

SKAT CASE STUDY SERIES

DOSSIER: EDUCATIONAL FACILITIES EF3, 2007

## **Basic Education (Girls) Project (BEGP) in Lao People's Democratic Republic**

Financed by Asian Development Bank and the Government of Lao P.D.R.  
Overall Responsibility by Ministry of Education Lao P.D.R.  
Project Consultants: SKM, Australia / Skat, Switzerland



**PROJECT INFORMATION**

front page:  
School building in Oudomxay

top:  
Well thought out classrooms provide a motivating learning environment. The generous veranda can be used by the villagers for social activities

right:  
Sustainable design for rural schools



**The country**

The population of the Lao People's Democratic Republic is 6.1 million, and growth is estimated at 3.1% per year. There are 47 ethnic minorities. With an estimated annual income of US\$ 381 in 2000, the Lao PDR ranks among the least developed countries in the world. The country consists of 18 provinces, in which there are 135 districts and about 12,000 villages.

The current five years plan of the Ministry of Education emphasises three key objectives: Equitable access, quality improvement,

**The regional perspective**

and improved relevance. There is limited access to primary education, especially for remote areas - girls in areas of ethnic minorities suffering most. In 2001 it was estimated that there were about 8,000 schools of which 19% were regarded as being in good condition, and only 35% were offering the full five years of primary education. About 4'000 villages, mostly in mountainous areas, had no schools at all. 58% of the schools are regarded as being of temporary construction.

The overall objective of concern here is

**The objective**

universal primary education by 2015 - providing access to at least five years of education for all Laotian children. Education is seen as a key step towards poverty reduction. The project objective of the construction component was the provision of adequate, technically realistic, affordable, and environmentally sound schools and district education offices in 52 districts.

Approximately 8,000 primary schools need to be built, extended or refurbished. In terms of classrooms, it is estimated that a

**The need**

total of 30,000 classrooms are needed for primary education, and that only 10,000 will be available at the end of the current externally supported construction projects. Furthermore, it is not enough to construct the buildings, but the buildings need furniture, books and teaching materials, and of course, teachers. The schools need to be administered and the buildings maintained. So school construction must be embedded into a national education development programme. The building programme must not be isolated from these other aspects.



## BUILDING CONSTRUCTION

top:  
Building site of new school

left:  
Modern architecture combined with  
local techniques and materials

### The partners

In addition to the building programme of the National government, there have been a number of multilateral and bilateral partners, who have become involved in the construction of schools. The main external support agencies are the Asian Development Bank, the World Bank, and the governments of Japan and Australia. Non-governmental organisations also play a major role.

Construction of schools is generally undertaken by contractors selected through tender bidding. The availability and capacity of contractors sets a

### The implementation approach

ceiling on the number of schools that can be constructed during the project implementation periods. Both national and international contractors were invited to bid for the construction of schools. Since the applied construction technology and building materials are well known in Laos the schools were mainly built by local contractors from the village itself or the neighbouring area thus creating ownership and stimulating the local economy.

The government contribution to civil works is fixed at a uniform level of 27% of the

### Government and community contributions

construction costs. The local communities are requested to make minimal contributions to the construction of their schools. The contributions required are typically the land for the site, the provision of water sources, the construction of railings to fence in the site, access road, and maintenance of the building. Involving the community in this way not only saves on costs, but also provides an important indicator of the commitment of the community to run and maintain the school, and it strengthens the sense of ownership.

### Site selection

Without clear site selection criteria and a determination to work according to the above criteria, the schools would be located close to major towns, in places served by good roads, and according to the directions and patronage of influential local leaders. Girls and ethnic minorities would continue to lack access. Therefore, in the overall interest of the nation, and keeping poverty reduction in mind, the ADB projects have defined their selection criteria. Selection will also allow to integrate project components such as ensuring the availability of teachers for the schools to be built.

**Project team** (related to the construction component of the project only)

Among others, one reason for the success of the project was the constitution, professional capacity and good collaboration of the project team. The key actors remained the same from inception to completion of the project (2001 – 2007) thus ensuring continuity and creating ownership.

