Concept Note and Agenda

for

ISA-NEDO Webinar

on

“Operational Use of Solar Mini-Grid Business Model in Uttar Pradesh, India”

15 March 2022 || 1700 - 1815 HRS IST

1.1. Background

Access to **reliable, cleaner** sources of energy and electricity is a fundamental requirement for **public health, education, and economic development**. Yet 600 million people remain without access to electricity in Africa and tens of millions more lack electricity in the Middle East, Asia, Latin America, and Small Island Developing Nations.[1]

In the absence of the electricity grid or with limited hours of electricity supply, people and enterprises turn to polluting energy sources such as kerosene and biofuels for heating, lighting, and running essential businesses. The reliability of the electricity supply is also crucial for the economic development perspective as it is among the primary filters business examine before investing. There are businesses that are the backbone of economic development in any country such as fueling stations, telecom towers, schools, health facilities, etc.

The solution is found in solar-generated electricity. Solar energy offers myriad advantages in bringing power to many more people: it is renewable and emissions-free, modular, and scalable, suitable for both, off-grid and on-grid applications, relatively easy to install, increasingly affordable, and well suited to "sunshine country" environments. The International Energy Agency (IEA) agrees, modeling a 20-fold increase by 2050 for global solar deployment if we are to achieve what we know we must: net-zero by 2050. To limit green house gas (GHG) emissions globally, most of the new solar capacity by 2050 (over 10,000 GW) will need to be installed in emerging and developing economies due to the expected increase in energy demand in these regions.

Thus, there is a solution, solar through mini-grids or solar mini-grids which offer a cheaper way to not only expedite energy access but also improve the reliability of the electricity supply. Solar mini-grids are seen as a convenient solution to provide electricity access in areas where the main grid is not available, or it is expensive to extend the grid to such areas. Because of these reasons, in South Africa, solar home systems were given preference over the main grid to provide immediate electricity access to the rural households who could not get electrified in the first phase of the national electrification program. Many countries such as Nigeria, Ethiopia, and Tanzania have now included mini-grids in their national electrification plans. The rural electrification program for Rwanda has provisions to distinguish areas for the grid and mini-grid development, with mini-grid development limited to areas that cannot be served by grid-electricity in a financially viable manner.

Though, mini-grids are not always making an economically viable case, specifically, if a higher proportion of consumers are domestic rural consumers who are not financially capable enough to pay for electricity consumed. Thus, not all solar mini-grids would make economic sense. The economic viability of solar mini-grids differs on a case-to-case basis. It depends on multiple factors such as location, region, financial incentives, types of consumers, the capacity of micro-grids and their components, etc. There is a requirement for innovative business models that can sustain solar mini-grids in rural communities.

The webinar aims to disseminate the key learnings of the case study of the solar mini-grid project, by OMC Power, located in Uttar Pradesh, jointly developed by NEDO and ISA to fill the policy and knowledge gaps in solar mini-grid adoption and encourage other countries to examine the applicability and replicability of innovative business models to accelerate the path of economic development. Bilgram is a small town and a Nagar Palika Parishad in

[1] "Access to Electricity – SDG7: Data and Projections – Analysis," IEA, accessed July 8, 2021, https://www.iea.org/reports/sdg7-data-and-projections/access-to-electricity.

Hardoi district in the state of Uttar Pradesh, India. The mini-grid was commissioned on the theme of "ABC" by addressing the 3 key segments: the "**A**" anchor, "**B**" business, and "**C**" community.

This case study deliberates on operational use cases of solar mini-grids in the state of Uttar Pradesh and replicability of the same in the ISA member countries to expedite economic development by improving electricity access and helping essential enterprises to prosper

Through this Webinar, ISA aims to deliberate on reproducibility and replicability of the "ABC" theme for solar mini-grids in member countries of ISA for the solar mini-grid segment. We will bring together all the stakeholders to identify the key gaps, consolidate relevant learnings, and engage proactively with entrepreneurs, investors, donors, civil society, and policymakers to discuss the way forward for the mini-grid sector.

1.2. Tentative Agenda- Date & Time- 15th March 2022 at 17:00hrs to 18:15hrs IST

Time	Discussion Point	Remarks
17:00hrs- 17:05hrs (5 mins)	Welcome Address	Mr. Shonly Litting, Programme Specialist, Solar Mini-Grid, ISA
17:05hrs-17:10hrs (5 mins)	Opening Remarks	Dr. Ajay Mathur, DG, ISA
17:10hrs-17:11hrs (1 mins)	Launch of Case Study on **"Operational Use of ABC Model Solar Mini-Grids in Uttar Pradesh, India"**	1. Dr. Ajay Mathur DG, ISA, 2.Ms. Ai Gonda, Counselor, Deputy Head of Economic Section & 3. Mr. Yoshiro Kaku, Chief Representative and Country Head, NEDO
17:11hrs-17:16hrs (5 mins)	Opening Remarks	Ms. Ai Gonda, Counselor, Deputy Head of Economic Section
17:16hrs-17:21hrs (5 mins)	Address by NEDO	Mr. Yoshiro Kaku, Chief Representative & Country Head, NEDO Delhi Office
17:21hrs-17:31hrs (10 mins)	Special Address by Director UPERC	Mr. Vikas Aggarwal, UPERC
17:31hrs-17:41hrs (10 mins)	Presentation by UPNEDA	Mr. Bhawani Singh Khangarot, UPNEDA
17:41hrs-17:51hrs (10 mins)	Presentation on implementation of Solar Mini-Grids in Uttar Pradesh	Mr. Rohit Chandra, OMC
17:51hrs-18:01hrs (10 mins)	Presentation on social impact assessment of Solar Mini-Grid in Uttar Pradesh	Mr.Pariphan Uawithya, Rockefeller Foundation
18:01hrs-18:10hrs (9 mins)	Q&A Session	

18:10hrs-18:15hrs (5 mins)	Closing Remarks & Vote of Thanks	Dr.AM Siddiqui, Representative, NEDO

***To be confirmed**