conducted by Laos Office: May 2018

Country Name	The Project for Supporting Unexploded Ordnance Clearance in Surrounding Areas of Main
Lao People's Democratic	Roads
Republic	Ivaus

I. Project Outline

While the Lao National Unexploded Ordnance Programme ("UXO Lao") had cleared UXO in approximately 3,000 ha of land each year, the number of cleared UXO accounted for only 0.6% of the total at the end of 2010. The additional funds, personnel, equipment, and other resources was essential in view of the fact that the UXO sector, if left with its current overall clearance capacity, would not be able to achieve the target figures described in the national programme for the UXO sector, the "National Strategic Plan for the

UXO Sector in the Lao People's Democratic Republic 2010-2020."

Furthermore, UXO Lao had been forced to detect and remove UXO quickly and smoothly to ensure the security of flood-stricken areas in various situations. This required UXO Lao to preferentially clear land on

which they were forced to relocate their public facilities.

Objectives of the Project

To improve the safety and efficiency of the UXO clearance activities by UXO Lao in areas including flood-stricken areas by procuring the UXO clearance equipment and thereby contributing to socio economic development and improvement in safety of residents/companies

1. Project Site: UXO Lao national office, training center, provincial offices in nine provinces.

2. Japanese side: Procurement of (1) equipment necessary for UXO detection and clearance (UXO Detectors, communication devices, GPS, vehicles, PC for data management) and (2) equipment necessary for capacity building and information management (PC, projectors) and others.

3. Lao side: (1) inland transportation from the training center to the project sites, (2) operation and maintenance of the equipment procured under the project, and others.

Project Period	E/N Date	May 23, 2012	Completion	September 27, 2013 (Handover of equipment)		
	G/A Date	June 5, 2012 (Amended on October 3, 2012)	Date			
Project Cost	E/N Grant Limit / G	A Grant Limit: : 900 million yen		Actual Grant Amount: 830 million yen:		
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Executing Agency Lao National Unexploded Ordnance Programme (UXO Lao)

Contracted Agencies Main Contractor(s): Mitsubishi Corporation, Sirius Corporation
Main Consultant(s): ORIENTAL CONSULTANTS Co.,Ltd. LANDTEC JAPAN, INC.

II. Result of the Evaluation

Contents of the Project

1 Relevance

<Consistency with the Development Policy of Laos at the Time of Ex-Ante and Ex-Post Evaluation>

The project has been consistent with Laos's development policy. At the time of ex-ante evaluation, "the National Strategic Plan for the UXO Sector in the Lao People's Democratic Republic 2011-2020" intended to reduce the number of UXO casualties from 300 to less than 75 per year by 2020. At the time of ex-post evaluation, "National Strategic Plan for the UXO Sector in the Lao PDR from 2011-2020, The Safe Path Forward II" set the priority on the UXO clearance in target 47 poorest districts.

<Consistency with the Development Needs of Laos at the Time of Ex-Ante and Ex-Post Evaluation >

The project has been consistent with development needs of Laos for UXO clearance. At the time of ex-ante evaluation, cumulative cleared area by UXO Lao until 2011 was 23,442ha, which accounts for only 0.27% of the UXO contaminated area of 8,700,000ha (estimate). Approximately 80 million UXO remained in Laos, and only 480,297 UXO (0.6%) were cleared by 2009. At the time of ex-post evaluation, although UXO have been cleared steady every year, still many UXO remain.

<Consistency with Japan's ODA Policy at the Time of Ex-Ante Evaluation>

The project was consistent with Japan's ODA policy. "Country Assistance Policy for Lao PDR (April 2012)" referred to the necessity to pay attention to UXO as follows: "UXO which is still all over the country impedes the expansion of farm lands and infrastructure lands, thereby presenting a barrier in the way for socioeconomic development. Hence, bear in mind the necessity of UXO clearance as a cross-sectoral issue."

<Evaluation Result>

In light of the above, the relevance of the project is high.

2 Effectiveness/Impact

<Effectiveness>

The project has partially achieved its objectives to improve the safety and efficiency of the UXO clearance activities by UXO Lao in areas including flood-stricken areas as per 4 indicators: 1) the total clearance area per year; 2) the number of beneficiaries by clearance operations; 3) the number of persons covered by community awareness activities and 4) the maintenance cost of all equipment.

