

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Timor-Leste office: September 2013

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| Country Name | The Project for the Capacity Building of Road Maintenance |
| Timor-Leste | |

I. Project Outline

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| Project Cost | 278 million yen | |
| Project Period | Originally-planned period: 21 June 2005 – November 2007. Extended period: November 2007 – 18 March 2008. (The project was suspended during the period from May to November 2006 due to political unrest) | |
| Implementing Agency | Directorate of Road, Bridge and Flood Control (DRBFC) and Directorates of Equipment and Material (DEM) of Ministry of Transport Communication and Public Works (MTCPW) (the infrastructure-related function of MTCPW was reorganized to Ministry of Public Works (MPW) in July 2005, then to Ministry of Infrastructure (MOI) in September 2007, and again to MPW in August 2012. DEM was renamed to Institute of Equipment Management (IGE) in September 2007.) | |
| Cooperation Agency in Japan | None | |
| Related Projects (if any) | <p>Japan's cooperation:</p> <ul style="list-style-type: none"> • The Project for Improvement of Roads between Dili and Cassa (Grant Aid, 2004) • Road Policy Advisor (dispatch of individual experts, till May 2006) • Infrastructure Policy Advisor (dispatch of individual experts, till May 2006) • The Project for Capacity Development by Training and Preparation of Guidelines and Manual for Roads (Technical Cooperation, 2006-2008) • The Project for the Capacity Development of Road Works (Technical Cooperation, 2010-2013) <p>Other donors' cooperation:</p> <ul style="list-style-type: none"> • Infrastructure Sectors Capacity Development Project and Core Roads Master Plan (ADB) • National Infrastructure Plan (AusAID) | |
| Background | <p>Road transport was the only means of transportation in Timor-Leste where there was no railways and underdeveloped marine transportation. However, due to steep geographic features and rainfall during rainy seasons, roads were prone to collapse and traffic was hindered. International development partners as well as Japan (including the dispatch of the Self Defense Forces for Peacekeeping Operations) rehabilitated the roads and bridges, and the construction machinery used for it were handed over to the government of Timor-Leste. JICA dispatched experts to the country for effective utilization of such machinery, but it was still a challenge for MTCPW to carry out systematic operation and maintenance of the roads given insufficient financial resources, technical personnel and system.</p> <p>DRBFC was responsible for road maintenance administration, and IGE was the only organization in a position to operate and maintain heavy machinery for road maintenance. However, they urgently needed to develop their capacities in planning and implementation of road control and management and operation and management of construction machinery, respectively.</p> | |
| Inputs | Japanese Side | Timor-Leste Side |
| | <ol style="list-style-type: none"> 1. Experts: Total 7 persons (6 subjects, total 75.62MM) 2. Trainees Received: 1 person (trained in Japan) 3. Equipment: 1,023 thousand yen (US\$89,121) 4. Local Cost: 43,304 thousand yen | <ol style="list-style-type: none"> 1. Personnel assigned: 71 persons in Year 1, 65 persons in Year 2, and 65 persons in Year 3 2. Land and facilities: Project office (Dili and Tacitolu) 3. Local Cost: US\$146,514 (construction cost for the implementation of the case study) |
| Project Objectives | Overall goal Arterial roads in Timor-Leste are always maintained. | |
| | Project Objective(s) Capability on daily and periodic maintenance/ repair of arterial roads and restoration against disaster on arterial roads are strengthened. | |
| | Output(s) Output 1: Appropriate works for maintenance and repair of arterial roads are planned by DRBFC of MTCPW (currently MOI). Output 2: Road management system, which DRBFC and regional road offices cooperate each other, is formulated. Output 3: The staff members of DRBFC and DEM (currently IGE) of MTCPW (currently MOI), who are responsible for the maintenance and repair works of arterial roads, are trained. Output 4: The case studies of management plan on the maintenance and repair works of arterial roads are appropriately planned, designed and implemented by MTCPW (currently MOI). | |
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Output 5: The operation system for construction equipment and repair equipment/ tools is appropriately maintained and managed by MTCPW (currently MOI).

II. Result of the Evaluation¹

Summary of the Evaluation

In Timor-Leste, international development partners and Japan were engaged in rehabilitation of roads and bridges. However, in order to carry out daily maintenance and post-disaster restoration of roads and bridges systematically and efficiently, the capacities of DRBFC (in charge of road maintenance) and IGE (in charge of operating and maintaining heavy machinery for road maintenance) were not sufficient.

This project has partially achieved the project purpose of strengthening capability on daily and periodic maintenance/ repair of arterial roads and restoration against disasters. The construction machinery has become utilized for restoration of roads after disasters to some extent, through the implementation of a series of works of operation and maintenance of the machinery and repair equipment/tools, partly thanks to the succeeding technical cooperation project. However, road maintenance works have not yet been systematically-planned and sufficiently-executed due to the low level of standard and quality of construction of existing roads in the country. Therefore, the overall goal, sustainable maintenance of arterial roads, have not been sufficiently achieved, either. As for sustainability, some problems have been observed in the implementing agency's financial aspect due to concerns on operation and maintenance budget.

