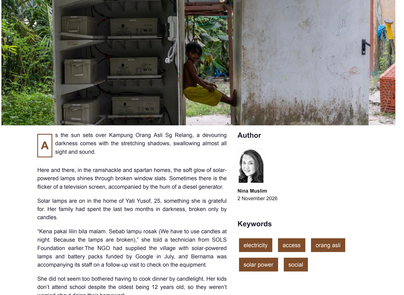
Solving Electricity Blues In Orang Asli Village Near KL



As the sun sets over Kampung Orang Asli Sg Relang, a devouring darkness comes with the stretching shadows, swallowing almost all sight and sound.

Here and there, in the ramshackle and spartan homes, the soft glow of solar-powered lamps shines through broken window slats. Sometimes there is the flicker of a television screen, accompanied by the hum of a diesel generator.

Solar lamps are on in the home of Yati Yusof, 25, something she is grateful for. Her family had spent the last two months in darkness, broken only by candles.

"Kena pakai lilin bila malam. Sebab lampu rosak (We have to use candles at night. Because the lamps are broken)," she told a technician from SOLS Foundation earlier.The NGO had supplied the village with solar-powered lamps and battery packs funded by Google in July, and Bernama was accompanying its staff on a follow-up visit to check on the equipment.

She did not seem too bothered having to cook dinner by candlelight. Her kids don't attend school despite the oldest being 12 years old, as they weren't worried about doing their homework.

Like at least 116 Orang Asli villages, according to government data in 2024, Kampung Sg Relang has mostly gone without electricity throughout the years.

What is unusual about the village, however, is its lack of electricity access despite being easily accessible. Located 500 metres off KL-Karak Highway, the Temuan village is a testament to the difficulties of electrification of rural areas, despite the government's efforts to fulfil everyone's basic needs.

In this case, the issue is not necessarily the distance but the size of the kampung, which has 12 households and about 50 residents total. It is difficult to justify the cost of laying transmission lines to the village. And while off-grid renewable energy systems are likely the villagers' best bet for electricity, they usually require a different approach from conventional energy projects.

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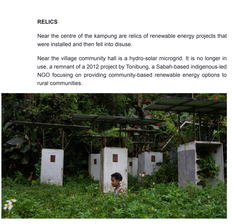
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electricity | access | orang asli | solar power | social

ELECTRIFICATION

Malaysia has committed to providing universal energy access to the population since independence in 1957 as a way to eradicate poverty and enhance economic growth. And for the most part, it has succeeded.

The Department of Statistics Malaysia (DoSM) reported in 2022 that 99.7 percent of households had direct access to electricity. The figure, however, did not specify the tiers of the electrification, a system by which to grade electricity access.



The World Bank classifies electricity access into six tiers, ranging from Tier 0 to Tier 5, with Tier 5 representing at least 23 hours of electricity supply a day.

"Tier 0 means having no electricity connection at all, while Tier 5 is what we enjoy in the cities," said SOLS Foundation Energy Access Director Nur Syawista Khanum Mohamed Fuad in an interview with Bernama at her office in Sungai Besi.

The foundation had provided the villagers with pico solar panels connected to battery packs, which produce enough electricity to light lamps for a few hours and to charge phones and power banks.

Syawista estimated that the villagers were currently at Tier 1, with enough power for at least four hours of use.

"Our plan is, of course, to get (the kampung) to (Tier) five, but it is a struggle," she said.

She added that access to a stable electrical supply was necessary for the villagers' well-being, economic and otherwise.

For example, not having access to 24-hour electricity means no refrigerators, a basic necessity in the modern age. In Kampung Sg Relang, no one owns a refrigerator or freezer, which makes foodkeeping a tricky affair.

Otok Singgah, who is in her 70s, told Bernama her son has to drive to a supermarket 30 minutes away to buy fresh meat every two days.

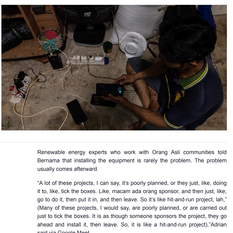
"Itu kalau ada duit, kalau takde duit, (makan) pucuk ubi lah (That is if we have money. If not, we'll just eat cassava leaves)," she said.

It's not that the government and others have not tried to get the village to Tier 2 and above. But it is not easy, as evidenced by relics of past energy projects in the kampung.

RELICS

Near the centre of the kampung are relics of renewable energy projects that were installed and then fell into disuse.

Near the village community hall is a hydro-solar microgrid. It is no longer in use, a remnant of a 2012 project by Tonibung, a Sabah-based indigenous-led NGO focusing on providing community-based renewable energy options to rural communities.



