PREPARATORY SURVEY REPORT
ON
THE PROJECT
FOR
THE IMPROVEMENT OF SCHOOL ENVIRONMENTS
IN CHAMPASACK AND SAVANNAKHET PROVINCES
IN
LAO PEOPLE’S DEMOCRATIC REPUBLIC

March 2010

JAPAN INTERNATIONAL COOPERATION AGENCY
MOHRI, ARCHITECT & ASSOCIATES, INC.
PREFACE

Japan International Cooperation Agency (JICA) conducted the preparatory survey on the Project for Improvement of School Environments in Champasack and Savannakhet Provinces in the Lao People’s Democratic Republic.

JICA sent to Laos a survey team from August 2 to September 12 and November 8 to November 23, 2009.

The team held discussions with the officials concerned of the Government of Laos, and conducted a field study at the study area. After the team returned to Japan, further studies were made. Then, a mission was sent to Laos in order to discuss a draft outline design, and as this result, the present report was finalized.

I hope that this report will contribute to the promotion of the project and to the enhancement of friendly relations between our two countries.

I wish to express my sincere appreciation to the officials concerned of the Government of Lao People’s Democratic Republic for their close cooperation extended to the teams.

March, 2010

Nobuko Kayashima
Director General, Human Development Department
Japan International Cooperation Agency
March, 2010

Letter of Transmittal

We are pleased to submit to you the preparatory survey report on the Project for Improvement of School Environments in Champasack and Savannakhet Provinces in the Lao People’s Democratic Republic.

This survey was conducted by Mohri, Architect & Associates, Inc., under a contract to JICA, during the period from July, 2009 to March, 2010. In conducting the survey, we have examined the feasibility and rationale of the project with due consideration to the present situation of Laos and formulated the most appropriate outline design for the project under Japan’s Grant Aid scheme.

Finally, we hope that this report will contribute to further promotion of the project.

Very Truly Yours,

Akira Sugiura
Project Manager,
Preparatory Survey team on the Project for Improvement of School Environments in Champasack and Savannakhet Provinces
SUMMARY

1. Country Profile

Lao People’s Democratic Republic (hereinafter referred to as “the Lao PDR”) is a landlocked Southeast Asian country with an area of 240 thousand sq. km and a population of about 5.9 million (World Bank 2007), and shares its borders with Thailand, China, Vietnam, Cambodia, and Myanmar. 80% of its territory is covered by mountains and plateaus, while flatlands are limited to the Mekong River areas. The climate is tropical and monsoonal. There is a distinct rainy season from May to October, followed by a dry season from November to April. The hottest time of the year is between March and May, when the temperature reaches about 40°C. The annual precipitation is over 1,500mm.

The series of civil wars after the 1953 independence came to an end when the monarchy was abolished and the Lao People’s Democratic Republic was established in December 1975. Politically, the country features a single-party system led by the Lao People’s Revolutionary Party that adheres to Marxism-Leninism. Policies and party posts are determined in a party congress held once every five years. The 8th party congress in 2006 was the latest one, and the next party congress and election are scheduled for 2011.

On the economic front, in line with the Soviet Perestroika, the country introduced a “New Economic Mechanism” in 1986 to reform its economy. Since then, the Lao PDR has deregulated its banking system, privatized state enterprises, enacted foreign investment laws, etc., to further accelerate the open market. At the 8th party congress, the government promulgated a long-term action plan for the Lao PDR to grow out of the Least Developed Country status by 2020 and realize Millennium Development Goals by 2015.

The major industries are agriculture, manufacturing, forestry, mining and hydroelectric power. The major export products are garments, gold/mining products, electricity, and timber, while the major import goods are fuel, manufactured products, and garment materials. The ratio of each industry to GDP in 2006 is 40% for the first industry, 32.5% for the second industry, and 25.5% for the third industry. GDP per capita is US$ 678 (2007, the Government of Lao PDR).

2. Background of the Request

“The Sixth National Socioeconomic Development Plan (NSEDPC: 2006-2010)” of Lao PDR adopts the goal of “the qualitative and quantitative improvement of human resources through educational reform” in the educational sector, which ranks as one of the top priority sectors. Also, the Ministry of Education (MOE) has set specific programs to achieve “Education for All” by 2015.

