

Summary of the Terminal Evaluation Results

1. Outline of the Project	
Country: Lao PDR	Project title: Sustainable Development of Human Resources for Health to improve Maternal, Neonatal and Child Health Services in Lao PDR
Issue/Sector: Maternal and Child Health	Cooperation scheme: Technical Cooperation
Division in charge: Human Development Department, JICA	Total cost (as of Sep 2015) : 236 million yen
Period of Cooperation: February, 2012 – February, 2016	Partner Country's Implementing Organisations: Department of Training and Research (DTR) , MOH and Department of Health Care (DHC) , MOH
	Japanese Cooperating Organisation (s) : <ul style="list-style-type: none"> ▪ Ministry of Health, Labor and Welfare ▪ National Center for Global Health and Medicine ▪ National College of Nursing, Japan
	Related Cooperation: <ul style="list-style-type: none"> • Project for Human resource Development of Nursing/Midwifery
<p>1-1 Background of the Project</p> <p>Since mid-1980s, Lao People's Democratic Republic (Lao PDR) has made considerable progress in improving the health of its population. However, it faces the most prominent challenges among the states of South East Asian Region in reaching the Millennium Development Goals (MDGs) 4 and 5. The Maternal Mortality Ratio per 100,000 live births is still at 580 and the Under Five Mortality Rate per 1,000 births is 61⁵. Moreover, in 2009, the number of health workers (medical doctors, nurses and midwives with middle and high level professional education) was 3,385, equal to 0.53 health workers per 1,000 populations which is significantly lower than the Global Health Work Alliance (GHWA) recommended standard of 2.3 health workers per 1,000 populations. The quality of health services is another challenge. Nursing and midwifery schools (both university and Colleges) do not have unified curriculum nor national level exams; as a result, quality of health services is often not standardized or equitable.</p> <p>To overcome these challenges, a comprehensive national policy 'Health Strategy up to the Year 2020 (May 2000) ' was established to bring the health sector in Lao PDR out of the least developed status and to achieve the MDGs. Under this master plan, 'Health Personnel Development Strategy By 2020 Nov.2010) ' was elaborated and the Human Resources for Health Technical Working Group (HRH-TWG) was formulated in order to enhance capacities of training institutions for health both in terms of quantity and quality.</p> <p>JICA carried out 'The Project for Human Resource Development of Nursing/Midwifery (2005-2010) ' to enhance a nursing education system by laying foundation for human resource development of nursing and midwifery staff. Through this project, "Nursing and Midwifery Regulations", "Guidelines for the Scope of Nursing Practice" and "Nursing/Midwifery School Management and Implementation Guidelines" were elaborated. Although this project developed sets of legal framework for nursing and midwifery education, the overall system for licensing based on national examination, capacity of trainers for nursing education, and/or coordination among schools and hospitals both at the central and the provincial levels still need to be strengthened.</p> <p>Based on the above background, the Government of Lao PDR submitted an official request to Japan for the 'Project for Sustainable Development of Human Resources for Health to Improve Maternal, Neonatal, and Child Health Services' in July 2009.</p> <p>The Project began in February 2012 for four years of cooperation period (till February 2016) . The counterpart (C/P) of the Project is Department of Training and Research (DTR) and Department of Health Care (DHC) of the Ministry of Health (MOH) , and it targets University of Health Science (UHS) , five central hospitals, 8 colleges and schools, and 12 provincial hospitals. The Project aims to reinforce</p>	

⁵ The State of the World's Midwifery 2011

systems for developing human resources for health in order to provide standard and quality services through 1) development of standard systems for nursing education, 2) Strengthening capabilities of training institutions to implement quality educational programs, and 3) Strengthening coordination among relevant departments and organizations to improve the educational systems. Since the Project cooperation period will end in February 2016, the Terminal Evaluation Team was dispatched to review the progress and the achievement and to discuss and agree on the countermeasure to solve the challenges if any.

