



By Chadani Pandey

Better Together: How Knowledge Exchange Empowers Micro Hydro Plants



Nishi II office that accommodates fifty people during meeting

“It was just a social enterprise for the management committee and they never considered micro hydro plants as a business,” says Mr. Ram Prasad Chalise, manager of Nishi II Micro Hydro Plant.

For Mr. Ram Prasad Chalise 28, it was difficult to find work in village. His weak financial condition left him with no option but to fly Dubai for work. “Life was difficult in Dubai. With some earnings, I returned village with a hope of finding job,” says Chalise. After returning from Dubai, Chalise, joined Nishi II Micro Hydro as a manager.

Nishi II MHP is situated in Nishi Rural Municipality-04 of Baglung District and has a capacity of 100kW. Winrock International selected Nishi II as one of the weak plants to participate in learning

sharing workshops jointly organized with the Renewable Energy for Rural Livelihood (RERL) program of Alternative Energy Promotion Center (AEPC) with the financial support of WISONS.

Weak management left Nishi II in debt, and these financial irregularities and an unreliable electricity supply led to frustrations in the community. Replacing the generator created the additional financial burden of USD \$11, 000. It took nearly six months to rehabilitate the plant due to lack of proper financial management, compelling it to solicit financial support from their customers.

“I was in regret for a year joining this plant as manager. Salary was never given on time. At one point, I even thought of returning to Dubai,” says Mr. Chalise.

After attending a series of knowledge exchange workshops, significant managerial improvements were noticed, and the committee started regarding micro hydro as a viable business enterprise.

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- MR. RAM PRASAD CHALISE, MANAGER NISHI II



Chairperson Paudel and manager Chalise interacting with customer on tariff collection

Soon after the workshops, we started load management and demand diversification that resulted in good revenue generation,” says Chalise. This increased revenue meant that Chalise could develop clear roles for his staff, fix a tariff collection schedule, design a computer billing system and proper human resource and office management.

The management committee could collect outstanding dues within a year of project intervention. Additionally, plants power 17 street lights in two bazars as an exercise in demand diversification. “We now power poor and marginalized neighborhoods in installments from excess electricity. Otherwise, it was wasted, forcing them to live in dark,” says chairperson Lokishwor Paudel.

“It’s not just electricity but an indicator of social prestige. We were labeled poor because of our dark house. Now I enjoy light for just \$1 a month”, says Dhanamaya Gharti Magar, who lives in one of these formerly dark neighborhoods.

Unfortunately, heavy rainfall and the landslide of September 4, 2018, damaged the 40-meter head race canal, which led Nishi II to shut down. This time, Chalise and the management committee could rehabilitate the plant within 16 days because of its transparent financial system, improved management and increased revenue collection. This meant greater satisfaction among beneficiaries and better ownership among stakeholders.

“Through this project, we realized that a prolonged

shut down period will lead to financial loss, whereas more reliable electricity connections for households and enterprises will increase sales, producing good profit,” says chairperson Paudel.

Winrock International linked the plant with multiple suppliers, establishing direct connections and significantly reducing the financial drain of repair and maintenance. They now store spare parts worth \$500. “We have been supplying spare parts to Nishi II and other MHPs from our store,” Chalise says. The exchange program has developed cordial relationship among selected MHPs. Five MHPs work in close consultation to reduce shutdowns and delayed repairs.

“We are thankful to Winrock for transforming our social enterprise to a profitable business. Along with managerial trainings, we hope for mechanical and electrical trainings for our operators in the coming days,” Chalise says.

“The knowledge exchange program is an effective tool to empower the management committee and local representatives on improving managerial and financial systems to transform weak micro hydro plants into sustainable and profitable enterprises,” says senior program officer Resha Piya of Winrock International.



Poor and marginalized Ms. Dhanamaya Gharti Magar too enjoys electricity connection

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