CHALLENGES IN THE TRANSFER OF INTERNATIONAL TRAINING FOR IMPROVEMENT OF ROAD ASSET MANAGEMENT CAPABILITY IN LAO PDR

Hokkaido University Master Student JSCE Member Amphaphone Bounnak Hokkaido University Associate Professor JSCE Member Michael Henry

1. Introduction

Lao government officially requested Japanese Government for a technical cooperation program in 2010, the Project for Improvement of Road Management Capability to develop planning and technical of road maintenance works in Lao PDR. The training program have known as the key element for better works on road management which supported by Japan International Cooperation Agency (JICA). Aiming to improve infrastructure maintenance works together capability of human resource. This carry six external training programs which is four trainings in Japan and two trainings in Thailand. Through a series of external training the trainees could expect to gain knowledge and skills such as 1) Asset management of road/bridge infrastructure, 2) Planning of road/bridge maintenances including budget making, 3) Human resources development, 4) Controlling over loaded vehicle. As the result, there are pilot projects and training transfer activities have done after training course. Nevertheless, this study aims to identify the challenges of the training transfer to better understand the relationship between role of departments and training result.

2. Research methodology

In this paper focuses on personal interview participants as the investigation, in order for identifying the issues after the training finished. Beside the evaluation of the training, the outline of the interview based on the concrete result of the trainees which gain from the training program and able to apply to their work.

2.1. Qualitative survey

The personal interview is the main component for this survey. There are three sections of the interview outline, focusing on the outcome of the training program. For this paper mainly talking about applying the new knowledge to their works after finished international training program. Besides, there are six departments, being the counterpart on the improvement road management capability project, under the Ministry of Public Works and Transport of Lao PDR, including: Department of Road (DOR), Department of Public Works and Transport of Savanhnakhet province (DPWT SNK), Department of Public Works and Transport of Vientiane province (DPWT VTE), Public Transport Training Center (PTTC), Public Works and Transport

Research Institute (PTRI) and Department of Transport (DOT). This interview emphasis besides of the evaluation of the training program.

2.2. Interview participants

There are six external training programs under the improvement road management capability as a title of all training courses including: four trainings between 2012 and 2015; and two trainings in Thailand (1st external training in 2013 and 2nd training in 2017 which is the last training under the program). Trainings in Japan were hosted by Ministry of Land, Infrastructure and Transport (MLIT). Additional, two trainings in Thailand were hosted by Department of Highway of Thailand. Table 1 shows each training was invited five to six departments under MPWT Lao PDR to attend each training.

Table 1 Number of participants of training programs

Department Training No.	– DOR	DPWT SNK	DPWT VTE	PTTC	PTRI	DOT	Total
1 st training at Japan	1	1	1	1	1	0	<u>5</u>
2 nd training at Japan	1	1	1	1	1	0	<u>5</u>
3 rd training at Japan	1	1	1	1	1	0	<u>5</u>
4 th training at Japan	1	1	1	1	1	0	<u>5</u>
1 st training at Thailand	1	1	1	1	1	0	<u>5</u>
2 nd training at Thailand	2	1	1	1	1	1	<u>7</u>

3. Discussion on the qualitative survey

According to interview, there are 16 out of 24 participants have done on the interview, meanwhile the interview had been done at least one participant of each training course. Moreover, Table 1 shows the number of trainees participated in each training program. There are five participants joined training program about two times. Additionally, three trainees are not able to do the interview because they are no longer being the counterpart of the project.

3.1. General challenges to training transfer

The project of improvement road management capability in Laos ran from 2011 to 2018 under JICA funding. The training program was providing as a short period and specific contents, expected the selected trainees from relevant departments under the counterpart of the

Keywords: international training program, road maintenance works, knowledge transfer, training transfer

project, to gain new knowledge from Japan and Thailand on road management. Trainees is expected to be a trainer after the external training in Japan and Thailand, which the result brought many activities under the improvement road management capability project including local training for technical manual of road/bridge/slope design, workshop at the construction field by trainees and inspection workshop. Thus, the trainees of the program still acquired the full effectiveness through their works. More than 55% of trainees said asphalt maintenance, modernize inspection system and some specific technique still not be able to apply in Laos. After international training, trainees played as the counterpart of many activities in the project under JICA funding. However, in order to continuous as a lesson learnt from Japan and Thailand relies on huge budget, which was said by 90% of trainees. Moreover, some technique of road management and construction are different which is useful for trainees to learnt new knowledge but long-term useful for the future.

3.2. Department's role and result on road management

The improvement of road management capability in Laos started in 2011 with six counterparts. Each department has responsibility on this project due to the activities and sub-project.

DOR: Construction plan, maintenance on national road, policy and strategy plan of road are the tasks. Since 2014, DOR has been supported fund by JICA on implementing rehabilitation works include: performance-based contract, technical manual for road/bridge/slope, local training program on technical manual.

DPWT-SNK: Savanhnakhet province is located in the middle of Lao road which is the National Road (NR) No. 9 was selected to be the best road for pilot project of rehabilitation in 2015. Nevertheless, DPWT-SNK responsibility local road including provincial road and rural road, but inspection on road and bridge.

DPWT-VTE: In 2014, another pilot project has done in NR No. 13 in Vientiane province by using Cement Foamed Asphalt (CFA), which involved by the Japanese company by using the modernize vehicle on pavement.

PTTC: Providing training for engineers and stakeholders and played as main responsibility of being a training center. The trainees updated and improved the new knowledge in the lesson and classes for local training. There are 37 classes in current situation of training which update after attended in the international training program.

PTRI: As a research institute of public works and transport, database of road/bridges is priority works. Since 2011, Vehicle Intelligent Monitoring system (VIM) were introduce for update database on Road Management System (RMS) together with Provincial Road Maintenance Management system (PRoMMS), as a pilot

project together with the Japanese expertise assistant during the project period. Until 2017, it was transferred from PTRI to DOR which the function will be continuous as system manager RMS.

DOT: In 2015, the minister approved a project for renew/upgrade modernized weight station as a pilot project in three provinces on national road of Laos. Additional, JICA funding supported to renew the weight station at NR No. 9; in 2016, this pilot project had started with DOT became a core responsibility on in-land transportation which brought DOT being a counterpart on this project.

3.3. Relationship between departments and training

There are nine Joint Coordination Committee meetings and thirteen Technical Working Group meetings to update the progress of the project, beside those are meeting lunched to contributed after each external training program. The timeline of each activities in the project were fully successful under JICA funding supported together with MPWT Laos cooperation. The international training is mainly support the counterpart and were expect trainees to be a trainer for training transfer in the local authority.

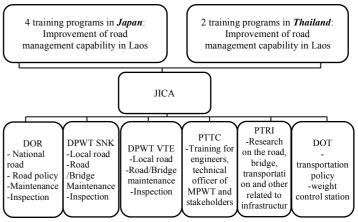


Figure 1 Relationship between departments and international training programs

4. Conclusion

Many sub-project and activities under the improvement on road asset management capability project have done under the long-term cooperation between Lao government and JICA funding. 90% of trainees from the external training said budget still being the challenges of road asset management due to many factors including some maintenance system not yet applicable to apply in Laos in current situation. As the result of many road maintenance activities represent as the clear responsibility in each department role. Road maintenance pilot projects are the first step of awareness how important of the road maintenance Lao PDR.

Acknowledgement: This research was funded by the JICA scholarship for Road Asset Management.