1-2 Project Overview

- (1) Overall Goal: Qualified human resources for health are developed to improve MNCH Services.
- (2) Project Purpose: Systems to develop human resources for health are reinforced to provide standard and quality services based on the concept of CHIPU (Complex Hospital Institute Project University) .
- (3) Outputs:
 1. Standard systems for nursing education are developed and/or institutionalized.
 2. Capacities of training institutions to implement quality educational programs are strengthened.
 3. Good coordination is strengthened among relevant departments and organizations to effectively improve the educational systems.
- (4) Inputs (as of Sep 2015)
 - Japanese side:
 - Japanese experts
 - Long-term: 5 persons; Short-term: 12 persons (16.5MM) ,
 - Third-country experts: 3 persons (2.1MM)
 - Training/workshops: 22 participants (in Japan) , 51 participants (in Thailand, Indonesia and China)
 - Local Cost: USD 418,996.48
 - Equipment: USD145,582.60
 - Lao side:
 - Assignment of C/P: 6 personnel from MOH
 - Project Office: office space within MOH
 - Office facilities: access to the computer network, telephone line, printer, fax and photocopy

2. Outline of the Terminal Evaluation Team

Terminal Evaluation Team	<ol style="list-style-type: none"> 1. Team Leader, Dr. Hirotugu Aiga, Senior Advisor on Health & Nutrition, Japan International Cooperation Agency (JICA) 2. Human Resource for MCH, Dr. Tamotsu Nakasa, Director, Department of Health Planning and Management, Bureau of International Health Cooperation, National Center for Global Health and Medicine 3. Nursing Education, Dr. Yayoi Tamura, President, National College of Nursing, Japan 4. Cooperation Planning, Ms. Nami Kishida, Deputy Assistant Director, Health Division 4, Human Development Department, JICA 5. Evaluation Analysis, Ms. Yuko Tanaka, Consultant, Tekizaitekisho LLC. 	
Period	September 6, 2015 – September 19, 2015	Type of Evaluation: Terminal Evaluation

3. Summary of Terminal Evaluation Results

3-1 Achievements

- (1) Likelihood of Achieving the Project Purpose

Project Purpose: Systems to develop human resources for health are reinforced to provide standard and

quality services based on the concept of CHIPU (Complex Hospital Institute Project University) .

The concept of CHIPU was introduced during the former health administration, and it is stated both in “Health Personnel Development Strategy by 2020” and “The VIIth Five Year Health Sector Development Plan (2011~2015)”. After the reorganisation of Ministry of Health in 2012, the term CHIPU itself is not utilised although the essence is still recognised. The Team notes that the concept of CHIPU is to promote development of human resources for health through partnership among schools, hospitals, and the MOH and development partners.

The possibility of achieving the Project Purpose by the end of the Project is moderately high. Management tools to put “competency” and “scope of nursing practice” into practice have been disseminated through various activities such as i) activities in model wards, ii) Training of trainers for improvement of nursing care for nurses in Mahosot Hospital, and iii) planning and implementation of supportive supervision for nursing education (indicator 1) . Moreover, the Project plans to conduct series of workshops during October-December 2015 in order to disseminate management tools (i.e. practice of nursing process using patients’ information sheet, assessment sheet and nursing care plan sheet etc.) in model wards. In order to effectively apply management tools in all target schools and hospitals, additional follow-up would be necessary.

As for the competency based nursing education (indicator 2) , the MOH approved the introduction of competency based curriculum for higher diploma nurses in October 2014. Final approval from the MOH and MOE were made in March 2015. The competency based curriculum was introduced from Oct 2014 in three CHS and Vientiane nursing school (continuing education) . UHS and four PHS plan to start utilising the competency based curriculum for its higher diploma nurses from October 2015.

Regarding the framework of the national licensing system (indicator 3) , detailed framework of the national licensing system including national examination for nurses has been discussed and the “Strategies of Health Professional Licensing System in Lao PDR” drafted by the Project will be submitted for approval by October 2015. It is reported that the Strategy shall be approved by the MOH by December 2015.

(2) Level of Achievements: Outputs

Output 1: Standard systems for nursing education are developed and/or institutionalized.

