

Simplified Ex-Post Evaluation for Grant Aid Project

Evaluator, Affiliation	Miho Kawahatsu Waseda Research Institute Corporation (WRI)	Duration of Evaluation Study
Project Name	The Project for Strengthening Regional Education and Training Institutions for Nurses and Primary Health Care Workers in the Lao People's Democratic Republic	January 2010 – December 2010

I Project Outline

Country Name	The Lao People's Democratic Republic	
Project Period	June 2004-November 2005	
Executing agency	The Ministry of Health	
Project Cost	Grant Limit: 546 million yen	Actual Grant Amount: 545 million yen
Main Contractors	Mitsui Sumitomo Construction Co., Ltd.	
Main Consultants	Pacific Consultants International	
Basic Design	March 2004	
Related Projects (if any)	JICA, "Project for Human Resource Development of Nursing/Midwifery" (2005-2010) (Technical Cooperation Project)	
Project Background	<p>"Health Development Plan Toward Year 2020 and 2010" and the "Health Development Plan 2001-2005" of Laos state that that human resource development is one of the most important contributing factors to attain its sectoral goal. Strengthened primary health care service through improvement of the service quality provided by nurses and health workers in rural areas has an impact on the overall health status in the country. Especially, five Public Health Schools and the College of Health Technology (currently, Department of Nursing, University of Health Sciences) should primarily provide such education. Yet, the physical condition of the facilities and equipment in those institutions are not adequate to appropriately meet the demand for education and in-service training for nursing and healthcare work. Therefore, the government of Laos requested Japan to help improve the health educational environment, by rehabilitation of these institutions, which was considered urgent and given high priority.</p>	
Project Objective	To newly construct and renovate facilities of five public health schools as well as to provide equipment to the five schools and College of Health Technology, in order to improve the quality of primary health care services in rural area in Laos.	
Output[s] (Japanese Side)	<ol style="list-style-type: none"> 1. Construction and renovation school facilities <ul style="list-style-type: none"> Oudomxay Public Health School; new construction of 3 classrooms, 1 demonstration room, 1 library, 1 restroom Luangprabang Public Health School; new construction of 1 demonstration room, 1 restroom, and renovation of 4 classrooms, 2 English room Khammuane Public Health School; new construction of 2 classrooms, 1 demonstration room, 1 library, 1 restroom, and renovation of 2 classrooms Savannakhet Public Health School; new construction of 3 classrooms, 1 demonstration room, 1 restroom, and renovation of 1 large classroom and 1 small classroom Cahmpasak Public Health School; renovation of 6 large classrooms, 1 small classroom, 1 demonstration room, 5 dormitory rooms, 1 storage, 2 restrooms 2. Provision of equipment for Oudomxay Public Health School; Luangprabang Public Health School; Khammuane Public Health School; Savannakhet Public Health School; Cahmpasak Public Health School; Collage of Health Technology (Dept. of Nursing, University of Health Sciences) <ol style="list-style-type: none"> 2-1. Equipment to learn basics of nursing through in-school practice <ul style="list-style-type: none"> Anatomical Human body, Human Skelton, Pregnant Uterus Model, Phantom for Delivery, Injection Simulator, Resuscitation Simulator, Binocular Microscope 2-2. Equipment used in the classroom lecture <ul style="list-style-type: none"> Overhead Projector, Overhead Projector (reflection), Tape Recorder, LCD Projector System, LCD Projector system (3D) 2-3. Equipment to produce teaching materials <ul style="list-style-type: none"> Copying Machine, Small Printing Machine, Computer with Printer, Image Acquisition equipment 	

II Result of the Evaluation

Summary of the evaluation

The relevance of this project is extremely high and regarding its effectiveness various activities have been carried out consistent with the initial plan. To the extent that can be judged from actual data serving as indicators at the time of the ex-post evaluation, regarding the effectiveness of the project, while we can see the importance of and potential for preparing educators for the College of Health Technology (the present Department of Nursing, University of Health Sciences) and the Public Health Schools, on a national basis the number of nurses and healthcare workers even when tabulated simply by adding the number of graduates of each school is still short of what is needed. Thus, from the viewpoint of improving the quality of regional health care, achievements have been limited. Further, while we note that there is a high degree of usage of equipment provided as part of the project, there is some concern regarding the operation and maintenance of said equipment. As has been indicated by the Ministry of Health, given the background of the increasing demand for healthcare workers in Laos, because student enrollment at targeted schools exceeds proper levels, the project itself is highly evaluated.

In light of the above, this project is evaluated to be satisfactory.

<Recommendations>

As recommendations to JICA, because it is believed that the development needs of this country will remain high in the future, it would be beneficial not only to ensure sustainability of the project but also for regional Public Health Schools outside the scope of the project to clearly convey to the Laotian nation the effects related to the preparation of educators that result from the connections made by this project between the Department of Nursing, University of Health Sciences) and the Public Health Schools.

