

Country Name	The Project for Improving Maternal and Newborn Care through Midwifery Capacity
Kingdom of Cambodia	Development

I. Project Outline

Background	<p>The government of Japan has supported the government of Cambodia for establishment of the maternal and child health service system through construction of the National Maternal and Child Health Center (NMCHC) and the technical cooperation projects. However, the number of skilled and experienced midwives was less than what was required. This was especially so in rural areas. Furthermore, quality service in delivery care was questionable as training for midwife was not satisfactory in quality. To tackle these issues, the Ministry of Health (MOH) in Cambodia had set up a policy to increase numbers of midwives. MOH gave priority to increase in numbers of midwives in rural areas, and enhancement of the quality of in-service and pre-service training conducted by regional referral hospitals.</p>				
Objectives of the Project	<p>Through trainings for midwife trainers and delivery of pre-service and in-service trainings for midwives in NMCHC and in the target provinces, the project aimed at strengthening midwifery training system, thereby contributing to increase in midwifery services focused on evidence-based quality care.</p> <ol style="list-style-type: none"> 1. Overall Goal: The utilization of and access to maternal and newborn care provided by midwives is increased. 2. Project Purpose: The midwifery training system is strengthened for enabling provision of midwifery services with evidenced-based quality care. 				
Activities of the Project	<ol style="list-style-type: none"> 1. Project site: Phnom Penh and the four provinces in Kampong Cham Region (Kampong Cham, Kampong Thom, Prey Veng, Svay Rieng) 2. Main activities: (i) Training on evidence-based midwifery care for normal birth practice for midwife trainers in NMCHC, Kampong Cham Provincial Hospital and a model region, (ii) development of guidelines and training materials, (iii) sharing of the project experience and issues with other regions, and (iv) integration of issues and lessons learned in midwifery capacity development into the national strategies/ programs. 3. Inputs (to carry out above activities) <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;"> Japanese Side <ol style="list-style-type: none"> 1) Experts from Japan: 22 persons 2) Trainees received: 21 persons 3) Training in the third country: 5 persons (in Brazil) 4) Equipment: Training equipment (e.g. delivery model, ANC model, doppler fetal heart rate detector, etc.), Vehicles, office equipment (e.g. PC and software, printer, projector, etc.) 5) Local cost: Cost for training activities, payroll for local staff, travel expenses, etc.. </td> <td style="width: 50%; vertical-align: top;"> Cambodian Side <ol style="list-style-type: none"> 1) Staff allocated: 59 persons 2) Land and facilities: Office space in NMCHC and in Training Building of Kampong Cham Provincial Hospital, and office furniture 3) Local cost: Maintenance cost for office space and furniture </td> </tr> </table> 			Japanese Side <ol style="list-style-type: none"> 1) Experts from Japan: 22 persons 2) Trainees received: 21 persons 3) Training in the third country: 5 persons (in Brazil) 4) Equipment: Training equipment (e.g. delivery model, ANC model, doppler fetal heart rate detector, etc.), Vehicles, office equipment (e.g. PC and software, printer, projector, etc.) 5) Local cost: Cost for training activities, payroll for local staff, travel expenses, etc.. 	Cambodian Side <ol style="list-style-type: none"> 1) Staff allocated: 59 persons 2) Land and facilities: Office space in NMCHC and in Training Building of Kampong Cham Provincial Hospital, and office furniture 3) Local cost: Maintenance cost for office space and furniture
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Project Period	March 2010 - August 2015 (Extension Period: March 2015 – August 2015)	Project Cost	(ex-ante) 420 million yen (actual) 435 million yen		
Implementing Agency	Ministry of Health (MOH), National Maternal and Child Health Center (NMCHC), Kampong Cham Provincial Health Department, Kampong Cham Provincial Referral Hospital, Kampong Cham Regional Training Center				
Cooperation Agency in Japan	None				

II. Result of the Evaluation

1 Relevance
<p><Consistency with the Development Policy of Cambodia at the Time of Ex-Ante Evaluation and Project Completion></p> <p>The project was consistent with Cambodia's development policies of "the National Strategic Development Plan (NSDP)" (2006-2010), "NSDP 2014-2018", "the Health Strategic Plan" (2003-2007 and 2008-2015) emphasizing the importance of maternal and child health.</p> <p><Consistency with the Development Needs of Cambodia at the Time of Ex-Ante Evaluation and Project Completion ></p> <p>The project was consistent with Cambodia's development needs for skilled and experienced midwives, especially in rural areas, and satisfactory quality service in delivery care.</p> <p><Consistency with Japan's ODA Policy at the Time of Ex-Ante Evaluation></p> <p>The project was consistent with "the Country Assistance Program for Cambodia" (2002) putting priority on strengthening the provision of services of basic human needs (BHN) including the basic medical service as an assistance for socially vulnerable people.</p> <p><Evaluation Result></p> <p>In light of the above, the relevance of the project is high.</p>
2 Effectiveness/Impact
<p><Status of Achievement of the Project Purpose at the time of Project Completion></p> <p>The Project Purpose was achieved by the time of project completion. Practice of evidence-based midwifery care which is useful and should be encouraged was increased (Indicator 1), and practice of evidence-based midwifery care which is harmful and ineffective was</p>

