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# MINUTES OF MEETINGS BETWEEN THE JAPANESE MID-TERM EVALUATION TEAM AND THE AUTHORITIES CONCERNED

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM **FOR** 

# THE PROJECT FOR THE STRENGTHENING TRAINING CAPABILITIES FOR ROAD CONSTRUCTION WORKERS IN TRANSPORT TECHNICAL AND PROFESSIONAL SCHOOL NO.1

The Japanese Mid-term Evaluation Team (hereinafter referred to as "the Team") organized by the Japan International Cooperation Agency (hereinafter referred to as "JICA") and headed by Mr. Kazuhiro Watanabe, visited the Socialist Republic of Vietnam from January 6, 2003 to January 23, 2003. During its stay, the Team had a series of discussions, evaluated the present achievements of the Project for the Strengthening Training Capabilities for Road Construction Workers in Transport Technical and Professional School No. 1 (hereinafter referred to as "the Project") and exchanged views on the possible measures to be taken to fulfill the Record of Discussions signed on September 22, 2000.

As a result of the discussions, both sides agreed to report to the respective Governments the matters referred to in the document attached hereto.

Hanoi, January 21, 2003

Mr. Kazuhiro Watanabe

Team Leader

Japanese Mid-term Evaluation Team

Japan International Cooperation Agency

Mr. Nguyen Van Nhan,

Deputy Director General of Organization

Personnel and Labor Department

Ministry of Transport

Mr. Dao Van Duong

Rector

Transport Technical and Professional

School No. 1

## ATTACHED DOCUMENTS

#### I. INTRODUCTION

The Project started in January 22, 2001, and will be completed on January 21, 2006. This time, in the middle of the project period, the Japanese Mid-term Evaluation Team dispatched by JICA visited the Socialist Republic of Vietnam from January 6, 2003 to January 23, 2003, for the purpose of evaluating the Project.

# 1. Objectives of Evaluation

Objectives of evaluation are as below.

- 1) To grasp the achievement of the Project and implementation process of the Project, as a basis of evaluation.
- 2) To execute a comprehensive evaluation of the Project from the viewpoints of five evaluation criteria (explained later in this document) to clarify the problems and issues to be addressed for the successful implementation of the Project
- 3) To make recommendations on the activities and directions to be undertaken for the remaining period of the Project

#### 2. Evaluators

# (a) The Japanese side

- Mr.Kazuhiro Watanabe, Deputy Director, Road Division, Shikoku Regional Development Bureau, Ministry of Land, Transport and Infrastructure (MLIT),
- Mr. Naotaka Teramoto, Director, Machinery Department Road Division, Kyushu Regional Development Bureau, MLIT
- Mr. Toshihisa Hasegawa, Staff, Social Development Cooperation Department, JICA
- Ms. Shinobu Mamiya, Researcher, Global Link Management

## (b) The Vietnamese side

- Dr. Nguyen Van Nhan, Deputy Director General of Organization, Personnel and Labor, Ministry of Transport
- Mr. Dao Van Duong, Rector, TTPS1
- Mr. Pham Duc An, Vice Rector, TTPS1
- Mr. Nguyen Kim An, Chief of Operation Department, TTPS1
- Mr. Tran Van Khanh, Chief of Mechanic Department, TTPS1
- Mr. Nguyen Van Vang, Chief of Production Department, TTPS1

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# 3. Methodology of Evaluation

The evaluation study was conducted in accordance with the Project Cycle Management (hereinafter referred to as PCM) method in the following steps:

- (1) The Project Design Matrix for Evaluation (hereinafter referred to as "PDMe") in Annex I was agreed upon by the both sides as the basis of the evaluation. PDMe was formulated based on the PDM agreed upon between Japanese side and Vietnamese side in the Minutes of Meeting signed on September 22, 2000, and some modification was made for clarifying the descriptions and indicators, the detailed reason of modification is described under II REVISED PDM FOR MID-TERM EVALUATION.
- (2) Achievement of the Project was studied by means of analyzing collected data and other relevant information.
- (3) Analysis was made for five evaluation criteria described below.

#### a. Relevance

Relevance of the Project plan is reviewed by the validity of the Project purpose and the overall goal in connection with the development policy of the Government of Vietnam and needs of the beneficiaries and also by the logical consistency of the Project plan.

#### b. Effectiveness

Effectiveness is assessed by evaluating to what extent the Project has achieved its purpose and clarifying the relationships between the purpose and outputs.

## c. Efficiency

Efficiency of the Project implementation is analyzed with emphasis on the relationships between outputs and inputs in terms of timing, quality, and quantity.

#### d. Impact

Impacts of the Project are assessed by either positive or negative influences caused by the Project.

#### e. Sustainability

Sustainability of the Project is assessed in organizational, financial and technical aspects by examining the extent to which the achievement of the Project will be sustained and expanded after the Project's completion.

(4) Finally, the evaluators reached an agreement on the conclusion of evaluation and made recommendations.

The materials used for evaluation was as follows: the R/D, the M/M, the current PDM, the Tentative Schedule of Implementation, the Plan of Operation (hereinafter referred as "PO"), the reports during the Project cooperation term and results of meetings and interviews during the evaluation period.

## II. REVISED PDM FOR MID-TERM EVALUATION (PDMe)

Both the Vietnamese side and the Japanese side agreed to revise the current PDM to start the evaluation, considering the changed circumstances of the Project and the actual activities

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being implemented as follows:

- (1) In order to reflect the context of which the Project was formulated, the additional goal is set for both Super Goal and Overall Goal. For the Overall Goal, "The skills of road construction workers in Vietnam are improved." is included to reflect the benefit of the Project for the target population, And in order to reflect the possible impact of the Project on the society, the "Road condition in Vietnam is improved to facilitate the economic activities" is additionally included into the Super Goal.
- (2) It was recognized that improvement of the management of TTPS1 is crucial to conduct training courses in more effective and efficient manner, so that the relevant technology transfer has been conducted. Therefore, an output "TTPS1 is well managed in terms of organization, planning and training management." is newly added to clearly indicate the Project's support toward the management of TTPS1.

