UGANDA

Key issue addressed:

Energy Sector Reforms (e.g. Energy Laws, Legal and Regulatory Initiatives)

Descriptive Title of Case Study:

UGANDA'S EXPERIENCE IN THE IMPLEMENTATION OF POWER SECTOR REFORMS

POWER SECTOR REFORM AND THE KEY PILLARS TO THE REFORM

Lead Institution:

Ministry of Energy and Mineral Development (MEMD)

Other implementation arrangements and stakeholders involved:

Electricity Regulatory Authority (ERA), Umeme Ltd

Brief summary:

Over the past years, Uganda has faced severe constraints in the power sector. To address the issue, Government formulated a Strategic Plan in 1997 to reform the industry. The Plan was revised in 1999. To put the policy tool in operation; Parliament enacted a new law, the Electricity Act in 1999.

Key objectives:

The main objectives of this Strategic Plan were to:

- Make the power sector financially viable;
- Increase the sector's efficiency;
- Improve the sector's commercial performance;
- Meet the growing demands for electricity and increasing area coverage;
- Improve the reliability and quality of electricity supply;
- Attract private capital and entrepreneurs; and
- Take advantage of export opportunities.

Key challenges:

1. Regulatory Challenges:

- The main aspect here is tariff management. All consumers would like to have a very low tariff. However there is need to invest in the sector for it to expand and provide reliable services.
- On the other hand, utilities may be tempted to charge higher rates in order to cover other aspects of mismanagement.
- There is also the key element that the electricity tariff is being unfairly judged especially if one compares with other sectors like the telecommunication sector.
- Nonetheless the bottom line is the capital required to invest and expand both generation capacity and access. This should be the main driver for tariff setting.

2. Participation by the Private Sector

- Participation by the private sector in energy projects, especially the large ones, has been impacted by the situation in the global energy markets. There has been excessive hedging by the private sector in view of the perceived market risks.
- The transactions have in general, been characterized by:

- ➤ Very protracted negotiations;
- ➤ Demand for guarantees;
- ➤ Mixed outcomes, with some transactions resulting in concrete deals while others have not materialized.
- The above situation has prevailed in the concessioning of the distribution concession, the Kakira Co-generation transaction let alone to mention the Bujagali project.

3. Available resources for the REF

- Experience has shown that substantial financial resources for grants will be required once development of rural electrification (RE) projects is scaled up.
- This therefore, necessitates more support towards the Rural Electrification Fund. US\$ 1 billion is required within the next 10 years to meet the target of 20% rural electrification in the next 10 years.

4. Attitude of commercial banks to long-term lending

• The local banks do not have an appetite, yet, for long term lending. This has been one of the main constraints in implementation of private sector RE projects.

Key features of the policy initiatives:

In order to achieve the above objectives, Uganda's Power Sector Reform Program was binged on four (4) pillars mainly:

I.Creation of a viable electricity market structure.

The purpose of this pillar or policy action was to remove the original Uganda Electricity Board (UEB) monopoly and create a level playing field for all investors to enter the power sector.

II.Creation of independent regulation of the electricity industry.

The purpose of independent regulation was to create arms length economic regulation (e.g. setting of tariffs) in the sector in order to ensure that electricity consumers are protected from unrealistic costs by utility companies while at the same time ensuring that the utility companies get a fair return on their invested capital. In addition, independent regulation ensures that tariffs are not set politically but rather through sound economic and social principles.

The Electricity Regulatory Authority (ERA) established by the Electricity Act, 1999 had its Authority Members appointed in April 2000. The ERA secretariat has been subsequently established.

III. Attraction of the private investment into the sector.

The purpose of this pillar was to create additional financial resources for investment in the power sector and introduce good management skills, which characterize private sector business.

This pillar is quite central in the development of Uganda's electricity industry and the Regulator will serve as an Advisor on the Direct Foreign or Local Investments which have accrued to the sector or which will flow in the medium term.

IV.Establishment of the Rural Electrification Fund.

The Fund was established to buy down the capital cost involved in rural electrification and renewable energy projects.

Rural Electrification Fund (REF) has the following sources of funding:

- ➤ Money appropriated by Parliament;
- ➤ Any surplus moneys made from Regulator;
- A levy of 5% on transmission bulk purchases; and
- > Donations, gifts, grants and loans.

Time frame: Year started: 1997

Status: Still Ongoing

Results achieved and known impacts:

Since 2000, Government has been implementing each of the key pillars of reforms. Below are some of the milestones, which have been attained on each of the Pillars:

Pillar I: Establishment of Independent Regulation:

- Since its establishment, the Electricity Regulatory Authority (ERA) has been able to register among others the following achievements:
 - ➤ Reviewed and approved the Tariff Structure;
 - Licensed several companies including UEB successor companies; and
 - > Issued various Permits to prospective investors in hydroelectricity generation.

Pillar II: Emplacement of a viable electricity market structure:

- The Uganda Electricity Board (UEB) was unbundled into the various segments of Generation, Transmission and Distribution in April 2001.
- The Electricity Generation business (Nalubaale and Kiira Power Stations) was concessioned to Eskom (U) Ltd in November 2002.
- The Electricity Distribution business has been recently concessioned to Umeme Ltd in March 2005.

Pillar III: Attraction of Private Investment:

- A number of private sector led investments have been attracted in the country. These include:
 - Bujagali and Karuma Power projects are under various stages of development as IPPs.
 - ➤ West Nile Rural Electrification Company, which has started Thermal generation and distribution of power in Arua and Nebbi Districts, the company will commence construction of Nyagak small hydro this year.
 - ➤ Kasese Cobalt Company, which generates 10.5MW on Mobuku River.
 - ➤ Kakira Sugar Works that is constructing a 16MW plant to generate electricity from sugar waste.
 - ➤ Hydromax Ltd, which is developing 10MW on River Wambabya.
 - > S.N Power which is studying various sites (Waki, Muzizi, Bugoye, Nengo Bridge etc) for development.
- In addition, the concessioning of generation and distribution business discussed earlier has boosted this pillar.

Pillar IV: Establishment of the Rural Electrification Fund:

• With the establishment of the Fund, rural electrification coverage has increased from 1% in 2001 to 4% to date.

Main obstacles faced:

- Unwillingness of local financial institutions to under take long term lending
- Investors want to participate in ready projects, without the encumbrance of carrying out studies. Lack of ready projects with all feasibility studies accomplished has therefore impinged the implementation of the reforms.
- Most energy companies have low appetite of for large power projects. This means that the latter cannot be developed to provide adequate power supply for grid extensions
- There has been a difficulty in bringing all stakeholders on board to embrace reforms

Sustainability, scalability and transferability

- Use of the experiences so far gained in the implementation of the energy policy reforms to institute appropriate strategies and mechanisms that will ensure the scaling up of rural access to energy services
- Pursue of an integrated approach to rural electrification, covering the whole spectrum of energy resources

Key lessons learned:

- A strong policy and legal framework on which to build the reforms is required
- Areas which are sensitive with high commercial risks like distribution should be tackled first
- In introducing IPPs, on 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

Further Information:

Ministry of Energy and Mineral Development www.energyandminerals.go.ug

Electricity Regulatory Authority www.era.or.ug