Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Cambodia Office: March, 2014

Country Name	The Project for Human Resource Development of Co-medicals
Kingdom of Cambodia	

I. Project Outline

Background	In Cambodia, education for co-medicals was provided at University of Health Sciences (UHS), Technical School for Medical Care (TSMC), and four Regional Training Centres (RTCs). TSMC was the only public school to develop Laboratory Technologist (LT) and Physiotherapist (PT) in Cambodia. There was no school to develop Radiological Technologist (RT) despite many cases of tuberculosis in Cambodia. Students who passed the exit examination were awarded medical license, but no one failed the examination and the examination was not standardized across schools, so it did not guarantee the quality of the graduates. Besides these schools, private funded International University opened the nursing department without clear definition of the contents of teaching and qualification of teachers. There were no national guidelines on approval of schools for co-medicals and the contents of education of such schools. TSMC itself also had many issues to solve, such as insufficient curriculum, teachers' capabilities and school management.		
Objectives of the Project	1. Overall Goal: Public and private co-medical schools are able to produce graduates who are capable to perform as qualified co-medicals (State Registered Nurse; SRN, LT, RT, and PT) and the Ministry of Health (MoH) employment status improved. 2. Project Purpose: TSMC and four RTCs are able to provide appropriate education of SRN, LT, PT and RT based on the national co-medical standard. 3. Assumed steps for achieving the project goals[i]: The project (i) develops criteria and guidelines for school approval and curricula and syllabi of pre-service training for co-medicals as national standard, (ii) develops training materials and conducts training of trainers, and monitors school management of TSMC, and thereby better education for co-medicals (training in accordance with the developed or revised curricula and syllabi; strengthening of examinations) becomes possible at TSMC and four RTCs. As a result, qualified graduates from improved education are properly assigned to health institutions. At other schools including private, criteria, guidelines, curricula and syllabi are applied, and qualified graduates are developed.		
Activities of the project	1. Project site: TSMC and four RTCs (Battambang, Kampong Cham, Komport, and Stung Treng) 2. Main activities: (1) Development of School Approval Criteria (SAC) and Guidelines for Accrediting Schools (GASs) by the Working Group and getting approval of MoH, (2) Development of curricula and syllabi by the Working Group and getting approval of MoH; development of training materials, (3) Planning, implementation and evaluation of training for teachers and instructors, (4) Formation of "Improvement Committee" within TSMC and monitoring of schools managed by the committee. 3. Inputs (to carry out above activities) Japanese Side 1. Experts: 32 persons (Long-term: 6, Short-term: 26) 2. Trainees received : 21 persons (counterpart training in Japan) 3. Third-country training: total 3 persons (Thailand) 4. Equipment: teaching equipment and books Cambodia Side 1. Staff allocated: 40 persons 2. Land and facilities: project office 3. Others: purchase of equipment, local cost for training and maintenance of project office		
Project Period	September 2003 – September 2008	Project Cost	513 million yen
Implementing Agency	Technical School for Medical Care (TSMC), Human Resource Development Department (HRDD) of Ministry of Health (MoH) Cambodia, and Regional Training Centre (RTC)		
Cooperation Agency in Japan	St. Mary's Hospital, International Medical Center of Japan, etc.		
Related Projects (if any)	Japan's cooperation: Project on Promotion of Medical Equipment Management System (Technical Cooperation, 2006-2008), Project for Improving Maternal and Child Health Service in Rural Areas (Technical Cooperation, 2007-2010); Third Country Training on teaching method in nursing in Malaysia (15 counterparts of this project were trained) (2003-2005) Other donors' cooperation: Health Sector Support Program (HSSP) (sector-wide program funded by the World Bank and others)		

II. Result of the Evaluation

1 Relevance
This project has been highly relevant with Cambodia's development policy, "improving quality of health personnel and

[i] Reviewed at the time of the ex-post evaluation.

reforming human resource development system" as set in the Health Sector Strategic Plan (HSP1) 2003-2007 and HSP2 2008-2015, and National Health Workforce Development Plan (NHWDP) 1996-2005 and the second NHWDP 2006-2015, development needs of improvement of quality of teaching and school management and increase of productivity of co-medical professionals, as well as Japan's ODA policy: Country Assistance Program to Cambodia (2002) both at the time of ex-ante evaluation and project completion. Therefore, relevance of this project is high.