However the indicators except indicator 4 have not attained the target, due to the change of UXO Lao's strategy. In 2014, a new Concept of Operations was developed for UXO Lao which incorporates an evidence-based survey methodology into the prioritization of clearance activities. The development of the new survey methodology that provides a stronger evidence-based system for survey, which prioritizes the identification of Confirmed Hazardous Areas (CHA) and very quickly led to an increase in the number of UXO cleared per hectare. This means that CHA is now the focus of clearance activities. Before that,It was detected an UXO without prioritize of select location. Therefore, it was inefficient work, such as sometimes they can not detect any. Owing to the preliminary survey make their performance better so that they can conduct operation certainly in suitable place where are buried UXO and increased the number of dispose of

UXO. That is why efficiency of the their performance of dispose is significantly improved. As a result, a much larger number of UXOs can be found and destroyed per ha cleared though total clearance area per year is decreasing. It can be proved that the efficiency of clearance activity has dramatically improved. According to National Programme Director, the evidence-based survey has been carried out smoothly in 2017 as well. Year by year, the number of UXO found and cleared is increasing and it shows that the new strategy is working effectively. Also, based on CHA data, UXO Lao can now approach to the poorest districts where the accessibility is limited and conduct awareness activities for residents there. "The maintenance cost of all equipment" (indicator 4) has been reduced as a result of introduction of the new equipment under the project. In general, conditions of the equipment procured under the project is good and the equipment continues to operate properly. Some detectors (less than 10% of the total) are under repair. The equipment was given an individual identification number so that it is possible to know in what office the number of equipment was placed, however, it is difficult to grasp the situation of individual equipment at the headquarters (HQ) on time. It was expected that the safety of clearance operators improved through replacement of worn-out equipment with the new equipment. According to the questionnaires survey with UXO Lao at the 9 provinces, by replacing the equipment, the operators realized that they were able to work safer and more efficiently than before the project.

Socio-economic development has been facilitated by the UXO clearance activities. Interviews with 9 provincial offices of UXO Lao revealed that local facilities such as health center, school, gravity-feed water systems and other community facilities have been developed after the UXO clearance. The numbers of UXO victims are on a downward trend as a result of promotion of removal work and educational activities. From an average of 100 UXO causalities annually as recently as 2011, the number has dropped to less than 50 in 2016. This is due, in part to ongoing Risk Education in contaminated provinces and also to clearance of more UXOs by a growing number of operators. In addition, the unexploded shell removal work of the area where many Japanese companies have invested has been completed and therefore, the safety of their operation has been improved as the project envisaged at the time of ex-ante evaluation.

Negative impact on the natural environment by this project has not been observed and land acquisition has not occurred either.

<Evaluation Result>

In light of the above, a certain effect of the project has been observed, as UXO clearance has progressed, and some socio-economic development after clearance has been partially observed. Therefore, the effectiveness/impact of the project is fair.

Quantitative Effects

Qualitative Effects							
	Baseline	Target	Actual	Actual	Actual	Actual	Actual
	2011	2017	2013	2014	2015	2016	2017
	Baseline Year		Completion	1 Year after	2 Years after	3 Years after	4 Years after
			Year	Completion	Completion	Completion	Completion*1
Indicator 1: Total clearance	2,938	3,783	2,845.46	3,090.23	1,973.32	2,593.17	1,825.60
area per year (ha)							
Supplemental indicator 1a:	-	-	35,113	31,658	51,165	67,166	41,940
Number of cluster							
munitions (UXO) found and							
cleared							
Supplemental indicator 1b:	-	-	12	10	26	26	23
Number of UXO found and							
cleared per hector							
Indicator 2: The number of	466,337	510,486	219,032	235,687	98,872	95,416	30,146
beneficiaries by clearance	,	,					
operations							
Supplemental indicator 2a:	-	-	214,737	259,256	96,706	104,958	n.a.
Planned number of							
beneficiaries by clearance							
operations set by UXO							
Lao*2							
Supplemental indicator 2b:	-	-	102	90	102	97	n.a.
Progress of the planned							
number of beneficiaries (%)							
Indicator 3: The number of	143,447	150,619	173,529	196,420	183,155	93,428	85,712
persons covered by		•					
community awareness							
activities							
Indicator 4: The	69,769	54,262	65,816	42,699	32,487	30,120	28,057
maintenance cost of all		(2016)					
equipment (USD)*3		(2016)					

