
Lao PDR, the Lao Institute for Renewable Energy (LIRE), ...and Weltwaerts



18/10/2010

Overview

- Introduction to the Lao PDR
- Renewables in the Lao PDR
- Introducing LIRE
- LIRE's activities
- DEWATS and requirements for the volunteer



LAO PDR

Lao PDR means Lao People Democratic Republic

Lao PDR is rich on natural resources and the only land in south east asia without access to the sea

Lao PDR counts to the least developed countries in the world but has experienced recently drastic economic growth

Since 1975, Government of Lao lead the country

In the late 1990's the country slowly open its borders



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MEKONG

The mekong counts to the 10 largest rivers in the world

The mekong flows from the north to the south of laos with a total length of 1835 km

Many families rely on the Mekong in many ways. They need the Mekong for fishing, irrigation, transportation and many others



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VIENTIANE

Vientiane is the capital of Lao PDR

Vientiane has approximately 500.000 thousand inhabitants

Some people say, its the most quiet capital city in south East Asia

One of the most popular visiting site in Vientiane is the Patuxay and the ThatLuang Temple

The Thatluang temple is an important temple for all lao People



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PEOPLE

The Lao PDR has a lot of ethic minorities. Long time ago, people travelled from China, Mongolia, Myanmar, Vietnam and other countries to Laos.

Most of the Lao People are buddists and religious.

People from the South are very different from people to the north



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WILDLIFE

Laos has a lot of virgin forest and a rich biodiversity

In some remote regions there are still wild tigers and elephants living

Also a lot of rare trees and plants can be found in Laos

The north of the country is very mountainous and some areas can only be reached by walking

The Lao PDR has 20 national parks in order to protect its wildlife. However illegal logging and hunting harms the biodiversity. More funds are needed to protect this areas



What is LIRE?

- Young research institute
 - Lao non-profit association of members, set up in 2006
 - No base funding
 - Own programs and on-demand research (for NGOs, private sector, government)
 - Fully authorized to work in the Lao PDR
- Lao and foreign experts
 - Permanent Lao staff: 9
 - Permanent foreign staff: 3
 - Lao and foreign interns: 4

Founding members:



Lao Promotion Organic Product Association





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LIRE's Mission

Objective: Contributing to the development of the renewable energy sector in the Lao PDR

Through:

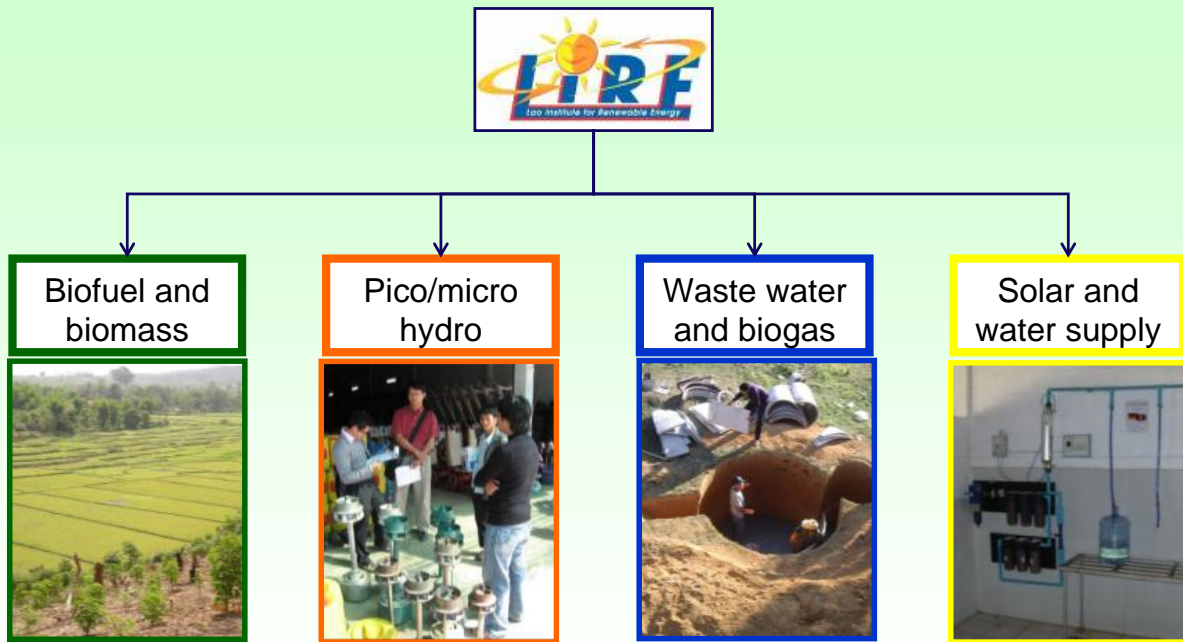
- Training and local capacity building
- Research and implementation
 - appropriate renewable energy technologies in the Lao context
 - sustainable implementation models
- Providing a local platform for all stakeholders involved
 - Knowledge exchange network
 - Technical advice
 - Feasibility studies
 - Monitoring and evaluation
- Policy support and development



