The Power of Water

Electricity generated by a hydropower plant has brought better health care and schooling to and improved incomes in a village in Nepal.

Kirnetar, Nepal – Mahesh Karki, 11, his sister Rani, 9, and his brother Santosh Raj, 5, walk into the Khimti Project Clinic and were greeted by the nurse who helped bring them into the world. The youngest has a head cold, and Mahesh is instructed how to treat him.

The children are among the 50 to 70 patients to visit the clinic every day for facilities that government health posts in the area do not offer. The clinic was built as part of the Khimti Hydropower Project - Nepal's first private sector foray into hydropower development.

Water Power

The hydropower plant, which came into operation in 2000, is a “run of the river” plant, which means it uses the natural flow and elevation drop of a river to generate power. It has an installed capacity of 60 megawatts, and was built at a cost of about $140 million, supported by ADB and other international development organizations. ADB's loan covers almost 25% of the project cost.

Promoted by Himal Power, the electricity is sold to the Nepal Electricity Authority and supplies 15% of national energy consumption. At the end of its 50-year license, Himal Power will hand the plant to the Nepal government.

The electrification project has made a difference to health, education, and livelihoods of local people.

Powering Knowledge

The Karki children were not only born in the Khimti project clinic but also study at the project school. Established more than 15 years ago, it has 480 students and is maintained by a grant from Himal Power. Fees for children from the community are lower than those of students whose family members came from outside to work on the project.

Seventeen-year-old Ram Krishna prepares to take his grade 10 graduation exam later this year. "The school has science labs, computer and internet facilities, and English-medium instruction," Ram explains. "I am the first person in the family to have studied to this level and have learnt everything I know here." He hopes to go on to higher education in Kathmandu.

Seeing the Light

Next to the school, Badri KC, chair of the Haluakhola Mini-Hydro Construction Committee, explains how the joint project of Himal Power and the United Nations Development Programme will electrify villages near the project. On completion, the small plant will have a capacity of 400 kilowatts - adding to the power already produced by the Jhankre mini hydropower plant. Together, the two plants comprise the Khimti Rural Electrification Cooperative and will provide power to 10 villages.

"Now for the first time, villages here will see light," said KC. The area enjoys continuous supplies while the rest of the country suffers power cuts as long as 12 hours and locals pay less than the national average.

Generating Incomes

Tangible livelihood improvements are obvious in the village of Khimtibesi, a few kilometers from the Khimti project site. From here, the Milk Producers Cooperative Organization buys milk from local farmers, keeping it in cold storage before it is sold to the Dolakha dairy and the local market.

More than 400 families have benefited by using the cooperative to store and sell their milk instead of being forced to distribute it in
a limited area on the day of production.

The Shri Mangla Devi bakery is a landmark in Khimtibesi. Every afternoon, the produce of a large oven fuelled by the mini hydropower plants is sent to nearby markets.

The Power of Community Investment

In the last week of March 2010, Himal Power handed over the entire Khimti Rural Electrification Cooperative infrastructure and maintenance responsibilities to the local community.

“This is in keeping with our larger philosophy," Tom Solberg, general manager of Himal Power, explains.

Through schools, health facilities, electricity, and small enterprises, the Khimti hydropower plant has brought a qualitative change in the lives of people in the rural villages of Dolakha and Ramechhap. As Narayan Dhoj Khadka, who chairs the Khimti Rural Electrification Cooperative, puts it: "Now we know that electricity truly makes the world and opens it up for people like us."

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