

Evaluation Summary

1. Outline of the Project	
Country: The Lao People's Democratic Republic	Project Title: Project for Medical Education and Research of the Setthathirath Hospital
Issue/Sector: Healthcare and medical treatment	Cooperation Scheme: Technical Cooperation Project
Division in charge: Health Division 3, Human Development Department	Total Cost: 295 mill. JPY (Estimated cost as of the end of the Project)
Period of Cooperation December 2007 – December 2010	Partner Country's Implementing Organization: Ministry of Health, Setthathirath Hospital
	Supporting Organization in Japan: International Research Center for Medical Education, The University of Tokyo, and System Science Consultants Inc.
	Other Related Projects: Grant Aid of "The Project for the Construction of New Setthathirath Hospital" (1998-2000), and Technical Cooperation of "The Project for Improvement of the Setthathirath Hospital" (1999-2004)

1-1 Background of the Project

The Government of the Lao People's Democratic Republic (Hereinafter referred to as "Lao PDR") stated in "Health Strategy 2020" to ensure that all Lao people have access to health care services, and one of the important principles to achieve this goal is to improve the capacity of health staff at each level in order to ensure high quality services.

The Setthathirath Hospital is a general hospital with 186 inpatient beds and is a central hospital, which provides tertiary curative care in the country. At the same time, the Hospital plays a role of teaching hospital providing clinical training and education for both undergraduate medical students and postgraduate medical doctors. Japan provided support to the Setthathirath Hospital through grant-aid and technical cooperation projects to contribute to improve health and medical care services. In September 2004, the Setthathirath Hospital was ranked up from a Vientiane Municipality Hospital to a university hospital of the Faculty of Medical Sciences of the National University of Laos (now the University of Health Sciences).

On the other hand, there exists a problem of scarcity in number as well as insufficient technical skills of medical doctors in the country, especially in the rural areas. There is a strong demand to educate qualified medical doctors with ability to respond to the local needs and health issues. The Faculty of Medical Sciences of the National University of Laos started a two-year post-graduate program, namely Family Medicine Specialist Program to respond to such demand.

Under these circumstances, the Government of the Lao PDR has submitted a proposal to the Government of Japan for the Technical Cooperation Project for Medical Education and Research of the Setthathirath Hospital (hereinafter referred to as "the Project"), and the Project is now in practice.

As the Project is expected to be terminated within 6 months, the Terminal Evaluation was conducted in order to assess the achievements and draw lessons learned from the Project. The evaluation was jointly

undertaken by the Lao and the Japanese sides.

1-2 Project Overview

(1) Overall Goal

Quality of clinical training for medical doctors in the Lao PDR is improved.

(2) Project Purpose

Quality of undergraduate clinical training and early postgraduate clinical training for those who graduate from Faculty of Medical Sciences within two years at Setthathirath Hospital is improved.

(3) Outputs

- 1) Knowledge and know-how on clinical training of the Setthathirath Hospital as a teaching hospital is expanded.
- 2) The training management system is improved at the Setthathirath Hospital.
- 3) Capacities of trainers of clinical training for medical students/doctors are strengthened.

(4) Input (as of the termination of the Project)

1) Japanese Side

Dispatch of Japanese Experts	69.93 M/M
Local costs	Approx. 18,811,000 JPY
Provision of Equipment	Approx. 35,000,000 JPY
Construction cost for CLC	Approx. 10,000,000 JPY

2) Lao Side

- Allocation of Counterparts
- Provision of land and facilities including office for the Project
- Appropriation of operational cost
- Preparation of Training and Seminar

2. Terminal Evaluation Team

Team Leader:	Dr. Mitsuhiro USHIO	Executive Technical Advisor to the Director General, Human Development Department, JICA
Cooperation Planning:	Ms. Ayumi MIZUNO	Health Division 3, Health Group 2, Human Development Department, JICA
Evaluation and Analysis:	Dr. Yoichi INOUE	Consulting Division, Japan Development Service Co., Ltd.

Period of Evaluation: June 22, 2010 – July 8, 2010

Study Type: Terminal Evaluation

3. Summary of Evaluation Results

3-1 Achievements

(1) Output 1

The Objectively Verifiable Indicators (OVIs) for Output 1 are generally achieved at the time of the

Terminal Evaluation.

The Project focused their effort on expanding knowledge and know-how on clinical training by constructing Clinical Learning Center (CLC), establishing its operation system, improving access to medical information through the purchase of medical reference books and the improvement of library operation, and modifying medical record forms for better medical chart, as it turned out that the student are getting accustomed to utilize library for issues arising from their clinical training. Therefore, the Project attained certain progress in the advance of their knowledge and strengthening of problem-solving capacity.

