Electrifying Growth: Electricity Access for Productive Use in Sierra Leone

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Proposal Description: Limited access to electricity can hamper economic development (Lipscomb et al 2013; Dinkelman 2011; Rud 2012). For this reason, universal access to electricity has become a primary goal for policymakers, international organizations, and donors (ex. USAID’s Power Africa). However, recent experimental research has called into question the assumption that expanding access to electricity alone leads to economic growth and improved development outcomes (Lee et al 2020; Aklin et al 2017). To better understand how expanding access to electricity leads to development, this study focuses on two key aspects of electrification: improving access to electricity for rural entrepreneurs and the complimentary role of productivity enhancing technologies. The project is implemented in Sierra Leone, where the Government with international support, has been working to expand access to electrification, by building close to 100 mini-grids. The 35kW mini-grids are stand alone and able to serve an entire community, reaching a potential population of 326,000 people. We implement a field experiment randomizing two instruments to influence update of electricity, by (i) subsidizing access to mini-grids for rural entrepreneurs through a public lottery, and (ii) subsidizing access to productive to productive complementary technologies (processing machines, refrigeration units, water heating rods, etc.).

Requisite Skills and Qualifications: The ideal candidate will be highly motivated with close attention to detail, have previous data analysis experience, and be able to commit to spending 10 hours per week on the project. Previous experience with Stata is preferred. Previous experience with survey design, particularly in ODK or Survey CTO is a plus.

Award: Jacob Alvarado
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