添付資料

## 添付資料 1-1 評価結果要約表(英語およびベトナム語)

(1)英語

#### **Summary**

# Evaluation Conducted by Takayuki KOJIMA, INTEM Consulting, Inc.

1. Outline of the Project			
Country: Socialist Republic of	Project title: Project for strengthening training capabilities for Road		
Vietnam	Construction Workers in Transport Technical and Professional School No.1		
Issue/Sector: Transport/Traffic	Cooperation scheme: Technical Cooperation		
Division in charge:	Total Cost: 1.27 billion Yen		
Social Development Department	Partner Country's Implementing Organization: Central Vocational College of Transport No.1, Ministry of Transport, General Department of Vocational Training, Ministry of Labour, Invalids and Social Affairs, Ministry of Planning and Investment		
Period of Cooperation: 22/01/2001-21/01/2006	Supporting Organization in Japan: Ministry of Land, Infrastructure, Transport and Tourism  Related Cooperation: Grant-Aid Project, 2000		

# 1-1. Background of the Project

In Socialist Republic of Vietnam (hereinafter referred to as "Vietnam"), the "Sixth 5 year Development Plan(1996-2000)" noted prioritized budget allocation on Transport sector (37.9%) in the Public investment, with 83.1% earmarked for spending on Road Construction (83.1%) among allocated budget. "National Transport Development Strategy" prepared by Master Plan Study Team dispatched by JICA also set construction of trunk roads as a goal. Since road construction and maintenance is an important issue to secure economic development, so training of the road construction workers becomes an urgent task.

Trunk roads construction is implementing by using overseas investment, however it is necessary to make continuous effort to construct local roads in Vietnam. Road construction enterprises such as Civil Engineering Construction Corporation are trying to construct roads efficiently applying new road construction equipment, but equipment is not utilized maximally because of lack of skilled workers who can operate, repair and maintain new equipment. Vocational training centres which implement skilled worker trainings have only out-dated equipment for their training, and have no capability to conduct training which related to up-dated machines. Transport Technical and Professional School No.1 (hereinafter referred to as "TTPS1") is an only nation wide training centre in Vietnam, however, it could not train skilled workers adequately because of week implementing organization and facilities. For this reason, Government of Vietnam requested Grant aid project and technical cooperation project which aimed to improve capability of TTPS1's training.

The Project purposed establishing new re-training courses (Operator, Mechanic and Road management/Road material testing) for road construction workers, and improving existing pre-service training courses (Operator, Mechanic and Road management/Road material testing), and raising training quality and trainees' technical qualification. Record of Discussion(R/D) for the Project was signed on September 22<sup>nd</sup> 2000, and the Project started on January 22<sup>nd</sup> 2001.

TTPS1 was promoted to high school in November 2004 and its name changed as "Central Transport High School No1" (hereinafter referred to as "CHTS1"), and now it was promoted to college in December 2007 with its name as "Central Vocational College of Transport No.1" (hereinafter referred to as "CVCT1").

## 1-2. Project Overview

#### (1) Overall Goal

- -CTHS1 becomes the model school in Vietnam for training of road construction workers.
- -The skills of road construction workers in Vietnam are improved.

#### (2) Project Purpose

Training capabilities of CTHS1are improved.

#### (3) Outputs

- 1) Equipment for training course is modernized to meet the requirements of construction sites.
- 2) The quality of teachers (CPs) is improved.
- 3) Retraining course for road construction workers is established.
- -Operator
- -Mechanic (engine)
- -Mechanic (chassis)
- -Module based training program
- -Material testing
- 4) The quality of pre-service training course for students is improved.
- -Operator
- -Mechanic
- -Material testing
- 5) CTHS1 is well managed in terms of organization, planning and training management

# (4) Inputs (As of the Project's termination):

### Japanese Side:

Experts : Long-term 8 persons / Short-term 11 persons (560,158 thousand Yen)

Equipment : 665,463 thousand Yen Others : 13,746 thousand yen

Trainees received: 28名(21,829 thousand Yen) Local cost: 4,997 thousand yen

Total 1.27 billion Yen

## **Vietnamese Side:**

Counterpart 29 persons Land and Facility

Local cost: 136 billion VND

#### 2. Evaluation Team

Member of Evaluation	Evaluation Analysis:	Takayuki KOJIMA, INTE	EM Consulting, Inc.
Team			
Period of	10/05/2009-06/06/2009		Type of Evaluation / Ev. post
Evaluation	10/03/2009-00/00/2009		Type of Evaluation/ Ex-post

#### 3. Project Performance

## 3-1 Performance of Project Purpose

(1)Indicator 1: CTHS1 can retrain 450 road construction workers at re-training course during the project period.