As recommendations to the executing agency, mention is made of some concerns regarding operation and maintenance of the equipment procured for the project. Accordingly, in view of the increasingly important preparation of healthcare workers in the future, in order that arrangements can be established for a comprehensive, diversified system of promoting implementation that includes management, financial control and technical matters related to the Public Health Schools, it is desirable that a detailed understanding be obtained of issues related to management of the schools, and that the issues be organized into groups for study and suitable action. Also, concerning the effectiveness, not only will there be physical constraints to the capacity in terms of number of students at the schools, need exists to optimize the number of students accepted from the viewpoints of the suitable number for each course given the number of educators available, and of the quality of the education. In addition, to ensure a proper supply of funds to pay for personnel expenses required to hire and keep high-quality educators at the schools in keeping with the tie-up between the schools and the Department of Nursing, it is desirable that courses be designed that merit high evaluations from graduates who are on the job and meet for high-priority needs, as well as producing high-quality personnel so as to alleviate the shortage of skilled healthcare workers over time.

<Constraints of this evaluation study>

Detailed information for each of the target schools such as would be desired for evaluation purposes was not made available, for which reason it was not possible to go as far as to evaluate the results and issues at each individual school. Therefore for ex-post evaluation, the basic common points for all schools, and overall trend, are used.

1 Relevance

(1) Relevance with the Development Plan of Laos

The Health Development Plan Toward Year 2020 and 2010 and the Health Development Plan 2001-2005 of Laos states as a goal "fair and swift access to the high-quality health care services that match the needs of all of the people, by 2020," and the highest priority is assigned to basic policy for developing the human resources needed to accomplish that, and this project is consistent with the priority programs having the target year 2005.

(2) Relevance with the Development Needs of Laos

Within the scope of this country's improvement of the status of health care is the area of basic health care, particularly preventive and therapeutic treatment and primary health care (PHC) in regional parts of the country. To attain this, the training and qualitative improvement of nurses and PHC workers is essential. Training of nurses and PHC workers, and their re-training or refresher education are work done by the schools that this project targets, so there is consistency with Laotian development needs.

(3) Relevance with Japan's ODA Policy

Japan undertook a study for a health and medical service improvement plan, from March 2001 to October 2002, formulated a master plan for this sector with the horizon of 2020, and identified as a basic strategic objective the development of health care personnel and particularly the education and training of nurses.

Further, on the basis of the concept and principles of the ODA Charter through discussions with Laotian counterparts human resources development (HRD) and support for basic human needs was made an area of special importance and this project, in that context, is consistent with ODA policy in that the project is concerned with "development of practitioners and technicians" and "support for higher education," as work on behalf of BHN.

This project has been highly relevant with Laos's development plan, development needs, as well as Japan's ODA policy, therefore its relevance is high.

2 Efficiency

(1) Project Outputs

The following gives changes and additions to output from the Japan side. The executing agency reports that there have been issues related to procurement of equipment, the performance of construction and installation contractors, and the effects on the total project budget of change in the yen exchange rate, which have been causes of delays in implementation and have required revision of plans.

It is thought that consideration must be given to the need and scope of the similar project in the future as to how to employ a multiple number of contractors as well as to the variety and quantity of procurement. Nevertheless, for this case, it is reported that these matters including change items were handled properly among relevant parties during the performance of work.

Changes as indicated in JICA's internal documents are as follows.

Common at all construction sites	Change in plans of the foundation, columns, beams and roofing materials
Luangprabang Public Health School	Change of roof shape for the new-construction demonstration room; addition of wooden furniture for the renovated classrooms; change of the shape of the water tank; additional work on the foundation of renovated classrooms; additional work for strengthening of pillars; change to the use of existing building materials for the trusses of the renovated classrooms; change in exterior finishing materials; additional concrete work for the under-layer of floors and tile floors
Cahmpasak Public Health School	Addition of rain gutters for dormitory roof; elimination of infiltration tank for toilets; truss removal work at dormitories and partial change and addition of materials; removal of existing earth floors, re-pouring of concrete, and addition of measures to prevent entry of ants
Khammuane Public Health School	Renovated classrooms: ; truss removal work at dormitories and partial change and addition of building materials, and addition of measures to prevent entry of ants
Savannakhet Public Health School	Renovated classrooms: ; truss removal work at dormitories and partial change and addition of building materials, re-pouring of concrete, and addition of measures to prevent entry of ants

(2) Project Period (Project Inputs)

Combined planning and implementation: 18 months from June 2004 (E/N) to December 2005. Project was completed as planned (100% of plan achieved).

(3) Project Cost (Project Inputs)

Total project cost, 545 million yen, or one million yen less than the 546 million yen in the E/N. Essentially on budget (98% of budget).

Both project period and project cost was mostly as planned, therefore efficiency of the project is high.

3 Effectiveness / Impact

(1) Quantitative Effects

Three indicators were adopted for this project, namely (1) increase in classroom area per student at the five schools where construction work was planned (Figure 1), (2) increase in actual practice time per nursing course student at the six schools (including the College of Health Technology [now the university]) which were planned to receive equipment (Figure 2), and (3) effects attained by re-education of health school educators at the college. For (1) and (2) benchmark data for 2004 were obtained for comparison with target values.

