



**VOPS
Office**

ໂຄງການສົ່ງເສີມໄຟຟ້ານອກລະບົບ
Village Off-Grid Promotion & Support
“ ທຸກໆຄືນ ມີແສງສະຫວ່າງ “
“ **Every night, light** “

Newsletter 7

November 2009

Dear Colleagues and Stakeholders of the Village Off-Grid Project,

We are pleased to send you this sixth Newsletter to inform you about the progress of the Village Off-Grid Project, a component of the Rural Electrification Program of the Government of Lao PDR.

For further information, please contact the VOPS Office in Vientiane on + 856 21 453 361, or the VOPS contractor, IED – +33 4 72 59 13 20 a.shanker@ied-sa.fr

More detailed information on the VOPS can be found on the VOPS website: www.vopslaos.org

1. Procedure and progress of installation of the new solar home systems

The installation of the new 5,250 solar home systems procured in 2009 is almost completed with 5,000 systems installed as of end October 2009,.

The procedure from customers identification until the effective operation of the SHS includes very strict steps described in the VOPS Operation Manual which can be summarized as follows:

- identification with local Authorities and Electricité du Laos of the areas to be included in the off grid program extension,
- execution of a cluster planning based on direct contacts with potential users and explanations of the duties and rights before registration,
- when SHSs are available, fabrication of frame, local transportation and installation of the systems at customers' house by the Provincial Electricity Service Companies (PESCOs) in accordance with the approved cluster plans,
- spot check of the quality of execution by the PESCOs and official approval of installations by local Authorities (PDEMs).

The PESCOs are the key operators. Indeed, they are involved in all steps of implementation including cluster planning, installation of SHS, training of end users and collection of the installation fees and of regular monthly fees to be paid by the customers.

For each step, PESCOs receive a fee based on the number of systems under their responsibility. This remuneration is defined in the Guideline of Incentives regularly updated by the DOE (see next Section) to ensure a decent income for the PESCOs and maintain a high quality service.



2. Incentives for PESCOs and others actors (2009)

The grid of incentives for the PESCOs is as follows:

Description	Amount (KIP)	Comments
Planning Fee	45,000	Paid after approval by PDEM and VOPS.
Hardware & local transport	110,000	
Installation, including customer and VEM training	80,000	After receipt of PDEM inspection report. Fee to be shared between PESCO (50,000 kip) and the VEM (30,000 kip)
Yearly post installation and Service Fee	up to 30,000	Bonus paid every year based on technical and financial assessment of PESCO performance during the period.
Monthly service Fee	9,000	Fee to be shared between PESCO (4,500 kip) and the VEM (4,500 kip)
System removal fee	55,000	Paid when the system is back at PESCO warehouse and ready for re-utilization.
PESCO Business loan	up to 50,000,000	Maximum one year, 0% interest
Start up support Fee	3,000,000	1,000,000 KIP per month over the first 3 months of activity

Other actors include the Village Energy Advisory Committees (VEAC) which ensure village traditional authorities' ownership and participation in project monitoring and the PDEMs who play the role of public sector regulator. Compensation for their participation is calculated as follows:

Description	Amount (KIP)	Comments
VEAC Inspection fee	1,000	per system and per month.
PDEM system inspection	15,000	for every inspection to cover their transport cost and expenses.

3. Re-installation of second hand panels

As mentioned in previous newsletters, there are regularly cancellations of hire-purchase contract by the customers; the most common reason being the arrival of the grid. In such situation the PESCOs proceed to the withdrawal of solar home systems, mainly the solar panel, for further utilization by other customers through another hire purchase agreement with a 5 year term.

Identification of new customers is made by the PESCOs who execute a specific cluster plan. Wherever necessary, second hand panels may be shipped from one province to another in order to satisfy specific demand. After approval, they proceed to re-installation of second hand panels using either their own means, i.e. available batteries, controllers and solar kits or balance of system components procured by DOE through the international competitive bidding process.