For relevance, the project has been highly relevant with Timor-Leste's development policy, development needs as well as Japan's ODA policy. For efficiency, although both the project cost and the project period were within the plan if not counting the suspended period due to the political unrest, a fair amount of inputs from the succeeding technical cooperation project was also used.

In the light of above, this project is evaluated to be partially satisfactory.

1 Relevance

This project has been highly relevant with Timor-Leste's development policy "capacity development in repair and maintenance of roads" as a prioritized issue of the National Development Plan (NDP: 2002-2007), development needs "identification, repair and improvement of damages through daily and periodic maintenance" and "prompt and appropriate road rehabilitation works", as well as Japan's ODA policy "road maintenance" as one of the three targeted sub-sectors of the "infrastructure development", the top priority area of assistance set out in the Country Assistance Program, at the time of both ex-ante evaluation and project completion. Therefore, relevance of this project is high.

2 Effectiveness/Impact

A part of the project purpose, namely, strengthening of capability on restoration against disaster on arterial roads, was achieved to a certain extent. The project made a work flow of operation of construction machinery and repair equipment/tools through the development of a machinery operation system and technical transfer. The Project for the Capacity Development of Road Works, the succeeding technical cooperation project, consolidated the implementation of the system. Consequently, IGE has become able to mobilize the construction machinery for repair of damaged parts of roads, though the speed of mobilization could be improved.

However, the other part of the project purpose, i.e. strengthening of capability on daily and periodic maintenance/ repair of arterial roads, has not reached the level where road maintenance works are systematically-planned and sufficiently-executed, for the standard and quality of construction of existing roads in the country was very poor. Since the databases developed under this project, such as the road inventory database and the road maintenance database (a database of damaged parts of roads) were not fully utilized after project completion, the succeeding project updated and improved the databases and promoted planning and execution of road maintenance plans. Nevertheless, such plans often have to be put off after ad hoc responses to unexpected damages. Even only regarding the periodic maintenance, the demand is too high for DRBFC with its current manpower and budget to sufficiently respond to it. It would take more time for DRBFC to be able to focus on daily and periodic maintenance and repair based on the road inventory database and other databases, and therefore the overall goal "arterial roads in Timor-Leste are always maintained" has not been achieved yet.

In this way, there has been an improvement from the situation before this project where the implementing agency had been incapable of maintaining and repairing roads for itself, and it is significant that the road inventory database, which gives a comprehensive view of the entire situation of the country's arterial roads, was developed in the inception phase of road maintenance in Timor-Leste. However, the achievement of this project has not yet reached the expected level. Therefore, its effectiveness/impact is fair.

3 Efficiency

Although both the project cost and the project period were within the plan, appropriateness of the inputs for producing the outputs should be somehow discounted, because, even at the time of project completion, urgent repair of damages due to weak design and standards of roads had to be done before consolidating daily and periodic repair that the project had intended. Therefore, efficiency of this project is fair.

4 Sustainability

In the policy background, this project is consistent with the development policy of Timor-Leste in an ongoing manner: the

¹ This evaluation could not clearly show the sole effectiveness/impact of this particular project because the succeeding technical cooperation project (the Project for the Capacity Development of Road Works) and assistance from other development partners were on-going in the same area of cooperation.

Strategic Development Plan (2011-2030) regards roads as the most important infrastructure to be developed to support economic development. In the institutional aspect, despite the changes of its superordinate organization, the structure of the implementing agency has been sustained in more or less a similar manner with the implementation period but with the increased number of staff. In the technical aspect, the implementing agency's technical level has been strengthened partly as a result of the activities of the Project for the Capacity Development of Road Works. With respect to the financial aspect, although budget for the road sub-sector as well as operation and maintenance budget have been increased compared to the project implementation period, the huge demand for road maintenance requires constant efforts to increase budget (in the fiscal year 2012, the implementing agency estimated the necessary budget based on the information from the databases with technical support from ADB, and requested an increase in budget allocation accordingly).

In this way, the project has some problems in the financial aspects, and therefore, sustainability of the effects of this project is fair.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency

A full-fledged rehabilitation of major arterial roads is being planned, which will enable the extensive use of the outputs of this project, i.e. execution of daily and periodic maintenance and repair based on the road inventory database. Therefore, periodic updating of the database as well as estimation and request of operation and maintenance budget based on the database are recommended.

Lessons learned for JICA

In Timor-Leste where there is no other means of land transport than roads and progression of road damage is seen everywhere, road maintenance is a pressing issue and therefore relevance of this project is high. However, in a newly-independent and vulnerable country such as Timor-Leste, everything must start from zero, and this project alone cannot achieve its overall goal "arterial roads in Timor-Leste are always maintained" but a more continuous and step-by-step approach is needed. Also, the standard and quality of construction of existing roads required repair of frequent unexpected road damages before daily and periodic maintenance and repair. Therefore, in the formulation of a project such as this project that would tackle an urgent but very large and hard issue, it is important to plan the project from a long-term perspective, envisage an orientation of cooperation that could improve the job performance and capacity of the implementing agency on a step-by-step basis, clearly define the position of the project in that orientation, and thoroughly assess the feasibility.