MISSION

Cambodia

- 16.5 million inhabitants
- 144th out of 189 on the HDI
- 37% of the population is poor
- 29% of the population has no access to the national electricity grid

2- Human Development Index
3- According to Multidimensional Poverty Index (IPM)

A vital need for electricity

In rural areas, 30% of Cambodian households are not connected to the electricity grid and use kerosene lamps or old car batteries. These are inexpensive to buy but very expensive to use. They also cause fires and emit noxious fumes. Moreover, they are far from providing the work and study conditions required to lift people out of poverty. Solar micro-grids can be an excellent alternative as they provide uninterrupted access to sustainable, safe and economical electricity!

Good quality solar equipment

Entrepreneurs du Monde created the social enterprise Pteah Baitong in 2015, to provide good quality solar lighting kits for the most vulnerable families in rural areas. Since 2018, Pteah Baitong has also been catering for growing energy needs by installing and managing solar micro-grids which provide green, affordable and reliable electricity with enough power to enable the development of revenue-generating activities. The team is also looking to diversify its range of equipment for productive use (e.g. egg or cricket incubators, water pumps, etc.).

BACKGROUND

A local distribution network

In three of the rural areas most affected by energy poverty (Kampong Speu, Svay Rieng and Takeo), Pteah Baitong has recruited and trained vendor-installers of solar appliances, ranging from individual lighting kits to connected micro-grids. They apply the comprehensive strategy created by Pteah Baitong: branding, communication tools, sales events, high-quality installation and maintenance. These vendors are proud to be able to provide their communities with equipment with a strong social impact!

Structuring and consolidating

Entrepreneurs du Monde supports Pteah Baitong in its structuring and development in all aspects: legal, operational and financial. Eventually, Pteah Baitong will be a viable and sustainable local social enterprise, supported by a 100% Cambodian team. While they are still looking for the best economic model to adopt, the prospects offered by the development of solar micro-grids, coupled with productive uses of energy, are a source of hope!

METHODOLOGY

INCUBATION

Technological innovation to facilitate access to energy for the poorest

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HIGHLIGHTS

OUTLOOK

Growth in sales of solar-powered egg incubators
Sales of solar-powered egg incubators rose in 2020: 109 incubators were sold and installed. In a satisfaction survey, 2/3 of users reported an increase in income and an improvement in their standard of living, and 80% said they would recommend this solution to other farmers.

The team is also innovative where its distribution network is concerned: it has recruited farmer-demonstrators and entered into contracts with veterinary centres.

Bringing electricity to a new village
The village of Steung Chrov is situated 5 hours north of Phnom Penh, on the banks of the Tonle Sap lake. Only accessible by boat, it is flooded for half the year and cannot be connected to the national electricity grid. A standalone solar electrification project has been launched as part of a partnership between the UNDP, Okra Solar and the Cambodian Ministry of Mines and Energy. Pteah Baitong is responsible for equipping 100 homes. Following this pilot project, it should be possible to provide electricity for a further 210 villages.

Extension of solar mini-grids
Pteah Baitong wants to extend and optimise its solar micro-grids to make them more resilient. For example, a partnership with the Nordic Development Fund will enable it to roll out long-life lithium-ion batteries. Other areas for improvement have been identified: the organisation of maintenance teams and the payment system, the development of the connection network between houses.

Development of productive uses of energy
In 2021, Pteah Baitong plans to expand its range of productive appliances which increase the efficiency of households' economic activities. Alongside this, an overhaul of its tools and digital marketing strategy will increase Pteah Baitong's visibility on social networks, and thereby enable it to reach more beneficiaries in the future.

PARTNERS

CONTACTS

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FOCUS

ACCESS TO MODERN & CLEAN COOKING APPLIANCES

In late 2020, Pteah Baitong conducted a large-scale study to analyse the impact on communities of the use of modern and clean cooking appliances.

It also questioned 100 families from three villages about their cooking habits. The survey results showed that they use mainly rudimentary cooking equipment (predominantly using coal or wood) which have dire economic, health and environmental consequences.

At the end of this first phase of the study, 75 families were selected to take part in a two-month trial. They could choose from three electrical appliances: a rice cooker, a mixer or a thermos kettle, and were then trained to use these small appliances by Pteah Baitong’s teams.

At the end of this trial period, the Pteah Baitong teams conducted a satisfaction survey. The results of this study will help them to identify how they can improve the families’ living conditions by supplying them with electrical appliances that meet their needs and are compatible with the micro-grids operated by Pteah Baitong.

So Pteah Baitong will be in a great position to facilitate access to modern, efficient equipment which will have an immediate impact not only on the users’ health and budget, but also on the environment.