From January to August 2009, the PESCOs proceeded to 666 re-installations according to the following breakdown:

Program	20W	30W	40W	50W	Total
SPRE	41	28	11	244	324
REPI	96	50	0	196	342
Total	137	78	11	440	666

4. Hydro related activities

VOPS has prepared detailed feasibility studies and bidding documents to connect 1,003 households in Houaphan and Xiengkhouang provinces. Due to lack of appropriate funds and financing mechanisms, these hydro units have not been implemented yet. The sites are the following:

N.	Province	District	Villages name	Nr of HHs	Capacity	Type	
1	Xieng khuang	Kham	Phonthane	64	12.5 KW	New	
2			Phonsai	51	12.6 KW	New	
3		Khoun	Thenphoun	61	11.5 KW	New	
4		Phoukout	Laithong	79	13.5 KW	New	
5			Phosy (Sopma)	174	55 KW	Rehab	
6	Houaphan	Xamtay	Hang	54	16 KW	New	
7			Paotai	90	14 KW	New	
8			Paoneua	114	20 KW	New	
9			Nala	53	10 KW	New	
10		Viengthong	Thamla tay	79	120 KW	New	
			Nakham	27		New	
			Thamla neua	61		New	
			Nakout	96		New	
				Total	1003	285.1 kW	

In addition, VOPS has also prepared feasibility studies for another batch of 6 sites in three provinces

Additional VHGS sites

N.	Province	District	Villages name	Nr of HHs	Capacity	Type
1	Houaphan	Xamneua	Ban Teuam	61	20 KW	New
2		Viengthong	Phoudan	30	5 KW	New
3		Vienxay	Namsoy	95	15 KW	Rehab
4	Phongsaly	Qua	Nam Bonneua	31	5 KW	New
5		Qua	Nam Maneua	31	7 KW	New
6	Champasak	Khon	Don Nangsom	75	16 kW	New
			Total	413	88 kW	

With the resources of the Rural Electrification Fund available, DOE is currently considering to start procurement process of one of several of these sites. VOPS has already proposed a business model including in particular the appropriate tariffs to be applied based a socio economic survey of the potential users and the operation and maintenance modalities. Among the various options, DOE is now assessing the possibility to develop a few sites through Public Private Partnership and specific analysis are being executed by VOPS to help DOE in its decision on how to proceed.

5. Safety and awareness raising development

VOPS also executed a safety awareness campaign of pico hydro installations in five Northern provinces of Laos. This training program was delivered in 351 villages and has reached 100,000 persons. It was attended by 14,442 villagers, i.e. more than 75% of households have been covered by the course in those villages where more than 57% of households are using pico hydro units. In the villages visited, 8,344 units are installed of which 7,154 are operational.

VOPS prepared specific communication materials which were widely distributed during field visits. Ex post checking has shown that posters were actually in display in most of village chief houses, schools and community premises. A video film prepared for that purpose was watched by villagers in all villages where a VCD player was available.



Some parts of the training were more the direct concern of end users such as in-house board, distribution line and thunder protection kit as these subjects are more directly under their control. Some other aspects were of less interest for the participants such as site selection, safety power house and channel. Indeed, in most cases, they could not always find appropriate sites to build state-of-the-art channel due to natural geographical constraints.

Supplementing the training of safety issues, the instructors executed a survey on pico-hydro usages to feed the DOE database on rural energy demand trends and patterns.

VOPS recommended that this safety and awareness development be continued and extended to other provinces during the REP Phase 2 currently in preparation.

6. Short term financing schemes to support working capital needs of PESCOs

A new loan agreement was signed in July 2009 with the Luangnamtha PESCO amounting to 50,000,000 KIP including mainly supply of batteries, lamps. This loan is being implemented without any difficulty with timely transfer of the three first installments.

The Champasak PESCO has submitted a business plan for a second loan. It is currently under consideration by DOE who will from now on be responsible for loan agreement.

7. PESCOs network

After several months during which supervision of activities was made by VOPS, a new PESCO has taken over responsibilities for the off grid operations in Vientiane province:

Anouxay Electricity Service Co Ltd in Cheangsavang,
Manager: Mr. Arthitsavanh Vongxai
Mob: 020 552 3243 and Fax: 023 211 359

There are currently 16 active PESCOs in 15 provinces of the country since, for geographical reasons, two PESCOs are operating in Xayabury province.

8. Forthcoming events

PESCO workshop from 9 to 13 December 2009
Final VOPS workshop in January 2009