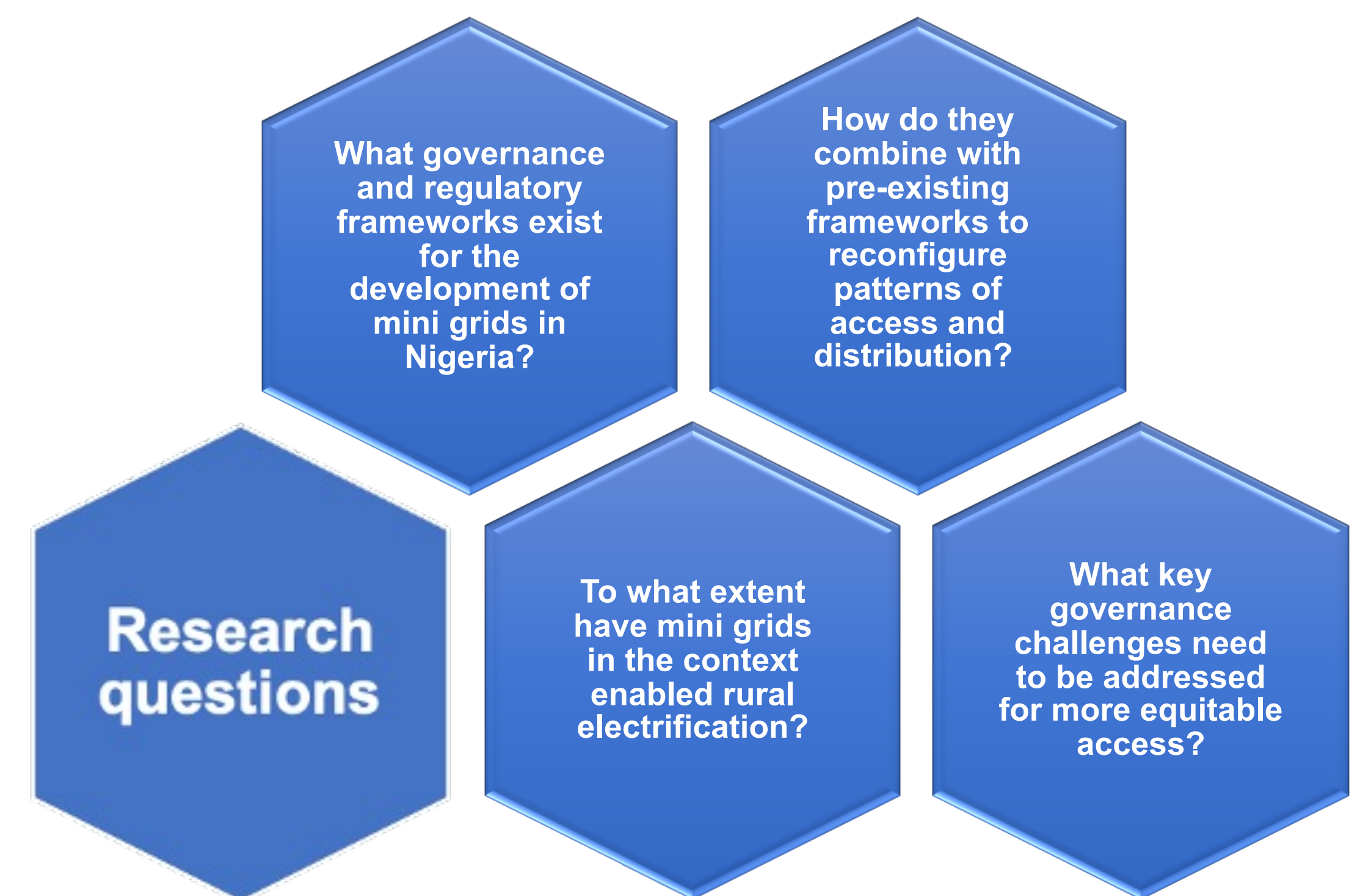


Exploring the connections between mini-grid market regulation and energy access expansion: The case of Nigeria

Temilade Sesan, Unico Uduka, Lucy Baker, Ewah Eleri, Okechukwu Ugwu, Subhes Bhattacharyya

Background

Around 60 percent of Nigeria’s 206 million people have access to electricity, with 86 percent of these living in urban areas and 34 percent living in rural areas. Solar-diesel hybrid mini grids and solar home systems are widely expected to help bridge this energy access gap, potentially providing electricity to as many as 42.9 million people, or about a fifth of the country’s population. Our study unpacks the governance and regulatory context within which the mini-grid sector in Nigeria is developing. While the country has been named a “frontier” country in the sector by the World Bank due to the investor-friendly provisions in its 2016 Regulation for Mini-grids, challenges remain with equitable distribution of access, especially at the so-called last-mile where the poorest rural communities are concentrated.



Methods

We conducted 16 in-depth interviews between March and September 2022 with government officials, the independent electricity regulator, mini-grid developers, representatives of distribution companies and development finance experts. The data were coded and analysed using a structured and rigorous collaborative qualitative analysis approach.



Key findings

- 1** The growth of the mini-grid market in Nigeria predates regulation and associated development finance, but it has subsequently been shaped by these factors .
- 2** The advent of regulation and investment has helped to accelerate the activities of market actors, but winners and losers have emerged in the process.
- 3** The premise of electrifying last-mile communities through improved regulation and investment for mini grids is not aligned with institutional and financial realities.

“You recall the regulator, five or six years ago, approved the Mini-grid Regulation... we came in and advised on how to expand access more efficiently... and then try to see those customers that are not within the coverage of the distribution companies, and then work possibly on what the regulation can actually do to create this framework that would allow mini-grid developers to extend access to them.”

“Many of the communities that are viable for commercial mini grids are already covered by the grid... What I am saying is that many communities that we currently have on the ground that are completely isolated may not be viable for commercial mini grids.”

Policy implications



Harmonise the policy environment



Adopt broader rural electrification framework



Institutionalise mechanisms for transparent governance



Unlock latent subsidies for rural electrification

Further reading: Sesan, T., Uduka, U., Baker, L., Eleri, E., Okechukwu, U., Bhattacharyya, S. (2023). Exploring the connections between mini-grid market regulation and energy access expansion: The case of Nigeria. Energy Policy, doi: 10.1016/j.enpol.2023.113891

© Sustainability, Inclusiveness and Governance of Mini-Grids in Africa (SIGMA) Project
Contact—Prof. Subhes Bhattacharyya, s.c.bhattacharyya@surrey.ac.uk
Visit: <https://www.sigma-gcrf.net/>