

Series 3 – Political Pillar: Governance and the Rule of Law

A Case for Providing Electricity Subsidies In Urban Informal Settlements

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Key Messages

Kenya lacks pro-poor electricity policies aimed at informal settlements leading to informal/illegal connections.

There is an urgent need for pro-poor energy policies to enhance access to safe energy for informal settlement households.

There is need for long-term collaborative partnerships that build trust between the informal settlement dwellers, government, and service providers.

Context

This policy brief highlights research findings from a two-year project using Nairobi's Mathare settlement as a case study. The research established that close to 93 per cent of the residents have access to electricity. However, 50 per cent of the connections are informal or illegal, meaning that they are not provided directly by the mandated electric power supply agency: the Kenya Power and Lighting Company, and are thus not metered.

A key feature is that self-made electricians connect households to the grid at a minimal monthly charge of about Ksh. 300 to cover for repairs and maintenance. This indicates that there is a demand for the services, but they are not affordable to the people, and it has therefore led to their opting for alternatives to meet their needs. These illegal connections pose a danger to the self-made electricians as well as those who benefit from the unregulated electricity. Moreover, the illegal connections are also a risk to Kenya Power's revenue as they provide an avenue for households in the informal settlements to enjoy unmetered electricity for which the utility provider cannot collect revenue.

Due to the lack of a smart metering system, Kenya Power cannot detect illegal taps into their network. Smart meters have worked in various developed countries. Although this might be an expensive and time-consuming endeavour, it could be the long-lasting solution Kenya needs to deal with the challenge of illegal connections. Another plausible solution is the reduction of the electricity cost of electricity for households in the informal settlement.

This policy brief holds that this price reduction can be achieved through subsidies. The argument is that subsidizing the costs associated with legal connection to the grid will go a long way in reducing the informal/illegal connections and therefore improve access to clean and safe energy for the residents.

Approach and Results

The research informing this brief was carried out by research partners in Kenya, Uganda and South Africa from 2017 to 2019, who set out to better understand how sustainable energy solutions in urban informal settlements can be achieved through collaborative efforts between community members, experts and policy actors. The research partners used participatory methods to facilitate solution co-design and knowledge co-production by bringing together a diverse range of stakeholders to establish viable pro-poor

Plate 1- Illegal/informal electricity connections
(Photo: Lou Del Bello/Climate Change News)



energy solutions that meet the objectives of the Kenya Vision 2030 policy blueprint, while also ensuring sustainable energy access for all as subsumed under the global Sustainable Development Goal 7.

In Kenya, researchers conducted a survey of 100 households in four villages in Mathare Valley informal settlement in 2017. The survey provided insights into the energy situation in the settlement in relation to health perceptions and other socio-economic factors. Following this exercise, the team held a co-design workshop and policy seminar that brought together participants from Mathare informal settlement, Nairobi County government, Ministry of Energy, Kenya Power, the Energy and Petroleum Regulatory Authority (EPRA), University of Nairobi and other research agencies such as Stockholm Environment Institute (SEI) and IRD-Kenya. From the research, the team concluded that Kenya's energy policy and regulations are highly standardized and might therefore not work for the urban informal settlement dwellers. For instance, despite the removal of the standing charge and the reduction in electricity cost under the 'Lifeline Tariff', a majority of Mathare residents still cannot afford to meet the cost of electricity because of their meagre earnings, averaging of Ksh. 18 thousand per household. This is a clear indication that more needs to be done to ensure that informal settlement dwellers also enjoy access to safe and reliable electricity.

Some initiatives have been promoted to ease the burden of electricity cost for households; however, they have done little to solve the electricity problems that residents in informal settlements are facing. The Global Partnership Output-Based Aid (GPOBA) Slum Electrification Program supported by the World Bank and Kenya Power and Lighting Company is one of the significant initiatives that were rolled out to solve electrification issues of informal settlements. However, despite households getting connected through this programme the illegal connections have not reduced. The residents' claim that the switchboards that were provided do not serve their needs

efficiently. They, therefore, settle for the illegal connections which cater to their multiple energy needs such as cooking, heating, refrigeration and lighting.

Key findings

- 50 per cent of the electricity connections in Mathare are informal/illegal
- Residents opt for informal/illegal connections because they are cheap at Ksh.300 (US\$3) per month.
- Residents are willing to get legal connections but only if the cost of connection and power bills are affordable.
- The GPOBA slum electrification project has done little to solve the residents' electricity challenges. The radio boards are not sufficient to cater for the household's multiple needs, i.e/, heating, refrigeration, cooking, and charging gadgets.

Policy Recommendations

Short-Term

Appropriate electricity subsidies should be put in place to:

- Phase-out informal/illegal connections by providing incentives in terms of safety, pricing and security of supply to encourage residents to switch to legal connections,
- Enable the Energy and Petroleum Regulatory Authority to create a special tariff for the informal settlement dwellers considering their low income.

Medium-Term

- Invest in understanding the needs of consumers and build a relationship of trust particularly between informal settlement dwellers, government, and service providers.
- Design centralised solar power and biogas energy stations in informal

settlements that can be used to serve communities at a cheaper cost.

- Invest in the installation of a smart metering system to enable Kenya Power to detect any illegal electricity connections to the network.

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