unit.

Website:

<http://www.deafrica.net>