Technology a data sheet: MIH-JICA pilot program

Type of project: (tick off the type)	PV	Solar Thermal	Biomass to Energy	
	✓			
Project name:	**MIH-JICA pilot program (monthly charge)**			
Location of the plant	**Lao PDR** Don Xayoudom island, Keooudom district Vientane province			
Year of Implementation:	1999-2003			
Operator (Name and Address)	Village electricity committee Don Xayoudom, Keooudom district, Vientiane province			
Planner: (Name and address)	Rural Electrification Division and Japan International Cooperation Agency (RED-JICA)			
Detailed description of the installation: (technology, function, benefit for users, etc. max 150 words)	In 1999, the Japan International Cooperation Agency (JICA) supported the Ministry of Industry and Handicrafts in piloting solar home systems and small battery charging station at two provinces: Vientiane and Bolikhamxay. The objectives of the projects were to gain experiences of village electricity management scheme, to demonstrate it acceptability of Lao people and also to draft the master plan for National Rural Electrification with favouring renewable energy resources. Formed village electricity committee (VEC) was entrusted to manage the installed systems. The MIH-JICA pilot projects installed solar home system of two sizes (55 Wp and 110 Wp) and BCS of several sizes, between 1-3 kWp. The Small Solar home system are designed for lighting. The system consists of 55 Wp PV panel with mounting pole, 15 A Charge controller, 110 Ah Car Battery and one 8 W energy saving fluorescent lamp and one 12 V DC wall outlet All system components were granted by the project and belong to the project. The users will pay for monthly charge. For Solar home system, the users will play 10 US$ for installation fees and 1 US$ for monthly charge. For battery charging station, VEC will manage, operate the system and collecting money from user for charging feed at cost of 0.4 US$ per month of one battery(7 times charging cycle per month). Each month VEC will send Depart of Electricity, MIH the collected money of 30 US$ for station capacity of 3 Kwp and 20 US$ for station capacity of 2 Kwp			
Generated Energy service: (tick off the energy type)	Electricity	heat	gas	Light
	✓ (12V DC)			
Power output of installation: (kWel, m³ biogas, kW th, etc.)	55 W			
Financing (tick off the financing type)	Private investment	loan	donation	grant
				✓
Investment costs in US$	The cost of SHS 55Wp of install capacity is around 550 US$,			
Maintenance costs in US$	Around 0.4 US$ per month for distilled water for			

	batter this cost is not include replacement of lamps and other damaged components
Savings:	Around 30 US$ per year saved cost of battery charging (the battery carried by small boat to charge in electrified village, roundtrip takes about 3 hours) or saved kerosene and candles.
Energy sale income in US$:	no
Comments:	The system provides bester light and more convenience for doing activity in night time compare to kerosene or candles. It is easy to operate and not much time taking for maintenance just clean panel in some time, refill distiller water to battery.
Pictures and graphics	
 Solar Home System diagram	 PV panel with support pole  Battery connected to breaker and Loads.