

Country Name	Strengthening of CMAC Function for Human Security Realization
Kingdom of Cambodia	

I. Project Outline

Background	<p>Landmines and Explosive Remnants of War (ERW) remained in Cambodia as a lethal legacy of the three decades of the war and civil conflict until as late as 1998. More than 40% of all Cambodian villages were said to be affected by landmines and Unexploded Ordnance (UXO) and more than 5 million people were said to face threat of them (2007). Demining activities in Cambodia was mainly handled by Cambodian Mine Action Center (CMAC) which was a governmental organization, and around 15% of mine contaminated areas were said to have been cleared at the time of ex-ante evaluation.</p> <p>Japan had been supporting CMAC since 1998 through provision of equipment (mine detectors, demining machines and vehicles etc.), financial support to demining activities through international organization or grass-roots grant aid scheme, dispatching of JICA experts in maintenance of equipment and information management etc. All these supports had been implemented separately which made it difficult to see how these assistances contributed for streamlining of management ability of CMAC and promotion of demining activities with safety. In order to see more visible and tangible effect, JICA and CMAC started this technical cooperation project.</p>																								
Objectives of the Project	<ol style="list-style-type: none"> Overall Goal: To realize the target of "CMAC Five-Year Strategic Plan 2010-2014" Project Purpose: Strengthening the function of CMAC and technical transfer system for demining operation 																								
Activities of the project	<ol style="list-style-type: none"> Project site: CMAC (Phnom Penh, Battambang, Kampong Chnang and Siem Reap) Main activities: 1) Development of Information System, 2) Training and technical guidance for maintenance, (3) improvement of curriculum, manuals and others. Inputs (to carry out above activities) <table border="0"> <tr> <td>Japanese Side</td> <td colspan="4">Cambodian Side</td> </tr> <tr> <td>1) Experts: 4 persons</td> <td colspan="4">1. Staff allocated: 24 persons</td> </tr> <tr> <td>2) Trainees received: 3 persons in Japan, and 7 persons in the third country</td> <td colspan="4">2. Land and facilities: Office space and facilities provided (Headquarters, Central Workshop (CWS) Training Center)</td> </tr> <tr> <td>3) network devices, computers, machines and tools for maintenance, audio visual devices etc.</td> <td colspan="4">3. Local cost: Cost necessary for project activities</td> </tr> </table>					Japanese Side	Cambodian Side				1) Experts: 4 persons	1. Staff allocated: 24 persons				2) Trainees received: 3 persons in Japan, and 7 persons in the third country	2. Land and facilities: Office space and facilities provided (Headquarters, Central Workshop (CWS) Training Center)				3) network devices, computers, machines and tools for maintenance, audio visual devices etc.	3. Local cost: Cost necessary for project activities			
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Ex-Ante Evaluation	2007	Project Period	April 2008 – September 2010	Project Cost	263 million yen																				
Implementing Agency	Cambodian Mine Action Centre : CMAC																								
Cooperation Agency in Japan	-																								

II. Result of the Evaluation

1 Relevance

This project was highly consistent with Cambodia's development policy such as Cambodian Millennium Development Goals (MDGs), National Strategic Development Plan (NSDP) 2006-2010 and other documents which regard reducing the victims of landmines as one of the national goals at the time of both ex-ante evaluation and project completion. The project was also consistent with development needs for clearing landmines/ERW at the above mentioned stages, as the number of landmines/ERW remains high. It is also consistent with Japan's ODA policy (Country Assistance Program to Cambodia 2002) at the time of ex-ante evaluation as it sets the comprehensive support for demining as one of the priority areas. JICA's country assistance implementation plan also aimed to achieve human security through capacity development, institutional development and infrastructure development. Therefore, relevance of the project is high.

2 Effectiveness/Impact

The project mainly implemented activities for enhancing CMAC's capacity of (1) information management system (development of data systems and upgrading of network and computers), (2) maintenance management system at Central Workshop¹ (development of guidelines, on-the-job training/technical advice, and training on basic maintenance skills) and (3) training management system (introduction of training management cycle, reorganizing training curriculum, and introduction of training management manual). Through these activities, the project aimed that CMAC's function as well as technical transfer system for demining operation is strengthened.

At the time of project completion, the project mostly achieved the project purpose in terms of improvement in information management capacity, maintenance capacity, and quality of training. As to the information capacity, under the project, accuracy of data and efficiency of data management improved as the system does not require paper-based record anymore. As a result of the project, CMAC's planning exercise became more evidence-based and more credible by making best use of

¹ The function of the Central Workshop is to conduct maintenance and repair activities, and it has served as a major facility to repair and maintain key demining related equipment such as vehicles, brush cutters and demining machines.

accurate and centralized data. For example, for assessing the remaining problems of landmines, baseline survey was being carried out under the coordination of Cambodian Mine Action and Victim Assistance Authority². In terms of maintenance capacity, the operating rate of machineries was regarded to be maintained at the time of terminal evaluation, but the data was not maintained as expected. With respect to training, training curricula and others were used properly, as essential resources.