Opposite the hybrid energy plant and across the muddy road, solar panels measuring about 4m by 1.7m stand atop of several tall, abandoned metal sheds in the midst of dense foliage. Located by Yati's house, each unit bears a house number. On the side are printed the names of the Sustainable Energy Development Authority (SEDA) and the contractor Times-Lite Electrical Engineering (TLEE).

Both projects were able to provide Tier 3 energy access, capable of supporting medium-load and productive appliances like a television.

Adrian Banie Lasimbang, founder and executive director of Tonibung, told Bernama the hydro-solar project was operational until 2014 when floods destroyed the microgrid. When asked why it was never repaired, Adrian said the funds were not there.

"The cost to repair the damaged intake is beyond the community's financial capability," he said.

As for the off-grid solar energy system, TLEE told Bernama in an email that it did the installation from October to December 2018. The company held Operations and Maintenance Training on March 13, 2019, before handing over the project to Selangor Economic Planning Unit (UPEN), which funded the project, the following month.

"Matters relating to the system's operation, maintenance and status after April 2019 would fall under the purview of the project owner," wrote Haley Khou Siew Ying from TLEE.

When contacted, UPEN Sectorial Section Deputy Director Rahayu Ali said the unit was considering funding an energy project for the village once its needs had been assessed.

"Lawatan siasatan bersama-sama pihak yang berkaitan akan dilaksanakan selepas menerima laporan (A joint investigative visit involving the relevant parties will be conducted upon receipt of the report)," she wrote in an email.

Bernama sent SEDA and the Department of Orang Asli Development (JAKOA) a list of detailed questions but received no answers.

SELF-RELIANCE

Villagers told Bernama that the off-grid solar power system lasted only about a year after the handover. None knew or had the training to maintain or fix it.

"Dia orang bila dah pasang, dia orang tak pergi lagilah. Dia orang cakap pandai-pandai sendirilah. Dia orang cakap macamtu (Once they had installed it, they never came back. They just told us to manage on our own)," said Otok.

Renewable energy experts who work with Orang Asli communities told Bernama that installing the equipment is rarely the problem. The problem usually comes afterward.

"A lot of these projects, I can say, it's poorly planned, or they just, like, doing it to, like, tick the boxes. Like, macam ada orang sponsor, and then just, like, go to do it, then put it in, and then leave. So it's like hit-and-run project, lah," (Many of these projects, I would say, are poorly planned, or are carried out just to tick the boxes. It is as though someone sponsors the project, they go ahead and install it, then leave. So, it is like a hit-and-run project),"Adrian said via Google Meet.

Experts said maintenance is usually the weakest link with these projects. Orang Asli villages tend to lie in isolated, hard-to-reach areas, and repair services there are very limited. Even Kampung Sg Relang, so close to a major highway, still lacks dependable telecommunications coverage. Calling a maintenance person to fix a faulty system remains a challenge.

Centre for Orang Asli Concerns Coordinator Dr. Colin Nicholas told Bernama that the approach needs to change, and that NGOs and other agencies should involve the Orang Asli in these projects from beginning to end.

"But they don't train the Orang Asli to problem-solve certain small issues and so on," he said.

Adrian, who is also a former senator, agreed. Due to difficulties accessing and communicating with their village, project leaders need to provide villagers with the training to be operators rather than recipients of the solar programme. Otherwise, he warned, the problem will keep repeating itself every few years.

"One day of training is not enough. Need to set up village committee, appoint community operator. Training needs to be at least four or five days to cover system management to system maintenance," he said.

He also acknowledged that some damage and system malfunctions were beyond the community's means to repair.

Syawista said foundation volunteers and staff provide orientation and training on how to use their system.She added that maintaining systems was easier when they have Orang Asli trainees on their team.

"Because we have one key team member there, like he's able to tell us like, "Okay, oh, ada yang rosak, how do I do this? (Because we have a key team member there who can tell us, 'Okay, something is broken. How do I fix this?)"

For now, the NGO only has enough funds to send staff for site visits every two or three months to check on the systems, which are under 24-month warranty. Once it expires, the villagers will have to maintain the systems by themselves.

The off-grid solar energy system SOLS Foundation provided for Kampung Sg Relang, which costs thousands of ringgit, is expected to last five years with care.

BETTER THAN NOTHING

Back at the kampung, the SOLS technician soon gave up on trying to repair the battery pack that stores the solar energy collected by the panels. The panels were functioning, but the battery pack was no longer working.

Luckily, he had brought a spare pack with him during this visit. Yati's wait now sports a new bright yellow battery box. A green light flashes, showing it is ready to be used.

Despite the fix, Yati told Bernama she wished they could get more continuous electricity. Still a little light is better than nothing, she added.

"Kita pun takut-takut juga (pergi toilet bila malam). Takut ularlah. Banyak ular kat sini (We're also afraid to go to the toilet at night because we're scared of snakes. There are a lot of snakes here)."

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