

WHY RENEWABLE ENERGY PROJECTS FAIL OR SUCCEED? DESIGN AND IMPLEMENTATION OF ENERGY ASSISTANCE PROJECTS IN CAMBODIA AND LAO PDR (DREAM) 2009–2012

Finland Futures Research Centre

Location of the action: Cambodia, Lao PDR

Total costs of the project: 400 000€

Funded by: Academy of Finland

Length of the project: 1/2009–12/2012

Project partners: Institute of Technology of Cambodia (ITC), Cambodia; National University of Laos (NUOL), Lao PDR; Lao Institute for Renewable Energy (LIRE), Lao PDR; Technology Research Institute, Laos; Mekong Programme on Water, Environment and Resilience (M-POWER); Mekong Energy and Climate Network (MECN)

Significant part of development assistance projects have failed to provide sustainable energy services and well-being despite the fact that such projects should pay special attention in integrative efforts towards local people while providing co-benefits in improved living standards. Even though many projects promote renewable energy, they are not necessarily sustainable. This often relates to inadequate or short-term funding. Energy projects also become socially unsustainable if they are not based on people's needs and preferences. Under the traditional supply-driven paradigm, the majority of projects in rural energy sector have been conceived without sufficient recognition of the needs and preferences of the local end-users. Appropriate technologies and effective implementation strategies imply site-specific consideration and understanding of local structures and power relations. The DREAM project looked into these issues more deeply in the Laotian and Cambodian context.



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The DREAM project aimed to (i) develop multi-disciplinary methodology to analyse renewable energy projects design, implementation, finance and influence on communities; (ii) build up knowledge on the various positive and negative impacts the renewable energy projects have especially at the village level; (iii) improve understanding of qualifications, such as success factors and reasons for failures, of renewable energy projects and; (iv) identify concrete means to increase long-term sustainability of donor-driven energy projects.

The research was done as a comparative case study analysis of eight donor-driven renewable energy projects implemented in Cambodia and Lao PDR. The research materials consisted of project documents, interviews, and ethnographic methods used in the case study villages. Integrated impact assessment framework was used to give emphasis on the cross-sectoral impacts of energy decisions and long time scale related to the energy systems.

The project improved the understanding of reasons why energy projects fail, and means to develop the planning and implementation of future renewable energy projects. The overall aim was to help the transition towards increasing sustainable use of renewable energy in developing countries. It also developed a multi-disciplinary methodology needed for assessing the impacts of projects and designing environmentally benign projects that would generate continued benefits for local communities. The research aimed at providing improved understanding for donors and development organizations working in the sector.



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Publications:

Kaisti, H. & M. Käkönen (2012) Actors, Interests and Forces Shaping the Energyscape of the Mekong Region. *Forum of Development Studies*, Vol. 39(2): 147-158.

Käkönen, M. & H. Kaisti (2012) The World Bank, Laos and Renewable Energy Revolution in the Making: Challenges in Alleviating Poverty and Mitigating Climate Change. *Forum for Development Studies*, Vol. 39(2): 159-184.

Kaisti, H. & M. Käkönen (2011) Powering the Future of the Least Developed Countries: World Bank's Role in Developing Renewable Energy in Laos. *Proceedings of Conference on Trends and Futures of Sustainable Development*, 9-10 June 2011, Tampere, Finland.