Summary

Evaluation conducted by: Foundation for Advanced Studies on International Development (FASID)
Report date: June 2009

1. Outline of the Project

**Country:** Kingdom of Cambodia  
**Project Title:** The Phase II of the Maternal and Child Health Project  
**Issue/Sector:** Health and Medicine  
**Cooperation Scheme:** Technical Cooperation  
**Division in Charge:** Human Development Department  
**Total Cost:** 854 million yen  
**Period of Cooperation:** July 1, 2000 - June 30, 2005  
**Partner Country’s Implementing Organization:** National Maternal and Child Health Center (NMCHC)  
**Supporting Organizations in Japan:** International Medical Center of Japan

**Related Cooperation:**  
- Dispatch of Medical Advisers (Experts), 1992-1995  
- Project for Construction of the Maternal and Child Health Centre (Grant Aid), FY1995

1-1. Background and Summary of the Project

During its 20-year long civil war, Cambodia’s basic social and economic infrastructure was destroyed. The shortfall in human resources for the infrastructural development and medical treatment is an issue that requires urgent attention. The Japanese government established a new National Maternal and Child Health Center (NMCHC) in 1997 with grant aid. As technical cooperation, “The Maternal and Child Health Project” (hereafter, Phase I project) was executed from 1997 for five years, which included the improvement of the management ability at the center, training, activities, diagnosis and treatment standards. Although the result of the project was highly evaluated, it became necessary to enhance clinical diagnostic capability, hospital management and maternal and child services in provincial areas. Therefore, Phase II was launched in 2000, targeting at human resources development for Maternal and Child Health (MCH), including community health.

1-2. Project Overview

(1) Overall Goal  
Quality of services for Maternal and Child Health in the Kingdom of Cambodia is improved.

(2) Project Purpose  
Human resources development for the improvement of Maternal and Child Health, including community health, is strengthened.

(3) Outputs  
1. The NMCHC as a national top referral hospital is further strengthened.  
2. The NMCHC as a national training center is further strengthened.  
3. Functions of the NMCHC as national program implementation and collaboration organization are strengthened to support national policy making.  
4. Hospital facility management at NMCHC, national hospitals and referral hospitals are improved.

(4) Inputs  
**Japanese Side:**
- Long-term experts: 15 persons  
- Short-term experts: 57 persons  
- Trainees received: 18 persons  
- Equipment: 69,000,000 yen  
- Local costs: 77,000,000 yen  
- Others: 14,000,000 yen  

**Total Cost:** 854,000,000 yen

1-25
368 persons
Unknown (Rate of Quantity: 8%, Rate of Cost: 4%)
Project office fee, Utilities
Unknown

2. Evaluation Team

<table>
<thead>
<tr>
<th>Members of Evaluation Team</th>
<th>Evaluation Analysis: Nobuko Fujita (Deputy Director, Department of International Development Research Institute, FASID)</th>
<th>Evaluation Analysis: Keiko Watanabe (Program Officer, Department of International Development Research Institute, FASID)</th>
<th>Local Consultant: Sao Botumroath, Cambodia Organization for Research and Development</th>
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</thead>
<tbody>
<tr>
<td>Period of Evaluation</td>
<td>March 29, 2009 – April 10, 2009 (including another ex-post evaluation study)</td>
<td>Type of Evaluation: Ex-post Evaluation</td>
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3. Project Performance

3-1. Performance of the Project Purpose

“Human resource development for the improvement of Maternal and Child Health, including community health, is strengthened.”

The project implemented trainings for nurses and midwives, who are the main providers for MCH services. The project has also strengthened the training functions of NMCHC, which is crucial in the success of the project. The training quality has received a high external evaluation. It is impossible to measure the degree of achievement because there was no target value set. However, the project was carried out in an adequate manner toward the accomplishment of its goal.

3-2. Achievements related to the Overall Goal

“Quality of service for maternal and child health in the Kingdom of Cambodia is improved.”

Much improvement has been seen in the following three indicators to verify the Overall Goal, indicating the improvement of the status of the quality of services for MCH in Cambodia; (1) Percentage of births attended by trained health personnel in Cambodia. (22% (2003) ➔ 58% (2008)) (2) Ante-natal care rate by trained health personnel. (40% (2003) ➔ 81% (2008)) (3) Caesarean section rate (0.35% (2003) ➔ 2.0% (2008)). However, likewise to the project purpose, it was impossible to measure the degree of achievement because there was no target value set.

