

FINANCING OF RENEWABLE ENERGY BY MICROFINANCE: CASE STUDIES FROM BANGLADESH, INDIA AND AFRICA

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ABSTRACT

In this paper, we highlight the importance of microfinancing for the expansion of solar energy products. The potential of microfinancing for the expansion of renewable energy has not yet been fully realized. The goal of this paper is to summarize the research findings of successful implementation of solar energy products from Bangladesh, India and Africa. The cases demonstrate that microfinancing not only helps in energy access but also alleviates poverty by diversifying income sources and escalating societal benefits (health, education) shielding the vulnerable from unprecedented crisis. The role of Government and favorable policies also plays key role.

Keywords: Microfinancing; Solar energy; Policies; Loans; Climate change; sustainable development.

1. INTRODUCTION

'Progress in human development can stagnate or even be reversed if threatened by shocks from environmental degradation, climate change, natural disasters, global epidemics and conflicts. Vulnerable and marginalized groups-those already left out-are the major victims.' Human Development Report the United Nations Development Program (UNDP) (2016).

The current policies on climate change have mostly focused on the adaptation costs, there is however little or no emphasis on ways to raise and to scale-up funding, particularly in context of poor people who are more often the most vulnerable to the impacts of climate change. Clean Energy is fundamental requirement for the attainment of sustainable development goals (SDG), yet, currently, 1.317 billion people across the globe do not have access to basic electricity and most of them live in rural areas (Azimoh et al., 2016). It is estimated that 45 million people in Southeast Asia (Southeast Asia Energy Outlook 2019, International Energy Agency) and 600 million people in sub-Saharan Africa (IEA, 2019a) are still without electricity and have to depend on traditional biomass fuels (e.g., wood, charcoal, kerosene, and dung) for cooking, lightning and heating.

The use of traditional fossil fuels leads to significant damage to the environment (deforestation due to unsustainable harvesting of fuelwood) and is hazardous for human health (IEA estimates 500,000 premature deaths per year in Africa owing to indoor air pollution: Indoor air pollution results in approximately 100,000 avoidable deaths per month globally due to respiratory ailments). People living in poverty are the ones worst impacted by climate change, natural disasters or global epidemics, hence they need to diversify their income sources, build assets and protect themselves from unprecedented crisis.

Over 20 years, microfinance institutions (MFIs) have provided range of financial services (in the form of working capital, consumer credits, saving and deposits, pensions and insurances) to reduce vulnerability of poor people and allow them to transform their lives and daily survival by planning for the future. While microfinance has established itself for enhancing economic opportunities for poor people, yet there is little evidence on its role for energy products and services. Owing to fundamental barriers, it is often difficult