Thanks to these efforts, the nationwide primary education net enrollment ratio rose steadily from 82.5% in 2002 to 92.7% in 2008, but the CLV (Cambodia, Laos, and Vietnam) Development Triangle Area has a high poverty rate and many children not attending school. Particularly, the educational
environment in the region remains very poor. For example, many schools are unable to offer the 5-year compulsory education, and still conduct lessons in dilapidated and/or temporary classrooms that require urgent repair or rebuilding. On top of that, 20% of villages in the region had no primary school in 2005.

Furthermore, in Laos, as the lower secondary education has been extended from 3-year to 4-year since 2009/10, additional classrooms are needed in lower secondary schools.

Since December 2007, the Government of Japan has been implementing “the Project of Supporting Community Initiatives for Primary Education Development in the Southern Provinces (CIED Project)” which is a technical cooperation project for Sekong Province, Salavane Province and Attapeu Province to improve the educational environment in the Southern Region. At the same time, the Government of Japan has also been implementing the “Project for Improvement of School Environments in the Three Southern Provinces” as a Japanese Grant Aid for Community Empowerment (GACE) project aiming to support CIED Project schools in terms of infrastructure.

At the same time, Champasack and Savannakhet Provinces, also located in the Southern Region, are still afflicted with a severe shortage of school buildings and classrooms. Even though there are school buildings, many of them are dilapidated and/or temporary ones requiring urgent rebuilding. Overall, the education environment is quite poor in the provinces.

Against this background, the Government of Lao PDR has requested the Government of Japan to provide grant aid for the construction of facilities and provision of equipment for the primary and lower secondary schools in Champasack Province and Savannakhet Province, in order to further improve the school environment in the Southern Region.

Initially, the Government of Lao PDR had requested to construct 261 schools (161 primary and 100 lower secondary schools) in 25 districts in the two provinces. The requested components included facility construction (classroom, teachers’ room, library, toilet, water supply systems and educational furniture), procurement of library books, and construction of access roads. At meetings held during the Field Survey, it was agreed for the team to survey 150 schools in 12 districts in the 2 provinces. Also, at the time of the Field Survey, an additional request to construct science laboratories was made.

The following table summarizes the number of requested schools by district and province.
### 3. Brief Outline of the Field Survey and the Contents of the Project

Based upon the request, the Government of Japan conducted the field surveys. Field Survey 1 (August 2 – Sept 12, 2009), Field Survey 2 (November 8 – November 23, 2009), Explanation of Draft Report (January 10 – January 23, 2010) and Explanation of the Technical Reference for Tender Documents (March 8 – March 17, 2010) were carried out. The Project has been planned based upon the following policies, incorporating the requests from the Government of Lao PDR, the Field Surveys, and a series of discussions.

#### 3-1. Short-listing the Project Schools

Of the 150 requested schools, 91 schools (61 primary schools, 30 lower secondary schools) are identified as the Project Schools. All the 61 primary schools are existing ones, while 3 of the 30 lower secondary schools are to be newly established. When short-listing the Project Schools, the following schools were excluded: (i) schools not having any need for classrooms, (ii) schools not having a good access road for construction work, (iii) schools needing relocation but having problems, (iv) schools having problems in construction sites, (v) schools having lower priority from the viewpoint of the Lao Side.

#### 3-2. Planned Components

This Project for the construction of school facilities consists of the addition of new classrooms, the rebuilding of dilapidated and/or temporary classrooms (excluding work to demolish dilapidated and/or teachers’ houses).
temporary school buildings, which will be undertaken by the Lao side) and the construction of new school buildings. Besides classrooms, the facility components include teachers’ rooms, science rooms, storage, toilets, and furniture as additional components. The Project does not provide schools not having any need for additional classrooms with such additional components. In addition, the facilities of pre-schools or upper secondary schools that are annexed to the primary or lower secondary schools are not included in this Project.