Output 1 is mostly achieved. During the first half of the cooperation period, the “National Competencies for Licensed Nurses” was developed under Output 1 as a key concept related to quality of nursing professions. For revising the Guidelines for the Scope of Nursing Practice, the Project conducted studies to assess situation of application of guidelines. Based on studies, the Project revised the guidelines and it was officially approved by Minister of Health in April 2015. The Project conducted series of workshops in order to disseminate revised/developed guidelines mentioned above (indicator 1-1) .

As for the Nursing/Midwifery School Management and Implementation Guidelines, the Project, in coordination with DTR, started revising the guidelines, and it is expected to be completed by the end of 2015 (indicator 1-2) . The Project had an internal meeting in August 2015 to discuss about the main points to be reviewed within the existing “Nursing and Midwifery Regulations”, and more details will be discussed among key stakeholders.

During the elaboration process of the framework of the national licensing system, some core personnel from the MOH and UHS were invited to learn about national licensing systems in Thailand, Indonesia and Japan. Short-term experts were also dispatched various times in order to enhance understanding and stimulate discussion on national examination and licensing system in Lao PDR (see section 3.1.1 and Annex 4 for details of training and short-term experts) . Regarding the development of a national licensing system including national examination (indicator 1-3) , the Project is currently developing a “Draft of Minister of Health Agreement on Strategies of Health Professional Licensing System in Lao PDR” as a result of various meetings.

Standards for nursing care are also introduced within four model wards in the surgery department (i.e. Urology, Abdominal, Pediatric and Plastic surgery) of Mahosot Hospital. With the formal approval by the MOH for the introduction of the Guidelines in Aug 2013 (No.1896/MOH) , the Project developed a road

map, goals and indicators in order to undertake activities. Ordering form was introduced at the earlier stage of the Project and is widely used by medical doctors in model wards. From June 2014 set of new forms for nursing records, including basic information sheet, assessment sheet, and nursing care plan sheet were introduced and started to be utilized by nurses in mentioned model wards. Several short-term experts were dispatched to follow-up and to conduct several assessments. Moreover, the Project could also benefit from collaboration of JICA senior volunteer, who follow-up activities of nursing process improvement at model wards on daily basis⁶.

Quality of nursing documentation is assessed by the Project in collaboration with nursing department of Mahosot Hospital and a senior volunteer from JICA dispatched to the hospital. The result of the study shows there is an improvement of quality of nursing documentation compared to the baselines taken in July 2014.

Output 2: Capacities of training institutions to implement quality educational programs are strengthened.

Output 2 is mostly achieved and it will be achieved by the end of the Project. During the first half of the cooperation period, the competency based nursing education curriculum committee was formulated with members from the MOH, teaching hospitals (central and provincial levels) , UHS and three CHS. The 16 committee meetings were held in May 2013 - December 2014 to develop competency based curriculum and syllabus for higher diploma nurses (indicator 2-2) .

25 teachers and clinical trainers from three provinces were also sent to participate in teachers' training course in Burapha University in Thailand. The Project then provided number of dissemination workshops targeting nursing teachers and clinical trainers of the hospitals in order to enhance their understanding of 1) competency based education and 2) standards of nursing care. Out of all target nursing teachers and clinical trainers, 62.4% trained on 1) competency-based education and 36.2% on 2) standard of nursing care (indicator 2-1) . The Project will continue dissemination of "standards of nursing care" in coordination with the MOH and Mahosot Hospital in order to enhance understanding of teachers and clinical trainers on nursing care.

As for the improvement of education environment (indicator 2-3) , the Project conducted needs assessments in 2012 and 2014 for teaching materials covering nine schools and teaching hospitals. Based on the results of needs assessments, the Project provided teaching materials (such as equipment for clinical practice, textbooks, etc.) to five schools and 13 teaching hospitals in order to effectively implement the revised curriculum for HDN. Further, the MOH provided teaching materials in 2014/15 and is also applying budget for the improvement of teaching environment in 2015/16.

