Experiences with PPP
- Public Private Partnership -
in rural electrification

By Andy Schroeter

Sunlabob Rural Energy Systems Co., Ltd, P.O.Box 9077, Vientiane /Lao PDR, Tel./Fax +856 21 313908
E mail: sunlabob@laotel.com  www.sunlabob.com
Content

• Introduction of Sunlabob
• Private Public Partnership with GTZ
• Rental System: General Overview
• Private Public Partnership with InWent
• Solar Development Group /Sunlabob project
Sunlabob in brief

- Registered end 2000 as a 100% Lao Company
- Works in sales, installation & after-sales service, training & coaching, promotion & demonstration in close interaction with government agencies
- Operates independent and nation wide
- Sold approximately 300 KW PV (3,500 units) since 2001
- Exists of 25 staff at head-quarter and 23 provincial enterprises with franchise agreement
- Extends activities to neighboring countries
Sunlabob's objective

- Providing rural energy systems to remote populations at low cost
- Creating a sustainable system for after-sales service
- Establishing maintenance service
- Providing training for policy makers, multipliers, village technicians and end-users
- Promoting public awareness
- Supporting international networking
- Establishing a franchise system
- Introducing a „Fee for Service“-System
Experiences with Private Public Partnership

- PPP GTZ - Sunlabob
  1.1.2003 to 30.6.2005, 30 month
  „Training for small scale enterprises“

- PPP Inwent – Sunlabob
  „Development and introduction of a rental service system for electrification in rural areas“

- SDG (Solar Development Group) – Sunlabob
  October 2003 to January 2004, 15 weeks
  „Establishing a business plan for the rental service system“
PPP with GTZ

Overall Objective

Establish a network of independent small scale enterprises in rural areas throughout Laos, that can propagate proven technologies and can provide follow-up services to the dispersed clients in the villages.
PPP with GTZ

Project Objectives

- Program for qualifying and coaching of small scale entrepreneurs is developed
- Master Trainers are trained
- Training centers are equipped with material
- Small scale entrepreneurs are qualified and finished their first business cycle
- At least 30 (of 70) entrepreneurs signed a franchise agreement with Sunlabob
Roles

- Sunlabob develops and conducts the basic training, including the on-the-spot follow-up-coaching, up to the finished first business cycle.
- The public partner provides funds for the development of the basic training, and a cost-covering stipend for each trainee.
PPP with GTZ

Steps of Implementation

- Develop curriculum for a basic training of small scale entrepreneurs
- Conduct basic training, that enable trainees to start business at a basic level with proven Sunlabob technologies
- Sign a provisional franchise agreement with each trainee
- Conduct on-the-spot coaching of the trainees during the full first cycle of business in their own locality
- Finalize the franchise agreement with those trainees who have achieved competence
- Develop upgrading curricula to improve knowledge of already franchised entrepreneurs and introduce new technologies to them.
PPP with GTZ

Output by January 2004

- Basic curriculum developed and tested
- 40 small scale entrepreneurs trained and are in the process of implementing the first business cycle
- 23 provisional franchise agreements signed
- All trainees coached by Master Trainers on regularly basis
- 5 regional training centers equipped
Training of Trainers (ToT)
Training of Trainees
Certification
„Make electricity affordable for remote villages through rental systems „
What is a rented system?

Our „rented system“ is a Solar energy unit, which is installed on household base. The household pays for the electricity on a regular basis, while the installed equipment remains property of the provider.
Cash-Sales vs. Rental

Property of consumer → Property of provider

Maintenance to be paid by consumer → Maintenance free of charge

Spare parts to be paid by costumer → Spare parts provided free of charge

Use only after complete payment → Use immediately after first rent paid

Size of solar unit fixed → Up/downgrading size of rented unit possible
Advantage for villagers

- Costs of electricity are small, regular and plan-able
- Electricity right after the first rent paid
- No rental payments when technical failures
- High quality equipment used
- Changing system size possible
- Regular maintenance through qualified technicians assured
Why rented system in Laos?

General:
• High demand: 72% of total population no access to grid line
• Grid extension financially not viable (low population density and demand)
• Priority policy of the government: GoL set goal to reach 90% electrification by 2020

Specific:
• Purchase capacity of rural population is low
• Open access to electricity also for the poorest
• Creates income generating for village technicians and service companies
• Promotes village based management and community funding
Systemic challenges in building a rental system

- Ensure fast and liable technical control and servicing of the widely isolated rented systems
- Ensure fast and efficient collection and forwarding of rents
- Ensure sufficient long-term capital investments for purchasing the equipment
How to organize the rental system?

VILLAGE

VT

Village Committee (VC)

E

E

E

E

Rental Company
Takes up capital, buys equipment and rents it out, pays back capital

Hardware Company
Installs and maintains the equipment on contract basis

Training Company
Trains all required skills in the system
How to finance the rental system?