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Mrs Yangxia, Project Director  
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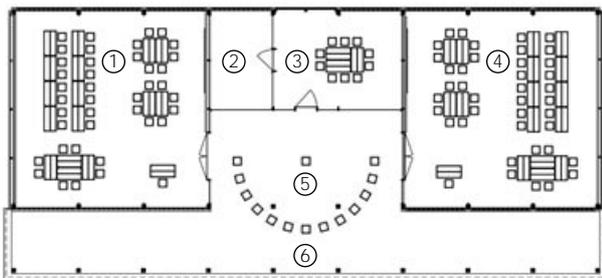
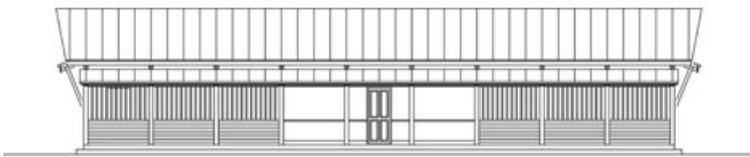
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# A sustainable solution

<b>FUNCTION</b>	Basic Education (Girls) Project
<b>LOCATION</b>	Lao P. D. R.
<b>LENDER</b>	Asian Development Bank
<b>PROJECT CONSULTANT</b>	SKM Australia
<b>ARCHITECTS, ENGINEERS</b>	Skat Consulting, Switzerland / MoE Laos
<b>YEARS OF CONSTRUCTION</b>	2001-2007

PROJECT DATA

## Example 2-Classroom School



### Legend

- 1 Classroom 1
- 2 Store
- 3 Teacher's room
- 4 Classroom 2
- 5 Covered area
- 6 Veranda

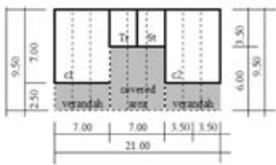
## PROJECT SCOPE

<b>Number of schools built:</b>	512
<b>Number of district education offices built:</b>	43
<b>Number of districts served:</b>	52

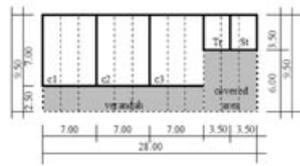
## BUILDING COST AND MATERIALS USED

<b>Construction cost per m<sup>2</sup>:</b>	US\$ 80. 00 (national average)
<b>Foundations:</b>	Concrete
<b>Walls:</b>	Concrete / wood
<b>Roof:</b>	Wooden trusses / corrugated iron- or fibre cement sheets
<b>Overall costs of civil works:</b>	US\$ 9.458 Mio
<b>Overall costs of furniture:</b>	US\$ 2.431 Mio

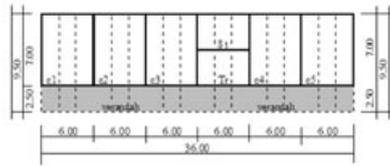




Scheme of a 2-classroom multi-grade school



Scheme of a 3-classroom multi-grade school



Possible scheme of a 5-classroom single-grade school

### Multi grade teaching

The population of the target villages located in rural areas is often small with less than 100 pupils divided up into five grades. Tuition of the five grades takes place in two classrooms, which calls for a multi-grade teaching methodology that is new in Laos. Hence, the project has put much emphasis on facilitating tuition of two or three grades in one room. These efforts were underpinned by the decision to install blackboards that are movable all along the four walls of the classroom. In addition to this, a working bench along the windows was built in, and specific furniture was designed to permit suitable arrangements for individual group works.

### Architectural layout

The architectural layout is simple, appropriate, and very cost-effective. It offers a wide range of options to communities and government, trying to give consideration to their needs and the available financial and natural resources as much as possible. The building design seeks to maximize the reflection of local character, cultural traditions and preferences. The basic idea was to build a solid structural frame (floor, columns and roof). All the other building parts (walls ceilings, etc.) are not load bearing and constructed in a way that they can be easily maintained, replaced or improved, e.g. from wood boarding to plastered masonry.

### Cost effectiveness

The rural multi-grade school buildings are utilised intensively during school hours. However, to give them even increased public importance and make them more economically viable, the buildings are used for various other purposes such as:

- Daily: Adult education (night school)
- Periodically: Social work, community meetings
- Occasionally: Natural calamities shelter, voting centre, etc.

To meet this demand, a covered area was provided for each building. During daytime teachers can use it as an additional "outdoor classroom" for group-work typical in multi-grade teaching. After school villagers may use it for social activities thus avoiding that the classrooms get dirty.

### Water and sanitation

Each school is provided with water supply and sanitation facilities. Very often, the school toilet is the first of its kind in the village. Teachers and students undergo a specific training in hygiene promotion including the use of toilets.



left:  
Under the BEGP, DEB's  
(District Education Offices)  
where built for 43 districts