decreased in the two target hospitals (Indicator 2). Proportion of women who felt themselves treated client-centered care was increased from 53% to 100% in NMCHC, and 53% to 87% in Kampong Cham Provincial Hospital (Indicator 3). Also it was confirmed that students' knowledge on evidence-based MW care was increased (Indicator 4). Kampong Cham Provincial Hospital conducted 51 trainings on midwifery care, out of which 37 were fully supported by the Training Unit (TU) (Indicator 5).

<Continuation Status of Project Effects at the time of Ex-post Evaluation>

The project effects have been continued after the project completion. In this ex-post evaluation, the actual data for five indicators of the project purpose after the project completion could not be obtained as it was difficult to conduct the follow-up survey by applying the same methodologies used in the baseline and endline surveys. Alternatively, the continuation status of the training systems introduced by this project was examined based on the premise that if the training system continues, the project effects should be maintained. The midwifery training system for midwifery services with evidence-based quality care has been maintained after the project completion. The four-week in-service midwifery training and one-month Basic Emergency Obstetrics and Newborn Care (BEmONC) training introduced by the project have been provided in NMCHC and Kampong Cham Provincial Hospital continuously.

<Status of Achievement for Overall Goal at the time of Ex-post Evaluation>

The Overall Goal has been achieved by the time of ex-post evaluation. The percentage of deliveries attended by skilled birth attendants was increased from 53% in 2008 to 85.2% in 2015 in NMCHC and 88.95% in 2015 in Kampong Cham Provincial Hospital, which met the target value (Indicator 1). Also, the percentage of deliveries performed at health facilities increased from 35% in 2008 to 80.4% in 2015 in NMCHC and 88.95% in 2015 in Kampong Cham Provincial Hospital, which met the target value (Indicator 2). Furthermore, the above two indicators have maintained over 80% after 2015. However, the actual values of two indicators exceeded 80% in 2013, and it was considered that the Overall Goal was already achieved in 2013. This expansion in access to delivery services could rather be explained by many changes brought to the Cambodia maternal and child health sector over the past decade. Among them, major contributing factors include 1) promotion of facility-based deliveries through midwife incentives, 2) allocation of more midwives to health facilities, 3) improved physical access to health facilities, both in number of functional health facilities and in availability of transportation, 4) improvement in capacity to provide BEmONC services at public hospitals, and 5) mass media campaign promoting safe deliveries. On the other hand, although there are other contributing factors besides this project that promoted the achievement of the Overall Goal, the improvement of capacity of midwives and midwifery service by the project also contributed to maintain the high ratio of deliveries attended by skilled birth attendants and deliveries performed at health facilities in the target two hospitals after the project completion.

<Other Impacts at the time of Ex-post Evaluation>

No other positive or negative impacts of the project were confirmed at the time of ex-post evaluation.

<Evaluation Result>

Therefore, the effectiveness/impact of the project is high.

Achievement of Project Purpose and Overall Goal

Aim	Indicators	Results																		
(Project Purpose) The midwifery training system is strengthened for enabling provision of midwifery services with evidence-based quality care.	Indicators 1 Practice of evidence-based midwifery care which is useful and should be encouraged is increased.	<p>Status of the Achievement: achieved (continued) (Project Completion)</p> <ul style="list-style-type: none"> In comparison with the results of baseline and endline surveys, the implementation of useful practices for midwifery care was increased in 8 out of 8 practices in NMCHC and Kampong Cham Provincial Hospital. <p>(Ex-post Evaluation)</p> <p>(1) NMCHC</p> <table border="1"> <thead> <tr> <th>Training course</th> <th>No. of training session</th> <th>No. of midwives received the training</th> </tr> </thead> <tbody> <tr> <td>Four-week in-service midwifery training</td> <td>3</td> <td>60</td> </tr> <tr> <td>One-month BEmONC training</td> <td>10</td> <td>219</td> </tr> </tbody> </table> <p>Note: Target period is from March 2015 till 2018 (This target period includes the extension period of the project from March 2015 to August 2015).</p> <p>(2) Training Unit (TU) of Kampong Cham Provincial Hospital</p> <table border="1"> <thead> <tr> <th>Training course</th> <th>No. of training session</th> <th>No. of midwives received the training</th> </tr> </thead> <tbody> <tr> <td>Four-week in-service midwifery training</td> <td colspan="2">This training was integrated into BEmONC training</td> </tr> <tr> <td>One-month BEmONC training</td> <td>18</td> <td>65</td> </tr> </tbody> </table> <p>Note 1: BEmONC (Basic Emergency Obstetrics and Newborn Care) Note 2: Target period is from March 2015 till 2018 (This target period includes the extension period of the project from March 2015 to August 2015).</p>	Training course	No. of training session	No. of midwives received the training	Four-week in-service midwifery training	3	60	One-month BEmONC training	10	219	Training course	No. of training session	No. of midwives received the training	Four-week in-service midwifery training	This training was integrated into BEmONC training		One-month BEmONC training	18	65
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Indicator 2 Practice of evidence-based midwifery care which is harmful and ineffective is decreased.	<p>Status of the Achievement: achieved (continued) (Project Completion)</p> <ul style="list-style-type: none"> In comparison with the results of baseline and endline surveys, the implementation of harmful practices decreased in 8 out of 12 practices NMCHC, and in 9 out of 12 practices in Kampong Cham Provincial Hospital. <p>(Ex-post Evaluation)</p> <ul style="list-style-type: none"> Same as the Results of Indicators 1. 																			
Indicator 3 Proportion of women who felt	<p>Status of the Achievement: achieved (continued) (Project Completion)</p>																			

