



Efficacy of the Energy for Rural Transformation Programme interventions in Health Service Provision

Overview

Socio-economic development and rural transformation is a priority for the Government of Uganda (GoU) as stipulated in the National Development Plan (NDP) - 2010/11-2014/15.

Limited access and use of energy significantly slows down economic and social transformation. To this effect, energy is identified as a priority complimentary sector to all the other social sectors that will be vital for the realization of the transformed Ugandan society in the medium and the long term.

One of the priorities for the Ministry of Energy and Mineral Development (MEMD) in the medium term is to increase access to modern energy services through rural electrification and renewable energy development. Among the key interventions for achieving this priority, is the Energy for Rural Transformation (ERT) programme. This programme is supporting the development of mini- hydro power plants and the provision of solar Photovoltaic panels among others.

The overall goal of ERT with respect to health service provision is to improve delivery of health services in rural health centres through increased access to modern energy services and Information and Communications Technology (ICT). The Health centres are provided with solar photovoltaic systems or connected to the electricity grid and ICT centres are established.

This briefing paper assesses the effectiveness of the ERT interventions in the health sector and in particular health centres (HCII -HCIV). It highlights successes, challenges and policy recommendations that will enhance effective implementation of the project.

Key Issues

- 77 percent of benefitting health units were not given adequate training in use and maintenance of the Solar equipment
- Minimum involvement of the districts in the selection of beneficiary health centres and actual implementation of activities; that could lead to poor maintenance.
- Distribution of weak Solar panels that cannot support sterilization of equipment, in Mubende, Mityana, Kibaale and Luwero districts.
- Delivery of incomplete packages in the districts of Mubende, Mityana, and Kibaale.

Background

The ERT programme is implemented by the Government of Uganda with the vision to 'use energy schemes to spur socio-economic development and aid rural transformation. The multi sectoral programme operates in the sectors of agriculture, education, health; and water and sanitation.

Planning and overall implementation of the health component is carried out by the Ministry of Health (MoH). Beneficiary districts are selected by the MoH according to set criteria but giving more priority to districts in northern Uganda.

The selection criteria for the beneficiary health centres include: a) not connected to the grid and with at least one staff house; b) functional and with good level staffing; c) have equipment to provide minimum designated services like delivery and immunisation; and d) health centre distribution in the district.

Findings

Financial year 2011/12 is the second year of implementation of the second phase of ERT. Under the health component, 9 districts¹ out of the 24 World Bank funded districts had project activities implemented by end of Q2 FY2011/12. Table 1 shows the HCs that had received installations under ERT II by the time of BMAU visits, FY 2010/11 and October 2011-March 2012.

Table 1: Number of health centres with solar PV installations by district.

| District | Number of health centres | Completeness of package | |
|-----------|--------------------------|-------------------------|------|
| | | Good | Poor |
| Kibaale | 31 | 26 | 5 |
| Mityana | 14 | 10 | 1 |
| Mubende | 25 | 16 | 1 |
| Kabale | 41 | 41 | 0 |
| Rukungiri | 19 | 19 | 0 |
| Kanungu | 15 | 15 | 0 |
| Luwero | 31 | 20 | 0 |
| Nakaseke | 01 | 01 | 0 |
| Kitgum | 10 | 10 | 0 |

Source: ERT Q2 Progress Report and Fieldwork findings

The term poor in table 1 shows health centres that received only a solar fridge without lighting system. The term good on the other hand represents those that received lighting systems and a solar fridge where there was no gas fridge already in the health centre.

¹Kibaale, Mityana, Mubende, Kabale, Rukungiri, Kanungu, Luwero, Kitgum and Nakaseke

Since ERT delivers a standard package depending on the level of the health centre, classification into good or poor is difficult as each health centre had unique requirements.