3-3. Design Standard
There are no established construction standards or design standards for school construction yet in Laos, and so far schools have been constructed to different standards and designs by various donors in various projects. In 2009, the Lao Ministry of Education began formulating Guidelines for School Construction, which define the minimum standards and target values in the construction of schools. In this Project, the construction plans will also be drawn up with reference to the standards and target values given in the Guidelines.¹

3-4. The Number of Classrooms to be Constructed
For each of the schools selected for this Project, the number of classrooms lacking will be constructed. The number of classrooms lacking is calculated using the following formula: “Number of classrooms lacking = Adequate number of classrooms – Number of usable classrooms.” The adequate number of classrooms is based on the assumption of 32 students per classroom for a primary school and 40 students per classroom for a lower secondary school.

3-5. Narrowing Down the Components
Of the requested components, the water supply system was removed from the Project components, as it is communities that usually secure a water source in the Lao PDR. Access roads are also excluded from the Project components, because the Project selected only accessible school sites for survey. In lieu of libraries, storage will be provided where students can read books. To add, library books are not covered under the Grant Aid. Though science laboratories were added to the request during the Field Survey, considering that teachers who are able to conduct scientific experiments are in shortage and the standard science equipment list is not available, science rooms with sinks that are convertible to full-fledged science laboratories in the future are provided to the lower secondary schools which the team and the Lao Side selected.

3-6. Contents of the Project
The number of Project schools and facilities to be constructed by district and province are summarized in the table below.

¹ In December 2009, “School Construction Guidelines” was finalized.
### Table 1: School Facilities, 2000

<table>
<thead>
<tr>
<th></th>
<th>Schools</th>
<th>Classrooms</th>
<th>Teachers’ Rooms</th>
<th>Storage</th>
<th>Science Rooms</th>
<th>Toilets</th>
</tr>
</thead>
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<tr>
<td><strong>Champasack</strong></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>35</td>
<td>169</td>
<td>31</td>
<td>34</td>
<td>-</td>
<td>30</td>
</tr>
<tr>
<td>Lower Secondary</td>
<td>15</td>
<td>83</td>
<td>8</td>
<td>14</td>
<td>1</td>
<td>12</td>
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<tr>
<td>Total</td>
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<td>252</td>
<td>39</td>
<td>48</td>
<td>1</td>
<td>42</td>
</tr>
<tr>
<td><strong>Savannakhet</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>26</td>
<td>92</td>
<td>22</td>
<td>26</td>
<td>-</td>
<td>17</td>
</tr>
<tr>
<td>Lower Secondary</td>
<td>15</td>
<td>60</td>
<td>6</td>
<td>14</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>41</td>
<td>152</td>
<td>28</td>
<td>40</td>
<td>1</td>
<td>25</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>91</td>
<td>404</td>
<td>67</td>
<td>88</td>
<td>2</td>
<td>67</td>
</tr>
</tbody>
</table>

4. **Project Implementation Period and Cost to be Borne by the Lao Side**

The Procurement Management Contract and the Consultant Contract will be concluded first, after which the tender documentation for selection of contractors will be prepared. Each work contract will be awarded to the successful contractor through tender, tender evaluation, contract negotiation and approval by related authorities. It is anticipated that these formalities will require a period of 5.0 months.

About 7.0 months is required for the construction of a one-story school building. Since the construction works in this Project will be implemented by 2 groups working in the dry season and the rainy season respectively, the entire project from the conclusion of the Procurement Management Contract to the completion of the project and the closing of the offices (not including the warranty inspection) will require a period of 20.0 months.
5. Relevance of the Project
The Project is expected to bring about the following direct effects.

1. Of the 480 existing classrooms, only 198 are usable in mid-long term. The Project will construct a total of 404 classrooms. In doing so, the number of usable classrooms will increase to 602 and the number of students who can study in a decent learning environment will increase to 21,200 from 7,100.

2. Of the 91 Project schools, 67 have no toilet. The Project will provide toilets to the 67 schools. In doing so, all the 91 Project schools will be equipped with toilets.

3. Of the 91 Project schools, 67 have no teachers’ room. The Project will provide teacher’s rooms to the 67 schools. In doing so, all the 91 Project schools will be equipped with a teachers’ room.

Furthermore, in order that the facilities provided in the Project are used continuously and effectively, the Ministry of Education and local authorities are requested to address the following issues.

