THE ELECTRICITY INDUSTRY REFORMS IN UGANDA
&
THE RURAL ELECTRIFICATION PROGRAMME

By Benon Bena
Principal Energy Officer
Ministry of Energy and Mineral Development-Uganda
CONTENTS

- What is Electricity Industry Reform in Uganda About?
  - Objectives of the Reform
  - Enabling Environment: policy & legislation
  - Status of the electricity industry reform

- The Rural Electrification Programme
  - The Driving Force of RE
  - Prevailing Key issues in Rural Electrification

- The ERT Programme
  - What is ERT?
  - Operational Framework
  - Institutional Framework
  - Fast track Projects

- SWOT analysis

- Lessons Learnt
WHAT IS ELECTRICITY
INDUSTRY REFORM IN UGANDA
ABOUT?
SHIFT FROM THE TRADITIONAL WAY OF FINANCING PROJECTS AND DELIVERY OF SERVICES

- Utility had monopoly to generate, transmit, distribute & supply electricity.
- Financing obtained from internal resources & development partners on concessional terms.
- Government/ministry & utility regulate the sector:
  - Government approved Tariff.
  - Utility granted licenses to other developers and set standards.
OBJECTIVES OF THE REFORM

- Create a level playing field for all players.
- Attract private capital in the power sector.
- Attain efficiency in service delivery.
ENABLING ENVIRONMENT: POLICY & LEGISLATION

- POWER SECTOR STRATEGIC PLAN 97 & 99
  - Defined the industry & market structure, form of regulation & Role of government.
  - Put in place a roadmap for the reform program.
  - Spelt out new policy direction and emphasized:
    » Need to make power sector financially viable.
    » Involvement private sector in electricity.
    » Increase of access to electricity.
- **ELECTRICITY ACT, 1999**
  - Broke the monopoly of UEB in power generation, transmission, distribution and supply.
  - Created a Regulator (ERA).
  - Created a licensing regime for projects.
  - Gave powers to the Minister to create a Rural Electrification Fund.
  - Obligates Government to promote, support and undertake Rural Electrification programmes.
STATUS OF THE ELECTRICITY INDUSTRY REFORM

1. ELECTRICITY REGULATORY AUTHORITY ESTABLISHED 2000.
   – Issues licences.
   – Sets tariff.
   – Develops and enforces standards.
   – General regulation of the industry
2. CONCESSIONING OF UTILITY (UEB) NEAR COMPLETION.

- UEB unbundled into Generation, Transmission and Distribution business.
- Generation concessioned to Eskom (U) Ltd.
- Distribution concessioning to be finalized soon.
- Transmission Company is a Bulk Supplier and System operator.
- To remain Govt parastatal in foreseeable future.
3. IPPs DEVELOPMENT

- Small generators in place.
- Bujagali and Karuma projects planned for development by IPPs.
THE RURAL ELECTRIFICATION PROGRAMME
DRIVING FORCE OF RE

MEMD/ESMAP STUDY: 1996 - 1997

Key findings were:

- At least 60 Mw of self generation: Indicates entrepreneurship in the sector.
- Consumers outside the grid pay over 10 times: Indicates willingness to pay.
- There was an equal number of Ugandans with grid electricity as those with car batteries.
MEMD/ESMAP STUDY: 1996 – 1997 Cont’d

- Level of rural access is very low – 1% grid connected.
- Traditional extension of the grid—where there is no economic sense.
- Limited sources of financing projects from GOU or donors only.
- Limited capacity to pay for electricity consumed and connection.
THE RURAL ELECTRICIFICATION STRATEGY AND PLAN-(2001-2010) OF FEBRUARY 2001
- It spelt out the mechanism of Rural Electrification and the targets:

- Institutional framework for the Rural Electrification Fund.

- Increase of rural electrification from 1% to 10% by 2012.