(2) Output 2

The OVIs for Output 2 are generally achieved except for several indicators at the time of the Terminal Evaluation. It can be evaluated, in general, that fundamental management system for clinical training through TMC supervision of MTU and/or other training-related issues at the Setthathirath Hospital.

Other cooperating partner introduced the concept of Medical Teaching Unit (MTU) in 2005. However, MTU was not functioning due to a poor understanding of actual operating procedures as of the time of the commencement of the Project, one of which missions were supposed to directly provide assistance to activate MTU in clinical training in Lao PDR. After the commencement of the Project, the Project put clinical training into effect in the form of MTU under the administration of Training management Committee (TMC), which have the function of progress monitoring of clinical training and problem-solving arising from the MTU operation.

Currently, embeddedness of appropriate operation for MTU schedule control falls behind schedule, while TMC is in the process of taking countermeasures. Internal Monitoring (formerly “*External Audit*”) also remains as a big issue to be solved, due to unconsolidated implementation structure for monitoring at UHS and priority of expansion and acceleration of Training of trainers (TOT) related activities to the foundation of internal monitoring system.

(3) Output 3

The OVIs for Output 3 is generally achieved at the time of the Terminal Evaluation. As described above, fundamental management system of clinical training is basically established at the Setthathirath Hospital. Other teaching hospital, including regional/provincial hospitals where newly assigned as students receiving facilities, are currently in the process of reinforcement of capacity in terms of operational management for clinical training as well as clinical trainers’ pedagogy at the initiative of “*the Project for Medical Education in Laos (PMEL)*” under the indirect support from Japanese experts.

As for the “Medical Education Seminar”, certain progress has been observed in terms of “technical sustainability”. Initially, Japanese experts took the initiative in organizing the Seminars and delivered lectures. The Seminar changes its style from lecturing by instructors to workshop at the operational initiative of Lao Counterparts.

Meanwhile, in accordance with a strong request by the Ministry of Health (MOH), the Project provided TOT workshops at regional/provincial hospitals prior to receiving students, which was planned to deal with growing number of medical students. For this reason, the Project contributed the MOH and other relevant parties to maintain the quality of clinical training system in Lao PDR.

(4) Project Purpose

The OVIs for the Project Purpose are generally achieved at the time of the Terminal Evaluation.

Though the results from the survey for students' and trainee doctors' satisfaction for clinical training showed the difficulty in quantitative assessment as mentioned hereinbelow, it is suggested that satisfaction from the trainees were generally favorable from the results of qualitative assessment such as interviews and direct observations. It is comprehensively evaluated that the Project Purpose is achieved since the foundation of the clinical training in Lao PDR is seemed to be established through the improvement of learning environment (Output 1), appropriate MTU operation under the administration of TMC (Output 2) and the improvement of clinical trainers' pedagogy (Output 3).

However, teaching hospitals including regional/provincial hospitals other than the Setthathirath Hospital are still in the initial phase of the actual operation of MTU-centered clinical training. It is, therefore, required to implement further training in continuous manner and further improvement in terms of the training system itself, to promote the training system mature and consolidate.

3-2 Implementation Process

The concept of activities under Output 1 was to compile clinical cases systematically for the expansion of knowledge and know-how on clinical training at the initial phase of the project period. However, the results from baseline survey and understanding of real world with regard to clinical training in Lao PDR indicated the priority in improvement of information accessibility and learning environment for medical students as well as doctors. In response, the activities under Output 1 were modified in accordance with a series of discussions by mutual agreement at the time of the Mid-term Review survey. In consequence, the foundation of the clinical training in terms of learning environment was established through improvement of library operation, provision of learning and reference materials, construction of Clinical Learning Center (CLC), and administrative assistance for CLC. On the other hand, no negative influence of such modification was observed for the achievement of the Output 1.

Positive relationship between Japanese experts and Lao Counterparts is maintained after the time of the Mid-term Review. And, counterparts demonstrated a strong commitment to the project activities with high motivation for acquisition of knowledge and skills, as well as sufficient awareness of the importance of pre- and postgraduate education for the betterment of clinical services in Lao PDR.

3-3 Evaluation by Five Criteria

(1) Relevance: The relevance of the Project is highly maintained at the time of the Terminal Evaluation for the following reasons.

