1. Record Nr. UNINA9910822214303321 Autore Khandker Shahidur R **Titolo** Surge in solar powered homes : experience in off-grid rural Bangladesh // Shahidur R. Khandker, Hussain A. Samad, Zubair K. M. Sadeque, Mohammed Asaduzzaman, Mohammad Yunus, A.K. Enamul Haque Washington, DC:,: World Bank Group,, [2014] Pubbl/distr/stampa **ISBN** 1-4648-0375-7 Edizione [1st ed.] Descrizione fisica 1 online resource (pages cm) Collana Directions in development **Directions in Development** Directions in Development - Energy and Mining Disciplina 333.792/3095492 Solar energy - Economic aspects - Bangladesh Soggetti Rural electrification - Bangladesh Rural development - Bangladesh Economic development - Bangladesh Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Description based upon print version of record. Note generali Includes bibliographical references. Nota di bibliografia Front Cover; Contents; Foreword; Preface; Acknowledgments; About the Nota di contenuto Authors; Abbreviations; Chapter 1 Introduction; Challenge of Off-Grid Electrification; Bangladesh's Experience; Study Purpose and Approach; Research Issues and Key Findings; Structure of This Book; Notes: References; Chapter 2 Surge in Off-Grid Solar-Powered Homes; Benefits of SHS Installation; Organization of Program Institutions; Boxes; Box 2.1 Accelerating Energy Access in Bangladesh: RERED II; Figures; Figure 2.1 Accelerated Growth in Bangladesh's SHS Installations; Box 2.2 How Does a Solar Home System Work? Figure B 2.2.1 Solar Home System in Action Delivery and Financing Scheme; Figure 2.2 Structure of IDCOL-Administered SHS Program; Tables; Table 2.1 Household Financing Mechanism for 50 Wp SHS;

Distribution of PO Market Share; Figure 2.3 Distribution of SHS

Installations, by Partner Organization; Technical Quality of Installations and Monitoring; Market Size and Potential Demand; Carbon Emissions Reduction; Concluding Remarks; Note; References; Chapter 3 Solar Energy's Role in Rural Electrification: International Experience;

Development Benefits to Rural People; Overcoming Financial Hurdles Box 3.1 Grameen Shakti: A Formidable Partner Organization Photo B 3.1.1 Women in Training at Grameen Technology Centre; Photo B3.1.2 Woman Working for Grameen Technology Centre; Photos; Technical Considerations; Building a Thriving Off-Grid Market; Beyond Off-Grid Markets; Potential for Bangladesh; References; Chapter 4 Patterns of SHS Growth and Usage: Survey Data Findings; Overview of Survey Design; Table 4.1 Distribution of Survey Sample, by Division; Growth Trend in SHS Adoption; Figure 4.1 SHS Adoption by Year from Sample Data

Table 4.2 Extent of SHS Adoption in Rural Bangladesh by Region, 2012 Drivers of SHS Adoption; Figure 4.2 SHS Adoption Rates and Household Landholdings; Table 4.3 Regression Estimate of SHS Demand; System Capacity and Appliance Use; Figure 4.3 Trend in SHS Adoption Rate by Capacity, 2004-11; Figure 4.4 Household Energy Consumption, by SHS Capacity; Table 4.4 Appliance-Use Patterns of Adopter Households, by SHS Capacity; Table 4.5 Household Energy Consumption and Use, by SHS Adoption; Composition of Energy Consumption and Use; Summing Up; Annex 4A: Household Survey Design

Table 4A.1 Selected Districts, Upazilas, and Treatment VillagesNotes; References; Chapter 5 Welfare Impacts of Household Adoption; SHS Gains Expressed as Consumer Surplus; Figure 5.1 Consumer Surplus from Demand Curve; Table 5.1 Gain in Consumer Surplus from Replacing Kerosene with Electric Lighting; Reduction in CO2 Emissions; Econometric Estimation of SHS Benefits; Table 5.2 Reduction in CO2 Emissions from Kerosene Replacement due to SHS Adoption; Table 5.3 Household Kerosene Consumption and Children's Educational Outcomes, by SHS Adoption Status

Table 5.4 PSM Estimates of SHS Adoption Impacts on Kerosene Consumption and Children's Educational Outcomes

Sommario/riassunto

Bangladesh has the world's fastest growing, off-grid solar home system (SHS) coverage. In the past decade, the number of SHS installations has risen phenomenally--from a five-year target of 50,000 in 2003 to 50,000 a month in 2013, with support from the World Bank and other development partners. Even so, only 10 percent of off-grid households have been reached, suggesting ample room for continued expansion. Given the recent surge in SHS adoption, a key policy issue is whether the partial subsidy provided under the current program, implemented by the Infrastructure Development Company Limited (