3-3. Follow-up of the Recommendation by Terminal Evaluation Study

<table>
<thead>
<tr>
<th>Recommendations in Terminal Evaluation Report</th>
<th>Stage of Implementation</th>
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<tr>
<td>2. To develop a strategy/plan for NMCHC human resources including management training.</td>
<td>A strategy/plan has been formulated every year. However, NMCHC does not have authority over recruitment, so there exists a gap between the plan and its implementation.</td>
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<td>3. To develop a database compiling existing data regarding training.</td>
<td>Although the database has been developed, it is not utilized enough due to the shortage of who are capable of using it.</td>
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<td>4. To further strengthen the procurement practices of medicines and equipment in NMCHC.</td>
<td>Procurement requests to MOH are made only once a year. Therefore, in some years there is an excess supply or a shortage from MOH. There are limitations to changing the system on the NMCHC side. However, it has not become a serious issue since the procurement costs are covered by the revenue of user fees.</td>
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5. To include an expansion plan of CPA and MPA trainings (including supervision) in the Annual Operation Plan and implement it. In order to decentralize the training and improve the quality of services in provinces, the Regional Training Center’s (RTC) training functions should be enhanced. MPA and CPA trainings continue to be carried out after the project. However, RTC’s training functions have not been enhanced yet.

6. Cooperation with hospitals offering practical training opportunities should be strengthened and maintenance of medical equipment in health facilities at the provincial level should be carried out. Maintenance of medical equipment at provincial health facilities has been taken over and carried out in a different project, “Promotion of Medical Equipment Management System”. Cooperation in practical training is being carried out in another project, “Improving Maternal and Child Health Service in Rural Areas in Cambodia”, the successive project that followed this Phase II project.

7. To build a drugs supply system with a shortened procurement period. Same as No.4 above.

8. To continual training of lab technicians. The training for lab technicians has not been executed.

9. To provide medical equipment management and maintenance services to regional referral hospitals based on the project results. Same as No.6 above. Regional medical equipment management and maintenance is being executed in a different project.

10. To strengthen the management ability of the PMTCT (Prevention of Mother-to-Child Transmission of HIV) program, the Provincial Health Departments (PHD) and the Operational District (OD) of health, particularly the partnership of PMTCT with other national programs. Strengthening the management ability of PHD and OD has been taken over in the “Improving MCH service in Rural Area” project. NMCHC was confirmed to function as a coordinator of four national programs. Cooperation amongst the programs is when needed.

According to the definition of MOH, Minimum Package of Activities (MPA) is the services to be delivered at the Health Center, while Comprehensive Package of Activities (CPA) is the services to be delivered at the Referral Hospitals. MPA/CPA Trainings are the trainings that enable medical personnel to provide each MPA/CPA service.

<table>
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<tr>
<th>Long-term Recommendations</th>
<th>4. Results of Evaluation</th>
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<tr>
<td></td>
<td>4-1. Summary of Evaluation Results</td>
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<td></td>
<td>(1) Relevance</td>
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<td></td>
<td>The health sector, including reproductive health, is a priority subject in the “Second Socio-Economic Development Plan (2001-2005)”. In the “Health Strategic Plan (2003-2007)”, improvement in Maternal and Child Health has been set as a priority subject. In Cambodia, maternal mortality and infant mortality are relatively high compared to neighbor countries. Due to the civil conflict, inadequacy of medical facilities and human resources are serious issues. Given the current situation, this project is in line with the urgent priority needs. In Japan’s assistance policy and strategies to Cambodia, MCH is one of the focused areas in health sector assistance. The target groups of this project were women and children, so as to assist the vulnerable people in the society. The project matched the Cambodia’s needs and their development plans, as well as the Japanese aid strategy. The steps taken in the project were also appropriate. Therefore, it can be concluded that the project was highly relevant.</td>
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<td>(2) Effectiveness</td>
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<td></td>
<td>Achievements from the following four outputs produced significance to the project, and it is confirmed that the project was effective and meaningful. However, it was impossible to measure the degree of achievement due to two reasons. One is that there was no target value set. Another reason is that the project design was not logically correct. The Project Purpose, “Human resource development for the improvement of MCH, including community health, is strengthened”, was to be derived from only outputs 1 and 2. Outputs 3 and 4 do not directly contribute to the Project Purpose but only contribute to the Overall Goal. Therefore, it was noted that the project design was not logical, and parts of the outputs have not contributed to the achievement of the</td>
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Regarding output 1, it was confirmed that major indicators that verify the functions of NMCHC as a top referral hospital have been strengthened (Table 1).