In accordance with the above modification, indicators of the Super Goal, Overall Goal, Project Purpose, and the Outputs have been modified in order to properly evaluate the Project. The PDMe is shown in Annex 1.

#### III. RESULTS OF EVALUATION

# 1. Achievement of the Project

The Evaluators reviewed the progress of the Project in accordance with the PDMe.

# (1) Inputs

Inputs to the Project during the past two (2) years since the inception in January 2001 to January 2003 are as follows:

## (1)-1 Inputs from Japanese side

# a) Dispatch of experts

In accordance with the R/D signed on September 22, 2000, the Japanese side dispatched six (6) long-term experts and eight (8) short-term experts to the Project for technology transfer. The names of these experts and their fields of specialization are shown in Annex 2.

# b) Training of counterpart personnel in Japan

The Japanese side received thirteen (13) counterpart personnel for technical training in Japan. The list of those counterpart personnel is shown in Annex 3.

#### c) Equipment

The Japanese provided vehicles, construction machines/tools, survey equipment, audio visual equipment etc. for the implementation of visual equipment etc., for the implementation of the Project activities amounting for 573 million Yen.

The list of the equipment and machinery provided is shown in Annex 4.

# d) Budgetary allocation

The Japanese side allocated the operational costs necessary for implementation of the Project activities by Japanese experts. Budget allocation record is shown in Annex 5.

# (1)-2 Inputs from Vietnamese Side

# a) Budgetary Allocation

Vietnamese side allocated the operational cost from 2001 to 2002 for the Project implementation. Budgetary allocation record is shown in Annex 6.

# b) Allocation of counterpart personnel

Twenty-two (22) counterparts are assigned for conducting project activities as of January 2003. The list of the counterparts is shown in Annex 7.

# (2) Progress of Activities

The Team recognized that the project activities have generally been going on steadily. The activities carried out until the time of the mid-term evaluation are summarized as follows:

- 1) Most of equipment for the Activities has already been provided to the TTPS1, and properly been set up to conduct the training course for Operation, Mechanics (Engine / Chassis). The maintenance of equipment has been conducted by counterparts with the guidance of Japanese experts.
- 2) With the assistance of Japanese experts, CPs in each field have acquire the knowledge and skills of operation and maintenance of new equipment, teaching tools such as videos, CD ROMs, projectors, etc. They also have developed the curriculum of the assigned training course, prepared the teaching materials. Through the teaching experience of retraining course, CPs have been encouraged for self-learning.
- 3) With the assistance of Japanese experts, CPs have developed the curriculums, prepared the teaching materials to conduct the retraining courses for Operator, Mechanics (Engine / Chassis). Japanese Experts, together with CPs, have also surveyed the needs of companies for retraining. The course evaluation was conducted after each retraining course by giving questionnaires to trainees. The results of questionnaires are taken into account to plan the course program, teaching method for the future. Rector of TTPS1 certified all trainees as qualified for completing the retraining courses.
- 4) Additional teaching materials have been prepared for pre-service training course for Operator and Mechanics. Advance courses have been conducted to upgrade the skills of those students who are appraised as "excellent grade". Rector certified the qualification of pre-service trainees.

5) In the field of Material Testing and Supervision Assisting, relevant information was collected and analyzed. A retraining course was implemented and reviewed for further

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activities. The plan of training course establishment and improvement is under consideration, and training of CPs is also in progress.

# (3) Outputs

The extent of the achievement is judged reasonable level, according to the indicators on PDMe, as follows:

# Output 1: Equipment is modernized to meet the requirements of construction sites.

Equipment provided under the project has greatly served to improve the training capabilities of TTPS1 as many students can increase their practical skills.

Most of equipment have properly been set up and been effectively utilized for retraining course and pre-service course as well. With the provision of equipment, the ratio of student per machinery has greatly been improved. (Indicator 1-2) And, at least 3 sets of each machine (bulldozer, hydraulic excavator, motor grader) are available to the students.(1-1) In order to transport the equipment, 1 tire crane (capacity 30 tons) and 1 trailer (30~40 tons) were used. (1-3) As the duration of retraining courses has been shortened by one month, the students can spend 160 hours for practices.

# Output 2: The quality of teachers is improved.

According to the interviews to Japanese experts and CPs themselves, it reveals that almost all CPs can now operate all equipment in charge.(2-1) Encouragement of self-learning by Japanese experts and the individual efforts by the side of CPs are the promoting factors to improve their teaching skills. In the future, it is expected that CPs can grade up their skills by reviewing their achievement and application of the lessons learned for the future training.

#### Output 3: Retraining course for road construction workers is established.

For Operator, 275 retrainees have completed the retraining course in three retraining courses conducted. For Mechanics, 56 retrainees of Chassis, 19 retrainees of Engines have completed the retraining course so far. Also, one training course for Material testing laboratory staff has been conducted for material testing and seven retrainees have completed the course.

It was reported that, since the retrainees who completed the course have then trained their colleagues in the companies or organizations they belong to, the number of applicants for retraining courses are less than expected. The potential demand for improvement of road construction workers seems still high, as shortage of skilled workers is reported. Even though most of the companies may have incentive to grade up their employees, they are too busy to send them to the retraining courses for a few months, or they have a financial constraints, etc.

# Output 4: The quality of pre-service training course for students is improved.

Training materials for Operator and Mechanics courses have been developed (4-1) In order to upgrade the skill level of trainees, the advance courses have been conducted for those students with good remarks. The upgrade of pre-service training course will be further strengthened by conducting the advance courses so that the number of certified trainees as

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grade four will increase in the future.

