Better Solutions Than Megadams for Powering Sarawak, Study Finds

By Tanya Lee and Katy Yan

For over 200 consecutive days, indigenous Penan, Kenyah and Kayan people have stood together at two road blockades near the site of the planned Baram Dam, in Sarawak, Malaysia. They have successfully stalled the construction of this project, which would flood 400 square kilometers of their ancestral lands and displace 26 villages. The affected communities, along with allied indigenous rights and environmental groups in Sarawak, argue that there is no need for such a destructive project when the nearby Bakun and Murum dams are still not operating at capacity due to a lack of demand.

There is a much bigger agenda at stake that the people living along the Baram River are challenging. The Sarawak Corridor of Renewable Energy ("SCORE") is a component of Malaysia's national development plan that proposes building a series of large hydropower projects, including the Baram Dam, to generate electricity for proposed clusters of heavy industries, including manganese processing, aluminum smelting and silicon manufacturing plants. Powerful proponents of the dam plans, including the 100% state-owned Sarawak Energy Berhad (SEB) and Sarawak Governor Taib Mahmoud, are involved in a variety of corrupt business deals that impoverish the majority of local people, while enriching themselves and their associates. As a result, indigenous communities to be affected by the dams remain willing to challenge the plans to turn Sarawak into an energy and economic hub, and tirelessly defend the land as well as their livelihoods.

During International Rivers' recent site visit to villages that will be affected by Baram Dam, a community leader from Long Laput explained: "There are at least nine or ten other dams planned as part of the SCORE plan; SEB seems to think that once they build Baram Dam, they will be able to build the rest. But at Baram, SEB faces big challenges if they are going to advance the project. They have never asked for the consent of the people who will be affected by their project!"

The Small-Scale Solution

Now a new study out of the University of California–Berkeley reveals that there are better energy alternatives that could electrify rural villages in the river basin in a sustainable manner, and at a fraction of the current cost of the SCORE project.

More importantly, the study has the potential to become a powerful tool for rural villages to take charge of their own energy future and actively participate in the energy debate around them.

The UC Berkeley report, *Kampung Capacity: Local Solutions for Sustainable Rural Energy in the Baram River Basin*, was conducted by graduate student Rebekah Shirley with the director of the Renewable and Appropriate Energy Laboratory, Dr. Daniel Kammen. The researchers surveyed the energy options for three villages (or *kampungs*) along the Baram River, in collaboration with the Sabah-based group Land, Empowerment, Animals and People (LEAP) and Oregon-based group Green Empowerment. The researchers found that the most feasible and least-cost options for these villages are locally managed small-scale hydropower projects, followed by biogas generators with batteries. In fact, Green Empowerment has already successfully installed small-scale hydro in a number of villages in Sarawak. These would replace the villages' polluting diesel generators, would cost approximately 40% less (and have no recurring fuel costs), would give them uninterrupted power (unlike existing systems), and could be paid back in three years' time. Not only would these villages be saved from the social, economic, and environmental impacts that would accompany SCORE's megadams, they would also receive cheap, clean electricity based on locally managed renewable resources. This in turn could lead to a score of other benefits including improved opportunities for education, greater social cohesion, and long-term local economic development.

Long Lawen villagers with a micro-hydro project built by Green Empowerment. Photo: Rebekah Shirley

According to the authors, expanding these benefits to all of rural Sarawak will require new policies, financing tools such as microfinance, and other institutional mechanisms that can support the implementation of these small-scale technologies across the country. But most of all, it will require public and political will to prioritize, as the authors put it, "empowering and strengthen[ing] indigenous life in East Malaysia."

Together with indigenous rights advocates and community groups in Sarawak, allied organizations are mobilizing in Malaysia and internationally to promote alternative energy and development plans that are in line with the findings of the UC Berkeley report, and respect indigenous peoples' rights to determine their own paths of development. Yet, as a community leader living on the Baram River asserted to International Rivers, a complete shift in priorities and political will is needed: "If the government is really serious about bringing development to our communities, they will build proper infrastructure for people. There is no need for big dams; there is no need for so much electricity. Why do they want to build the dam when there is enough electricity anyway? Why not build some micro dams, as those smaller projects could generate all the power we need."