Khanikhola Rural Municipality
Kavrepalanchowk, Nepal

SIEMENPUU foundation

EKOenergy

CRT

GOA KAVRE 2058

Solar Mini Grids Electrifying the Rural Community:

A case of Khanikhola Rural Municipality, Kavrepalanchowk, Nepal

The project "Solar Electrification of a Remote Village and Promoting Energy Planning Based on Reliable Data Collection in Nepal" advocates the use of renewable energy technology for rural electrification and adoption of energy planning process and tool namely Municipal Energy Planning (MEP) process and GIS-Based MEP Tool to improve level of energy access in rural community of Kavrepalanchowk, Nepal. The project introduced and installed 10 kWp solar powered Minigrid for domestic electrification, and to power appropriate enterprises within the project community. The minigrid is designed such that it can be tied with the national grid or any other sources of electricity to enhance the capacity and reliability of the supply.

Impacts of Solar Minigrid at Saure Bhagtar Village Khanikhola Rural Municipality

Prior to the installation of 10 kWp Solar Minigrid project, Saure Bhangtar's households relied on standalone Solar Home System (SHS), provided by various development organizations following 2015 massive earthquake in Nepal, for lighting with occasional usage of kerosene lamps. In absence of adequate lighting sources, like Sangita, other villagers could not stay longer to complete their households' chores. Children studies were limited to hours of the day light. Emergencies that required mobility during night were accompanied by fear of wild animals and mishaps. The inhabitants of the village had to walk to the neighboring villages with heavy load on their back and spend almost an entire day to process their agro-product like maize, paddy, finger millet and wheat. Lack of illuminance and electricity had compromised the basic needs of the people.

Following the operation of the project "Solar Electrification of a Remote Village and Promoting Energy Planning Based on Reliable Data Collection in Nepal" funded by Siemenpuu Foundation, Finland and EKOenergy, Finland, 96 households are connected with the solar minigrid. The beneficiary community is also provided with the 2 in 1 electric mill powered by a 3 HP motor for hulling and grinding. The mill is in operation under the ownership of the Solar Energy Electrification Program User Committee.

Stories from Soure Bhangtar

Sangita Darlami

Sangita Darlami, a 38 year old teacher is a resident of Bhangtar-3, Khanikhola Rural Municipality. She lives with her son, husband and in laws. Along with her job, similar to any other rural women, she is responsible for household chores and livestock management. Prior to getting electricity from the solar minigrid, she had a 50Wp standalone solar PV whose services were limited to 2 light bulbs and phone and radio chargers. These days, she has light in her kitchen, rooms, front yard and in the shed. She can cook in an adequate light and work late in the shed, guide her son on his studies and correct the assignments of her students. Her happiness is doubled with the operation of the electric mill at her neighborhood. She shared her tough past experiences of having to spare 6/7 hours to process her basic agro-products such as maize, wheat and paddy.

A 77 years senior citizen Dhanraj Lungeli's joy unfolded, as he could now have his dinner under light. Before he used to have dinner under kerosene lamp and could barely identify the food he was having due to poor visibility.

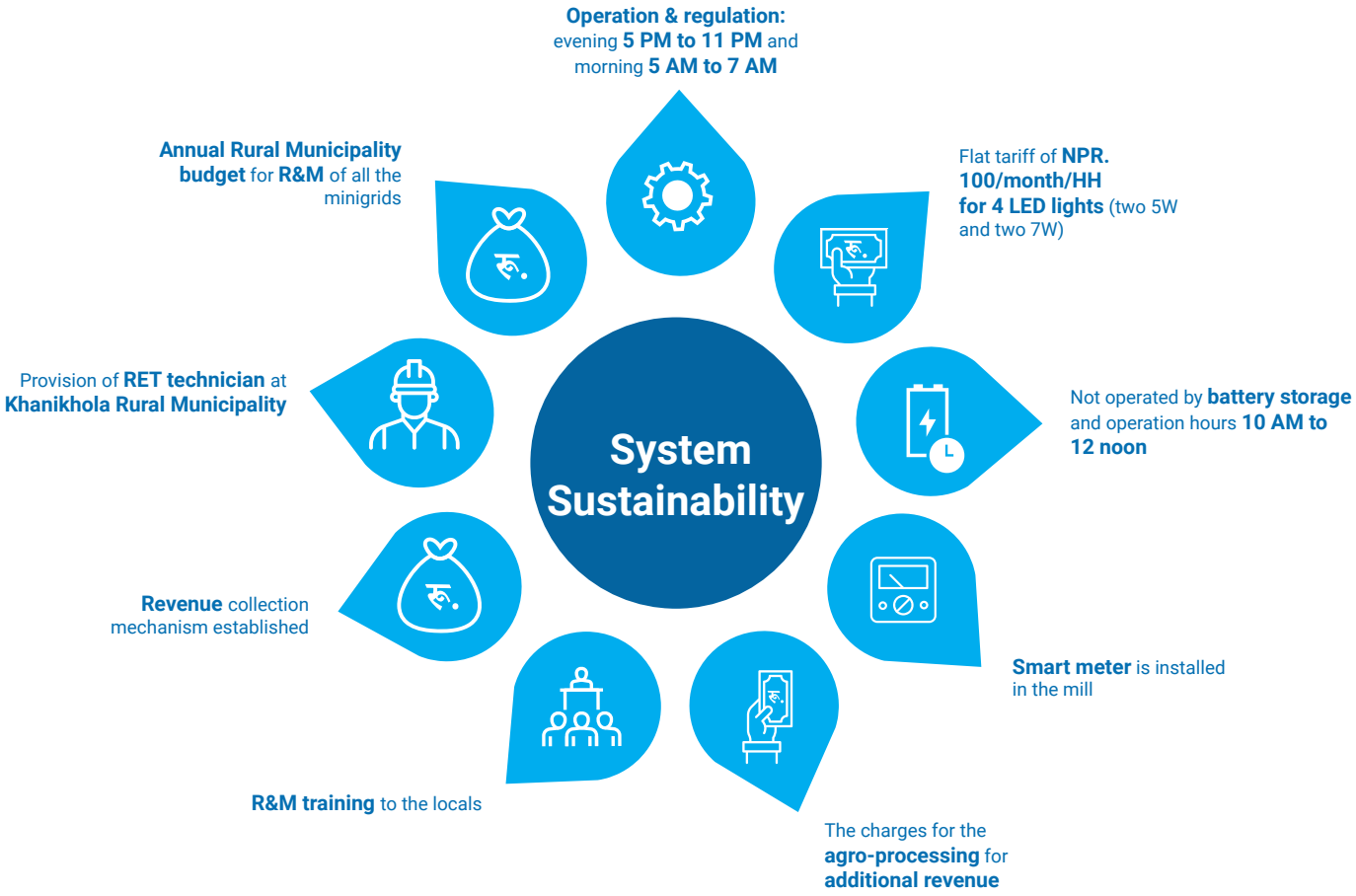
"After solar electrification, I am having my dinner happily in the light. Before, I used to feel downhearted while eating in darkness. Old age with diminished eye sight was a nuisance to me. This electricity system has given a different joy to me."

- Dhanraj Lungeli

"I cannot express in words the happiness of having mill in my own community. Now the mill, mere two steps away from my home, has not only saved my time but also relieved the drudgery associated with milling responsibility. Electric mill is a blessing for us because we have never imagined of having a mill in our village. These days people from other villages are also coming to our village for milling purpose."

- Ek Bahadur Kingring

Sustainability of the System



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