As of September 2005, 961 persons completed re-training courses. During 2006 to 2008, totally 370 persons finished re-training courses.

(2)Indicator 2: 270 students (90 per year) at Pre-service training course for Operator/Mechanics can get the 4<sup>th</sup> grade certificate at their graduation for three years.

As of the project termination, 90 persons (2003), 151 persons (2004) and 282 persons (2005) acquired level 4 qualification. At present, as qualification system reformed, past system cannot be applied as the indicator.

## (3) Indicator 3: material testing course(pre-service course) can be managed well by CTHS1.

As for road material testing course concerned, vocational secondary level and vocational college level are running as "Road material testing and quality inspecting course". However necessary equipment is not available for quality inspection training component.

# (4) Indicator 4: Reputation of CTHS1 in road construction sector is raised. (External evaluation by related organizations)

According to Ministry of Transport (MOT) which has jurisdiction over CVCT1, CVCT1 became a model school in vocational training, in light that CVCT1 is implementing practical training which graduates can be an immediate contribution at construction sites, and other 11 schools under MOT adopted CVCT1's training contents and method.

# (5) Indicator 5: The number and ratio of the graduates (of pre-service training) who are able to get jobs is increased.

Before the Project execution (in 1998), employment rate for graduate was 73.8% and number of employment was 597 persons. In 2004 sample survey found that employment rate improved to 95%. At present, as CVCT1 does not monitor employment of graduate, so that it is not measured.

#### 3-2 Achievement related to Overall Goal

# (1) Indicator 1: Training methods (Curriculum, syllabus, etc) are applied by other training schools.

National standard curriculum which proposed by the Project was not approved by General Department of Vocational Training (GDVT) because of revision of vocational training system in accordance with amendment of Law on Vocational Training in 2006. Based on proposed curriculum by the Project, however, GDVT selected trainers of CVCT1 as curriculum development committee member and is preparing national standard curriculum. Also trainers of CVCT1 are assigned to be chairpersons for curriculum development committee of Operator course and Road material testing course. Therefore the curriculum which the Project proposed is integrated into GDVT's curriculum development process and now developed curriculum is used by 17 schools under MOT.

#### (2) Indicator 2: Increase of road construction workers who are qualified for No.4 level.

At this moment, related data of number of qualified construction worker was not obtained because No.4 level of qualification has no more applied to worker since qualification system was modified. As trainees are awarded a certification at the time of graduation, so that this study defined "workers who are qualified No.4 level" as "workers who graduated school with certification" and trend of number of graduate is confirmed. Number of graduate was largely increased from 2006 to 2007, but was slightly decreased from 2007 to 2008. However number of student for vocational college level is increasing steadily.

#### (3) Indicator 3: Increase of road construction workers who are employed by transportation industries.

There is no data available for number of construction workers who are employed in transportation industries. Instead of this indicator, number of employees who are working for enterprises under MOT would be set as an alternative indicator through consultation with MOT. There are about 20 enterprises under MOT and number of workers who are working for enterprises related to road construction decreased from 14,057 (2004) to 10,758 (2008). MOT offered explanation for this decrease that scale of road construction was reduced because of a bribery case of road constructor bidding occurred in 2006.

## 3-3 Follow-up of the Recommendations by Terminal Evaluation Study

## (1) Authorization of National Standard Curriculum provided by the Project

National standard curriculum which proposed by the Project was not approved by GDVT. However based on that curriculum, curriculum development committee of GDVT prepared national standard curriculum. Consequently vocational training schools under MOT are using that curriculum.

## (2)Improvement of Qualification system

At present, "National Standard Skills" defines skill qualification for worker. "National Standard Skills" will divide skill qualifications into 5 levels. However this new qualification system is under developing, GDVT plans to adapt this system from 2020 to entire occupations.

# (3) Planning of CTHS1 after the Project

CVCT1 started 3 level of vocational training (primary, secondary and college level) after amendment of Law of Vocational Training (2006).

# (4)Improvement of School management

CVCT1 does not conduct needs survey for enterprises and trace survey for graduates. It is necessary for CVCT1 to implement these kinds of surveys.

# (5) Equipment maintenance

No particular problem was found in the equipment maintenance from technical and financial aspects

## 4. Results of Evaluation

## 4-1 Summary of Evaluation Results

#### (1)Relevance

Project purpose and Overall goal were consistent with the policies of the Government of Vietnam "The Five Year Socio-Economic Development Plan (2001-2005)" and policies of the Government of Japan "Country Assistance Plan for Vietnam". "Vietnam Transport Development Strategy by 2020" mentioned that "Implementing vocational training and re-training for management staffs and skilled workers for improvement of work skill and capability" and "Diversification of vocational training form" in the field of vocational training. Therefore target group was properly selected.

