

“IWMI's SoLAR project facilitates us to set up grid connections for distributed generation and a reliable power supply” - Asha Khanal, Energy efficiency and Loss Reduction Department, Nepal Electricity Authority



How does IWMI's SoLAR project contribute to your organization's mission?

[Nepal Electricity Authority](#) (NEA) is the sole electricity distributor in Nepal. Its goal is to generate, transmit and distribute electricity to different consumers all over Nepal. The generation of electricity in Nepal is season-specific. In the wet season, power generation from existing hydro can fulfill the demand. In contrast, in the dry season, NEA has to buy electricity via cross-border trading from India to meet its domestic market. So, in the dry season, renewable energy like solar, and particularly grid-connected solar,

plays a crucial role. IWMI's SoLAR project facilitates us to set up grid connections for distributed generation and a reliable power supply. Also, the surplus solar power can return to the grid via net metering provision.

What learning lessons have NEA drawn from this project, and how?

This project took us on an exposure visit to Gujarat in India to see the grid-connected solar irrigation systems under the Gujarat government's Suryashakti Kisan Yojana. With this, we had the opportunity to learn about the state's electricity regulation board, Gujarat Urja Vikas Nigam Limited's (GUVNL) dedicated agricultural feeders and their technical aspects.

From the exposure visit, we got an opportunity to understand net metering design, Special Design Transformer, a web portal, and the mobile app developed to monitor the grid status and individual system's performance on a real-time basis. We are sharing this knowledge with the NEA's operation departments to increase the durability of our systems and equipment. Not only the technological knowledge transfer, but this visit has also helped us to build a network with the utility professionals' at GUVNL for further future communication and guidance.

How are you implementing these lessons for your country?

NEA already has the net metering provisions for grid-connected solar irrigation systems. We will also coordinate with the Alternative Energy Promotion Council (APEC) to identify sites for implementing agricultural feeders. We will conduct the initial trials for feeder segregation on our existing radial feeder and then amplify the process with further feedback from the GUVNL officials.

Which aspect of this project excites you personally, and why?

In Nepal, the solar cooperative concept is still not realized. So for me, leading such projects by a rural cooperative is one of the most exciting parts of the project.