In addition to "*Health Strategy 2020*" aforementioned, "*The 7th Five-Year Health Development Plan 2011-2015*", which is placed as an incoming action plan, is being conferred with Sector Wide Groups (SWG) amongst the MOH and development partners to finalize. Issues with regard to human resource development are technically dealt with at the subordinating "Human Resource for Health- Technical Working Group (HRH-TWG)". The HRH-TWG also recognized MTU, of which the Project assisted to establish the practical operation, as an important and effective element for the capacity development of health personnel, especially for medical doctors. Therefore, it is considered that the purpose of the Project, aiming to improve the quality of clinical training for medical students as well as early graduates by MTU system under TMC administration, closely meets Laotian health policies, especially for capacity development for medical doctors at the time of the Terminal Evaluation.

Moreover, reinforcement of management system, improvement of educational environment and capacity

strengthening of clinical trainers, which were expected outputs of the Project, were highly reasonable for the improvement of clinical training, and for up-coming increase of medical students as well. Simultaneously, it is considered that the Project Purpose is highly consistent not only with needs from medical students and doctors but also with practical necessity of human resource development plan in Lao PDR.

With regard to the basic policy of Japan's assistance for Lao PDR, the Project aiming for future quality reinforcement of medical doctors through the improvement of quality of clinical training is placed at "Program for strengthening of human resource development in health" under "developing human resources and institution building related to the field of healthcare".

(2) Effectiveness: The effectiveness of the Project is considered to be high on average at the time of the Terminal Evaluation for the following reasons.

Three Outputs, set out in PDM, constitute necessary and sufficient conditions mutually for the achievement of the Project Purpose. Additionally, there found no logical error in the relation between the Project Purpose and Outputs, and objectively verifiable indicators for Outputs as well as the Project Purpose are favorably fulfilled at the time of the Terminal Evaluation Survey. Thus, it is highly expected that the comprehensive achievement of the project purpose by the end of the project purpose. Especially for the practical MTU foundation that was established by the Project, authorities of human resource development emphasized the importance of MTU in future quality clinical training in Lao PDR. Thus, it is implied that the Project implemented their activities effectively.

Meanwhile, even the Setthathirath Hospital established the organizational foundation for quality clinical training, yet to be consolidated. Thus, it is of necessity to advance the quality of clinical training in terms of organizational system. On the other hand, the Project was not directly engaged in improvement of clinical capabilities of medical doctors as well as students.

(3) Efficiency: The efficiency of the Project is generally high though several external factors vitiated the progress of the project activities.

CLC is efficiently used not only by hospital staff and medical students but also by other organizations such as UHS, cooperating partners, etc. Moreover, teaching materials and text books are utilized by other teaching hospitals as well as UHS, which was also confirmed through the direct observation by the Terminal Evaluation Team. It is notable that medical doctors and students effectively use medical reference books written in Thai language provided by the Project. Medical students are getting accustomed to utilize library for issues arising from their clinical training under the guidance of preceptors and clinical trainers. Thus, inputs from the Project were efficiently turned into the achievement of Outputs of the Project.

Effective collaboration with the university of Calgary and other cooperating partners contributed to the efficient implementation of the project activities. It is particularly worth noting that the Project and the University of Calgary developed a learning material in collaboration, by modifying existing material that was developed by the university of Calgary on the basis of their experiences. Therefore, it is considered the learning material should meet the actual conditions of clinical practices in Lao PDR. In addition, other learning materials are also developed on the basis of existing materials, which contributed the efficiency of the Project.

"SEA Games" and fire accident of CLC influenced on the efficient progress of the Project. But fortunately, there was little impact on the eventual achievement of the Project Purpose.

(4) Impact: The following positive and/or negative impacts are confirmed and/or expected by the implementation of the Project.

The Government of Lao PDR focuses on the enhancement of the capability of health professionals for the improvement of the medical conditions of the country. Activities in the Setthathirath Hospital that is promoting enhancement of the quality of clinical training are regarded as a base for the doctor training with guaranteed quality by the future. In this Project, activities are conducted with the emphasis on sustainability in the participant for the purpose of future prevalence of benefits through the activities. In particular, PMEL was formed by UHS and the representatives of four education hospitals and is conducting the activities enthusiastically including the implementation of TOT. Through TOT, the training management method in the Setthathirath Hospital is shared among other education hospitals and regional/provincial hospitals that were newly appointed for providing internship. In this way, the impact such as the institutionalization of TMC is confirmed. That is, the foundation of clinical training that has been established by the Setthathirath Hospital has evolved during the project period with the emphasis on the sustainability within Lao PDR, which means that the basis for achievement of the overall goal has been established.