Regarding (1), classroom area, as shown in Figure 1, the degree of achievement of target varies from school to school but at the tie of the ex-post evaluation there had been general improvement. Considering in addition the formidable increase in the number of students – this against the background of increasing demand in the health care services, these results are considered to be realistic. In particular at Luangprabang Public Health School the rate of increase of the number of students was the highest of all schools and this worked to depress the area per student.

Regarding (2), practice time per student, as shown by Figure 2 there was a moderate increase from the benchmark values at all schools but results fell far short of the target of 300 hours.

Regarding (3) it is reported that whereas there were only three persons with the bachelor degree of nursing science working as educators in 2004, the number has increased to 21, far above the target of 13, suggesting that re-education and refresher study at the university's nursing department is improving in quality.

[Figure 1] Classroom area per student at target schools (sq m per person)

	Benchmark (2004)		Target (2006)		Actual (2010)	
	Class-Room	Demo room	Class-room	Demo room	Class-room	Demo room
Oudomxay Public Health School	0	0.57	1.40	1.87	1.2	2.0
Luangprabang Public Health School	1.01	1.01	1.58	1.87	0.94	1.33
Khammuane Public Health School	0.93	0.62	1.40	1.87	1.2	2.0
Savannakhet Public Health School	1.05	0.91	1.40	1.87	1.4	1.2
Cahmpasak Public Health School	1.44	0.96	1.44	1.92	2.0	1.3

Source: Ministry of Health data

【Figure 2】 Actual practice time per student in nursing courses (in hours)

	Benchmark (2004)*	Target (2006)	Actual (2010)
Oudomxay Public Health School	128	300	132
Luangprabang Public Health School			130
Khammuane Public Health School			128
Savannakhet Public Health School			132
Cahmpasak Public Health School			135
**Collage of Health Technology			135

* The average number of 5 schools at the basic design study

**Present Nursing Department, University of Health Sciences

Source: Ministry of Health

(2) Impact (Impacts on the natural environment, Land Acquisition and Resettlement, Unintended Positive/Negative Impact)

The libraries created at Khammuane and Oudomxay public health schools are being used by health care workers in the schools' communities, as well as by the students, and this is taken as representing a degree of spillover effects to the communities through the access now possible to health and medical information. Concerning the indirect effect, "increasing the number of nurses and primary health care workers in the nation's regions, improvement of their abilities and as a result the improvement and augmentation of health and medical practice in the regions," the lack of quantitative information for the regions prevents detailed analysis from being done.

Nevertheless, whereas there were, according to the basic design study, 11,195 health care workers in the nation as of 2002, data from the Ministry of Health that gives the figure for 2010 as 12,422 means there has been only a slight increase. Further, at the time of project planning the number of nurses in 2002 was 5,175 (at which time the number required was estimated at 8,391). If the number of graduates since that year is added to this the total obtained is 6,516 (a shortfall of 1,875). The Ministry of Health reports that in 2010 there were 5,570 nurses (a shortfall of 2,821), from which we can observe that the shortage is a chronic condition.

Further, including the effect on cultural legacies of construction at the Luangprabang Public Health School, there have been no reports of problems related to the environment, relocation of residents or acquisition of land.

This project has somewhat achieved its objectives, therefore its effectiveness is fair.

4 Sustainability

(1) Structural Aspects of Operation Maintenance

Subsequent to implementation of this project, the required policy support to ensure its sustainability has been provided by the central and local governments, and there are ongoing increases in education and practical training of midwives and primary health care workers as undertakings initiated by the health schools on behalf of their communities. Moreover, according to the Ministry of Health the construction done and equipment supplied under this project have led to improvement of the income earned by the health schools. Although the cause is not known, overall, even though the number of students has increased, there have been decreases in the number of educators and administrative staff since the basic design study.

(2) Technical Aspects of Operation Maintenance

At the time of project planning, it was not expected that there would be need for large-scale introduction of new technology as it was thought that the project would make maximum use of existing facilities and equipment, and up to this time there have been no complicated issues regarding techniques arisen. Moreover, it is reported that training in the O & M of medical equipment is being provided in the curriculum at the five health schools. However, it is reported that it is hard to retain suitable technicians for repair and O & M of the equipment.

(3) Financial Aspects of Operation Maintenance

At present, the cost of O & M of equipment at the five health schools is covered by funds from the central government budget and from tuition or other fees paid by students. According to reports from the five schools, the 2010 budget is ranged from 1.5 to 6.5 times greater than at the time of project planning. Also, as the plan did not anticipate a great increase in utilities cost or O & M cost of the new facilities and equipment, it was not expected that the new facilities and equipment would create a significant financial burden, while on the other hand a shortage of Ministry of Health budget funds and insufficient income are reported to have led to difficulty in managing and repairing the equipment, and in cases when a school's income has imposed restraints it has not been possible to allocate adequate funds for such activities, causing concern that the equipment may become unusable.

(4) Current Status of Operation Maintenance

According to the Ministry of Health, the equipment and facilities provided by this project are being fully utilized but because of the increase in the number of students and increased use of the facilities and equipment, management and repair has become difficult.

Some problems have been observed in terms of financial aspects as well as in the current status of O & M, therefore sustainability of the project effects is fair.