# (4) Project Purpose

Based on the objectively verifiable indicators, training capability of TTPS1 is improved steadily and it is estimated that the Project Purpose will be achieved within the Project period in accordance with the Project schedule.

According to the interviews to related organizations, the reputation as well as the evaluation of TTPS1 has been raised since the Project has been implemented. The number of applicants has been drastically increased in recent years, and most of the graduates of pre-service training course have been employed in the construction industry, and others.

As it is unlikely to increase the number of applicants for retraining course and CPs' ability to conduct retraining courses is improved, it is judged appropriate that the Project will gradually shift its focus on strengthening the pre-service training course.

#### IV. EVALUATION UNDER FIVE CRITERIA

#### 1. Relevance

The Project's Overall Goal and Project Purpose have consistency with the policy of Vietnamese government. The Ministry of Transport of the Government of the Socialist Republic of Vietnam (hereinafter referred as "MOT") has been promoting the training of road construction workers to improve their skills, and to increase the number of those workers, in order to cope with the demand of infrastructure development. The MOT proposed the training plan to train road construction workers during the period of 2000 till 2005, in which the TTPS1 is placed as a successful model for training schools to produce those workers.

The Overall Goal and the Project Purpose are also consistent with the policy of JICA's assistance to Vietnam, which defines the human resources development and promotion of infrastructure development as one of the key issues to be tackled for facilitating the economic activities.

#### 2. Effectiveness

Four outputs have been contributing to the Project Purpose directly and the Project is heading for the right direction. Combined efforts of Japanese and Vietnamese sides have contributed to the improvement of training capabilities of TTPS1. The number of applicants for pre-service training course has drastically increased in recent years, and the ratio of employment for graduates has also been improved. According to the interviews and the self-evaluation by questionnaires, it has revealed that Vietnamese counterparts have acquired knowledge and skills through developing the curriculum, and applying the effective teaching methods and of operating new equipment to conduct the training courses. Most of equipment for retraining course has already been provided and been effectively utilized in the training courses. Assistance of Japanese experts has greatly helped to improve the training capabilities of each counterpart. The schemes of advance course and upgrade course have provided the opportunities for Vietnamese counterparts to apply their

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acquired skills by the technical transfer, at the same time it has served to give opportunities for trainees to grade up the knowledge and skills.

In order to cope with the drastic increase of applicants for pre-service training course and the unstable demand for retraining course due to the seasonal market needs and companies' financial conditions, etc, the focus of the Project is to be shifted to strengthening the pre-service training course to upgrade the knowledge and skills to the level of fourth grade. For this purpose, it is agreed by both Japanese and Vietnamese sides to include the output as "TTPS1 is well managed in terms of organization, planning and training management", so that the Project will support to strengthen the management of TTPS1.

## 3. Efficiency

#### a. Japanese side

Inputs by Japanese side were generally appropriate in terms of timing, quantity and quality. Especially, counterpart trainings in Japan have proved to be very effective to promote the initiative of counterparts and to improve the understanding of teaching method in Japan.

#### b. Vietnamese side

As assigned counterparts have kept very busy because they often have to work for both retraining and pre-service training course, it is preferable that Vietnamese counterparts can devote themselves to the Project activities in the future. As some Vietnamese counterparts in the field of Material testing has resigned due to the unavoidable reasons, it is essential for Vietnamese side to assign the appropriate number of qualified counterparts to conduct the technical transfer.

# c. Supporting System

The teamwork of the Project has been facilitated by monthly meeting among Japanese experts and Vietnamese counterparts. It also serves to monitor the progress of project activities. The appointment of interpreters has greatly helped to improve the communication among the Project.

# 4. Impact

The impact of the Project Purpose cannot be judged at the middle point of the Project period. However, following positive impacts by the Project activities have been observed.

First, the Project has contributed to raise the reputation and evaluation of TTPS1, so that the number of applicants for pre-service training course has drastically increased in recent years. Second, most of those who graduate the pre-service courses have been employed by the companies. In addition, the following multiplier effect of the retraining course has been observed. Those who completed the retraining courses have transferred the knowledge and skills to other colleagues in the company.

However, it is indicated that these positive impact may also serve as the following negative impacts. The drastic increase of applicants for pre-service training course has caused the shortage of equipment for practice, and the shortage of instructors as well. It is cautioned that the shortage of equipment and instructors may degenerate the quality of training. And

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teaching within the companies may accelerate to reduce the number of applicants for retraining course. In order to cope with these problems, it is essential to improve the school management of TTPS1.

# 5. Sustainability

# a. Organizational aspect

The Project Purpose is consistent with the Vietnamese development policy, and there is a demand of upgrading the skill-level of road construction workers. The Vietnamese Government has placed the TTPS1 as a model to improve the skill level of road construction workers and to provide the continuous support. To retain the organizational sustainability, it is recommended that TTPS1 should make a continuous effort to strengthen the school management, so that it can provide the effective training course to always meet the market demand.

# b. Financial aspect

TTPS1 have made some effort to generate the income through conducting the upgrade course and giving grade examination. However, in order to cover the necessary expenses for equipment maintenance, it is recommended that TTPS1 should look for other means to generate the sufficient budget, such as to conduct the On the Job Training (OJT) at the construction site. In this regard, MOT has already been considering the increase of financial support toward TTPS1.

# c. Technical aspect

Technical transfer to the Vietnamese counterparts has been progressed in the field of Operator and Mechanics (Engine / Chassis). Material testing course to meet the need in Vietnamese market will be established at TTPS1. If Vietnamese side can assign the counterparts with appropriate background to work in the Project, and to make continuous effort to apply their skills for the training, it is projected that the technical aspect of sustainability will be retained.