2 Effectiveness/Impact

(1) Attainment of Project Purpose and continuity of project effects

The project achieved the project purpose at the time of completion. The education at TSMC and four RTCs were being properly delivered, according to the annual class schedules in line with the new standard curricula. The development and approval of SAC and GASs was fully achieved in this project for quality control and enhancement of co-medical pre-service educations. The RT course at TSMC was newly established in Cambodia by the project. This accomplishment was a crucial achievement and significantly contributed to setting a foundation for pre-service educations for RT and improvement of RT services in Cambodia.

After the project completion, the project effects continued as TSMC and four RTCs have improved pre-service education for co-medicals professionals by using the revised curricula and syllabi and education materials developed by the project. The courses have been delivered according to annual class schedules. The continuous increase in the number of enrolled students and graduates is the concrete evidence of this improvement (See tables 1 and 2). Some parts of the curricula and syllabi have been updated, and TSMC/UHS, RTC and HRDD are working and discussing together to further update curricula but the progress is slow due to the limited technical and financial resources. Same applies to the update of the education materials. In the meantime, there is a plan to review and revise the curriculum for the laboratory course to be a bachelor course with supports from the U.S. Centers for Disease Control and Prevention, while an Australian NGO supports TSMC to review the contents of each course curriculum and check the status of training materials.

According to an interview with TSMC, the way of teaching and school management has been improved as follows: (1) delivery of courses based on standard curriculum developed, (2) school regulation has been established, (3) the detail duties of each division have been prescribed, (4) student information system has been developed, and (5) ability and capacity of planning has been improved. Through interviews and the observation at RTCs, it was confirmed that the quality of teaching has improved in terms of improvement of teaching methodology, lesson plan preparation and others and the level of understanding of students have been much improved due to visual aids and handouts prepared by trainers.

(2) Overall Goal

The overall goal has been somewhat achieved. SAC and GASs are effective and adopted as national regulations for both public and private schools. Although precise data about the result of the exit examination was not obtained completely, the exit examinations for LT, RT, and PT were carried out in 2010, 2011 and 2012 and the number of examinees who passed has increased. According to the director of TSMC, a large proportion of graduates from TSMC enter into public and private sector because TSMC is a school of established reputation in the health sector of Cambodia and both public and private health care institutes give more value to TSMC graduates, which is the evidence of the high quality of services of co-medicals who graduated from TSMC.

Thus, the expected effects are found to be produced from the information collected, and therefore, effectiveness/impact of the project is high.

Achievement of project purpose and overall goal

Aim	Indicators	Results
(Project Purpose) TSMC and four RTCs are able to provide appropriate education of SRN, LT, PT and RT based on the national co-medical standard.	(Indicator) Education in TSMC and four RTCs are implemented according to Educational plan based on developed or revised curriculum and syllabi. .	(Project Completion) The education at TSMC and four RTCs were being properly delivered according to the annual class schedules in line with the new standard curricula. (Ex-post Evaluation) TSMC and four RTCs have improved pre-service education by using the revised curricula and syllabi and education materials developed by the project, as evidenced by the increase of the number in enrolled students and graduates (see tables 1 and 2) .
(Overall goal) Public and private co-medical schools are able to produce graduates who are capable to perform as qualified co-medicals (SRN, LT, RT, and PT) and the MoH employment status improved.	(Indicator 1) Public and private co-medical schools follow the regulations which are established by output 1.	(Ex-post Evaluation) SAC and GASs are effective and adopted as national regulations for both public and private schools.
	(Indicator 2) Passing rate of the first trial of graduation examination (of SRN) for public and private co-medical schools is increased.	(Ex-post Evaluation) No data are obtained.
	(Indicator 3) Employment of graduates is increased	(Ex-post Evaluation) No precise data are obtained, however, according to director of TSMC, a large proportion of graduates from TSMC enter into public and private sector such Calmette and Kuntha Bopha Hopsital that have high reputation in the country and some international and local NGOs.

Sources : Terminal Evaluation Report, Questionnaires & Interviews with counterparts

3 Efficiency

While the inputs were mostly appropriate for producing the outputs of the project, and the project period was within the plan (ratio against the plan: 100%), the project cost was slightly exceeded the plan (ratio against the plan: 105%) because the number of experts increased and the counterpart training in Japan was implemented although it was not planned at the time of ex-ante evaluation. Therefore, efficiency of the project is fair.

