# **Summary of Terminal Evaluation**

I. Outline of the Project			
Country:		Project title:	
Islamic Republic of Afghanistan		the Project for Capacity Development and Establishment of	
		Road Maintenance and Management System	
Issue/Sector: Transport		Cooperation scheme: Technical Cooperation	
Division in charge:		Total cost:	
Transport and ICT Division III		500 million JPY (approximate figure as of Dec, 2011)	
Economic Infrastructure Department			
Period of	(R/D):9 December 2007	Partner Country's Implementing Organization:	
Cooperation	(Extension):13 April 2011	General Department of Infrastructure Maintenance (DGM),	
	2008.3.3 ~ 2012.1.6	Ministry of Public Works	
		Supporting Organization in Japan: None	

Related Cooperation: Kabul Road Engineering Centre (Grant Aid)

## 1 Background of the Project

After long and devastating conflict that have taken place in Afghanistan left the country with damaged roads and bridges. After Bonn Agreement in December 2001, Afghanistan started to rebuild its road infrastructure mainly through international cooperation. International donors played a crucial role in re-establishing road network in the country; however, little attention was paid to maintenance and human resource development. With sharp increase in road assets, it was obvious that road maintenance soon become important area that needed to be strengthened. In 2006, JICA has conducted project formulation survey and recommended to implement a project to strengthen the capacity for road maintenance and management. Responding to this recommendation, the Government of Afghanistan in 2007 requested to Japan to conduct a project aiming at establishing road maintenance and management system (RMM) as well as developing capacity of human resources of the Ministry of Public Works. The Government of Japan responded positively to the request, and after Preliminary Evaluation conducted by JICA in July 2007, the project document (Record of Discussions, R/D) was signed in December 2007.

## 2 Project Overview

#### 1. Overall Goal

Road maintenance and management system works in Kabul region. (Indicator) By 2015, RMM work will be implemented at the 80% (2,022km) of road under the KRO.

## 2. Project Purpose

Prototype of road maintenance and management system in Kabul region is completed. (Indicators)

- > By the end of second year of the Project, RMM plan including a budgeting plan for the next year for the road under KRO will be made.
- ➤ By the end of the Project, at the 39.3% (994km) of road under KRO, RMM works will be implemented by Force-account and Contracted-out schemes.

### 3. Outputs

- (1) Operational setup and organizational structure for RMMS are built in DRM, KRO and KCMC.
- (2) Staff's capability for services related to RMM (Inspection, Planning, Budgeting, Contracting, etc.) is improved in DRM, KRO and KCMC.
- (3) Staff's capability for services related to RMM (Work, Supervising and Examination) is improved in DRM and KRO.
- (4) Staff's capability for services related to Management of Construction and Maintenance Equipment (Work, Inspection and Examination) is improved in KCMC.
- (5) Information about the Regional Offices, Machinery Centres and Workshops except the one in Kabul is collected.

### 4. Inputs

### Japanese side:

Experts: 9 experts, 76 person-months in total Accepted trainees: in Japan 3, in Malaysia 12

Operation cost: 200 million JPY (including pilot projects)

#### **Afghanistan Side:**

C/P staff: 11 principal CP in total

Others: provision of project office with utilities

#### II. Evaluation Team

Members of	Yoshihiro Miyamoto, Deputy Director, Transport and ICT Division III, Economic		
Evaluation	Infrastructure Department		
Team	Kenshiro Tanaka, Senior Resident Representative, JICA Afghanistan Office		
Period of	Day/ month/ Year~ Day/ month/ Year	Type of Evaluation: Terminal Evaluation	
Evaluation	22/12/2011~29/12/2011		

### III. Results of Evaluation

### 1. Achievement levels of Project Purpose

(1) Output 1 : Operational setup and organizational structure for RMM are built in DGM, KRO and KCMC

Final versions of Business Manuals were complete and approved in Nov. 2011, and they were being used by counterparts already. Road Inventory was completed for more than 300km of roads in Kabul and Bamyan Provinces, and Machinery inventories were completed for KRO and KCMC.

- (2) Output 2: Staff's capability for services related to RMM (Inspection, Planning, Budgeting, Contracting, etc.) is improved in DRM, KRO and KCMC In total, 93 staff members were trained for Business Manuals in the area of planning and administration.
- (3) Output 3: Staff's capability for services related to RMM (Inspection, Planning, Budgeting, Contracting, etc.) is improved in DRM, KRO and KCMC

Three pilot projects were conducted and 49 counterparts in total took part in the process. 14 of them were given on-the-job training from planning to construction stage.