On the other hand, the number of medical students who will receive training is expected to increase for the next five years so that obviously, the current important assumptions will not be satisfied. Currently, the scope of facilities made available to the training has expanded to the regional hospitals. The clinical training in Laos may fail and this may become a critical assumption. The measure for coping with increasing participants for clinical training is requested as well as the realization of a restriction on the number of students accepted by the Faculty of Medicine based on the demand. The issue of health professionals is discussed in HR-TWG of the SWG conference and at the same time, a practical handling method such as formation of a specialized task force in this matter is expected within the subcommittee meeting.

(5) Sustainability: A self-sustainability as well as a self-deployment of the benefits provided by the Project can be expected in some degree if continuous small-sized assistances are obtained by any means.

The Laotian Government highly evaluated the improvement of the quality of the clinical training implemented by this project. Highly comprehensive sustainability can be expected in the political and institutional viewpoints also as MTU are expected to be incorporated in the strategic plan for human resource development.

In the technical aspect also, although the Setthathirath Hospital can independently provide clinical training with the guarantee of a certain quality, it is still at the primary stage regarding the training. Other education hospitals and training hospitals of the provincial level are at the initial stage of introduction and the necessity for sustainable technical assistances even on a small scale is signaled.

To achieve the quality of clinical training across the whole of Laos, it is necessary to improve the learning environment and to train instructors. The necessity for some sort of financial assistance is suggested for proper implementation of clinical training for the increasing number of medical students.

3-4 Conclusions

In conclusion, even though the Project had been influenced by some outside factors, outputs are expected to be achieved by the end of the project period. The quality of medical training in Lao PDR, mainly in the

Setthathirath hospital, has been greatly improved, and relevance, effectiveness, and efficiency are all quite high nevertheless of short project period of 3 years.

In addition, positive impacts on other teaching hospitals and regional/provincial hospitals are already observed, so the output of the project can be positively evaluated. Moreover, since the project activities have been focusing on sustainability throughout the project period, technical and organizational sustainability is relatively high.

However, the rapid increase of medical students can greatly affect the medical training program in Lao PDR, thus it is suggested to discuss how to deal with this matter until the termination of the project period.

Also, not only organizational and environmental improvement, which the Project have been focused on, but also improvement of basic technique is crucial in order to improve the quality of medical training. Therefore, it is recommended to keep working hard to strengthen organizational and environmental improvement of teaching hospitals and improve clinical skill under the good coordination with institutions concerned.

3-5 Recommendations

<Ministry of Health>

- 1) MOH should continue the policy to develop community-based medical education and allocate the necessary budget to expand the success of medical education in central hospitals to provincial hospitals.
- 2) MOH should promote discussion about medical education under HRH-TWG, and invite related developing partners.
- 3) MOH should support UHS to conduct TOT by issuing the letter and making necessary arrangement to the teaching hospitals and provincial hospitals.

<University of Health Sciences>

- 1) UHS should technically and financially support TOT activities by PMEL, which is promoting MTU and TMC activities.
- 2) UHS should make technical advice to MTU and TMC activities in each teaching hospital and provincial hospital, and monitor these activities.
- 3) UHS should utilize teaching materials made by the Project.

<Teaching Hospitals>

- 1) Teaching Hospitals should establish and strengthen the management and operation of TMC
- 2) Teaching Hospitals should maintain management of clinical education through closer communication with UHS about MTU and TMC.
- 3) MOH, the University of Health Sciences, and each teaching hospital should recognize the current situation of living and learning environment of medical students and improve them such as providing study space and improving accessibility to relevant information (Textbook, Internet etc.).

<The Project>

- 1) The Project should strengthen the capacity of PMEL to maintain MTU and TMC activities.

- 2) Project should estimate the necessary cost of the TOT for the continuation.

3-6 Lessons Learned

- 1) Conducting a baseline survey was included in PDM from the beginning of the Project. The result of survey was useful to know the present situation and environment of medical education, and to decide direction of project activities, and it greatly contributed to the achievement of outputs.
- 2) In order to improve quality of education, it always needs long-term assistance by its nature. However, the Project has significantly contributed to establish a feasible foundation of clinical trainings in line with its actual situation, despite a short project period of three years. Thus, it is important to establish a sustainable foundation of educational system that can be achieved within medium and short term, with long-term point of view.
- 3) In many cases, it is very difficult to evaluate the “quality” of a project objectively; thus it tends to be subjectively evaluated. However, it is preferable to choose indicators, which are objectively measurable. If objective data are not available, it is important to collect reliable and valid data and put them into project activity in PDM.
- 4) After the activity of the Project was introduced at the HRH-TWG under MOH, the Project got attention from MOH, and as a result, activity in Setthathirath hospital became a model to central and provincial hospitals. In this way, it can be effective to share project activity and output in common platform in order to ensure sustainability of a project.