① The Project schools must be staffed with the necessary number of teachers and staff.
② The Project schools must be provided with the necessary operational and maintenance budget.
Since the Project is expected to produce many important benefits, and simultaneously to contribute to the Basic Human Needs (BHN) of community residents, it is confirmed appropriate to assist in a part of the Project using the Grant Aid for Community Empowerment. In addition, it is confirmed that the Lao Side has sufficient manpower and finance to operate and maintain the Project facilities and therefore, no problems are anticipated. Hence, the Project is expected to be implemented smoothly and efficiently.
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<thead>
<tr>
<th>Abbreviations</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>A/M</td>
<td>Agreed Minute</td>
</tr>
<tr>
<td>BESDP</td>
<td>Basic Education Sector Development Program</td>
</tr>
<tr>
<td>CIED Project</td>
<td>Community Initiatives Education Development Project</td>
</tr>
<tr>
<td>DEB</td>
<td>District Education Bureau</td>
</tr>
<tr>
<td>DOF</td>
<td>Department of Finance</td>
</tr>
<tr>
<td>DPC</td>
<td>Department of Planning and Cooperation</td>
</tr>
<tr>
<td>DPPE</td>
<td>Department of Pre-service and Primary Education</td>
</tr>
<tr>
<td>DSE</td>
<td>Department of Secondary Education</td>
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<td>Education Construction Development Management</td>
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<td>Exchange of Notes</td>
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<td>Education Sector Development Framework</td>
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<td>G/A</td>
<td>Grant Agreement</td>
</tr>
<tr>
<td>JICS</td>
<td>Japan International Cooperation System</td>
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<tr>
<td>IT'SME</td>
<td>Project for Improving In-service Teacher Training for Science and Mathematics Education</td>
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<td>NEDP</td>
<td>National Education Development Plan</td>
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<td>NESRS</td>
<td>National Education System Reform Strategy</td>
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<td>NGPES</td>
<td>National Growth and Poverty Eradication Strategy</td>
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<td>NSEDP</td>
<td>National Socio-Economic Development Plan</td>
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<tr>
<td>PES</td>
<td>Provincial Education Service</td>
</tr>
<tr>
<td>PUCDA</td>
<td>Provincial Unit for Construction and Development Assistance</td>
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</table>
Chapter 1 Background of the Project
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1-1 Background of the Request

“The Sixth National Socioeconomic Development Plan (NSED P: 2006-2010)” of Lao People’s Democratic Republic (Hereinafter referred to as “Lao PDR”) adopts the goal of “the qualitative and quantitative improvement of human resources through educational reform” in the educational sector, which ranks as one of the top priority sectors. Also, the Ministry of Education (MOE) has set specific programs to achieve “Education for All” by 2015.

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Against this background, the Government of Lao PDR has requested the Government of Japan to provide grant aid for the construction of facilities and provision of equipment for the primary and lower secondary schools in Champasack Province and Savannakhet Province, in order to further improve the school environment in the Southern Region.
1-2 Natural Conditions

Lao PDR is a landlocked Southeast Asian country with an area of 240 thousand sq. km and a population of about 5.9 million (World Bank 2007), and shares its borders with Thailand, China, Vietnam, Cambodia, and Myanmar. 80% of its territory is covered by mountains and plateaus, while flatlands are limited to the Mekong River areas. The climate is tropical and monsoonal. There is a distinct rainy season from May to October, followed by a dry season from November to April. The hottest time of a year is between March and May, and the temperature reaches about 40°C. The annual precipitation is over 1,500 mm. The detail of the Southern Region, where the Project takes place, is discussed below.

(1) Weather
After the dry season (November – March), the rainy season starts from April. It rains heavily between May and September.

(2) Earthquake
While earthquakes hit the Northern Region, there is no earthquake in the Southern Region. Thus, seismic force is not considered in the structural calculation in the Project.

1-3 Environmental and Social Considerations

The implementation of this Project requires the felling of some trees but no large-scale land development, so that it will basically have no negative impact on the environment. This Project will not involve the involuntary relocation of local residents, so there will be no negative social impact.
Chapter 2 Basic Concept of the Project