# (2)Effectiveness

Project purposes are generally achieved, and 1 to 5 outputs of the Project contributed to achievement of the Project purposes. Equipment procured used in training and properly maintained. Curriculum for short-term courses was prepared, and long-term courses of operator and mechanic were already implemented. In the pre-service training courses, trainees of operator course and mechanic course could acquire No.4 level of qualification. As for road material testing course concerned, advanced course and parts of training which had conducted at outside of the school (i.e. Indoor road material test) were able to be implemented in the school. Planning and operating capabilities of C/P were strengthened, and C/P could use equipment and materials which procured by the Project effectively. Moreover, school management ability was improved compared with that of before project execution.

## (3)Efficiency

In general, dispatch of expert, equipment procurement, receiving trainee and inputs by Vietnamese side were appropriate, despite there were some inputs to be improved. As for dispatch of expert concerned, it was pointed that envisaged work execution was delayed because an expert had to cover other expert's work during his absence. As for the equipment, used machines were allowed to be procured, so that trainees could have an experience to repair same machine troubles with actual construction sites. This training was effective. Generall counterparts were properly assigned by Vietnamese side in spite of some replacements. It was found, however,

that some reports which drafted by the Project were not remained at the school.

## (4)Impact

#### 1)Promotion to College

During the Project implementation, CVCT1 was a vocational high school. After the Project, CVCT1 was promoted to a college because MOT evaluated that CVCT1 was ready to open college level training in terms of equipment and facility which includes ones procured by the Project.

### 2)Securing self-income resource of the school

Before project, since CVCT1 had used outdated machine made in Soviet Union, so CVCT1 could not produce human resources who could work immediately at construction sites. As the Project has procured machines which met updated technology, CVCT1 could offer trainees practical trainings which were correspondent to actual road construction sites. Trainees could practice at construction sites accompanied with trainers. This on-site training was not only practical training for trainees but also self-income resource for CVCT1.

3)Improvement of project management skills for MOT staffs

Through cooperation with JICA project, MOT staffs' project management skills such as organizing implementation unit, planning, implementation and evaluation were strengthened according to MOT staff interview. Particularly MOT adopted PCM evaluation method to other project evaluation.

#### (5)Sustainability

## 1)Organizational aspect

At the time of project implementation, CVCT1 had been implementing 13 training courses. At present CVCT1 is ready to start 40 courses in the future. CVCT1 is recognized as a school which offers most effective vocational training among 11 vocational schools under MOT. MOT expects CVCT1 to play instructional role offering training method to other schools. Also it is noted that the project targeted 3 courses are to be core training courses in CVCT1.

## 2)Technical aspect

The project mainly targeted short-term training courses for projected area, however, now CVCT1 closed these short-courses and is implementing them as long-term training courses. As all work for reorganization, course redesign and course management were done by CVCT1 staff, so it is considered that CVCT1 staffs have enough ability of course management. Also among 25 counterparts who worked for the Project in cooperation with Japanese experts, 20 staffs continue to work at CVCT1. CVCT1 strengthens trainer's skills by carrying out internal teacher trainings about 30 times a year, and sending trainers to overseas study by school funding. CVCT1 conducts course evaluation, but, it is necessary to take effective measure to feedback results of evaluation.

#### 3)Financial aspect

Portion of Tuition fee in total school income is gradually decreasing, while portion of subsidiary is increasing, i.e. from 20% in 2004 to 48% in 2008. According to MOT, MOT continues to allocate necessary budget even if governmental subsidiary is increasing. If MOT allocates CVCT1 budget properly, financial sustainability of the CVCT1 will be ensured.

# 4-2 Factors that have promoted project

# (1)Impact

Cooperation scheme with combination of softwas component and hardware component

Not only training program and methodologies were developed by the technical cooperation project, but also necessary facility and equipment were procured by Grant Aid. With the collaboration of software component and hardware component executed by Japan, CVCT1 could become a model school in aspects of proper training

environment and quality of trainers. MOT and GDVT highly evaluate CVCT1 for its training program and method. By virtue of high assessments for CVCT1, CVCT1 trainers were selected as members of curriculum development committee and project outcome had an effect on national standard curriculum.

## (2)Sustainability

## Promotion to college

After renewal of vocational training system in 2006, CVCT1 was to be a school which could offer college level training program. Curriculum development and trainer's skill improvement are required to conduct college level training. CVCT1 trainers are working for GDVT curriculum development committee and continuing to improve trainer's skill. Consequently these school activities contribute to strengthen sustainability of organizational aspect and technical aspect.

