

THEME: Business Models and Scaling up (grid and off-grid)

Parallel Session 3 – Effective Grid Integration Models for Solar Irrigation

Time: 15:30 – 17:00 Venue: Himalaya Ballroom, Hotel Himalaya

Background

Over the past few decades, solar irrigation has become a reliable method of pumping water for irrigation in farms without access to the grid. Solar irrigation systems have shown to be dependable, but because of their high initial cost, they heavily depend on subsidies, which means that in order to scale across varied regions, they will need creative business models.

Due to seasonal irrigation needs, off-grid Solar Irrigation Pumps (SIPs) frequently sit idle most of the year, resulting in underutilization and wasted energy. Grid integration of SIPs is made possible by the growth of rural grid infrastructure. Grid-integrated SIPs increase the utilization factor to 100%, give farmers more revenue streams, and encourage groundwater conservation. This session explores different grid-integration models for scaling Solar irrigation.

Objectives of the session

The session will delve into the various modalities of grid-connected solar irrigation, focusing on learning key lessons from South Asian grid-connected solar irrigation projects and identifying policy pathways for a sustainable and equitable business model.

The session aims to investigate the challenges and opportunities associated with various grid-connected solar irrigation models and recommend a more scalable, financially sustainable, and inclusive approach.

Moderator: Prof. Dr. Netra Chettri, Chair, Innovation in Global Development PhD Program, Arizona

Time	Presentation	Speaker
15:30 -15:40	Experiences from Grid-connected Solar Irrigation Pilots in South Asia	Mr. Shisher Shrestha, National Researcher, IWMI Nepal
15:40 – 15:50	Lessons from Solar Photovoltaic Pumping for Agricultural Irrigation (SPPAI) Project in Bangladesh	Mr. Md. Sakil Ibne Sayeed, Project Director SPPAI Project, Bangladesh Rural Electrification Board (BREB), Bangladesh
15:50 – 16:00	Lessons from Solar Photovoltaic Pumping for Agricultural Irrigation (SPPAI) Project in Bangladesh	Mr. Suyesh Prajapati, Team Leader BEEN Project MinErgy
16:00 – 16:10	Q&A on presentations	

Panelists

1. Ms. Asha Khanal - Engineer, Nepal Electricity Authority (Nepal)
2. Mr. Wakil Ahmed Arnob – Senior Officer, IDCOL (Bangladesh)
3. Dr. Youssef Brouziyne – IWMI Representative and CGIAR Water Systems Lead - MENA
4. Elizabeth Kaijuka Okwenje - Principal Energy Officer, Department of RE (Uganda)
5. Dr. Sardar Mohazzam – Managing Director, National Energy Efficiency and Conservation Authority, Government of Pakistan, Pakistan
6. Dr. Deepak Varshney, Regional Researcher, IWMI India

Questions to the Panellists

Round 1 (5 mins for each Panelist)

Ms. Asha Khanal	What are the technical challenges for utility in Nepal for grid integration?
Wakil Ahmed Arnob	How has Grid-integration affected IDCOL's Business Model for SIP
Dr. Sardar Mohazzam	What is the Status of grid-integrated Solar? What Policy Changes are needed in Pakistan?
Elizabeth Kaijuka Okwenje	Could you share your experience from Uganda and potential for grid-integrated solar irrigation, productive end-use of solar energy, etc.
Dr. Youssef Brouziyne	
Deepak Varshney	

Round 2 (3 mins for each Panelist)

Session Custodian: Shisher Shrestha

Rapporteurs: Anuj Mishra and Amrita Rauniyar