Donor

Fund

Training Company

Rental Company

Hardware Company

GoL

Village
Rental Company

- Is an independent accounting company
- Manages the fund
- Operates the fund according to rules agreed with the village committee, the donor and the district authorities
- Buys solar systems from hardware company, and rents them out to the village committees
- Contracts a hardware company to do fast-reaction servicing
- Cooperates with training providers for training in financial management
- Collects rents from the end users
- Pays back the loan
- Involves district authorities in the whole process
Hardware company

• Is a commercial company which provides equipment according to required technical specifications
• Operates through sales agents on district level
• Installs all equipment in the villages
• Provides fast and reliable technical maintenance through service contract with rental company
• Cooperates with training provider and rental company
Training company

• Provides technical training to village technician
• Provides training in financial management to village committee
• Provides all necessary information about the rental system to the relevant government authorities as well as the donors
• Cooperates continuously with the hardware and rental companies during all activities
Village committee

- Rents the systems and sub-rents single units to the individual households
- Facilitates installation and training
- Collects the rent from end-users and hands the agreed fee to the rental company
- Handles the village fund (surplus of rent collection)
- Pays the village technician
Village Technician

• Receives training from the training provider
• Responsible for first level maintenance in all households of the village
• Communicates with Hardware Company in case of failure
• Accountable to the village committee
Government authorities

- Political decision on running a public funded effort to provide solar units to villages on a rental basis
- Appoint a board that govern the fund
- Supervise activities and monitor the development effect
- Cooperate with donors
- Negotiate in case of conflicts
Donors

- Provide resources to the fund
- Provide support in training, coaching and monitoring until competence is achieved
- Provide support in quality control
- Support capacity building of the various stakeholders

(be careful: don’t put the emergence of viable commercial mechanisms on risk - through unsustainable long-term transaction subsidies)
Procedures

• 1. Village authorities approach the rental company for a program to launch a rental system in their village

• 2. The rental company dispatches a team of a fund manager and a person of the hardware company to assess the situation and reach an agreement with the village authorities

• 3. The hardware company plans and installs the systems. Simultaneously the training company trains the village committee in financial management and the village technician in use and first level maintenance
4. The rental company pays the hardware company for installing the equipment and the training company for the initial trainings.

5. The rental company makes a service contract with the hardware company, and pays a fixed sum per year per system for maintenance.

6. The village authorities collect rents from the various systems, and pay the collective rent to the rental company. The difference of the rents is for managing at the village level.
• 7. The rental company reinvests the rents into new equipment, etc. The aim is to maximize the number of rents that are operating.

• 8. The rental company pays interests on the investment to the fund.

• 9. The rental company also pays back the initial loan. The public investor can decide to reinvest the interests/loan-money in the fund.
Private Public Partnership
InWent-Sunlabob

„Pilot project for rural electrification through PV-Systems on rental base in Lao PDR“
PPP InWent

Goals

• Electrify an identified pilot area with SHS on rental base
• Qualify the village committees in fulfilling their public tasks in the interest of the village community
• Enable the village committees to function as facilitators for emerging village committees
• Establish a Model System of PV rental units (to create awareness among government staff and donors)
• Develop, test and establish a training curriculum for educating village committees
PPP InWent

Implementation steps

• Conduct nationwide needs assessment based on agreed criteria
• Select four pilot village in cooperation with involved government service (2 Vientiane province and 2 Savannakhet province)
• Introduction meetings with villagers, village representatives, local government staff and all local service providers
• Villager appoint Village Committee and Village Technician
• Master Trainers develop concept and info material for rental system
• Management training for Village Committees
• Technical training for Village Technicians
• Installation of equipment
• Continuous monitoring of activities (interdisciplinary team of government staff, village representatives and master trainers)
• Collect first rents
PPP InWent

Output by December 2003

• First rental systems in Laos installed
• Four village committees identified, trained and operating
• Four village technicians trained and operating
• First rent collection without delay
• Awareness creation (video presentations, broadcasting and TV advertisement, trade fairs, promotion tours, etc)
• Curriculum for financial management of rental systems developed and tested
Outlook

- Evaluation of the pilot project
- Adjust the curriculum based on the experiences
- Spread the good experiences and promote the rental system
- Increase information flow through public awareness campaigns
- Cooperate with government and donors for identifying methods and ways of finance for broad dissemination
Developing the rental system concept with Master Trainers and foreign experts
Training of Village Committee

Training of Village Technicians
Installation in the villages
Village committee is visiting a village, where the solar units have been installed already.
First rent collection

Income generating
Public Awareness and Demonstration
Objective

Developing a business plan to operate solar home rental systems in rural areas of Lao PDR
Phases of implementation

1. **Pilot phase:** *October 2003 – January 2004*
   Design of the rental business model (business plan, cost calculation, extension to other provinces, organization, legal aspects etc.)

2. **Demonstration phase:**  
   *May 2004 – December 2004*
   Adjustment of the business model for broad dissemination (pilot phase of 300 units)

3. **Rental Business in operation:**  
   *January 2005*
Design of rental business plan

- Legal aspects
- Fee collection
- Management aspects (franchise/agents/structure)
- Cost calculation/pricing/balance sheet
- Cash flow projection for the demonstration phase
- IT aspects (track and trace of inventory/rented equipment)
- M&E aspects
Thank you for your attention