#### V. CONCLUSION

The evaluation result shows that the progress of the activities is quite well, and the achievement level of the output at the time of evaluation is judged reasonable, thanks to the efforts of the Japanese experts and CPs and other relevant officials. Also, it is estimated that the project purpose will be fully achieved at the end of the Project.

Therefore, it was concluded that the present status of the Project is quite well, and prospect of the Project is also appropriate.

However, it was recognized that some points must be clarified and improved for smooth implementation of the activities for the remaining project period of three years, as well as securing the sustainability of the Project. These points are as below:

# 1. Improvement and strengthening of the Management of TTPS1

As the project activities are related to the training courses, Japanese input has been focused directly on them. However, improvement of the quality of training courses and trainee can be realized with the support of administration and other relevant divisions in the school, such as invitation of trainees, needs survey, efficient allocation of facilities and equipment and so on. Therefore, it is recognized that improvement of management of TTPS1 must be tackled with the involvement of relevant school staff.

# 2. Material Testing and Supervision Assisting

With regard to the field, following crucial points were identified;

- (1) The role of TTPS1 is training of material testing workers in the laboratory, and not supervising engineer.
- (2) Training of supervising engineer is under responsibility of college or university, so that it is out of the scope of the project.

Therefore, considering above facts, the name of the course "Material Testing and Supervision Assisting" is to be modified as "Material Testing". The activities will be conducted under the title.

#### 3. Improvement of input from Vietnamese side

It is recognized that assignment of CPs must be improved especially on the material testing field, and CPs are too busy with their task outside the Project. It is expected that the situation will be improved soon.

In addition, it is projected that budget for maintenance of equipment provided under the Project will increase in the near future, and also budget for management of the school must be allocated for the sustaining and development of the Project, after the cooperation period.

#### VI. RECOMMENDATION

Based on the conclusions mentioned above, both sides agreed to make the following recommendations on the Project:

# 1. Input from Vietnamese side

The Japanese Evaluation Team requested Vietnamese side to take necessary action to improve the assignment of CPs and budget allocation, as stated in the conclusion. Vietnamese side agreed to try their best to follow the request.

# 2. The result of revision of PDM during Mid-term

The PDMe was revised during the mid-term evaluation in accordance with the discussion between both Vietnamese and Japanese side. The PO will be also revised in accordance with the revised PDM. The Project will be implemented along the revised PDM and the revised PO. The revised PDM is shown in Annex 8.

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- 1. Super Goal
- Transport Technical and Professional School No.1 (TTPS1) becomes the center of excellence in Indochina for training of road construction workers.
- Road construction in Vietnam is improved to facilitate the economic activities.
- 2. Overall Goal
- TTPS1 becomes the model school in Vietnam for training of road construction workers.
- The skills of road construction workers in Vietnam are improved.
- 3. Project Purpose

Training capabilities of TTPS1 are improved.

- 4. Outputs
  - 1) Equipment for retraining 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

Mechanics (Engine / Chassis)

Module based training program

Material testing

4) The quality of pre-service training course for students is improved

Operator

Mechanics

Material testing

- 5) TTPS1 is well managed in terms of organization, planning and training management.
- 5. Activities
- 1)-1 Obtain new equipment
- 1)-2 Set up new equipment
- 1)-3 Maintain equipment
- 2)-1 Transfer operation and maintenance techniques of new equipment to Vietnamese counterpart personnel (some of the teachers)
- 2)-2 Have a high quality teachers with high level of practical skills
- 2)-3 Organize training program for teachers and technicians
- 2)-4 Conduct training program for teachers and technicians
- 2)-5 Establish a system to encourage teachers for self-learning
- 2)-6 Teachers fulfill the research offered by school
- 2)-7 All CPs of Material testing are certified as instructors for Material testing.
- 3)-1 Survey the needs of companies for retraining
- 3)-2 Develop retraining curriculums

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- 3)-3 Develop textbooks and teaching materials.
- 3)-4 Establish a working group to improve curriculum and syllabus
- 3)-5 Improve training curriculum and syllabus
- 3)-6 Improve textbooks and teaching materials
- 3)-7 Recruit retrainees
- 3)-8 Conduct retraining courses for retrainees (including test and evaluation)
- 3)-9 Rector certificates the qualification of retrainees
- 3)-10 Make proposal for the improvement of the qualification system and submit to MOT and GDVT.
- 3)-11 Establish the module based training program for mechanic
- 3)-12 Survey the standard of Material testing for road construction in Vietnam.
- 4)-1 Establish a working group to improve curriculum and syllabus
- 4)-2 Improve training curriculums and syllabus
- 4)-3 Improve textbooks and teaching materials.
- 4)-4 Conduct training courses for students (including test and evaluation)
- 4)-5 Conduct semester test and evaluate the grade of progress of students.
- 4)-6 Rector certificates the qualification of pre-service trainees.
- 5)-1 Assign the appropriate number of CPs.
- 5)-2 Review the achievements of training courses conducted.
- 5)-3 Analyze the collected information and make the training program in each training field.
- 5)-4 Evaluate the management of training course.
- 5)-5 Improve the promotional and public relations activities on TTPS1 to recruit the potential applicants.
- 5)-6 Survey the needs for training of each field.
- 5)-7 Collect the information of job status for graduates.

# VII. OTHERS

## Quality improvement of road construction

The Team recognized that comprehensive measures for quality improvement of road construction is required, considering the present situation in Vietnam through the site observation. The contribution of this project on this is quite limited, so that it is suggested that MOT should consider the further policy in this field.