As part of its activities to support efficient and effective implementation of the revised curriculum, the Project set up a team of supportive supervision for nursing education, composed of members from the MOH, UHS and central hospitals. The team visited CHS and their teaching hospitals in three provinces during March- May 2015 in order to assess quality of nursing education by utilizing criteria stipulated within Nursing/Midwifery School Management and Implementation Guidelines. DTR is willing to continue this activity for the next year as they include supportive supervision for nursing activity in their annual budget planning

Output 3: Good coordination is strengthened among relevant departments and organizations to effectively improve the educational systems.

Output 3 is moderately achieved. UHS and three CHS develop each annual plan and they are shared among stakeholders (PHO etc.) during coordination meetings with their teaching hospitals (indicator 3-1) . Schools and hospitals adjusted the coordination mechanism to improve clinical teaching in hospitals by incorporating competency based curriculum.

School sends report to PHO and the MOH almost once a year, while the current Nursing/Midwifery School Management and Implementation Guidelines regulate to submit bi-annual reports (indicator 3-2) .

Feedback from the MOH to schools is made once a year to all health schools in the country during the school management annual meeting, including necessary actions to be taken in order to improve nursing

⁶ The senior volunteer (SV) nurse was dispatched during September 2011- March 2014, and the same SV nurse was re-assigned from January 2015 for two years.

education environment (indicator 3-3) . In order to provide feedback, supportive supervision for nursing education composed of a team from the MOH, UHS and central hospitals were conducted on a pilot basis in three provinces (LPB, SVK, CPS) .

Even though annual reports are submitted from every school, management of reports within DTR is not strong enough to keep track of reports. The Project clarified the procedure for reporting and feedback system within DTR and the procedure will be utilized once revised Nursing/Midwifery School Management and Implementation Guidelines is enacted.

3-2 Results as per Five Evaluation Criteria

(1) Relevance

The relevance of the Project is high for the following reasons:

- The Project design is in line with national policies of Lao PDR, namely “Health Personnel Development Strategy by 2020” and “The VIIth Five Year Health Sector Development Plan (2011~2015) ” both of which elaborate the needs of improvement of human resources for health through collaboration and partnership among schools, hospitals and the MOH. Improvement of the quality of health service to the level of ASEAN and International by improving health system is also mentioned in above “VIIth Five Year Health Sector Development Plan⁷”
- The Project is consistent with priority areas for Japan’s Assistance Strategy to Lao PDR. The Project is under the “Maternal and Child Health Improvement Program” of the priority area “improvement of healthcare services”. The nursing personnel make up large number of maternal and child health care personnel hence target of the Project to focus on the nursing education is appropriate. More recently, “Memorandum of Cooperation in the Field of Healthcare” between Ministry of Health, Labour and Welfare of Japan and the MOH of Lao PDR” was signed in November 2013. Cooperation in the field healthcare in area of “human resource development such as training programs for medical practitioners, nurses and public health practitioners” were one of the five fields specified in the memorandum.
- In relation to preparatory arrangement for integration into ASEAN Economic Community (AEC) by the end of 2015, the MOH is required to develop National Competency and national licensing system.
- Improvement of MCH is also included in Millennium Development Goals.

(2) Effectiveness

The effectiveness of the Project is considered to be moderately high for the following reasons:

- The possibility of achieving the Project Purpose by the end of the Project is considered to be moderately high.
- Dissemination of the model nursing practices in Mahosot Hospital to both within and outside the hospital is another challenge for the Project. The effectiveness of the Project would increase if the Project implements series of workshops as planned, and management tools are started to be utilized in all target schools and hospitals.
- The “Strategies of Health Professional Licensing System” is planned to be approved by December 2015.

(3) Efficiency

Overall, the level of efficiency of the Project is considered to be moderately high for the following reasons:

- Third country experts from Thailand are continuously dispatched during the cooperation period. The third country experts helped with development of national competency for licensed nurses, development of competency based curriculum, as well as improvement of nursing records in model wards. In addition, five training courses for teachers and clinical trainers are implemented from February 2014 in Burapha University in Thailand. The utilization of experts from Thailand enabled the Project to efficiently implement capacity building of Lao counterparts, since there are less language and cultural barriers between two countries.
- The Project increased the number of Japanese long-term experts from two to three in the

⁷ Page 24 of the VIIth Five Year Health Sector Development Plan (2011-2015)

latter half of the cooperation period. A greater number of short-term experts were also dispatched (see Table 3-1 for details) . The increased number of experts by Japan enhanced the Project to achieve the Project Purpose specified in PDM before its end.

