INTERLINKAGES BETWEEN ENERGY AND LIVELIHOODS - DATA, TRAINING AND SCENARIOS FOR SUSTAINABLE ENERGY PLANNING IN LAOS (INES) 2010–2012

Finland Futures Research Centre

Location of the action: Lao PDR Total costs of the project: 480 000 €

Funded by: Energy and Environment Partnership (Ministry for Foreign Affairs of

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Lenght of the project: 11/2010–12/2012

Project partners: Ministry of Energy and Mines (MEM), Lao PDR

The INES project concentrated on energy related data collection and sustainable energy planning in one of the poorest countries in Southeast Asia, Lao PDR (or Laos). The purpose of INES project was to (i) collect data on households energy consumption patterns and the impact on livelihoods; (ii) collect data on energy use in industry, agriculture and transportation; (iii) develop energy planning models for Lao PDR with different relevant ministries; (iv) carry out training and capacity building in energy models development and their use in national planning and; (v) create scenarios for planning purposes together with ministry representatives, and disseminate the information with the aim in raising awareness and support in sustainable policy making.

The overall aim of the project was to improve the access to renewable energy in Laos. The project produced reliable national and regional data on energy







consumption patterns and impacts to livelihoods in Laos, as well as new energy modelling tools; LaoLINDA and LEAP. These were developed to suit especially the Laotian circumstances and needs, in order to produce energy planning scenarios for future policy making and research.

The household energy consumption data was collected with two methods. First, a survey with a large sample of 2000 households across the country was conducted. To support this, the research team also conducted 14 Focus Group Discussions (FGDs) among ordinary Laotians and village leaders. Discussions ranged from energy consumption patterns to livelihood strategies and food security. Additional to the household survey, data was also collected on energy use in industry sector, agriculture and transportation. This was done by utilising existing databases but also complementing this with a survey.

The collected data was used as an input for LaoLINDA and LEAP energy modelling tools. The models were developed in close cooperation with the government in order to respond to the national needs. The results provided necessary data of energy consumption sources and patterns in Laos, and supported policy-makers in prioritising sustainable investments and decisions for the country's development. In addition to the research, several trainings were organised for government representatives to be able to apply modelling and scenario-making also in the future.



Publications:

Luukkanen, J., Kouphokham, K., Panula-Ontto, J., Kaivo-Oja, J., Korkeakoski, M., Vehmas, J., Tuominen, V., Jusi, S., Pasanen, T. & H. Lakkala (2012) Future Energy Demand in Laos. Scenario Alternatives for Development. FFRC eBOOK 8/2012. Finland Futures Research Centre, University of Turku.

Tuominen, V., Pasanen, T., Keskiväli, I., Lakkala, H., Akgün, O., Luukkanen, J., Kaivo-Oja, J. & J. Panula-Ontto (2013) Energy, Environment and Livelihoods in the Lao PDR. Results from a 2011 Household Survey. FFRC eBOOK 5/2013. Finland Futures Research Centre, University of Turku.

Khanthapath, B., Lakkala, H. & J. Luukkanen (2012) Interlinkages between Energy, Environmental Changes and Livelihoods in Laotian Households. Findings from 14 Focus Group Discussions. FFRC eBOOK 9/2012. Finland Futures Research Centre, University of Turku.