	themselves treated client-centered care is increased.	<ul style="list-style-type: none"> Increased from 53% to 100% in NMCHC, and 53% to 87% in Kampong Cham Provincial Hospital (baseline and end-line survey result) (Ex-post Evaluation) <ul style="list-style-type: none"> Same as the Results of Indicators 1. 																
	Indicator 4 Students' knowledge on evidence-based midwifery care is increased.	Status of the Achievement: achieved (continued) (Project Completion) <ul style="list-style-type: none"> More than 70% of students answered correctly for 9 out of 12 questions asked. (Ex-post Evaluation) <ul style="list-style-type: none"> Same as the Results of Indicators 1. 																
	Indicator 5 Number of Midwifery training conducted in Kampong Cham	Status of the Achievement: achieved (continued) (Project Completion) <ul style="list-style-type: none"> Kampong Cham PH conducted 51 training on midwifery care, out of which 37 were fully supported by the TU. (Ex-post Evaluation) <ul style="list-style-type: none"> Refer to the Results of Indicators 1 at the ex-post evaluation. After the project completion, Kampong Cham PH continued the provision of midwifery care training, and conducted the one-month BEmONC training for 4-5 times a year from 2015 to 2018 targeting existing and newly recruited midwives. 																
(Overall Goal) The utilization of and access to Maternal and Newborn care provided by midwives is increased.	Indicator 1 The percentage of deliveries attended by skilled birth attendants (SBA) is increased from 58% (NHS2008) to 80% (NHS2015 target) and over 80% is maintained in 2018. *NHS2008: National Health Survey 2008 *NHS2015: National Health Survey 2015	(Ex-post Evaluation) achieved (1) Percentage of Delivery attended by Skilled Health Staff (NMCHC): <table border="1"> <thead> <tr> <th>2015</th> <th>2016</th> <th>2017</th> <th>2018</th> </tr> </thead> <tbody> <tr> <td>85.2</td> <td>85.0</td> <td>89.0</td> <td>87.3</td> </tr> </tbody> </table> (2) Percentage of Delivery attended by Skilled Health Staff (Kampong Cham Provincial Hospital): <table border="1"> <thead> <tr> <th>2015</th> <th>2016</th> <th>2017</th> <th>2018</th> </tr> </thead> <tbody> <tr> <td>88.9</td> <td>83.0</td> <td>80.6</td> <td>83.1</td> </tr> </tbody> </table> <ul style="list-style-type: none"> The target value of 80% was achieved in 2015 and was maintained until 2018 due to increase in number of skilled birth attendants (midwives) with skills on maternal and newborn care, decrease in delivery by traditional midwives, community health education, BEmONC training, Midwifery Coordination Alliance Team (MCAT) meetings. 	2015	2016	2017	2018	85.2	85.0	89.0	87.3	2015	2016	2017	2018	88.9	83.0	80.6	83.1
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Indicator 2 The percentage of deliveries performed at health facilities is increased from 39% (NHS2008) to 70% (NHS2015 target), and over 70% is maintained in 2018.	(Ex-post Evaluation) achieved (1) Percentage of Deliveries performed at Health Facilities (NMCHC) <table border="1"> <thead> <tr> <th>2015</th> <th>2016</th> <th>2017</th> <th>2018</th> </tr> </thead> <tbody> <tr> <td>80.4</td> <td>80.5</td> <td>85.4</td> <td>84.0</td> </tr> </tbody> </table> (2) Percentage of Deliveries performed at Health Facilities (Kampong Cham Provincial Hospital) <table border="1"> <thead> <tr> <th>2015</th> <th>2016</th> <th>2017</th> <th>2018</th> </tr> </thead> <tbody> <tr> <td>88.9</td> <td>83.0</td> <td>80.6</td> <td>83.1</td> </tr> </tbody> </table> <ul style="list-style-type: none"> The target value of 70% was achieved in 2015 and was maintained until 2018 due to increase in number of skilled midwife allocation and number of health center infrastructure development. 	2015	2016	2017	2018	80.4	80.5	85.4	84.0	2015	2016	2017	2018	88.9	83.0	80.6	83.1	
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Source: Terminal Evaluation Report, Data provided by NIS, Questionnaire and Interview with NMCHC.