- Modifications of PDM were made three times since the initiation of the Project in February 2012. PDM (Ver.1) was agreed during the Project Consulting Mission in July 2013, followed by PDM (Ver. 2) during the Mid-term Review in March 2014. The Project then made effect of PDM (Ver. 3) in April 2015 by adding target numbers for indicator 2-1 (Output 2) . As a result of modifications, the Project efficiently implements activities to achieve expected outcomes.

(4) Impact

As for the achievement of Overall Goal “Qualified human resources for health are developed to improve MNCH Services”, the Team considers that the probability of achieving mentioned Overall Goal within three to five years is moderate. National licensing examination for new graduates is expected to start within three years. Organizing Health Professional Council will be promoted in the process of developing the national licensing system. Impacts other than Overall Goal include the following:

- During the development process of national licensing system, the Project involves medical doctors and dentists, let alone nurses. The outcome of the Project regarding the national licensing system would also affect other health professionals.
- Curriculum for diploma nurses program (2.5 years) in four PHS is planned to be upgraded to competency based curriculum for higher diploma nurses (3 years) in October 2015. Moreover, this curriculum was also utilized as a reference purpose during the development of revised midwifery curriculum.

No negative impacts have been identified so far.

(5) Sustainability

1) Policy aspects

The sustainability of the Project from policy aspects is considered to be high for the following reasons:

- Development of human resources for health is likely to remain one of the priority areas of health sectors in Lao PDR. “Health Personnel Development Strategy by 2020” emphasizes the importance to enhance capacity of human resources for health through better coordination and partnership among schools, hospitals and the MOH.
- “Directions and Functions of the VIIIth Five Year Health Sector Development Plan (HSDP) (2016~2020)⁸ includes objectives related to i) ensure quality of health services and ii) strengthen health system development.
- Revised Law on Health Care is approved by the congress in December 2014 and it was enacted in May 2015. Licensing system including national examination is added in the revised Law within the roles and duties of Health Professional Council. Additionally, the “Strategies of Health Professional Licensing System in Lao PDR” is drafted and expected to be submitted for approval before Oct 2015.

2) Institutional and financial aspects

In terms of organizational and financial aspects, it is premature to determine level of sustainability of the effect of the Project.

- Budget for providing educational materials and supportive supervision are proposed from DTR for the year 2015/16 in order to improve nursing education in nine schools.
- According to Health Care Reformative Plan (2016~2020) , “the project on the national examination for health professional registration in both public and private sectors” is listed with estimated budget required USD668,100.
- Deputy Director of Mahosot Hospital assures that nursing records introduced by the Project in model wards shall be utilized after the end of the Project. It was also implied that Mahosot Hospital is willing to disseminate these nursing records to non-model wards.
- Institutional structure of Health Professional Council is not yet sufficiently determined at

⁸ Dated 6 October 2014, unofficial translation.

the time of terminal evaluation.

3) Technical aspects

The sustainability of the Project from technical aspects is considered to be moderately high for the following reasons:

- Competency based curriculum for higher diploma nurses is introduced in three CHS and teachers prepared standard syllabus and learned about the teaching methods to implement the new curriculum. Educational materials were also provided to schools and teaching hospitals to enhance their teaching.
- Improvement of nursing care records is gradually observed in model wards. Set of new forms for nursing records are utilized since June 2014 and nurses in model wards report that they will continue utilizing these forms.
- Moreover, 20 nurses from both model wards and non-model wards in Mahosot Hospital are prepared to become trainers for dissemination of model wards' activities.
- Nursing education committee (composed of teachers from UHS, CHS and teaching hospitals) will be available whenever required by DTR, such as revising the competency based curriculum etc. For the continuation of supportive supervision for nursing education, supervisors are prepared to conduct supportive supervision through trainings as well as development of manual.