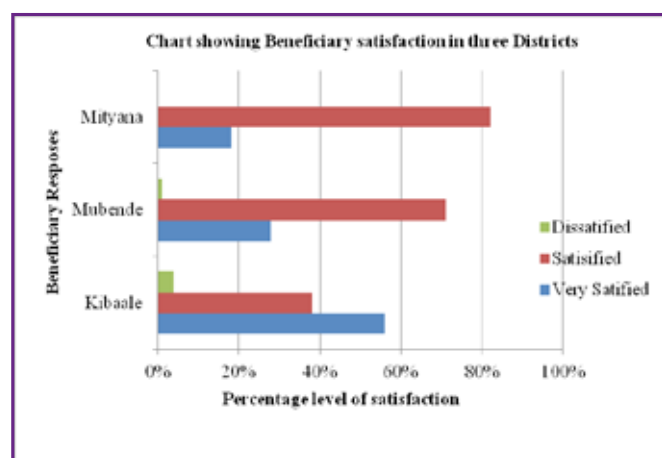
The BMAU monitoring visits revealed mixed results in terms of project implementation, with great satisfaction among some health centres and some degree of dissatisfaction amongst others.

The health centres that had a good experience with the scheme reported:

- Better provision of services at night especially maternal care and ability to handle emergencies due to improved lighting.
- Information and communication services were improved as members of staff could charge phones.
- Energy is cheaper due to the reduced monthly costs of purchasing kerosene for lighting from US\$30,000 to US\$10,000
- The lighting provided improved security at the health centres

Figure 1 shows that the provision of solar packages is popular among the beneficiaries.

Figure 1: Beneficiary views on levels of satisfaction with solar PV



Source: Field findings

However, a number of challenges were still constraining effective implementation of this good programme.

Key Challenges

There are a number of challenges highlighted on both the part of the health centres and from the district personnel that are critical in realization of the goal to 'improve delivery of health services in rural health centres through increased access to modern energy services and ICT.'²

The issues highlighted by the health centres included:

- **Inability to sterilize the equipment** The solar panels that were received were too weak to support sterilization equipment. This was noted in the districts of Mubende, Mityana, Kibaale and Luwero among all the health centres visited since FY2010/11.
- **Inadequate training:**

77% of the health centres reported that they never received adequate training on operation and maintenance of the solar equipment.

The health centres reported that they simply received very basic training on how to switch on and off; and usually the installing company left a telephone contact in case of any mechanical faults.
- **Delivery of incomplete packages:** Some health centres did not receive adequate bulbs, sockets, switches and solar panels to serve the health centre premises and the staff houses. On the other hand, some received only a solar fridge without lights thus still conducting deliveries by candles or phone torches. For example, Kiyuni health centre III in Mubende district.

Issues highlighted by the district

- **Limited involvement of the District Health office in project planning and implementation :**

Decisions about which health centres to benefit are made by the MoH. This often results in health centres in dire need of panels missing out. On the other hand districts hardly monitored actual installations. This weakens chances of future maintenance.
- **Lack of monitoring tools:**

The local governments are not provided with the bills of quantities to establish the package that each health unit is supposed to receive. This makes supervision of the project difficult.

Conclusion

The ERT health component is a good initiative. The Photovoltaic Solar Energy systems present an alternative solution to meeting rural energy demands. However the programme still has problems that need to be addressed. The project planning and implementation has limited participation; while some packages delivered are either incomplete or inadequate to meet clients' power needs.

²ERT Operations Manual 2009

Policy recommendations

- **Bottom-Up approach in needs assessment**

The ERT program needs to consult the beneficiaries before decisions for the health centres packages are made. Health officials of the benefitting local governments should be involved in choosing HCs that are to be targeted by the ERT.

- **Procure stronger solar panels**

The program should also consider provision of stronger solar panels that can power sterilization of equipment and lighting

- **Enhance monitoring of projects**

There is need for the implementing agency to provide the bills of quantities to the District Health Officers to enable adequate monitoring and reporting on the implementation.

- **Provide for maintenance of equipment**

Service Level Agreements for equipment maintenance and repair should be signed to enable timely and effective maintenance support

References:

The Government of Uganda; National Development Plan FY 10/11 -2014/15

ERT Base line Report September 2011

ERT Q2 F/Y2011/12 Progress Report

MoFPED 2011: Budget Monitoring Report October- December 2010

MoFPED 2011: Annual Budget Monitoring Report, July 2010 – June 2011

MoFPED 2012: Budget Monitoring Report, October – December 2011

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