

## What is constraining increased power use/ connections in Uganda?

### **OVERVIEW**

Energy is a key strategic infrastructure in development according to the second National Development Plan (NDP II) as it accelerates the harnessing of opportunities thereby spurring growth in the country. Uganda's Vision 2040 also recognizes that energy, particularly electricity is a driver of socio-economic transformation of the nation.

From Financial Year (FY) 2011/12 to 2015/16, Government has invested Ug shs 126.022 billion towards grid extension and increasing household connections to the rural poor households. This has been done through funding projects such as grid extension lines, and by subsidizing household connections.

This briefing paper examines whether these investments will result in increased power use/ connection. Focus of analysis is on development expenditures during FYs2011/12-2015/16 majorly using the Integrated Financial Management System (IFMS), Budget Monitoring and Accountability Unit (BMAU) reports, Ministry of Finance's Approved Estimates and the Public Investment Plan.

### Introduction

In FY2011/12 and 2012/13, a Government of Uganda (GoU) contribution of Ug shs 24billion was allocated to increase rural electrification under the Energy for Rural Transformation (ERTII) and the Rural Electrification projects.

### **KEY POLICY ISSUES**

- There are persistent delays in the implementation of grid extension projects due to limited capacity of contractors, which is exacerbated by late payment by Rural Electrification Agency (REA).
- Many poor households cannot afford to connect.
- Knowledge of the existence of the subsidised household connections project is still slowed down by limited sensitization.

Currently, energy access in Uganda is at 20%<sup>1</sup>. However, this is still very low to achieve meaningful development.

The Rural Electrification Program was elevated to Vote status in FY2013/14 and funding to this vote has cumulatively increased to about Ug shs 126 billion.

Projects funded under this vote include the Rural Electrification Program and the Output Based Aid (OBA) - Household Connections Project. The projects aim at contributing to the overall objective of achieving rural electrification access of 26% by June 2022. The GoU and development partners jointly support these projects.

UBOS National Population and Housing Census, 2014:

# **BMAU Briefing Paper (16/16)**

#### **Grid Extension Projects**

These are implemented under the Rural Electrification Program with an aim of increasing grid coverage throughout the country. In the period under review, a number of projects have been completed including; Namutamba-Bugobi; Migyera-Nyakitoma line; Soroti-Katakwu-Amuria; Ibanda-Kabujwogera; Muhanga - Kamwezi; Bukwiri - Kyankanzi; Ibanda - Kazo - Rushere; Gulu - Kamdini -Bobi. The grid extension projects supply power for lighting, powering electronic equipment to various social institutions such as schools; sub-county headquarters; and health centers. In trading centers, it enables business development leading to increased incomes among the users.

A number of projects are also still under implementation such as; Apac/ Chegere-Kole/ Akalo-baala, Ntungamo/ Rukungiri/ Kabale/ Mbarara/ Kanungu/ Kisoro/ Nakasongola/ Luwero, Serere/ Soroti/ Palisa/ Kapchorwa/ Kumi; Kapchworwa-Bukwo-Suam.



Ongoing low voltage string in Ntungamo district for Ntungamo/Rukungiri/Kanungu/Kisoro/ Kabale/Mbarara and Environs

### **Challenges with Grid extension Projects**

A number of challenges have continuously affected the successful implementation of grid extension projects. Some of these include;

### a) Delayed implementation of projects

There have been delays in all projects that have been monitored in the period under review. All contractors have applied for extensions during project implementation and hardly completing by the revised dates. The major reason highlighted by all contractors for the delays was delayed payments from REA. For instance, the contractor on the Gulu/Kitgum/Pader/Otuke/Lira/Lamwo; and Wakiso/Butambala lines are yet to be paid fully after completion of the lines. Some of the contractors did not have adequate financial capacity to implement projects using own resources until the REA paid them. Table 1 below shows the project timeframes and revised timeframes.

Table 1: Timeframe of Selected Grid Extension Projects

Project	Initial Start and completion dates	Revised Completion date	
Apac-Chegere- Alemi (delayed payment)	Aug 2014 to Oct 2015	January 2016	
Ntungamo/ Rukungiri/ Kanungu/Kisoro/ Kabale/Mbarara and Environs	July 2014 to June 2015	July 2016	
Nakasongola/ Luwero/ Nakaseke/ Hoima/ Zombo/ Arua/Paidha	May 2014 to June 2015	May 2016	
Wakiso/ Butambala	May 2014 to June 2015	May 2016	
Serere/ Soroti/Pallisa/ Kapchorwa	June 2014 to Sep 2015	April 2016	
Kapchworwa- Bukwo- Suam	Dec 2014 to Sep 2015	July 2016	
Bundibugyo- Kasese-Rubirizi- Kamwenge	June 2014 to June 2015	February 2016	
Gulu/Kitgum/ Pader/ Otuke/ Lira/Lamwo	Sep 2014 to Dec 2015	March 2016	

Source: Field Findings

# **BMAU Briefing Paper (16/16)**

Other reasons delaying project implementation include:

- b) Change in scope on the lines –like Nakasongola/Luwero/Nakaseke/Hoima/Zombo/Arua/Paidha and Ntungamo/Rukungiri/Kanungu/Kisoro/Kabale/Mbarara lines
- Delays in clearance of materials including transformers, wires and insulators from Uganda Revenue Authority.
- d) Vandalized transformers as reported on Wakiso/Butambala line.

