

SDG 7

Power for the people?

The chimera of pro-poor energy solutions

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Recent discoveries of hydrocarbons in various African countries and the massive investments in energy generation capacity have created expectations that the blackouts and brownouts that several African countries have endured for the past decades will soon be a thing of the past. In East Africa, national economies have in recent years also been recording stellar growth rates which promise new opportunities and discontinuity with the past.

Despite this record, in its *Africa Energy Outlook 2014*, the International Energy Agency remarked: “More than 200 million people in East Africa are without electricity, around 80% of its population. Ethiopia, Kenya and Uganda are among the most populous countries in East Africa and have the largest populations both with and without access to electricity.”¹

So, the irony is that as the region records world-beating economic growth rates, the majority of our co-citizens remain in conditions of energy poverty, forced to rely on alternative energy sources (notably biomass) to meet their energy needs. The knock-on effects of this energy poverty are myriad and contribute significantly to the persistence of inequalities and marginalization. The prevalence of energy poverty is literally a killer – from respiratory diseases and related ailments that are the result of prolonged inhalation of firewood smoke and other fumes from cooking fuels, to ruined drugs and vaccines that are not kept at prescribed temperatures due to the inability to guarantee constant refrigeration, not to

mention other life-saving equipment in hospitals and clinics that is rendered useless by either frequent black/brownouts or absence of electricity. For many of the region’s farmers, post-harvest losses increase food insecurity. Whilst not directly related to energy, they are heavily influenced by absence of appropriate infrastructure in the rural areas, including energy.

Energy poverty also has a very female face to it: it is most often women who have to suffer the indignity and physical pain of gathering firewood, often walking long distances to find it and to bring it back home, and then to suffer the debilitating effects of cooking in a cloud of noxious fumes of firewood combustion. Beyond this, millions of school hours are lost due to lack of lighting in schools and the economy suffers when jobs are either lost or not created due to lack of energy – not to mention the damage done to sensitive machinery by power fluctuations.

Catch-up without change

To date, many of the conversations and policy inputs around energy poverty have tended to be incremental in nature. They favour a ‘catch-up’ mentality but rarely question how the poor could access modern (reliable) energy services. They assume that providing these services to the majority of the population which is currently off the grid need not involve any structural change or call for the transformation of the national energy plans. Fundamentally, adding one person to the grid or several millions is treated with the same indifference. Perhaps those who speak of their plans in these terms are aware that

¹ International Energy Agency (2014), p. 32.

they contain much more propaganda than any serious transformational strategy.

In 2016, an ‘Energy Futures’ initiative that sought to look at possible future scenarios for energy and how these would affect energy poverty was launched in four selected countries of Eastern Africa.² The results of this initiative will challenge the conventional wisdom that positive social and economic development can be expected soon after the grid is expanded. Yes, the national grids are expanding in a bit of a helter-skelter fashion, but the quality of power that is on offer still leaves much to be desired. Furthermore, the cost of energy from the grid is still out of reach for many East Africans. This makes a mockery of the fanfare that has accompanied the electrification programmes and ignores an emerging reality of smaller micro- and mini-grids that are providing affordable power to local communities. Relying mostly on renewable sources for energy generation, they offer an alternative paradigm to the large power-generation projects that are being pushed by the governments.

Alternative pathways

So what energy futures can we anticipate for the majority of East Africans in the next two to three decades? In all of the scenarios we considered, there will be qualitative and quantitative improvements, but the goal of eliminating energy poverty will remain largely unmet. The critical message is that it is less a question of technologies making the difference than an issue of governance and how we choose to align resources to meet with the myriad challenges affecting the provision of energy. This resonates with the earlier assertion that what is needed to provide reliable, affordable energy to the majority of East Africans is a genuine transformational model. Such a model would engage with our proposed production models and respects the limits that climate change and other resources will impose. Our technological solutions

would favour an energy mix that is appropriate to the circumstances and needs of the region and be one that emphasizes renewables over fossil fuels. The scenarios we have prepared may never come to pass. However, they are tools to explore alternative possible futures in order to ensure our strategic choices are both more resilient and more inclusive than current policies.

So, what are the possible pathways that policy-makers need to consider? Obviously, each country will present different specificities. However, three broad elements need to be considered:

- First, energy policies should put the needs of the population front and centre. Many policies today favour industrialization in one flavour or another, but what kind of industrialization it will be still seems to be unclear. It appears to be driven more by an article of faith: ‘if you build it, they will come’ than by concrete industrial agendas. Perhaps investing in ensuring that the grid reaches as many people as possible will offer a better return to our countries.
- Second, energy policies need to pay greater attention to climate change and its potential effects on the investments and plans being made. At this point, the impact of climate change is not a variable that can be treated lightly – it requires that countries begin to make preparations now to future-proof their grids for whatever climate change might throw at us.
- Finally, there needs to be a consideration of how to make energy affordable over the longer term. This is not only a question of which subsidies need to be considered, but also a function of ensuring that we design and implement efficient energy generation and distribution systems.

References

International Energy Agency (2014): Africa Energy Outlook. Paris. www.iea.org/publications/freepublications/publication/WEO2014_AfricaEnergyOutlook.pdf

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² The Energy Futures initiative is led by the Society for International Development and focuses on energy developments in Ethiopia, Kenya, Tanzania and Uganda. The scenarios developed as part of this initiative are slated to be launched in the second half of 2018.