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LIRE programmes



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LIRE's activities: Hydro (pictures)



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LIRE's activities: Biofuels (pictures)



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LIRE's activities: Biomass gasification



Pictures: Installations SME Cambodia



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LIRE's activities: Solar (pictures)

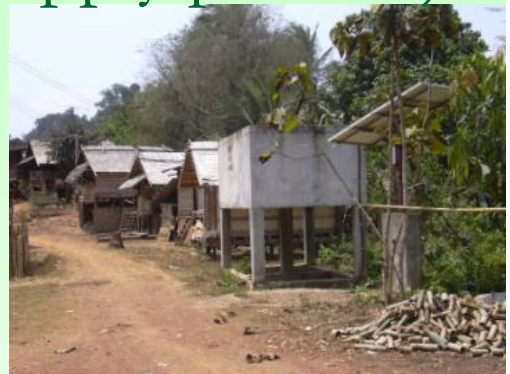


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LIRE's activities: water supply pictures)

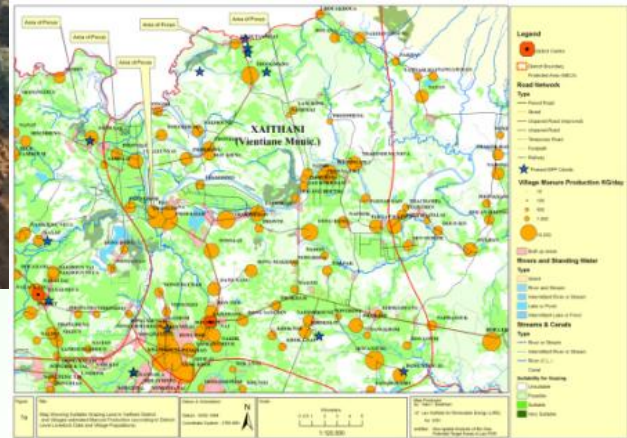
- Bottled drinking water for rural villages
 - Solar power for pumps, UV and Ozone disinfection, and local chlorine production
 - Operational model: owned by community, with village entrepreneur to run service, and collect income for maintenance costs
- Pilot project implementation
 - 5000 litre/day supply
 - Detailed monitoring to evaluate technical and operational models
- Programme improvement
 - Trials of open sand filters
 - Capacity building for HIA
 - Monitoring and evaluation of pilot
- Promotion and Marketing
 - Working with local implementation partners to supply to SME
 - Tendering for mining programmes



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LIRE's activities: Biogas (pictures)



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My working field: DEWATS

- Decentralized Waste Water Treatment Systems
 - Community-Based Sanitation (CBS)
 - Small and Medium Enterprises (SME)
- New project area starting in 2009
- First stage:
 - sector analysis,
 - raising awareness,
 - pilot project in Vientiane city
- The team
 - Noka Destalina: BORDA DEWATS-CBS expert (worked at Balifokus, Indonesia)
 - Aurelie Phimasone: Project Coordinator (expert in Lao WASH sector)
 - Sengdeuan (Ki) Thammavong: Technical assistant and community facilitator
 - *Plus volunteers*

WASH – Water, Sanitation and Hygiene Promotion



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Sector analysis - Waste Water Situation

Vientiane is growing fast!
Waste water problem is growing fast too!

Centralized system is too expensive and takes a long time to make

At the moment, all waste water goes to Thatluang Marsh (WWF, 2004)

→ **Recommendation: Stronger attention for waste water management and alternative waste water treatment systems**

Decentralized models were recommended for Lao PDR (Keosithamma, 2004, Atsanavong, 2004)

People are willing to contribute for group systems (Atsanavong, 2004)

→ **DEWATS** are suitable solutions to serve these problems



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Waste Water Situation - Vientiane



Scope of Work for Weltwaerts volunteer

A key time for sanitation in the Lao PDR:

- New water law in 2009
- JICA (Japanese Development Cooperation) Master Plan for Sanitation under development
- In 2009 a Technical Working Group was set up by NGOs working in Laos

Main challenge for project:

- how to work with other WASH sector actors?
- LIRE needs to promote URBAN sanitation, and raise awareness of DEWATS

Role of the volunteer:

- Coordinate with international development community
- Establish partnerships with organisations working in urban sanitation
- Build capacity in LIRE to manage the DEWATS programme efficiently



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Thank you very much



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