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

Head office in Vientiane 30 people

Increasing numbers of franchised small entrepreneurs as sales agents

Sunlabob provides surveys, equipment, trainings, quality control and networking
Renting out Solar Home Systems for individual households

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

Operate a Rental Service

- Affordable and Steady Financial commitment for Households
- Avoid Dependence on Subsidies
- Financial Flexibility (non sitting on expensive investments) for Households

A Rental Fund as an investment opportunity
- Long-term capital for purchasing equipment
- Reliable and fast technical servicing
- Reliable and Cheap Collection of Rents

Franchised Network of service agents of Sunlabob
- Competent Village Energy Committees trained by Sunlabob

Affordable and Steady Financial commitment for Households

Reliable and Cheap Collection of Rents
High Light

- Sunlabob rental service for solar equipment is among the final winners of the Development Marketplace of the World Bank 2005.
Renting out Community Systems for **Villages**

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**Affordable and Steady Financial commitment for Villages**

**Avoid Dependence on Subsidies**

**Financial Flexibility (non sitting on expensive investments) for Villages**

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Community Systems I

- For public use (e.g. schools, health posts, meeting halls, …) to improve the living conditions in the village
Community Systems II

• For productive use (e.g. water pumps, rice mills, ice producing machines,...) to generate income in the village
PPP For Remote Village Grids

Operate PV Rental Service

Private Energy Provider

Rent out 12 Volt System

Pico/Micro Hydro

Operate Hybrid Generation

PV

Movable assets

Sell 220 Volt Electricity

Private Public Partnership

Remote Village With Grid

Fixed assets

Remote Village No Grid

Village Electricification with Hybrid System

Fixed assets

Remote Village With Grid
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
tains
hires

Franchised small entrepreneur
trains
repairs, maintains

Private Energy Provider (Sunlabob)

Village Technician
services

Investments by individuals
Public Investments
Public Private Partnership
Private Investments

Dams, intake, channel generator housing village grid

penstock, turbine, generator, solar generators chargers, inverters batteries

Private Investments
Public Private Partnership
Public Investments
Investments by individuals

Village Energy Committee
hires

Private Energy Provider (Sunlabob)

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Franchised small entrepreneur
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Village Technician
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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.
Village Technician training...

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.
Rental Fund for Rural Electrification

Creditors
- Soft Loans
- Interests & Amort

Investors
- Equity-type Investments
- Fixed Dividends

Rental Fund
- Collects Rents & Fees

Specific
- Buys Equipment
- Pays Sunlabob for servicing

Solar Home Systems
- (Schools, Health posts, ..)

Community Systems
- (Pumps, Mills, Driers, Telecom,..)

Productive Use Systems
- Village Grids

Creditors
- Investors

Equity-type Investments
- Fixed Dividends

Interests & Amort
- Collects Rents & Fees

Soft Loans
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Solar Home Systems
- Community Systems
- Productive Use Systems
- Village Grids
Catalyzing Social Change through village electrification

Solar Home Systems
- Improved school performance of children
- Home industry (for instance weaving)

Community Systems
(Schools, Health posts, ..)
- Improved health service
- Evening adult education classes
- Evening community events

Productive Use Systems
(Pumps, Mills, Driers, Telecom, ..)
- Income generation

Village Grids
- Public-Private Partnership at village level

Job creation in the service chain based on regular local need
Skill development for local good governance at village level
PPP Investment program for Rural Electrification in South East Asia
Thank you for your attention