Internal Ex-Post Evaluation for Grant Aid Project

conducted by Bolivia Office: October 2011

Country	The Project of Equipment for Expansion of Local Roads
Bolivia	

I. Project Outline

Project Cost	E/N Grant Limit: 900 million yen	Contract Amount: 794 million yen
E/N Date	January, 2007	
Completion Date	February, 2008	
Implementing Agency	Prefectural road office in La Paz, Santa Cruz, Potosí (Supervision: Office of Vice - Minister of Transportation, Ministry of Public Works)	
Related Studies	Basic Design Study: January2006 - November 2006	
Contract Agencies	Consultant(s): Construction Project Consultants, Inc.	
	Contractor(s): N/A	
	Supplier(s): Mitsubishi Corporation, Sojitz Corporation	
Related Projects (if any)	Japanese cooperations: Grant Aid - Project for Preparation of Road Department Workshop (1989) - Project for Preparation of farm road in Potosí (1989) - Project for Preparation of farm road in La Paz (1990) - Project for Preparation of farm road in Santa Cruz (1990)	
Background	Delay in development of local roads was one of the factors that hinder the development of rural area in Bolivia. It was difficult for poor population in rural area to have more opportunities for income and to access to social services such as schools, health facilities without sufficient infrastructure including local road net-work. However, road improvement in rural areas was difficult due to mountainous landscape and frequent natural disasters. To improve above-described situation on local road network, "Plan for local road preparation" set the target of total 2,018 km of local roads to be constructed / up-graded in prefectures of La Paz, Santa Cruz, and Potosí.	
Project Objectives	Outcome To prepare the roads (total 2,018km) in the targeted 3 prefectures (La Paz, Santa Cruz, Potosí) by procurement of road construction equipment.	
	Outputs Japanese Side - Equipment for road preparation in 3 prefectures (La Paz, Santa Cruz, Potosí): Bulldozer (3), Wheel Loader (10), Motor Grader (15), Excavator (4), Vibratory Roller (3), Dump Truck (19), Sprinkler Truck (3), Tips Ladder (2), Tire Roller (1) Bolivia Side - Custom related cost (Customs clearance fee, storage charge, etc.), Domestic transportation cost	

II. Result of the Evaluation

Summary of the Evaluation

Road improvement in rural areas was important for rural poor, but difficult due to mountainous landscape and frequent natural disasters in Bolivia. Under such circumstances, road development in the three prefectures of La Paz, Santa Cruz and Potosi was an urgent issue..

This project has largely achieved the preparation of roads due to the proper use of the equipment prepared. As for sustainability, some problems have been observed in terms of technical aspects due to the lack of experienced staff in the O&M of the equipment. For relevance, the project has been highly relevant with Bolivia's development policy, development needs as well as Japan's ODA policy at the time of both ex-ante and ex-post evaluation. For efficiency as well, both the project cost and project period were almost within the plan.

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

1 Relevance

This project has been highly relevant with the Bolivian development plan ("Productive Bolivia", etc.), development needs ("Transportation infrastructure improvement for economic activities"), as well as Japan's ODA policy at the time of both ex-ante and ex-post evaluation. Therefore, its relevance is high.

2 Efficiency

Project cost was within the plan (88 % against plan)and project period was as planned(100% against plan). Therefore, efficiency of the project is high.

3 Effectiveness/Impact

This project has largely achieved its objective of expanding local roads in the targeted three prefectures (La Paz, Santa Cruz, Potosí) by procurement of road construction equipment. The target values on the lengths of roads prepared were achieved by both Potosí (937.7km as against the planned 740km) and Santa Cruz (2,912.12km as against the planned 678km) in the year 2010, though it is difficult to show the segregated data on the length of roads constructed only by the procured equipment. Also, data from La Paz were not available at the time of the ex-post evaluation due to the lack of availability of time from SEDCAM La Paz personnel for interviews and lack of readily available information. However, based on the interviews with- or reports of SEDCAMs (Departmental Service of Roads: current names of the implementing agency) of the three prefectures, it was found that all of their road construction equipment, including the equipment procured by this project, is fully utilized for realization of the mentioned lengths of road preparation.

Based on the interview result with the implementing agencies as well as local residents, the expansion of the roads has allowed better access to social and economic services (e.g. positive impacts were observed on local tourism in Potosí and distribution of agricultural products to wider areas), therefore improving the way of life of the local residents).

Therefore, considering the good utilization status of all the construction machineries and positive findings on better accessibility due to the expanded roads, it can be concluded that effectiveness/impact of this project is high

Although the procured equipment have been sufficiently used, "closed cabin" equipment, rather than the "open cabin" equipment provided by the project, would have provided more comfort and security to the operators hence they could have worked more hours and improved the overall performance of the equipment in severe cold weather.

Quantitative Effects

Indicator	baseline value (2006)	target value (2011)	actual value (2011)	actual value (2010)
Length of roads prepared by Prefecture				
La Paz		600 km	N.A.	N.A.
Santa Cruz		678 km	N.A.	2,912.12 km
Potosí		740 km	N.A.	937.70 km

(Sources: Interviews results to the directors of SEDCAM Potosí and Santa Cruz and related staff. Reports presented by SEDCAM La Paz and Potosí.)

4 Sustainability

The responsibility of equipment prepared by this project belongs to prefectural road office in three districts: same as implementing agencies; Information from La Paz was not available at the time of the ex-post evaluation so analysis was made based on the information collected during field survey,

In terms of structure of theimplementing agencies, it was partly changed in name from SEPCAM (Prefectural Service of Roads) to SEDCAM (Departmental Service of Roads) from the implementation period while the number of staffs is more than implementing period. This is considered enough for continuity of project effectiveness. One of the implementing agencies (SEDCAM Potosí) has some problems in the technical aspect due to lack of qualified staff. The staffs of Potosí are neither qualified nor provided the training for the maintenance of modern machineries although they have skills that have been accumulated over their long working experience.

Dump trucks procured to SEDCAM Potosí

The implementing agencies have no problem in the financial aspect because it has the necessary budget for the O&M of the equipment. And they have no problem in the status of operation and maintenance because they follow the established procedures for the operation, maintenance and management of the equipment, except the slow procurement of spare parts in Potosi where there is no supplier, though this problem is beyond the control of the implementing agency.

Therefore, sustainability of the project is fair.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

- Prefectural Road office of Potosí is suggested to allocate appropriately qualified personnel including the new mechanics with necessary knowledge/experience as well as to provide necessary trainings in order to conduct proper O&M activities.
- In order to prevent road operations from hampering and to keep smooth parts repair, the procurement process of important spare parts should be checked previously by C/P Agencies

Lessons learned for JICA:

- It would be advisable to check the (weather/temperature) conditions of the place where the equipment is used so that the type of equipment suitable for the given weather conditions could be procured and thus operators of the equipment could maximize their performance.