- Defined the strategy for development of projects & delivery of services.
  » Private sector led commercially oriented rural electrification: spp, ngos, cbo, local investments

- Combination of delivery modes: grid extension, off-grid systems, solar PVs and renewable energy projects.
– DEFINED THE TARIFF POLICY

» Private capital to earn a reasonable return.
» Cost reflective tariff.
» Tariff vary from place to place

– TYPE OF REGULATION

» Relax administrative procedures and stringent standards
» The regulator delegates to local Authorities/Institutions
DEFINED SYNERGIES WITH SOCIAL & ECONOMIC ACTIVITIES

» Agriculture, Health, Water Education and ICT.

» Set the target for RETs & RE

- Increase RETs from the current 20 MW to 100 MW in 2012
ENERGY FOR RURAL TRANSFORMATION (ERT) PROGRAMME
WHAT IS ERT?

- A ten year programme developed by GOU with support of World Bank 2002-12.
- It is private sector led.
- Projects benefit from subsidies to buy down capital costs.
- The overall goal is to increase electricity access in rural areas from 1% to 10% by 2012.
It address several delivery mechanisms grid extension:

- Grid extension where feasible;
- Decentralized mini grids;
- Solar PVs; and
- Development of other renewable energy resources.
ERT has strong linkage with key production and human resource sectors: Agriculture, Health, Water and Education.

Target areas are: District Headquarters, Trading Centers, Agro Processing areas, Schools, Health Centers and Rural Water supply units.

Delivery mechanism and Project Developers: Private Sector, NGO’s, Local Communities and local governments.
INSTITUTIONAL FRAMEWORK

Ministry of Energy and Mineral Development

- Policy role and coordination.
- Generate required data and information.
RURAL ELECTRIFICATION BOARD

- To manage Rural Electrification Fund and Authorize Disbursement of Smart Subsidies.
- Define criteria for award of subsidies.

RURAL ELECTRIFICATION AGENCY

- Initiate projects and pass them to ERA to advertise and license.
- Receive and review applications for grants.
UGANDA COMMUNICATIONS COMMISSION (UCC)

- Ensure proper management of ICT component

BANK OF UGANDA

- Manage loan component of ERT through Commercial Banks
SECTOR MINISTRIES (Health, Education and Agriculture)

- Identify and package energy and ICT requirements for their respective institutions.
- Submit package as appropriate for grant financing.

MICRO-FINANCING INSTITUTION

- Intermediaries for delivery of solar PV
MINISTRY OF LOCAL GOVERNMENT

- Provide support services in linking with local authorities
- Work with MEMD to disseminate information.

PRIVATE SECTOR FOUNDATION

- Business plan development and technical assistance
FAST TRACK PROJECTS

- WEST NILE POWER PROJECT
- KAKIRA COGENERATION PROJECT
- KANUNGU, RUKUNGIRI, BUSHENYI POWER PROJECT
- KISIIZI PROJECT
- OTHER PROJECTS
SWOT ANALYSIS OF ERT

- **Strengths**
  - Attracts new capital in rural electrification.
  - A combination of delivery mechanism (grid, off grid solar PV etc.)
  - Strong legal and policy environment rules are well defined.
  - Strong linkage with production.

- **Weakness**
  - A challenge to coordinate several institutions involved.
  - Offshore coordination.
SWOT ANALYSIS OF ERT Cont’d

- **Opportunities**
  - Subsidies on projects.
  - Small to big sized projects (solar PVs, generation and grid extension).
  - Strong informal sector in Uganda creates local businesses to be exploited.

- **Threats**
  - Rural Electrification Fund dwindling due to:
    » Resistance on tariffs; and
    » Donor funding.
LESSONS LEARNT IN SECTOR REFORM

- Strong Policy and Legal Framework on which to build the reforms required
- Areas which are sensitive with high commercial risks like Distribution should be tackled first
- In introducing IPPs one should start with small projects to create confidence in the market
- A lot of public awareness is required e.g. tariff issues, investment programmes, introduction of new policies.