Source: JICA documents, questionnaire and interview with UXO Lao

3 Efficiency

Both project cost and project period were within the plan (the ratio against the plan: 92%, 67%). Therefore, the efficiency of the project

^{*1} Up to June, 2017

^{*2} UXO Lao set the target when they draw up an annual operation plan (December or January every year)

^{*3} Maintenance cost which consists of maintenance of clearing equipment and office equipment dramatically decreased in 2015 because UXO Lao replaced most of the office equipment and therefore, the maintenance cost for office equipment dropped.

is high.

4 Sustainability

<Institutional Aspect>

Operation and Maintenance (O&M) of the equipment procured under the project is carried out by UXO Lao. UXO Lao belongs to the Ministry of Labor and Social Welfare. In addition to HQ in Vientiane Capital, there are 9 provincial offices and one training center. Although the number of personnel has increased compared to before, it is not sufficient for carrying out clearance operation all over the country. On the other hand, UXO Lao is trying to strengthen capacity and a framework in terms of "human resource management" and "procurement and logistics" for proper activities as far as they can. JICA has been implementing Technical Cooperation Project, "The project for Strengthening management capacity of UXO Lao" since 2015 for enhancing asset and human resource management to make maximum use of equipment.

<Technical Aspect>

UXO Lao is striving to improve the technical skills of the staff through six training programs. However, at this moment, the staff is not satisfied with their skills especially on UXO equipment maintenance and considers that they need more training.

<Financial Aspect>

UXO Lao alone does not have sufficient budget to carry out O&M of the equipment. However, UXO Lao is sufficiently financed by development partners. It also has a great impact to UXO Lao that USA confirmed that they fund US\$90 million over for the next three years (from 2017-2019).

Budget of UXO Lao

(Unit: USD)

			(OIII. OSD)
	2014	2015	2016
Revenue	8,057,028.	10,097,511	10,131,142
	80	.53	.47
Expenditure	6,543,859.	7,775,734.	8,562,751.
	72	15	89

<Current Status of Operation and Maintenance>

The most of equipment items procured under the project are in good condition. UXO Lao regularly carries out maintenance of the equipment, however, they were not able to receive sufficient after-sales service for some of the equipment procured outside of Laos.

<Evaluation Result>

In light of the above, some issues have been observed in terms of institutional, technical and financial aspects, as the number of staff is not sufficient, more training is needed and UXO Laos is financially dependent on donors as same as other organizations in this field. However, it could be confirmed that the equipment is handled by the HQs and provincial offices properly. Therefore, the sustainability of the project effect is fair.

5 Summary of the Evaluation

The project has partially achieved its objectives, "to improve the safety and efficiency of the UXO clearance activities in areas including flood-stricken areas by UXO Lao" as the indicators set to measures the effectiveness, such as "total clearance area per year", "the number of beneficiaries by clearance operations", "the number of persons covered by community awareness activities", and "the maintenance cost of all equipment" partially achieved the targets. Positive impacts have been observed in terms of socio-economic development after UXO clearance. As for the sustainability, though slight problems have been observed in terms of the institutional, technical and the financial aspect, it can be said that the organizational structure and management system are appropriate in general.

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

III. Recommendations & Lessons Learned

Recommendations to Implementing Agency:

• The equipment was given an individual identification number so that it was possible to know in what office the number of equipment was placed, but it is difficult to grasp the situation of individual equipment at HQ. For proper management of equipment, it is necessary to share correct data of situation of equipment between HQ and provincial offices.

Lessons Learned for JICA:

• UXO Lao is short of data of impact for socio economic development after clearance activities. It is important to observe the socio-economic development of clearance site to evaluate the activity of clearance. In order to do that, it is necessary to cooperate with international organizations, other donors or NGOs who can monitor effective utilization of post clearance sites.



Motorbikes in Training Center



Generator in Savanakhet Office



Detectors and Radios in Champasak office