- (4) Output 4: Staff's capability for services related to Management of Construction and Maintenance Equipment (Work, Inspection and Examination) is improved in KCMC In total, 45 staff members were trained in KCMC.
- (5) Output 5: Information about the Regional Offices, Machinery Centres and Workshops except the one in Kabul is collected

Survey was done for all regional offices in Afghanistan, and the final report was being compiled at the time evaluation. This will be used in the future to plan capacity development activities for regional offices.

(6) Project Purpose: Prototype of road maintenance and management system in Kabul region is completed MPW prepared a maintenance plan for FY 2010 in 2009, based on the actual performance of the budget for 2009. This was continued for the plan for FY 2011.

From the maintenance plan in 2010, actual Expense/Plan ratio, and the budget for 2011, it can be assumed that at 57.2 % (the 1,313km) of the road under KRO will have maintenance works (routine or periodic) in 2011.

### 2. Summary of Evaluation Results

(1) Relevance "very high"

At the preliminary evaluation stage of the Project, relevance was rated very high because RMM was in line with ANDS (Afghanistan National Development Strategy) and MPW Strategy. At the time of termination evaluation, ANDS and MPW Strategy still remain as an important document for development strategy in road sector.

Improvement of road condition was one of the key issues for reconstruction and development of Afghanistan, and many donor assisted projects were targeted in this sector. Construction and improvements of roads still remain important, but road maintenance is becoming crucial with increase in road asset.

(2) Effectiveness "high."

Project activities were well designed to build capacities among administrative section, technical and engineering section and mechanical section. Numbers of staff trained were more than what was planned. With the Work Flow Guideline and Business Manuals produced during the Project, procedures and documentation were made clear, which contributed greatly to the implementation of RMM within MPW.

Also, two pilot projects implemented during the Project contributed greatly to capacity building of MPW staff in managing road maintenance work using private company as a contractor. Hands-on technology transfer from Japanese experts has highly effective for Afghan counterparts, and the fact that they have taken part in the process was valuable experience for them.

Achievement level of the Project Purpose compared to verifiable indicators is satisfactory. Maintenance plan for next fiscal year was planned ahead using actual spending of previous year as a reference. In terms of road length covered, it can be assumed from the budget increase and planned road length that targeted length has been reached.

(3) Efficiency "intermediate to high"

The efficiency is difficult to evaluate as security is a major issue for projects conducted in Afghanistan.

Inputs were appropriate, however timely inputs were sometimes impeded by security reasons. Therefore, efficiency of the project is intermediate to high.

There were several issues that impeded planned inputs to be made available at designated time.

As is mentioned earlier, the project had to go through several difficult conditions especially in terms of dispatching Japanese experts to Afghanistan. There was interruption of project activities during presidential election in 2009 for about 8 months, and in March 2010, JICA introduced cap ceiling for number of Japanese experts in Kabul.

Also, set of equipment brought to Afghanistan by Japanese expert to conduct training at KCMC did not clear the customs in due time and as a result training schedule had to be changed.

In terms of Project duration, the Project was extended two times due to reasons mentioned above and also due to delayed implementation of the Pilot Project II.

## (4) Impact "most likely that the overall goal will be achieved with few years"

The actual length of road maintained can be anticipated by multiplying the planned length and Actual Expense/Plan ratio. Based on the actual expense record in 2010, this ratio was 72% and, therefore, it can be expected that the actual road length maintained in 2010 was around 918km which is 40% of road under KRO. The budget for road maintenance works in 2011, however, is increased 47% of the budget in 2010 (from US\$ 17 mil to US\$ 25 mil). If the budget increases continuously with the same rate, the total length of road maintained in 2015 will be longer than the target value (80%).

## (5) Sustainability "likely that the achievement of the project be sustained"

Road sector development in Afghanistan remains to be fundamental for social and economic development of the country. The Government of Afghanistan and MPW places priority for road development as well as maintenance. Paved road in Afghanistan has almost doubled in in recent 5 years, from 3000km to 6000km. Construction of new roads were mostly by international assistance. MPW recognizes importance of proper maintenance being essential for sound development of the sector.

Budget for road maintenance in on the rise in recent years, and is increased by 23% per year for last 6 years. Percentage of actual expenditure to budget is about 70%.

In terms of staffing, number of employee in MPW is 1424. And it has seen some decrease in number since 2006. Staff trained in the Project will be key personnel to disseminate knowledge to fellow coworkers, and this has been already done in some occasions. As it was mentioned by Director Planning of GDM during an interview, engineers of GDM, MPW are already giving instructions to fellow workers in other provinces to conduct road inventory survey.

Hence, with steady expansion of budget and continuous capacity building within MPW, RMMS will be sustainable.

