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Energy Security, Rural Electrification, and Market-based Climate Change Intervention by the Global Environment Facility in India: the Limits of Transformation

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Abstract

This paper investigates the effects of market-based projects supporting rural electrification throug small scale solar photovoltaic applications on climate change mitigation and energy security in developing countries It is based on a case study investigating a Global Environment Facility proje India. It concludes that market based approaches have the advantage of providing support for pr actors that is otherwise not available and serve well to complement similar government activities. From that perspective, they may have a positive impact on mitigation through reduction of CO_2 emissions and on energy security of rural populations. At the same time, this research suggests t market based approaches are limited considerably through the business goals of the private acto they aim to support as well as lack of mechanism to effectively compensate the additional cost of solar photovoltaic technology.