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#### List of Annex

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Annex 2	Dispatch records of Japanese Experts	
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Annex 4	Equipment List provided under the Project	
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Annex 7	Counterpart List	
Annex 8	Revised PDM after Mid-term Evaluation (PDM1)	

Project Design Matrix for Evaluation (PDMe)

Project Title: Project for strengthening training capabilities for Road Construction Workers in Transport Technical and Professional School No. 1

Implementing Agency: Transport Technical and Professional School No. 1, Ministry of Transport

Target Group: Road Construction Workers

Duration: Jan. 22, 2001~Jan. 21, 2006

Target Group: Road Construction Workers			
* Stagrange Strongers	Chieratvety Verifiable Indicators	Means of Verification	Important Assumption
Somer Goal way 1994			
Transport Technical and Professional School No. 1 (TTPS) becomes the center	Students from Indochina countries come to study at the school	No. of foreign students visited the center	
of excellence in Indochina for training of road construction workers.	Increase of trafic volume	Statistics issued by the Government of	
	Increase of ratio of paved roads	Vietnam	
Road condition in Vietnam is improved to facilitate economic activities.	Improvement of economic indicators		
	·		
Cyemiticos)			
TTP5 becomes the model school in Vietnam for training of road construction	Training methods (curriculum, syllabus, etc.) are applied by other	Study result for other training schools	Economic situation of Vietnam is good.
workers.	training schools,	under MOT	
	real Market		Consequent of Madeaus will not about a the assess
The skils of road construction workers in Vietnam is improved.	1 Increase of road construction workers who are qualified as No.5 level	Statistics issued by the Government of Vietnam	Government of Vietnam will not change the overal policy toward the road subsector.
The skills of road construction workers in vietnatif is improved.		Aletticitt	policy toward the road subsector.
	2 Increase of road construction workers who are employed by		
	transportation industries		
			MOT described and the second
Training capabilities of TTPS are improved.	1 TTPS can retrain 210 road construction workers at retraining course	- School records	MOT doesn't change the policy for TTPS.
	each year.	<ul> <li>Questionnaires for employers of retrainees/graduates of TTPS</li> </ul>	Other training calculation read construction
	<ol><li>TTPS can give 4th grade certificate to students at pre-service training course</li></ol>	13,14111000 8100000000000000000000000000000	Other training schools for road construction workers will continue providing the training
	Course		courses.
	Reputation of TTPS in road construction sector is raised.		
	o (topulation of the officer) and the control of th		
	4 The ratio of the graduates who are able to get jobs is increased.		
CHAPTE TO THE PROPERTY OF THE			
1 Equipment is modernized to meet the requirements of construction sites.	1-1 At least 3 sets of each important machine (bulldozer, hydraulic	1 School records	Machine distributors provide good maintenance
	excavator, motor grader) are available to students.		and repair services.
,	1-2 The ratio of student per machinery is improved.		
	1-3 At least 1 tire crane (capa. 30 tons) + 1 trailer (30~40 tons) are		
	available to transport machinery to sites.		
	1-4 Each students practices 180 hours.		
	·		
2 The quality of teachers is improved.	2-1 All the teachers are able to operate newly procured equipment.	2 -Test results (before/after the project)	
	2-2 All the teachers meet the standards of qualification for vocational	- Number of qualified teachers.	
	training teachers.		
1 3 Retraining course for road construction workers is established.	3-1 Textbooks for 5 courses are developed.	3 School records	
	2.0.240 and construction waters are estadaed at TTBS //		
-Mechanic (engine)	3-2 210 road construction workers are retrained at TTPS each year (from second year.)		
-Mechanic (chassis)  -Materials testing and supervision assisting	3-3 Official certificates on modern machinery are given to successful	<u>}</u>	
-Materials testing and supervision assisting -Module based training program	retrainees.	,	
The quality of pre-service training course for students is improved.	4-1 9 (3sets for 3 courses) textbooks are revised.	4 School records	
-Operator	· · · · · · · · · · · · · · · · · · ·	- Survey on the needs for school graduates	
-Mechanic	4-2 No. of newly introduced subjects / teaching methods.	to companies	
-Materials testing and supervision assisting	4-3 The ratio of the graduates who have above "Good" grades is increased	- Meeting with companies once a year to	
P	from 30% to 50%.	grasp demands - List of graduates	
₹		- List of graduates	
5 TTPS is well managed in terms of organization, planning and training	5-1 Report of needs survey are prepared		
management	5-2 Database for student recruitment, and graduates with employment		
	status is developed.		
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	VIETO A SEC.		
1-1 Obtain new equipment	Necessary facilities and sites for project implementation	Long-term Experts: 3~5	MOT and GDVT continues to support this project.
1-2 Set up new equipment	Running cost for newly procured equipment	Short-term Experts:-3~4 /year	]
1-3 Maintain equipment	·	Counterpart Training In Japan : 3~4 / year	
2 The quality of teachers is improved.		Equipment:	ļ
2-1 Transfer operation and maintenance techniques of new equipment to Vietnamese counterpart personnel (some of the teachers)		Grant Aid for equipment and Facilities: Approx. 730 million Japanese Yen	
2-2 Have a high quality teachers with high level of practical skills.			
2-3 Organize training program for teachers and technicians.			Pre-Conditions
2-4 Conduct training program for teachers and technicians			The construction of TTPS, equipiment provision to
2-5 Establish a system to encourage teachers for self-learning			TTPS from Japan are completed as planned.
2-6 Teachers fulfill the research offered by school.			
3 Retraining course for road construction workers is established.			
3-1 Survey the needs of companies for training			The number of counterparts, necessary facilities
3-2 Develop retraining curriculums.			for project implemetation are provided by
3-3 Develop textbooks and teaching materials.			Vietnamese side.
3-4 Establish a working group to improve curriculum and syllabus			
3-5 Improve training curriculums and syllabus			
3-6 Improve textbooks and teaching materials			
3-7 Recruit retrainees			· •
3-8 Conduct retraining courses for retrainees (including test and evaluation)			· .
3-9 Rector certificates the qualification of retrainees.			
3-10 Make proposal for the improvement of the qualification system and submit to MOT and GDVT.			
3-11 Establish the module based training program for mechanic.			
4 The quality of pre-service training course for students is improved.			
4-1 Establish a working group to improve curriculum and syllabus			
4-2 Improve training curriculums and syllabus			
4-3 Improve textbooks and teaching materials			
4-4 Conduct training courses for students. (including test and evaluation)			
4-5 Conduct semester test and evaluate the grade of progress of students.			
4-6 Rector certificates the qualification of pre-service trainees.			
5 TTPS is well managed in terms of organization, planning and training course management.			
5-1 Review the achievements of training courses conducted			
5-2 Make annual plan in each training field in detail			
5-3 Improve the promotional and public relations activities on TTPS course to recruit potential applicants.			
5-4 Monitor the progress of the training courses periodically			
5-5 Evaluate the management of training courses-			



