Impact Assessment of the Rural Electrification Program through Networks on Employment and Education: The Case of Morocco

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Abstract

This study evaluates the socio-economic impact of the Global Rural Electrification Program (PERG) on employment and education outcomes in rural Morocco. While grid-based electrification has expanded significantly under PERG, its causal effects on key development indicators remain under-researched. Using a quasi-experimental evaluation approach specifically, Propensity Score Matching (PSM) we analyze whether access to grid electricity leads to measurable improvements in literacy rates, educational attainment, and labor market participation. Our findings indicate that rural electrification produces significant positive effects on primary, secondary, and higher education outcomes, while also fostering increases in self-employment and formal sector employment. However, a rise in unemployment suggests transitional dynamics in labor force participation. These results underscore the role of grid-based electrification as a driver of human capital development and economic inclusion. The study offers evidence-based insights to inform future rural development and electrification strategies in Morocco and similar contexts.

Keywords

Rural electrification, Morocco, PERG, employment, education, grid-based electrification, impact evaluation, matching method, rural development.