

The IWMI-Nepal team visits two Municipalities to select sites for the SIP micro-grid connection pilot

The predominant model in Nepal is stand-alone off-grid solar irrigation pumps (SIPs). These SIPs reduce the use of dirty diesel fuel to a large extent and also helps farmers diversify their cropping patterns. Yet, there is a real threat that many of these SIPs may become obsolete once grid electricity reaches those areas because grid electricity is cheap. In addition, even when used intensively, SIPs remain idle for a substantial part of the year when irrigation demand is low. One way to keep these off-grid SIPs viable and utilize their potential to the full extent is to connect them to the electricity grid. One of the activities in the SDC-SOLAR, Nepal component is a pilot on micro-grid connection. For this purpose, a team from IWMI and AEPC comprising Dr Manohara Khadka, Mr Shisher Shrestha and Mr Sundar Bahadur Khadka visited two potential sites for piloting micro-grids and held consultations with the local government and farmers.

The team visited the Chhipaharmai RM, which is around an hour drive from Birgunj. The site has a high density of solar SIP, and public land is available for installing the micro-grid. Further, meetings were held with the Vice-Chair and Chief Administrative Officer of Chhipaharmai RM to understand their expectations and concerns.

The team then drove Udaypur to visit the second site at Belaka Municipality to meet with the Mayor of Belaka Municipality. In the meeting, the mayor shared the plan of providing public land to landless and marginalized farmers for agriculture and residential purposes. The MG-connected SIP could be a value-addition to the municipality's 10-year development vision, such as improving the livelihoods of its constituencies through agriculture, livestock, and aquaculture and the larger project it is already working on.



Picture 1: Female farmers selling their produce in a vegetable market at Bhagalpur Village. The weekly market is usually held every Thursday, sees many activities, and is very close to the proposed pilot site in Belaka Municipality. Large cities like Dharan, Gaighat, Biratnagar, and Itahari are close to this site, with a tremendous market for the farmers.



Picture 2: A farmer (in Chhipaharmai Rural Municipality) using his neighbour's SIP to irrigate a small plot of his land for vegetable farming. His previous application for SIP was not successful, and he has requested the RM to allocate a SIP for him. Once he gets continuous irrigation water through SIP, he plans to increase vegetable farming in his land.



Picture 3: Participants at RE Expert Mr Babu Raja Shrestha's farm



Picture 4: Participants filling O&M checklists at the SIP site as instructed by the trainer

