

Achieving Universal Access to Electricity in Mozambique: The Role of the Government, the Utility, and Power Sector Reform

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Executive summary

1. Motivations underlying the research

In 2013, Mozambique was ranked the 13th poorest country in the world, compared to 3rd poorest in the world in 1993. Although Mozambique is blessed with abundant fossil fuel and renewable energy resources, achieving the national goal of universal access to electricity by 2030, for a population of over 30 million people, is a formidable task.

In order to improve system efficiency and achieve universal access, many nations have attempted power sector reform to stimulate new investment, adopt new technology, and reduce costs. The “standard model” of reform that emerged in Europe and Chile has had mixed success when pursued in developing nations where the political, institutional, and socio-economic context is very different.

We examine the electricity access challenges in Mozambique from the perspective of a large, public utility in a developing country, including the constraints and trade-offs it faces in delivering on its dual mandate, as a driver of socio-economic development and as a commercial business entity. We compare the proposed reforms with the standard model of power system reform and discuss the risks and opportunities on the road ahead.

2. A short account of the research performed

The authors used published information and documents to characterize access levels in Mozambique, and the progression of its electricity supply. The national power utility (EDM) has been the main actor in these developments, connecting 130 districts and 1.5 million households in 25 years, and adding more than 25,000 kilometers of medium- and high- voltage lines across the country. Still, residential access was barely 28% in 2017, and the goal of universal access by 2030 will require connecting more than 6 million new households and investing around 5 billion USD in transmission and distribution networks.

EDM is engaged in a massive transformation program to introduce accountability, ethics and transparency of processes, digital platforms, innovative financial and governance structures, and to establish performance driven planning and management. Expectations are that this will create the necessary conditions to achieve the 2030 goals.

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All stakeholders must recognize and take account of the fact that EDM has dual, often conflicting, mandates:

- “The social mandate”, to provide Universal Access to electricity at an affordable rate and without geographical differentiation.
- “The commercial mandate”, to maintain sufficient liquidity and creditworthiness to sustain its operations and support the mobilization of funds for power infrastructure expansion and business growth.

The necessary transformation of the power utility is occurring in an environment of emerging professional and technological capabilities in Mozambique, urbanization, globalization, digitization, and uneven distribution of resources.

We examine the key elements of the standard model of power reform and compare these with the current status and goals in Mozambique. We find that the long term vision of achieving universal access needs to be supported by pragmatic and transparent, shorter term initiatives that are rooted in the current context and realities of the country.

To achieve universal access, a wide array of stakeholders, each with specific concerns and measures of success, must be considered. These include the government, society, municipalities, the general public, financiers, development partners, service providers and suppliers, and the new regulatory agency, ARENE, which aims to balance the various interests and requirements and ensure competition and fair treatment under the terms of the law.

3. Main conclusions and policy implications of the work

Often, public utilities are deemed vulnerable to political influence and corruption. However, public companies play an important role in realizing the equity goals of electrification efforts, as no private company can meet the electrification targets at prices considered affordable to poorer populations. We propose that the paradigm of the public utility can and must change: public companies must address the source of their losses, and reform, so that their cost of supplies can fall to a level that is on par with the most competitive costs, and provide a reference for establishing reasonable price or return caps on private operators.

If the sector and utility reforms can continue and are supported by a shift in the Government (the owner), there will be proof that the public sector of a developing country, a fragile transition economy, can evolve and deliver the social mandate as well as meet its business viability requirements.