# Dispatch record of Japanese Experts

2001 year

Long-term expert: 4

(1) Chief Advisor and operator Kinoshita Tomotaka (22<sup>nd</sup> Jan. 2001-21<sup>st</sup> Jan. 2004)

(2) Coordinator Kurata Mikio (22<sup>nd</sup> Jan. 2001-21<sup>st</sup> Jan. 2004) (3) Mechanic (chassis) Ito Nobuo (22<sup>nd</sup> Jan. 2001-21<sup>st</sup> Jan. 2003)

(4) Mechanic (engine) Inoue Tsuyoshi (6<sup>th</sup> Jun. 2001-5<sup>th</sup> Jun. 2003)

Short-term expert: 4

(1) Adviser Emoto Taira (12<sup>th</sup> Feb. 2001-21<sup>st</sup> Feb. 2001)

(2) Road materials testing and road construction standard

Kanesawa Hidekazu (11<sup>th</sup> Sep. 2001-22<sup>nd</sup> Sep. 2001)
(3) Hydraulic universal tester installation and instruction 1

Okudai Masanori (14<sup>th</sup> Oct. 2001-28<sup>th</sup> Oct. 2001)

(4) Engine dynamo meter installation and instruction 1

Kikuchi Nobuhiko (1<sup>st</sup> Oct. 2001-13th Oct. 2001)

2002 year

Long-term expert: 1

(1) Material testing Kitamura Nobuhiko (25<sup>th</sup> Mar. 2002-24<sup>th</sup> Mar. 2004)

Short-term expert: 3

(1) Mechtronics system Tsukamoto Yoshiaki (24<sup>th</sup> Mar-2002-13<sup>th</sup> Apr. 2002)
(2) Material testing Murakami Hironobu (23<sup>rd</sup> Nov. 2002-21<sup>st</sup> Dec. 2002)

(2) Material testing Murakami Hironobu (23<sup>rd</sup> Nov. 2002-21<sup>st</sup> Dec. 2002)

(3) Road construction supervision Kitamura Yoshinori (7<sup>th</sup> Dec. 2002-28<sup>th</sup> Dec. 2002)

2003 year

Long-term expert: 1

(1) Operator Kondo Sadamu (10<sup>th</sup> Jan. 2003-9<sup>th</sup> Jan. 2005)

Short-term expert: 1

(1) Mechtronics system Banse Hisao (5<sup>th</sup> Jan. 2003-25<sup>th</sup> Jan. 2003)

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# Record of counterpart training in Japan

No.	Name	Position	Course title	Period
1	Bui Dinh Can	Teacher	Maintenance of Construction	16/1~18/3/2001
			Machinery	
2	Dang Canh Phuc	Teacher	Maintenance of Construction	16/1~18/3/2001
			Machinery	
3	Ta Thi Sen	Teacher	Maintenance of Construction	16/1~18/3/2001
			Machinery	
4	Dang Thi Huong	Teacher	Maintenance of Construction	16/1~18/3/2001
			Machinery	
5	Do Huu Toan	Teacher	Maintenance of Construction	15/1~17/3/2002
		,	Machinery	
6	Vu Dinh Duong	Teacher	Maintenance of Construction	15/1~17/3/2002
			Machinery	
7	Le Xuan Lich	Teacher	Maintenance of Construction	15/1~17/3/2002
	,		Machinery	
8	Dao Duy Muc	Teacher	Maintenance of Construction	15/1~17/3/2002
			Machinery	
9	Duong Duc Cuong	Teacher	Maintenance of Construction	15/1~17/3/2002
			Machinery	
10	Bui Thi Thuy Nga	Teacher	Multimedia Production for	03/1~27/4/2002
			Education	
1 1	Thai Anh Tam	Teacher	Road Material Testing and	11/9~27/10/2002
			Supervision	
1 2	Nguyen An	Teacher	Road Material Testing and	11/9~27/10/2002
			Supervision	
1 3	Duong The Anh	Teacher	Mechanic for Construction	03/2~16/3/2003
			Machinery	



2000YEAR

(In thousand yen)

