

Theme: Business models and scaling up (grid and off-grid)

Parallel Session 4-Establishing sustainable business models for off-grid SIPs

Time: 15:30 – 17:00 Venue: Skyline Hall, Hotel Himalaya

Background

Solar is attractive as an alternative irrigation energy source in many parts of Asia and Africa, which still depend on expensive diesel for their irrigation energy demand. However, SIPs are characterized by high upfront costs and almost zero running costs, which differentiate them from the more commonly used diesel pumps, which are very cheap to buy but have high running costs. So, even if the lifetime cost of solar is cheaper than diesel in off-grid areas, scaling up solar pumps requires a suitable financial and institutional model. Risk aversion and liquidity constraints, especially for smallholder farmers, act as major constraints for scaling SIPs unless they are heavily dependent on subsidies. Also, given a new technology, operation and maintenance issues need to be addressed in any solar business model. Also, there are important equity implications of any particular business model as new stakeholders (often private entities or NGOs) enter the rural groundwater irrigation market, and the extent of subsidy, loan, equity etc. will determine who gets access to these pumps and who does not. In that context what is a suitable business model also will depend on the objective – whether it is replacing diesel or it is for providing affordable irrigation, which will justify how much and to whom irrigation should be provided, if at all.

Objectives of the session:

The objective of the session is to identify policy pathways for a sustainable and equitable business model to scale solar energy in off-grid areas. Panelists are expected to reflect on the presentations and share their experiences working with SIP business models from different parts of the world. The goal is to identify the challenges and opportunities of various business models and determine necessary improvements for an equitable, scalable, and financially sustainable model.

Moderator: Mr. Shilp Verma, Deputy Country Representative, IWMI

Time	Presentation	Speaker
15:30 -15:40	Off-grid business models in South Asia: Learnings from SoLAR	Mr. Archisman Mitra, Regional Researcher, IWMI India
15:40 – 15:50	Scaling solar pumps through viable business models– experience from West Africa	Ms. Abena Ofosu, Senior Research Officer, IWMI Ghana
15:50 – 16:00	Experience of off-grid solar models in India	Mr. Siddharth Gahoi, Program Manager, Social Alpha, India
16:00 – 16:10	Q&A on presentations	

Panelists:

- Ms. Sharon Yeti, Co-founder & CEO, Powerlive, Zimbabwe
- Ms. Laxmi Sharma, Research Consultant, IWMI India
- Mr. Shadman bin Zahir, Manager (Investment), Renewable Energy, IDCOL, Bangladesh
- Mr. Hafiz Qaisar Yasin, Directorate General Agriculture, Water Management, Pakistan
- Mr. Aklavya Sharan, Director, Decentralised Energy Systems, DESI Power
- Ms. Resha Piya, Energy Adviser, British Embassy Kathmandu, Nepal

Questions to the Panelists:

Round 1:

Reflecting on these three presentations on scaling off-grid SIP models, could you share your insights on the **(5 min)**

Sharon Yeti (Powerlive)	scope and experience from off-grid solar pumps in Zimbabwe
Laxmi Sharma (IWMI)	experience of different field experiments on off-grid SIP models from Eastern India
Shadman Bin Zahir (IDCOL)	Overview of IDCOL SIP Program and experience of the IDCOL Fee-for-service model? (especially depending on private companies as ISPs). Along with its challenges.
Resha Piya (British Embassy Kathmandu)	drivers for and bottlenecks to scaling off-grid solar business models (especially in light of high capital subsidies and low utilization rates)
Aklavya Sharan (DESI Power)	based on learnings from the Innovation Fund Grantees, what innovations are required for addressing some of the key challenges of off-grid solar, i.e., affordability and accessibility for small-holders, increasing low capacity utilization, financial viability, etc.
Mr. Hafiz Qaisar Yasin (Directorate General Agriculture (Water Management) Punjab, GoP)	scope and experience of deploying off-grid solar pumps in Pakistan. What sort of model would be suitable (from among those discussed)?

Round 2:

If you were to identify the single most important policy intervention that the government could implement to foster private models for the uptake of off-grid solar systems, what would that be in your country/region? (2 min)

Session Custodian: Archisman Mitra

Rapporteurs: Manikanta Radhakrishna