

LINKING TO THE WORLD

A new project has given residents of a remote province easy online access

STORY: SASIWIMON BOONRUANG

Living in a remote area of Thailand is no longer a barrier to internet access, as students at Ban Khiri Lom, Prachuap Khiri Khan, on the border of Thailand and Myanmar now can partake of the e-learning class at the Border Patrol Police learning centre, thanks to the Information and Communication Technology (ICT) and Renewable Energy project for locals at the border by HRH Princess Maha Chakri Sirindhorn.

Founded in May 2014, the learning centre had no electricity or telecommunication system, although it's situated only 40km from the town. A team from the ICT project of Princess Maha Chakri Sirindhorn worked in collaboration with the relevant agencies to implement the information and communication technology by first developing an electricity-generating system.

The school is located in the watershed forest — the area of hornbill conservation. Around one kilometre from the school is a waterfall sufficient for generating hydro power in combination with a solar cell. The overall 20MB internet and 3G infrastructure

network was later sponsored by Advanced Info Services (AIS) while a team of researchers from the National Electronics and Computer Technology Centre (Nectec) set the plan and designed the system and transferred knowledge to the community, the Wildlife Sanctuary supported the location for the communications system, and the Provincial Electricity Authority supported the maintenance and the project extension in other areas.

The integrated ICT and Renewable Energy project for people living in the border area by HRH Princess Maha Chakri Sirindhorn aims to enable students and people at Ban Khiri Lom access to the internet and 3G infrastructure network. The total capacity of 6.5kW electricity generated by the hydro power and solar cell, sufficient to support the use of e-learning-on-demand.

The pilot classroom for the border community is equipped with 10 computers, two tablets, a wireless access point, VDO projector for teleconference, IP camera and a 50-inch LED TV.

The research team also developed the energy-charging station so that students and villagers can have them for lighting lamps and to be able to bring them back



The pilot classroom is equipped with 10 computers, two tablets, a wireless access point, VDO projector for teleconference, IP camera and a 50-inch LED TV.



Students at Ban Khiri Lom in Prachuap Khiri Khan benefit from e-learning.

home for reading books at night and then bring them in the morning for recharging.

Ban Khiri Lom Border Patrol Police School has 105 students, ranging from kindergarten to grade 12, who today have a better chance of schooling with technology and the ability to access educational content.

Nuttakarn Udomdachanut, assistant researcher at Nectec, noted that the team designed the system based on the real use of electricity. Though the system is complex, the team tried to make it as easy as possible to use.

“In the past, there was no communications system. We had to travel to the Border Patrol units for meetings, but now we can do so via teleconferences

“The electric power that we designed has been used for a few months — the energy is sufficient for consumption in the school and the community — but we need to wait for the heavy rain season to figure out a solution for any events of solar shortage. But so far it has been fine,” he said.

Besides education, the school also serves as the centre of the community, providing primary health care to the community.

According to Pol Lt Chaiya Chantadee, the school principal, the ICT project improves the quality of life of people in remote areas, as they're able to consult with doctors in the city by teleconference.

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Juthamanee Sriwang, a 5th-grader who moved from Nakhon Si Thammarat to Prachuap Khiri Khan with her parents, said she enjoys searching for information on the internet, enabling her horizons to broaden.

“I got a better opportunity for education and found that learning in this school is more enjoyable than in my old one,” said Juthamanee. “I learn and enjoy many activities outside the classroom, such as growing vegetables in the yard.”