3 Efficiency

Both the project cost and the project period exceed the plan (ration against plan: project cost 104%, project period 110%). The outputs were produced as planned. Therefore, the efficiency of the project is fair.

4 Sustainability

<Policy Aspect>

“The Fast Track Initiative Road Map for Reducing Maternal and Newborn Mortality” (2016-2020) and the “EmONC Improvement Plan” (2016-2020) established by the Ministry of Health promotes the reduction of maternal and newborn mortality by leveling up the maternal and newborn care system in the country. The above policies support the project effects on midwifery capacity development

<Institutional Aspect>

There has not been any change in the institutional structure for trainings for pre-service and in-service trainings for midwives in NMCHC. NMCHC, which is a top referral hospital in Cambodia specialized in the department obstetrics and gynecology and the department of newborn baby as well as a national training center for the experts of maternal and child health, is in charge of planning and implementation of midwifery training including four-week in-service midwifery training and one-month BEmONC training introduced by the project. The Training Unit of Kampong Cham Provincial Hospital is responsible for nursing and midwifery training in the regional level. On the other hand, the Department of Human Resource Development (HRDD), MOH administrates (i) health workforce planning and management, (ii) training, and (iii) quality improvement of health workforce. 36 out of 37 core trainers and 82 out of 87 midwifery trainers educated by the project have been working continuously at their respective medical institutions. .

<Technical Aspect>

Although a frequency of implementation of the four-week in-service training was decreased, one-month BEmONC trainings has been conducted on regular-bases continuously with the technical and financial support from the United Nations Population Fund (UNFPA), which enable core trainers and midwifery trainers to maintain the training skills and knowledge.

NMCHC has supported provincial health departments of Battambang, Takeo, and Kampot with the support from the German Corporation for International Cooperation (GIZ) to establish Training Unit (TU) in addition to Kampong Cham province. According to MOH, the newly established TU in the three provinces functions well. The training manuals and guidelines developed or revised by the project have been utilized by NMCHC and Kampong Cham Provincial Hospital continuously.

<Financial Aspect>

The budget for the four-week in-service training, and particularly BEmONC trainings have been continually allocated with the financial support from UNFPA since the project completion. The actual budgets allocated for the midwifery training at NMCHC were USD 69,798 (2015), USD 66,820 (2016), USD 62,526 (2017), USD 89,241 (2018) and USD 131,353 (2019). The budget disbursement and a significant increase in budget allocation were witnessed. According to NMCHC, they secured a budget for midwifery training for 2020. On the other hand, it was found that the counterpart agency did not have a systematic budget planning and management practice based on the training needs, which could be underscored by the project as an exit strategy. NMCHC has been discussing the future resource mobilization plan in order to secure a sufficient amount of budget from the Cambodian government as well as funding from the development partners.

<Evaluation Result>

Therefore, the sustainability of the effects through the project is high.

5 Summary of the Evaluation

The project achieved the Project Purpose and the Overall Goal to improve the accessibility to maternal and newborn care provided by midwives. In terms of sustainability, no major problems have been observed in the policy, institutional, technical, and financial aspects. As for efficiency, both the project cost and the project period exceed the plan.

Considering all of the above points, this project is evaluated to be highly satisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing Agency:

- BEmONC training and the four-week in-service midwifery training have been provided mainly at NMCHC and TU at Kampong Cham Provincial Hospital. Thanks to this, Kampong Cham Provincial Hospital has become to play a significant role not only as a training center for midwifery staffs under its regional coverage, but also provision of quality service delivery. Therefore, MOH is recommended to expand the opportunities for BEmONC training and the four-week in-service midwifery training to the other medical institutions nationwide in the future.

Lessons Learned for JICA:

- In order to secure the budget for trainings introduced by technical cooperation project, the sustainable funding mechanism in consideration with the institutional capacity of counterpart agency on training need-based financial planning, training management, supervision and training delivery should be discussed with the project counterparts and relevant stakeholders during the project implementation.



Exterior Structure
Training Unit of Kampong Cham Provincial Hospital



BEmONC Training
at Training Unit of Kampong Cham Provincial Hospital