## 4-3 Factors that have inhibited project

## (1)Impact

## Indicator for overall goal

In accordance with amendment of Law on Vocational Training, qualification system for skilled worker revised as well, and new qualification system is under developing. Therefore if measure overall goal according to indicators mentioned in the PDM, it is necessary to establish conditions such as; 1) re-definition of qualification level for road construction worker after establishment of new qualification system, 2) data accumulation for qualified road construction worker, and 3) data accumulation for qualified road construction worker who are employed by transportation industry.

## (2)Sustainability

Nothing special.

## 4-4 Conclusions

As results of the Study, positive impacts from the Project were found. There are no major problems in sustainability of organizational aspect, technical aspect and financial aspect. As for road material testing and quality inspection course concerned, training equipment and materials for "Quality inspection" for road, bridge and concrete should be procured.

#### 4-5 Recommendations

## (1)Road material testing and quality inspection course

Road material testing course is only course which offers vocational college level training among 3 targeted courses of the Project. Now "quality inspection for road, bridge etc" component was included into the curriculum of this course by request of MOT. However as equipment and facility for quality inspection is not available, CVCT1 cannot implement adequate training. Training equipment and materials for "Quality inspection" for road, bridge and concrete should be procured.

#### (2)Trace study for graduate

Now CVCT1 does not conduct trace study for graduate because of lack of fund, despite CVCT1 technically can do it. MOT also feels necessity of trace study, and plans to implement this study in the future. Necessary budget should be allocated.

## (3) Needs survey for enterprise

Now CVCT1 does not conduct needs survey for enterprise because of lack of fund and human resource. To develop organization for needs survey is required in the future.

## (4)Offering new course

CVCT1 offered 23 courses for vocational primary, vocational secondary and vocational college level. Hereafter

new 17 courses will be established and number of offered training course will be 40 courses. As CVCT1 is required to hire additional trainers and to develop curriculum and syllabus of new courses, so GDVT and MOT should support CVCT1 to open new courses smoothly. Also it is noted that demand of training shall be confirmed through needs survey.

#### (5)Strengthening course evaluation and sharing results

CVCT1 evaluates training courses every year. Useful information to improve training contents and method will be gained through course evaluation. However feedback from the evaluation is not enough effective in improving training course because CVCT1 does not prepare reports or materials of course evaluation. Drafting some reports of results of course evaluation is required, and feedback method shall be developed.

#### 4-6 Lessons Learned

## (1) Handling of report prepared by the Project

In case of CVCT1, terminal evaluation report mentioned that "Report for needs survey on road material testing" and "Report for road material testing standards" were prepared by the Project. However the former report was not provided to the school, and for latter report, even its existence was not recognized by the school. Reports which prepared by the Project should be provided to counterparts, if the reports are important for the school activities all the more.

## (2) Activities which is not planned in PDM

In case of this project, "Preparation of national standard curriculum" was not included into activities of original PDM. In 2003 the Project prepared and submitted national standard curriculum (draft) by request of GDVT. However this curriculum was not approved by GDVT by the reason of amendment of Law on Vocational training in 2006 and revision of vocational training system. Also as the reason of this, GDVT explained that the Project did not follow necessary measure of curriculum development such as occupational group analysis etc. From this fact, 2 lessons can be drawn out.

## a) Necessity of agreement

According to project terminal evaluation report, GDVT requested the Project to prepare the national standard curriculum. However there were no records on the agreement for curriculum preparation between Japanese side and Vietnamese side. If important activities added to the Project, it is necessary to agree scope of work, responsibility for each side, approval process and work schedule etc among related persons in the meetings such as Joint Steering Committee.

# b) Remark on curriculum development by the Project

It is considered that central government may approve the curriculum which used for a pilot activity in the Project. In case of standard curriculum development intended to use nationwide, it is necessary to ascertain the prospect whether educational system or situation will change drastically or not, and to confirm that the Project activity follows national procedures for curriculum development.

## (3)School management method- To develop sustainable implementation framework

An output "CTHS1 is well managed in terms of organization, planning and training management" was added to PDM at the time of mid-term evaluation study. Among indicators for this output, "Reports of needs survey are upgraded on a regular basis" and "Information for student recruitment, and graduates with employment status are upgraded on a regular basis" are not implemented now because of the limitation of budget etc. If the Project adopted the implementation method for these surveys which met the technical and budgetary condition of CVCT1, CVCT1 may be able to continue these activities after the Project. It is important for technology transfer not only to carry out activities but also to develop "Sustainable implementation framework (activities and implementation method etc" with which local person can continue with local resources.