Equipment name	Q'ty	Price	Condition	n in-service	Remarks
			in	not	
Bulldozer	2	51,366	0	1	<del></del>
Excavator	1	10,222	0		
Bulldozer	4	58,589	0	1	
Excavator	7.	45,038	0		
Motor grader	3	36,312	0		
Vibration roller	1	4,440	Ŏ	1	<del></del>
Dumping	1	3,885	Ö	†	
Load roller	1	4,800	Ö		
Wheel loader	2	10,065	0	1	
Component parts for engine		8,665	ō		
Spare parts	1	6,561	ŏ	1	······································
Vehicle for Survey	<u> </u>	3,458	ŏ	1	, ,
Combined roller	1	13,102	<del>- ö</del> :	<del> </del>	· · · · · · · · · · · · · · · · · · ·
Tire roller	2	11,965	<del>- </del>	+	
Macadam roller	2	11,487	<del>- ö</del> -	<del>  </del>	
Macadam roller Truck with a crane	1	5,457	<del>- 8</del> -	<del> </del>	<del> </del>
	3	14,358	<del>~</del>	<del> </del>	:
Dumping truck Component parts engine for oil pressure	2	5,744	<del>- 8</del> -	<del> </del>	
		6,640	<del>-6</del> -	<del>                                     </del>	
Spare parts	1	3,590	<del>- ŏ-</del>	<del> </del>	
Vehicle for Survey Sub total		¥315,744		-	
Sub total		#313,744			
2001YEAR					
Excavator	1	24,000	0		
Grader A	1	24,600	0		
Grader B	1	22,100	0		
Wheel loader	1	12,000	0		
The vibration roller	1	12,000	0		
The tire roller	1	10,935	0		
Macadam roller	1	10,200	0		
Asphalt finisher	1	25,837	0		
Compactor	1	167	0		
Concrete cutter	1	900	0		
Core picking device	1	660	0		
Soil tester CBR	1	1,960	0		
Other devices		38,557	0		
Vehicle for Survey	1	3,289	0		
Dumping truck	2	18,292	0		
Spare parts		6,992	0		
Special tool	3	9,316	0		
Sub total		¥221,805			
2002YEAR		<u> </u>	**************************************	·	
	1	7045		7	
Vibration roller	1	7,245	<del></del>		
Road material test equipments etc.		3,472		<del> </del>	
Air conditioner	3	1,760	Ŏ		
Road stabilizer	1	15,000	Ŏ	<b></b>	
Asphalt sprinkling machine	<u>l</u>	1,200	<u> </u>		
Spare parts		6,900	0	<del>  </del>	
Sub total		¥35,577			<del></del>
Grand Total		¥573,126		1	

FX rate: 1US\$=118.00 yen (Jan. 18, 2003)

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Budgetary allocation for the Project by the Japanese side

Item	Description of expense	2000	2001	2002
1	Project operational expenses	¥2,136,000	¥8,920,000	¥6,731,000
2	Development of teaching material budget	0	¥10,400,000	¥2,069,800
3	Welding seminar organizing budget	0	¥2,000,000	¥1,275,879
Total		¥2,136,000	¥21,320,000	¥10,076,679



Annex 5

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# Annex 6

# Budgetary allocation for project by the Vietnamese side Budget allowance for project

Item	Description of expense	2000	2001	2002
1	Project management	VND 839,640,147	VND 1,238,809,000	VND 1,010.424,060
2	Retraining course	VND 64,583,300	VND 128,645,930	VND 509,022,542
3	Fuel for equipment donated by project	VND 367,694,340	VND 412,171,420	VND 373,989,530
4	Maintenance equipment donated by project	VND 105,232,252	VND 61,938,000	VND 38,192,000

1US\$=15,428VND 18<sup>th</sup>2003

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# List of counterparts

# No. Name

# Management (1)

1. Mr. Pham Duc An

# Operator (6)

- 2. Mr. Nguyen Duc Thanh
- 3. Mr. Le Xuan Lich
- 4. Mr. Bui Dinh Can
- 5. Mr. Phan Van Loc
- 6. Mr. Dang Canh Phuc
- 7. Mr. Do Huu Toan

# Mechanics – Engine Group (5)

- 8. Mr. Duong Duc Cuong
- 9. Mr. Dao Duy Muc
- 10. Ms. Ta Thi Sen
- 11. Mr. Le Manh Ha
- 12. Mr. Dang Hung Son

# Mechanics - Chassis Group (6)

- 13. Mr. Tran Van Hieu
- 14. Mr. Vu Dinh Duong
- 15. Mr. Nguyen Van Minh
- 16. Ms. Dang Thi Huong
- 17. Mr. Phung Duc Thang
- 18. Mr. Duong The Anh

# Material Testing Group (3)

- 19. Mr. Thai Anh Tam
- 20. Mr. Giang Van Ly
- 21. Mr. Nguyen An

## Assistant (1)

22. Ms. Bui Thi Thuy Nga

Orcemban

Project Design Matrix (PDM-1) DRAFT

Project Title: Project for strengthening training capabilities for Road Construction Workers in Transport Technical and Professional School No. 1

Implementing Agency: Transport Technical and Professional School No. 1, Ministry of Transport Target Group: Road Construction Workers

