Profitable and affordable energy services for remote areas in Lao PDR

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What is Sunlabob?

• A Lao Company operating in the field of RE, registered in 2000
• A Private Energy Provider for remote villages
• A Business Developer for its local partners
• A Facilitator for investments in remote areas
Our Mission

...to be competent in logistics and operational handling
Our Mission

.... to be competent in providing commercially viable energy services
Our Mission

... to be competent in reaching the remotest areas in Lao PDR
The Operational Setting

Increasing numbers of franchised small entrepreneurs as sales agents

Sunlabob provides surveys, equipment, trainings, quality control and networking

Head office in Vientiane 25 people
Renting out Solar Home Systems for individual households

The majority of Rural Households can afford Solar Lighting for at least 20 years

- Affordable and Steady Financial commitment for Households
- Avoid Dependence on Subsidies
- Financial Flexibility (non sitting on expensive investments) for Households
- Operate a Rental Service
  - A Rental Fund as an investment opportunity
  - Reliable and fast technical servicing
  - Franchised Network of service agents of Sunlabob
  - Reliable and Cheap Collection of Rents
  - Competent Village Energy Committees trained by Sunlabob
High Light

- Sunlabob rental service for solar equipment is among the final winners of the Development Marketplace of the World Bank 2005.
PPP For Remote Village Grids

Operate PV Rental Service + Operate Hybrid Generation

Private Energy Provider

Rent out 12 Volt System
Rent out 12 Volt System

Sell 220 Volt Electricity

Remote Village With Grid
Remote Village With Grid

Movable assets

Private Public Partnership

Fixed assets

Village Electricification with Hybrid System

Fixed assets

Remote Village No Grid
Remote Village No Grid

Movable assets

Pico/Micro Hydro
PV

Movable assets

Private Public Partnership

Fixed assets

Village Electricification with Hybrid System

Fixed assets
Hybrid village grid as viable business
1. The typical situation
Hybrid village grid as viable business
2. Public-Private cooperation for hydro
Hybrid village grid as viable business
3. Boost grid with solar → hybrid
Hybrid village grid as viable business
4. Boost system for productive uses
Private-Public Partnership for Village Grid

- **Households**
  - Village enterprises
  - Sells kWh

- **Village Energy Committee**
  - Owns
  - Hires
  - Village grid

- **Franchised small entrepreneur**
  - Trains

- **Private Energy Provider (Sunlabob)**
  - Trains
  - Owns

- **Village Technician**
  - Operates
  - Repairs, maintains

- **Investments by individuals**

- **Public Investments**

- **Public Private Partnership**

- **Penstock, turbine, generator, solar generators, chargers, inverters, batteries**
End-user training...

It is important that End-users understand how they can efficiently use energy.
Entrepreneur training...

It is important to have motivated and competent service agents. Sunlabob identifies the best small-entrepreneurs-trainees to become the franchise service agents.
Village Energy Committee training...

It is important to have well trained VECs, able to support and manage the operation of the hybrid village grid
The Village Technicians are an early warning system. They crucially contribute to the long-life-operation of the systems.
It is essential to have experienced and skilled trainers, supervisors, managers and technicians on central level. Continuous upgrading training based on the newest technical and management developments to all staff members is assured.
Building the required partnerships

For designing and installing viable hybrid systems

Entec and SMA
Hydro/ PV /Hybrid solution for village Grid

Government of Lao PDR with all related departments

Lorentz and RWE Schott
Solar Community Systems for productive use
Organizing the funding and exploration

Pilot project for Hybrid Village Grid in Namkha district

To prove the concept & identify open issues
PPP Investment program for Hybrid Village Grids in South East Asia
Thank you for your attention

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