## The OBA Grid Extensions program: Free Household Connections

The Uganda grid-based OBA Project is funded by the Global Partnership on Output-Based Aid (GPOBA) through the World Bank (IDA), the Government of the Federal Republic of Germany, the European Union (EU) through the German Financial Cooperation (KfW), and GoU The objective of the OBA Project is to provide improved access to electricity to poor households throughout Uganda. The project subsidizes the full cost of connection to poor households who need no pole service, in a distance of less or equal to 35 metres from a low voltage network. These must be able to pay for internal house wiring and the energy consumed but have not connected their premises for at least 18 months after commissioning of the power lines. Alternatively, it is poor households identified in newly electrified areas where poverty mapping has been undertaken by an independent consultant.

The total project funding is US\$18.2 million. The OBA Project is now targeting 115,700 connections throughout the rural and peri-urban areas. Considering an average occupancy of five members per household, the estimated project beneficiaries are 578,000.

The electricity connections under the OBA project are made by licensed distribution companies (LDCs) namely; Umeme Limited, West Nile Rural Electrification Company (WENRECO), Ferdsult

Engineering Services Limited (FESL), Kilembe Investments Limited (KIL), Bundibudyo Energy

Cooperative Society (BECS), Pader – Abim Community Multi-Purpose Electric Cooperative Society Limited (PACMECS), Uganda Electricity Distribution Company Limited (UEDCL), and Kyegegwa Rural Electric Cooperative Society (KRECS).

The OBA project became effective in December 2012 and actual connections commenced in July 2013. A cumulative total of 102,205 connections were reported by service providers to have been made by the end of March 2016, representing 89% of the total target as detailed in table 2.

**Table 2: Cumulative Connection made for the OBA Project** 

SP/Period	FY2013 /14	FY2014 /15	July-Sept 2015	Oct-Dec	Jan-Mar	Total
UEDCL	-	462	481	1,083	593	2,619
Umeme	58	31,460	33,842	18,172	5,279	88,811
PACMECS	226	219	101	82	35	663
WENRECO	417	516	-	-	-	933
FESL	464	778	-	-	-	1,242
BECS	388	1,142	627	848	401	3,406
KIL	1,357	2,274	392	34	394	4,451
KRECS	-	-	-	-	80	80
Total	2,910	36,851	35,443	20,219	6,782	102,205

Source: Field Findings; REA

# **BMAU Briefing Paper (16/16)**

### **Benefits from OBA project**

The customers connected to power under the OBA project listed various benefits. These include:

- Ability to operate businesses such as saloons; mobile money kiosks; restaurants leading to improved incomes and development in the area,
- Ability to light houses using clean energy,
- Ability to charge phones,
- The prepaid metering system eased payment for power.





L-R: OBA beneficiary operating a mobile money shop and phone charging business; Installed power meter in Kasese district

## Persistent Challenges of the OBA Connections

In spite of the benefits associated with the project, in-depth discussions with the service providers and beneficiaries revealed that the project is not entirely benefiting the intended poor households. For instance; i) majority of the poor households cannot afford the wiring costs of about Ug shs 350,000 ii) the ready boards which could serve the poor who cannot afford wiring costs are not available; grid power is largely linear and concentrated in urban and trading centres for the villages leaving out some rural households; iii) Sensitization efforts by Real Marketing Limited have not effectively reached all the households as some potential beneficiaries are not aware of the existence of such a program.

#### **Conclusion**

In conclusion, government has invested heavily in energy through increasing grid extension and electricity access. However, powers connections/use continues to be constrained by the delayed completion of grid extension projects; and inability of the poor households to connect.

### **Recommendations**

- Government should prioritise required counterpart funding to the grid extensions project.
- REA should effectively appraise the financial capacity of contractors during the evaluation of bids from contactors.
- REA should mobilize funds to give free connection to the poor households or further subsidize the connections.
- REA should enhance awareness of the OBA programme to rural households.

#### **References:**

- Budget Monitoring Reports FY 2011/12-Q2 FY 2015/16
- GOU (June 2015) Second National Development Plan 2015/16-2019/20
- GOU (June 2015) Approved Estimates of Revenue and Expenditure (Recurrent and Development) 2011/12-2015/16
- MEMD Sector performance Report 2013-14
- MFPED Public Investment Plan (2012/13-2017/18)

Budget Monitoring and Accountability
Unit

Ministry of Finance Planning and Economic Development,

Plot 2-12 Apollo Kaggwa Road, P.O. Box 8147 Kampala