At the time of ex-post evaluation, the newly developed information system under the project has greatly contributed to the improvement of CMAC operation and management and it has been continuously used and expanding. For example, in terms of planning and implementation, it enabled CMAC to consolidate features of all database for reporting purpose and apply the data to project management. The systems developed by the project also have been used for equipment planning, providing minefield information, and personnel information. As for maintenance capacity, there is no data on availability rate as the practice of recording data on maintenance time, which was introduced by the project as the basis for calculating availability rate, has yet to be carried out. However, CMAC has been maintaining the number of usable equipment. The training management cycle introduced by the project is still working, and training manuals, curriculum and equipment have been properly utilized and revised. These materials have contributed to improve the quality of training since the process of course and training assessment, the process of training request, the qualification examination, and etc. have been applied based on the training manual. With equipment installed, trainers could train efficiently and students also could study easily.

As for overall goal, although the zero victims has not been achieved, the number of casualties has decreased year by year, and the cleared contaminated area has increased as planned. The number of landmines and UXOs destroyed did not reach the target yet, however, its total number has been increasing and it is approaching to the target steadily. The project has contributed to these improvements in the demining activities through capacity development of CMAC. There is no negative impact on the natural environment, and CMAC rather carries out demining activities in an environmentally friendly fashion. There is no land acquisition and no resettlement accordingly.

In light of the above, effectiveness/impact of the project is fair.

Achievement of project purpose and overall goal

Aim	Indicators	Results															
(Project Purpose) Strengthening the function of CMAC and technical transfer system for demining operation	(Indicator 1) Necessary information on various activities is systemized and searching and processing of data is conducted effectively.	(Project Completion) (1) The development of data systems, upgrading network and computer-related devices, posting full-time management information system staff in all Demining Units (DUs) and training of MIS staff allowed CMAC information management capacity more systematic and efficient. (2) With such development, CMAC's planning exercise became more evidence-based and more credible by making best use of accurate and centralized data. (Ex-post Evaluation) (1) The system has contributed to the improvement in planning and implementation of CMAC. (2) Fixed Asset Tracking System (FATS) has helped in oversight and providing data for the equipment planning. (3) Operation Database helps in providing minefield information; mine/UXO found and destroyed, Baseline survey data, and etc. (4) Human Resource System provides information on the situation of personnel.															
	(Indicator 2) Current operating rate of machineries (especially brush cutters, vehicles) is maintained.	(Project Completion) Although data was not available, maintaining the current availability rate ³ of machineries is to be met through upgrading mechanics' skills and knowledge and providing necessary machineries and equipment to CWS. * At the terminal evaluation, operating rate was replaced by availability rate. (Ex-post Evaluation) The data on the availability rate is not available. The number of usable equipment against the number of total equipment:															
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(Indicator 3) Training curricula, management manual and equipment installed are properly used.	(Project Completion) All 46 standard training course curriculum, training management manual and equipment installed are used and expected to be used properly as they are well perceived by counterpart personnel as essential resources to Training Center.																

² The Cambodian Mine Action and Victim Assistance Authority (CMAA) has been working on policy guideline and strategic plan development for mine actions in Cambodia since 2000. Mine clearance, mine risk education, survivor assistance, and related mine action activities are conducted in Cambodia under the authority of the CMAA.

³ Availability rate here refers to "days/time that machineries and equipment are available for use" and can be raised by fixing the problems in Central Workshop in a shorter time. (Source: The Joint Terminal Evaluation Report for The Project of Strengthening of CMAC's Function for Human Security Realization. P11)