(6) Factors that promoted/ inhibited realization of effects

1) Promoting factors:

- The Project activities have also been carried out in close coordination with a JICA senior volunteer who is dispatched to Mahosot Hospital. Activities for the improvement of nursing records in model wards are followed-up on a daily basis during the placement of the senior volunteer. In addition, Japan Overseas Cooperation Volunteers (JOCVs) dispatched to provincial and district level hospitals also joined some of the workshops together with nursing staff from respective hospitals to learn about National Competency, Competency based curriculum, Guidelines for the Scope of Nursing Practice and management of educational equipment.
- Involvement of medical doctors and senior management (directors, deputy directors, head of nursing division etc.) of hospitals was an important promoting factor to effectively disseminate Guidelines for the Scope of Nursing Practice and National Competencies for Licensed Nurses. The Project made frequent effort to invite medical doctors and senior management of the hospitals in workshops to disseminate guidelines and management tools.
- The Project dispatched third country experts from Thailand in order to enhance activities under Output 1 and 2. One third country expert visits Lao PDR on regular basis to support conducting workshops for nursing education curriculum development, and the third country trainings including teacher training program in Burapha University were implemented in Thailand. These experience enhanced understanding of teachers and clinical trainers in Lao PDR since there are less linguistic and cultural barrier between two countries.
- Study visit to Indonesia stimulate discussions among Lao counterpart regarding the national licensing system. The result of the visit was also reported to senior management of the MOH. The initial draft for "Policies and Strategies of Health Professional Licensing System" was developed shortly after this visit.

2) Inhibiting factors:

- Office of Health Care Professional is in charge of development of national licensing system and infection control. Human resources of the office are not sufficient to implement these multiple responsibilities, therefore could not sufficiently concentrate on development of national licensing system.
- Specified division in nursing was existed at the initial stage of the Project. As a result of institutional reform of the MOH in 2012, role of Nursing Division was integrated into other divisions in DHC. Consequently, there is no section exclusively in charge of managing nursing profession and quality of nursing care services.

3-3 Conclusion

The Project is making good progress. Regarding level of achievements, both Outputs 1&2 are

considered to be mostly achieved, and Output 3 is moderately achieved. The possibility of achieving the Project Purpose by the end of the Project is moderately high. The Project enhanced the foundation for competency based nursing education by integrating theoretical concept, clinical practice and education. In terms of five evaluation criteria, relevance is considered to be high, both effectiveness and efficiency are considered to be moderately high. The impact of the Project is moderate. There are several impacts observed in addition to Overall Goals. In terms of sustainability, it is considered to be high from the policy aspect, premature to determine from organizational and financial aspects, and moderately high from technical aspects.

3-4 Recommendations and Lessons learned

3-4-1 Recommendations

On the ground of the results of the study summarised above, the Terminal Evaluation Team has made the following recommendations to the Project.

<Recommendations to be considered during the Project period>

- 1) Smoother submission and approval of National Licensing Strategy
- 2) Further improvement of the model nursing practices
- 3) Ensuring knowledge about the model nursing practices
- 4) Senior management's participation in nursing care management tool workshops
- 5) Involvement of JOCVs in dissemination process of the model nursing practices
- 6) Need for assessing reporting frequency
- 7) Synergizing between supportive supervision and bi-annual reports
- 8) : Increasing in the number of staff at Office of Health Care Professional

< Recommendations to be considered after the completion of the Project>

- 1) Strategic scaling-up of the model nursing practices
- 2) Consultative revision process for Nursing and Midwifery Regulations
- 3) Adjustment of supportive supervision mission
- 4) Revision of competency based curriculum

3-4-2 Lessons learned

In the process of implementation of the Project, a few good practices and lessons learnt were identified. They could be applied or at least considered, when designing and planning for an upcoming technical cooperation project.

- 1) Challenges in behavior changes for the model nursing practices
- 2) Leveraging third-country expert and training
- 3) Flexibly adjusted project design
- 4) Nursing-professional-targeted intervention as a key trigger
- 5) A comprehensive package of Human Resources for Health interventions