Duration: Jan. 22, 2001~Jan. 21, 2006

Target Group: Road Construction Workers			Duration: Jan. 22, 2001 ~ Jan. 21, 2006
Natralitie Sponar	Chiecone (verificities of the Section of the Sectio	Meshs of Vertication	importent Assumption
-Transport Technical and Professional School No. 1 (TTPS1) becomes the center of excellence in Indochina for training of road construction workers.	Students from Indochina countries come to study at the school!	-No. of foreign students visited the center	
-Road condition in Vietnam is improved to facilitate the economic activities.	2 Increase of traffic volume 3 Increase of ratio for paved roads 4 Improvement of economic indicators	-Statistics issued by the GOV	
Overall Chat			
-TTPS1 becomes the model school in Vietnam for training of road construction workers.	Training methods (curriculum, syllabus, etc.) are applied by other training schools.	-Study result for other training schools under MOT	Economic situation of Vietnam is good.
-The skills of road construction workers in Vietnam are improved.	2 Increase of road construction workers who are qualified as No.4 level	-Statistics issued by the GOV	Government of Vietnam will continue the supportive policy toward the road subsector.
	3 Increase of road construction workers who are employed by transportation industries	-Statistics issued by the GOV	
Physical Purpose			
Training capabilities of TTP\$1 are improved.	TTPS1 can retrain 450 road construction workers at retraining course during the project period.	- School records, documents	MOT doesn't change the policy for TTPS1.
	2 70 students (90 per year) at Pre-Service Training Course for Operator / Mechanics can get the 4th grade certificate at their graduation for three years.	- School records, documents	Other training schools for road construction workers will continue providing the training courses
-	Reputation of TTPS1 in road construction sector is raised. (External evaluation by related organizations.)	<ul> <li>Interview / Questionnaire for employers of graduates of TTPS1.</li> </ul>	
	The number and ratio of the graduates (of pre-service training) who are able to get jobs is increased.	- School records, documents	
Equipment for retraining course is modernized to meet the requirements of construction sites.	1-1 At least 3 sets of each important machine (buildozer, hydraulic excavator, motor grader) are available to students.	1 -School records, documents	Machine distributors provide good maintenance and repair services.
· ·	1-2 The ratio of student per machinery is improved.		
	1-3 At least 1 tire crane (capa, 30 tons) + 1 trailer (30~40 tons) are available to transport machinery to sites.		
	1-4 Each students practices 160 hours.		
2 The quality of teachers (CPs) is improved.	2-1 All CPs are able to operate all equipment in charge.	2 -Test results (before/after the project)	
	2-2 All the teachers meet the standards of qualification for vocational training.	- Test results (by experts)	
	2-3 Result of self-evaluation of CPs	-Questionnaires	
Retraining course for road construction workers is established.     Operator	3-1 Training materials for 4 courses are developed. (Operator, Engine, Chassis, and Module based training)	3 -School records	
-Mechanic (engine) -Mechanic (chassis)	3-2 Official certificates on modern machinery are given to 90% of retrainees.		
-Module based training program -Material testing	3-3 At least 25 kinds of equipments are in operative condition to conduct the Material testing.  3-4 At least 3 CPs can plan and run the course for Material testing by	-Test results (by experts)	
	themselves.  3-5 CPs can prepare the report for needs survey and Material testing standard.	-School records, documents	
	1 2-2 OF 2 COLL Propose the report to theeds survey and material testing staticists.		
The quality of pre-service training course for students is improved.  -Operator	4-1 6 ( 3 sets of both for Operator and Mechanics) training materials are upgraded.	4 School records, documents	
Mechanic -Materials testing  TTPS1 is well managed in terms of organization, planning and training management.	4-2 The ratio of the graduates who have above "Good" grades of the skill level is increased from 30% to 50%.		
TTPS1 is well managed in terms of organization, planning and training management.		5 -School records, documents	
	5-2 Information for student recruitment, and graduates with employment status is upgraded on a regular basis.		
The second second	5-3 Evaluation of training course is regularly conducted.		

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_ [	Activities			
	1 Equipment for retraining courses is modernized to meet the		The Transfer of the Control of the C	
~	requirements of construction sites.			
- }	1-1 Obtain new equipment	Counterpart personnel	Long-term Experts: 3~5	MOT and GDVT continues to support this project.
- 1	1-2 Set up new equipment	Necessary facilities and sites for project implementation	Short-term Experts: 3~4 /year	
- 1	1-3 Maintain equipment	Running cost for newly procured equipment	Counterpart Training in Japan : 3~4 / year	}
	2 The quality of teachers(CPs) is improved.		Equipment:	
- 1	Transfer operation and maintenance techniques of new equipment to Vietnamese counterpart personnel (some of the teachers)		Grant Aid for equipment and Facilities: Approx, 730 million Japanese Yen	
	2-2 Have a high quality teachers with high level of practical skills.			
	2-3 Organize training program for teachers and technicians.     2-4 Conduct training program for teachers and technicians			Pre-Continue
•	2-5 Establish a system to encourage teachers for self-learning			The construction of TTPS1, equipment provision to
	2-6 Teachers fulfill the research offered by school.			TTPS1 from Japan are completed as planned.
	2-7 All CPs of Material testing are certified as instructors for Material testing.			The sumber of sumbers of
١	3 Retraining course for road construction workers is established.			The number of counterparts, necessary facilities for project implementation are provided by Vietnamese side.
- 1	3-1 Survey the needs of companies for retraining.			
- 1	3-2 Develop retraining curriculums.			į
	3-3 Develop textbooks and teaching materials.		i	1
- 1	3-4 Establish a working group to improve curriculum and syllabus			· ·
- 1	3-5 Improve training curriculums and syllabus			
	3-6 Improve textbooks and teaching materials			
ı	3-7 Recruit retrainees			<u> </u>
	3-8 Conduct retraining courses for retrainees (including test and evaluation)			
	3-9 Rector certificates the qualification of retrainees.	,		,
- 1	3-10 Make proposal for the improvement of the qualification system and submit			
- [.	to MOT and GDVT.			
	3-11 Establish the module based training program for mechanic.	4.4		
- 1	3-12 Survey the standard of Material testing for road construction in Vietnam.			
1	4 The quality of pre-service training course for students is improved.	·		
	4-1 Establish a working group to improve curriculum and syllabus			
	4-2 Improve training curriculums and syllabus			
- 1	4-3 Improve textbooks and teaching materials			]
	4-4 Conduct training courses for students. (including test and evaluation)			
	4-5 Conduct semester test and evaluate the grade of progress of students.			1
	4-6 Rector certificates the qualification of pre-service trainees.			
	5 TTPS1 is well managed in terms of organization, planning and training course management.			
ı	5-1 Assign the appropriate number of CPs			
-	5-2 Review the achievements of training courses conducted			i i
Œ)	5-3 Analyze the collected information and make the training program in each			
$\omega_{\mathcal{M}}$	U samining more:			
21	5-4 Evaluate the management of training courses.			
٤	545 Improve the promotional and public relations activities on TTPS1 to recruit			
STATE OF	5 Survey the needs for training of each field.			
	5-7 Collect the information of job status for graduates.			
$\Box$	or construct the information of job status for graduates.			ļ
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