		(Ex-post Evaluation) 46 standard training course curriculum and training management manual have been continuously used. Most of the equipment items have also been continuously used.																					
(Overall goal) To realize the target of “CMAC Five-Year Strategic Plan 2010-2014”	(Indicator 1) To contribute toward zero victims by 2012	(Ex-post Evaluation) (1) The number of victims in 2012 was 181 persons. (2) The number of casualties:																					
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(Indicator 2) To clear at least 230 km ² contaminated area within 5 years	(Ex-post Evaluation) The total land areas cleared in 4 years is approximately 248 km ²	<table border="1"> <thead> <tr> <th></th> <th>2010</th> <th>2011</th> <th>2012</th> <th>2013</th> <th>2014</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Cleared land area (km²)</td> <td>75.8</td> <td>51.9</td> <td>76.7</td> <td>63.9</td> <td>55.3</td> <td>323.6</td> </tr> </tbody> </table>		2010	2011	2012	2013	2014	Total	Cleared land area (km ²)	75.8	51.9	76.7	63.9	55.3	323.6							
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(Indicator 3) To destroy approximately 1 million landmines and UXOs within 5 years	(Ex-post Evaluation) Found and destroyed mines and UXOs:	<table border="1"> <thead> <tr> <th></th> <th>2010</th> <th>2011</th> <th>2012</th> <th>2013</th> <th>2014</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Mine</td> <td>18,469</td> <td>14,573</td> <td>16,106</td> <td>11,249</td> <td>7,056</td> <td>67,453</td> </tr> <tr> <td>UXO</td> <td>135,176</td> <td>83,673</td> <td>96,439</td> <td>111,428</td> <td>51,217</td> <td>477,933</td> </tr> </tbody> </table>		2010	2011	2012	2013	2014	Total	Mine	18,469	14,573	16,106	11,249	7,056	67,453	UXO	135,176	83,673	96,439	111,428	51,217	477,933
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Source : (Project completion) Terminal evaluation report. (Ex-post evaluation) Questionnaire survey and Interviews with CMAC.

3 Efficiency

While the project period was within the plan (ratio against the plan: 100%), the project cost exceeded the plan (ratio against the plan: 125%) . Therefore, efficiency of the project is fair.

4 Sustainability

In the policy aspect, a landmine issue is still given importance in the current development policy such as Cambodian MDGs as well as Rectangular Strategy of Cambodia, and the Royal Government of Cambodia gives CMAC priority to landmine clearance activities. Institutionally, although there is a slight change in CMAC's organizational structure including the Department of Training, the organizational set up is appropriate as the organizational structure and terms of reference of departments show clear command and reporting line. Regarding the number of staff, the Training Management Manual and the CMAC work plan identify 72 instructors/trainers necessary, and CMAC has 72 instructors/trainers. Although some of them are not permanently stationed at the Training Center, these instructors/trainers have their own position and task besides responsibility as instructors/trainers. Training course do not require full number of instructors/trainers spontaneously, therefore CMAC has no problem with current number of instructors/trainers.

Technical level of staff of information management system is not sufficient. The system was developed by an outside programmer hired during the project and currently there is no programmer at CMAC, therefore the current staff cannot respond to the system problem, or develop new report format. However, technical level of daily operation and training management system is sufficient as training and internal technical transfer based on the manual produced by the project is continuously conducted. Financially, CMAC is mainly dependent on the development partners, and funding from the government and CMAC's own revenue are limited so far. However, to ensure CMAC's sustainability, the Royal Government of Cambodia has made efforts to increase its funding for CMAC. Actually, in the past recent years, CMAC has continuously received increased funding from Royal Government of Cambodia. Therefore, it is thought the financial situation of CMAC has been improved gradually.

In view of these facts, sustainability of the effects of the project is fair.

5 Summary of the Evaluation

This project has somewhat achieved the project purpose and overall goal. The information management system developed by the project continuously used and contributed to improvement in the project management of CMAC. The training management cycle, training manuals, curriculum and equipment introduced by the project have improved the quality of training. However, it is difficult to exactly measure the improvement in the maintenance capacity, as the data recording practices introduced by the project are yet to be carried out. As to overall goal, the number of casualties has decreased every year and the cleared contaminated area and the number of landmines and UXOs destroyed has continuously increased.

As for sustainability, while the project is still given importance in the current development policy, there are problems in terms of technical and financial aspects. The software problem of the data system cannot be solved with the current technical level of staff. CMAC's activity mainly relies on the development partners' fund although this situation has been improved gradually. For efficiency, the project cost exceeded the plan.

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

III. Recommendations & Lessons Learned

Recommendations for Implementing agency

Although funding from the government has gradually increased, CMAC financially relies on development partners' support, and many activities of CMAC are carried out on project basis, which means CMAC always faces uncertainty of continuity of activities. Therefore, CMAC should keep requesting the government to increase the budget or CMAC should seek approval from the government to earn own revenue through commercial demining. Most of the land in Cambodia is given as economic concession to private companies and their needs for demining is high.

Lessons learned for JICA

When JICA implement a project, it is necessary to consider how to secure the sustainability of the project activities. In the case of this project, it was recognized through ex-post evaluation that there are some problems in terms of sustainability of CMAC, for example, the shortage of technical staff, unstableness of operational budget and so on. Therefore, it is important to reveal the potential factor which can affect securing sustainability in the future and to take some measures against it within the project.



(Photo 1) The database system which was developed by the project is used in each Demining Unit



(Photo 2) Demining related equipment such as vehicles, brush cutters and demining machines is repaired by CMAC staff at central workshop.