### Table 1: Major Indicators on NMCHC Function (output 1)

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<tbody>
<tr>
<td>Number of births</td>
<td>577</td>
<td>561</td>
<td>603 682 638</td>
<td></td>
</tr>
<tr>
<td>Number of C-section</td>
<td>-</td>
<td>807</td>
<td>902 1,060 1,083</td>
<td></td>
</tr>
<tr>
<td>Number of ante-natal checkup</td>
<td>2,011</td>
<td>2,314</td>
<td>2,132 2,392 2,182</td>
<td></td>
</tr>
<tr>
<td>Number of lumbar anesthesia</td>
<td>494</td>
<td>1,203</td>
<td>1,330 1,540 1,531</td>
<td></td>
</tr>
</tbody>
</table>

Regarding output 2, the NMCHC training system has been built up (training cycle of plan-do-check-act) and the training carried out is highly evaluated from the outside. The actual performance of training is illustrated in Table 2. Although the numbers are lower compared to the number of midwives across the country (approximately 3,000), the fact that they are spread across the country should be recognized. It is reported that not only have their individual skills improved through training, they have also gained confidence, which has enhanced the effectiveness of the project. On the other hand, the project has not affected the rural areas, since rural midwives were not trained to be trainers. Although it was outside of the project scope, the project could have been more effective if such activities were included, considering that the Project Purpose targeted community health as well. In addition, the project did not liaise with pre-service training for midwives. Pre-service training for midwives in Cambodia has not reached “international standards” determined by WHO, and there is a concern to improve the overall level of midwives. A linkage between pre-service training and institutions which have technical knowledge and practical facilities (e.g. NMCHC and RH) should be established to enhance human resources development in a more effective way.

### Table 2: Actual Performance of Training (output 2)

<table>
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<tr>
<th>NMCHC trainings carried out</th>
<th>During the project</th>
<th>After the termination of project</th>
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<tr>
<td></td>
<td>Number of trainees completed (Course number)</td>
<td>2005</td>
</tr>
<tr>
<td>HC midwives training (4 weeks)</td>
<td>155 (8)</td>
<td>19 (1)</td>
</tr>
<tr>
<td>RH midwives training (5 weeks)</td>
<td>122 (8)</td>
<td>38 (1)</td>
</tr>
<tr>
<td>RH doctors training (3 months)</td>
<td>30 (6)</td>
<td>5 (1)</td>
</tr>
<tr>
<td>Number of midwives and nurses who became trainers</td>
<td>17</td>
<td>27 (Number of trainers at the time of ex-post evaluation)</td>
</tr>
<tr>
<td>Number of doctors who became trainers</td>
<td>27</td>
<td>31 (Number of trainers at the time of ex-post evaluation)</td>
</tr>
<tr>
<td>Number of supervisory visits for follow-ups by province</td>
<td>41 (provinces)</td>
<td>19</td>
</tr>
</tbody>
</table>

Regarding output 3, it was confirmed that NMCHC was functioning as mediator, coordinating four national programs.

Regarding output 4, the Medical Equipment Unit of NMCHC was upgraded to becoming a National Workshop. The ultimate objective of output 4, to expand the maintenance services to the provincial level, was not achieved, since the equipment inventory including provincial level which was due to be created with the assistance of another donor (GTZ), was not completed. Therefore, the project also gave assistance in the
development of this inventory.

(3) Efficiency

Counterparts (C/P) successfully engaged in this project while handling other operations. The training for C/P was executed in an efficient way by allocating several courses, including C/P training, group training, third country training and training organized by other organizations. The input of equipments was also efficient, verified by the fact that the proper amount of appropriate equipment was provided and the operating rate of equipment has kept at more than 90% even now. Overall, the project was efficient. The external factors that had been concerned to affect efficiency such as the turn over rate and the supply of medicine and equipment did not become issues because they were handled flexibly.

(4) Impact

The project has brought about several positive impacts in its policy and technical aspects. No particular negative impacts have been confirmed. As seen in 3-2 above, improvement towards achieving the Overall Goal has been confirmed. However, the cause-effect relationship has not been verified, of whether the project made any impact on the Overall Goal, and to what extent contributions were made, if any.

This project has made a huge contribution in strengthening the function of NMCHC (strengthening the ability of treatment, training system, management of medical equipment, and coordination among national programs). According to the research on midwives training by MOH/UNFPA (2006), the training conducted by NMCHC was concluded to be more effective compared to other similar training, which enhanced NMCHC’s training confidence. The project’s impacts on policies and systems include how the NMCHC training courses have approved by MOH, which led to the securing of a budget from the government. Regarding management of medical equipment, the Medical Equipment Unit of NMCHC has been upgraded to becoming a National workshop. The partnership with the Department of Medical Service of MOH has been realized. Due to this partnership, this project contributed to the enhancement of the Department of Medical Service of MOH. Unexpected impacts include the establishment of a sub-committee of the Society of Obstetrics and Gynecology in Khmer. Although it was not an impact brought about solely from this project, NMCHC is recognized as the “Japan Hospital” by local residents due to the Japanese Government’s long term cooperation, which has led to the enhancement of the friendship between the two countries.

(5) Sustainability

The sustainability of the project’s effects can be ensured regarding its technical, financial, institutional and policy aspects.

