

Lao PDR: Rural Electrification Program



Powering the Countryside: The Lao PDR Rural Electrification Success Story

Overview

The Rural Electrification Program supports the development of the Laotian power sector, extending the electricity grid to rural households, which account for 68% of the total population, while also promoting off-grid renewable energy throughout the country. Between 1995 and September 2010, electricity access across Lao PDR has steadily increased to 71% from 16%, reaching 730,000 households.

Challenge

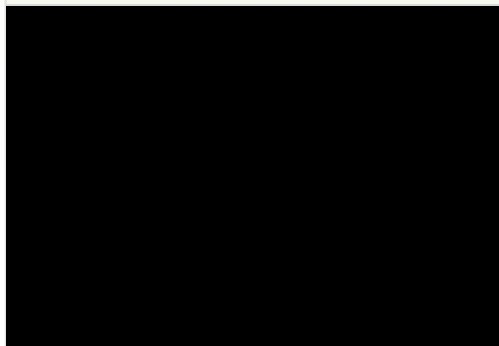
At the beginning of the Program, the underdeveloped state of rural infrastructure in Lao PDR was a major constraint to rural economic growth and poverty alleviation. Only 8% of rural Lao households were connected to the electricity grid (compared to over 60% in Vientiane). To help relieve rural poverty and create opportunities for broad-based growth, the Government's power sector policy focused on making sufficient, reliable and affordable electricity widely available.

Approach

The program was established to provide electricity to the seven southern provinces of Lao PDR, to strengthen the capacity of the country's power utility (Electricité du Laos or EdL), to expand its reach to the rural poor, and to help EdL operate on a commercial basis. It also aimed to support the Department of Electricity within the Ministry of Energy and Mines in off-grid electricity supply and rural electrification planning.

The Bank's programs in the power sector in Lao PDR have combined investments with policy assistance and capacity building. They support EdL, the state-owned power utility, which is steadily expanding the power grid throughout the country. The Rural Electrification Program covers social and development aspects, such as:

MULTIMEDIA



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More Results



71%

of households with electricity in 2010, up from 16% in 1995.

MORE INFORMATION

- » Southern Provinces Rural Electrification Project
- » Rural Electrification Program I

Cross-subsidies in the tariff system covering 20% of the cost of supply to rural households to ensure that electricity costs for rural households are not higher than alternatives for lighting (kerosene and rechargeable batteries).

- **Village screening program** that ensures that villages with clinics, schools, irrigation systems and higher potential for economic growth are prioritized.
- **Power to the Poor**, a component that provides interest-free credits for poor families to connect to the grid. It particularly benefits female-headed households, since these are usually the poorest and most vulnerable in rural communities.
- **Productive Use of Electricity program** provides support to local communities and rural households to use electricity for income generation.

- » Rural Electrification Program I - Global Environmental Facility Additional Financing
- » Rural Electrification Program II
- » Country Website
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Results

- In 1995, only 15% of households in Lao PDR had access to electricity. By November 2010, access had increased almost five-fold, reaching 71% of the population in 734,600 households. This program supported access for 200,000 of these households.
- Of the total households connected, 35,000 use off-grid systems such as solar home systems or mini-hydro power plants.
- A comprehensive socio-economic survey conducted in 2005 showed a growing number of new businesses in newly-electrified villages, especially retail stores, weaving and knitting shops, and rice mills, averaging 30 new businesses per village since electricity arrived. The use of electric tools and appliances has improved living standards and allowed for other productive activities. Also, the electrical lighting extends the evening hours for the family to work at home or to study.
- Technical assistance to EdL has built the agency's capacity in planning, design, procurement, installation, and environmental and social impacts assessment.
- Through the Power to the Poor program, connection rates in previously-electrified villages jumped on average to 95% from 70%.
- The program designed an innovative system to manage the off-grid connections in remote areas. Solar home systems and small village-based hydro schemes helped electrify more than 23,000 households in villages without grid coverage.

Voices

“My life is normal now, not like in the past when we couldn't see well. Since we've had electricity, we can save 40,000 to 50,000 Kip (around US\$5-6) a month because we can make more mats and fishing nets. Before, we couldn't make any more money but now we can do whatever we want whenever we want to do it.”

— Ms. Pan, a widow who makes a living weaving fishing nets and mats

Bank Contribution

The World Bank Group is directly contributing US\$83.9 million to connect about 200,000 households through the program, comprising US\$65 million in International Development Association (IDA) grants and US\$18.9 million in loans from the International Finance Corporation (IFC).

Partners

Given limited IDA resources, the Bank focused on mobilizing co-financing from other donors, including Australia's AusAID (US\$10.1 million), Norwegian Agency for Development Cooperation - NORAD (US\$14.0 million), the Global Environment Facility (US\$6.3 million), and the Energy Sector Management Assistance Program (US\$500,000). The Lao Government contributed US\$15.7 million and local communities US\$8 million, for total financing of US\$138 million.

Toward the Future

The Government faces the major challenge of connecting 90% of the country's households to reliable electricity supplies by 2020. Building on the success of the program, IDA plans to continue its support to the Government through rural electrification projects, a regional power trade project, and various technical assistance initiatives to build capacity in the sector. These projects will further broaden electrification access in rural areas, as well as related systems that service the regional power trade goals.