## 3. Factors enabling the realization of positive effects

As mentioned by many counterparts, hands-on technology transfer method employed by the Project was highly evaluated, as it contributed greatly to capacity building of MPW staff. Before this project, road construction or maintenance projects by international donors did not pay much attention to capacity building of MPW staff, therefore, they were not directly involved in the process. As main target of this Project was to build institutional capacity of MPW, the Project has spent a vast amount of time for discussion and training,

and moreover, all pilot projects involved active participation of the counterparts, which have supported the high evaluation to the Project by the counterparts.

New road construction is increasing in Afghanistan and many officials of MPW were recognizing the importance of road maintenance. Timely implementation also contributed to realize positive effects of the Project.

#### 4. Factors obstructing the realization of positive effects

Security is a big issue in Afghanistan. The Project had one long break in 2009 during presidential election. After March 2011, scheduled dispatch of experts from Japan became difficult with change in JICA's policy. However, as answers of many of counterparts to questionnaire reveal, this did not turn out to be major obstruction of the Project.

Another impeding factor was limitation of field works by Japanese experts. Road maintenance projects urge much work in the field. With strict restriction of movements for Japanese experts, it imposed some difficulty especially to confirm the quality of work done by Afghanistan counterparts. Two pilot projects carried out took place within this boundary, so hands-on technology transfer could be realized.

Some counterparts mentioned that contractual procedures of Pilot Project should have involved the Ministry of Finance. Although this may be difficult, some consultations may be needed for future pilot projects, as it will always involve the Ministry of Finance to conduct any projects with own budget of Afghanistan.

In terms of important assumptions noted on PDM, there were no notable negative effects.

#### 5. Conclusions

It is possible to say that at the completion of the Project, outputs planned have achieved, in most part, its target values. Some difficulties were observed in road inventory to attain its targeted values, however, considering security conditions and the fact that capacities were built among counterparts, this should not be considered as major drawback.

Relevance is evaluated "very high" because road maintenance is still in line with national policy of Afghanistan. Effectiveness is evaluated "high" because as a result of attaining outputs, the Project Purpose was achieved in most part. Efficiency is rated "intermediate to high" as the Project had to go through several modifications due to reasons not controlled by the Project, but level of inputs was appropriate. Impact was rated "likely to bring positive effect" given the importance of road maintenance and positive indications which were already observed before the completion of the Project. And finally, sustainability was rated "likely to be sustained" considering rapid increase of the budget in last few years. However, keeping records of road asset as well as activities related to road maintenance, continuous capacity building of staff are extremely important to sustain the achievements of the Project.

In short, the Project have achieved the project purpose through attainments of the outputs, and will likely to achieve the overall goal in near future, however to sustain the Project, it is indeed important to keep records of road conditions for proper planning and implementation of road maintenance and management system.

#### 6. Recommendations

#### (1) Road Inventory and Maintenance record

It is extremely important to keep the inventory of road asset to properly manage the road. MPW for the first time developed a road inventory with a support from Japanese experts. It is recommended that MPW continue to produce road inventory to cover entire network of Afghanistan as well as record of maintenance, to properly plan and implement maintenance works. This will in turn reduce cost, not only for road maintenance but also traveling cost of road users.

### (2) Capacity building for the staff members of MPW

Several trainings, including training in Japan and Malaysia, were conducted during the course of the Project. Moreover, during the Pilot Projects, MPW staff were given a chance to participate in on-the-job training basis. These training opportunities are essential to keep up the quality of maintenance and management of the roads. It is recommended that MPW make best use of training opportunities provided by different donors including that of JICA.

#### (3) Basic Infrastructure

Introducing electricity to KCMC has been an issue throughout the Project implementation. Yet, at the time of evaluation, KCMC was still without any electricity. To properly use equipment and machineries, KCMC should supply its own power source. This was an issue during the whole project period, but never resolved. Urgent actions from KCMC should be taken.

#### 7. Lessons learned

### (1) Involvement of counterparts

Almost all of the counterparts mentioned that the Project was meaningful because Japanese experts and Afghanistan counterparts worked closely together. In capacity building projects, it is essential that experts and counterparts build confidence among them through discussion, cooperation and coordination.

#### (2) Implementation of Pilot Projects

Implementation of pilot projects contributed not only to improve the condition of roads but also for the capacity building of counterparts. Involvement of counterparts from the very beginning provided them with an opportunity to learn whole process of road maintenance, and counterparts were able to understand the whole picture of road maintenance. However, it should be noted that procurement procedure may be a bit different from usual practices taken in the country; therefore, comparison of procedures could have helped understand the process better.