Regarding technical aspects, there are no problems judging from the utilization of NMCHC and the implementation status of training. In terms of its institutional aspects, no serious problems have been identified. The vacancy posts are covered by the staff in different departments or by short term contracts. However, human resources management needs to be taken care of immediately because MOH/HRD possesses the authority to recruit and assign personnel to NMCHC, and it is difficult to allocate the right person to the right post in a timely manner. Since many staff is expected to reach the retirement age, countermeasures have to taken immediately. Considering financial aspects, the budget allocated from MOH is increasing every year, though the disbursement timing is sometimes delayed. However, the collection of user fees is ongoing and it can cover for disbursement delays. In addition, input from the Health Sector Support Project (multi-donor sector project) can be expected for the NMCHC training in case of a delay in budget disbursement from MOH.

4-2. Factors that have promoted the project

(1) Impacts

The positive contribution in aid coordination by NMCHC, Japanese experts and JICA officials concerned have promoted the strong cooperation and alignment with other donor organizations/agencies. According to the other donors, Japan has contributed to the overall improvement of MCH sector by providing technical advice and sharing information. Such efforts from the Japanese side have contributed to the increase in
the effectiveness of the project and also to the improvement of its visibility.

(2) Sustainability

The existing user fee system, which was introduced in the Phase I project, has contributed to the project’s financial sustainability. The fees can cover for the staff posts which are not provided by the MOH, and also for procurement of drugs when they are scarce.

4-3. Factors that have inhibited the project

(1) Impact

Although it did not inhibit the impact brought on by the project, the aspect which inhibited the measurement of the project’s contribution to the Overall Goal was the fact that the Project Purpose and the Overall Goal were not clearly defined and a huge gap arose between the Project Purpose and the Overall Goal because of the project design.

(2) Sustainability

Nothing reported in particular.

4-4. Conclusion

Overall, the direction of this project is in line with the policies of Cambodia and local needs, and the NMCHC clinical skills and training functions were enhanced. Judging from the institutional, technical, financial, and policy aspects, the sustainability of the project’s effect is expected. In this project, the ability of those that completed the training improved, and NMCHC was well-established as a core center for human resources development in MCH. However, the project effect was not spread country-wide.

The situation of MCH has been improved, however, the cause-effect relationship of whether the project made any impact on the Overall Goal, and to what extent contributions were made, if any, have not been verified.

Nonetheless, the impacts of NMCHC training are highly evaluated, and its numerous positive impacts on systems and policies have been exhibited. The implication from this project has become a base for subsequent related projects, and it can be said that the effect of the project has continuously been contributing to the improvement of MCH services.

4-5. Recommendations

(1) Enhancing the linkage with pre-service training

Pre-service training for midwives in Cambodia has not reached the levels of “international standards” determined by WHO. In order to improve the quality of midwives in general, pre-service training has to be strengthened. Furthermore, MOH has started a one-year course for the qualification of primary midwives. Therefore, it is important to train such inexperienced new graduates. Currently the NMCHC training course offers in-service training for those who have practiced as midwives. In order to elevate the overall level of midwives in Cambodia, it is important to enhance the abilities of these new graduates and the quality of pre-service training. It is recommended that, as a core national MCH center, NMCHC should cooperate with the Regional Training Centers (RTC) and other institutions, which are conductiong pre-service training, in the technical and practical aspects of pre-service training. At the same time, at the provincial level, RTCs should link with Referral Hospitals and Health Centers.

(2) The role of NMCHC in the future training system

At present, it is difficult to decentralize trainings at the provincial levels due to the insufficiency of medical equipment and human resources. However, relevant stakeholders have reached an agreement that the training for MCH at the provincial levels is necessary in the future. When this becomes feasible, it is expected for NMCHC to train regional trainers and standardize the training contents together with MOH. It is also
recommended that NMCHC supervises MCH training conducted across the country. In consequence, NMCHC is expected to continuously enhance training functions and contribute to the improvement of MCH.

4-6. Lessons Learned

(1) Clarification of Project Design Matrix (PDM) summary and set up of indicators

It is necessary to define clearly what the terms Project Purpose, Overall Goal, and Output (PDM summary) mean. For this purpose, it is also necessary to set up measurable/objectively verifiable indicators and target levels. If a target level is not set, it is impossible to make any evaluations based on comparison with the plans; in addition, it makes it harder for project implementers to have common perception, which inactivates the management of activities. It is desirable to quantify the target as much as possible at the beginning of the project (modify it during projects when necessary), and it should be shared amongst all project related persons as a common understanding.

(2) Clarify the cause-effect relation between the Project Purpose and Overall Goal

It is necessary to clarify the cause-effect relationship between the Project Purpose and the Overall Goal, by taking external assumptions into consideration, and by carefully examining if any gaps exist between the goals.