4 Sustainability

The project is still given importance in the current development policy as SAC was launched as a sub-decree, and SAC and GASs have been effectively used and maintained.

Institutionally, there is a problem in the number of staff. The current organizational status of TSMC has been changed and TSMC is now under UHS. This change has affected TSMC's operation in terms of slow progress in decision-making because TSMC needs to get approval from the operational committee of the UHS. However, under the umbrella of government structure, TSMC/UHS is under the technical supervision of MOH, and TSMC/UHS and HRDD are cooperating together to improve training quality. The current organizational status of RTCs is now under technical supervision of HRDD. In the future, RTCs will be promoted and become a public administrative enterprise (semi-autonomous organization) as same as TSMC/UHS. Financial management of RTCs will be done independently but they are under technical supervision of MOH. The number of teaching and management staff at TSMC is sufficient, except insufficient number of teachers in RT course. TSMC is requesting UHS and MOH to supply more qualified and skilled staff. The number of the teaching and management staff at RTCs is not sufficient compared to the designated number of staff for each organization.

There is no problem in the technical aspect of TSMC. The technical level for school management and up-to-date teaching for co-medicals is maintained. Some trainers have been sent overseas to obtain higher educations and certificates. Task descriptions and operational functions of the divisions of TSMC were reviewed and revised to reflect the needs at the time of ex-post evaluation. The technical level of human resources at RTCs is partly insufficient in the field of clinical practices.

Financially, the budget for TSMC is sufficient for school operation with the income from admission fees and subsidy from the government. The current budget does not cover the additional expenses required for updating curricula, syllabi and education materials, however, with the capacity of TSMC to raise its own revenue, TSMC could use the SAC and GASs as direction for promoting the quality of education in the future. The four RTCs have bigger challenges even in implementing courses. Donors basically provide technical supports only.

Thus, as there are problems in institutional, technical and financial aspects, sustainability of the effects of this project is fair.

5 Summary of the Evaluation

This project achieved the project purpose "TSMC and four RTCs are able to provide appropriate education of SRN, LT, PT and RT based on the national co-medical standard" as TSMC and four RTCs have improved pre-service education for co-medicals professionals by using the revised curricula and syllabi and education materials developed by the project. Overall goal has been somewhat achieved. Although the precise data for overall goal are not obtained, the effects are found to be produced from the information collected, since SAC and GASs are effective and adopted as national regulations for both public and private schools, and most of the TSMC graduates have been employed with the public institutions. Therefore, effectiveness/impact of the project is high. As for sustainability, there are some problems in terms of institutional, technical and financial aspects. The number and technical level of staff is partly insufficient, especially at RTCs. The RTCs also have a problem of insufficient budget. For efficiency, the project cost slightly exceeded the plan. In the light of above, this project is evaluated to be satisfactory.

III. Recommendations & Lessons Learned.

Recommendations to implementing agency:

Both the HRDD and MOH are recommended to reinforce and review SAC and GASs that has been applied at both public and private training institutions. As for the maintaining of the quality training, especially HRDD should review and revise the national curricula and education materials regularly in collaborating with stakeholders based on the needs and try to obtain technical supports from donors for such activities.

Table 1: Basic statistics of TSMC

Course title (No. of students/No. of graduates)	2010	2011	2012
Bachelor of science in Nursing	550/0	678/49	708/448
Associate degree in nursing	360/141	311/128	386/87
Associate degree in midwifery	338/0	453/178	458/148
Bachelor of science in Nursing/ Midwifery(*)	84/35	100/40	0/40
Associate degree of LT	130/40	172/54	216/35
Associate degree of RT	53/20	76/19	96/15
Associate degree of PT	84/29	68/27	69/24
No. of teachers	618	721	788

(Source: TSMC)

(note):*The course was cancelled both in 2012 and 2013 due to the applicants for admission were less than 30 students.

Table 2: Basic statistics of four RTCs

	2010	2011	2012
Total no. of students	1,349	1,465	1,794
Total no. of graduates	848	1,149	1,174
No. of teachers	688	728	794

(Source: HRDD)

Clinical Activities of Nursing Course in Kg Cham RTC

Class Activity of Nursing Course in Stung Treng RTC