

Electrification and Socio-Economic Empowerment of Women in India

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Abstract

This study examines the effect of quality of electrification on empowerment of women in terms of economic autonomy, agency, mobility, decision-making abilities, and time allocation in fuel collection in India. It moves beyond the consensus of counting electrified households as a measure of progress in gender parity, and analyzes how the quality of electrification affects women's intra-household bargaining power, labor supply decision and fuel collection time. We develop a set of indices using principal component analysis from a large cross-section of gender-disaggregated survey. We use two stage least squares instrumental variables regression to assess the causal effect of access and hours of electricity on women's empowerment using geographic instrumental variables along with district and caste fixed effects. The results show that quality of electrification has significant positive effects on all empowerment indices. However, the effect differs at the margin of deficiency, location, living standards and education. The study recommends revisiting the paradigm of access to electrification and women empowerment by focusing on the quality of not only extensive but also intensive electrification to enhance life and economic opportunities for women and their households

Keywords Women Empowerment, Quality of Electrification, Instrumental Variables

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