

# Internal Ex-Post Evaluation for Grant Aid Project

conducted by Bolivia Office: October 2011

Country	The Project of Equipment for the Rural Development of La Paz Prefecture
Bolivia	

## I. Project Outline

Project Cost	E/N Grant Limit: 683 million yen	Contract Amount: 683 million yen
E/N Date	July, 2005	
Completion Date	December, 2006	
Implementing Agency	La Paz Prefectural Office Department in charge: DDDP O&M Organization: SEDCAM, SEDEPPAR, SDEETI	
Related Studies	Basic Design Study: November 2004 (August 2004 - December 2004), September 2005 - October 2005 (Project formulation study)	
Contract Agencies	Consultant(s)	Pacific Consultants International Co., LTD. (Basic Design) Taiyo Consultants Co., Ltd.
	Contractor(s)	N/A
	Supplier(s)	Mitsubishi Corporation
Related Projects (if any)	<p>Japanese cooperations:</p> <p>Technical Cooperation</p> <ul style="list-style-type: none"> <li>- Development Study: "The Study for Agricultural/Rural Development in Achacachi Region, La Paz Prefecture"</li> <li>- Technical Cooperation Project: "Achacachi Regional Development Project"</li> </ul> <p>Grant Aid</p> <ul style="list-style-type: none"> <li>- Agricultural Development Project in Achacachi Region (Facilities)*Completed only first half period of construction due to political instability</li> </ul>	
Background	<p>In Bolivia, economic gap between urban and rural is large as the poverty rate shows (Urban: 51%, Rural: 92% as of 1995). The productivity in agriculture was relatively low among neighboring countries while its agricultural sector occupies 15.7% of GDP (2001) and 43.9% among working population (2001). Achacachi in La Paz prefecture, located at high land, is the area where its population suffer from poverty due to the low agricultural productivity under sever natural environment. 39% of total households in La Paz prefecture was categorized as extremely poor. 74% of households in rural area in La Paz was categorized as extremely poor and 22% was as poor. Majority of population in Achacachi is indigenous people.</p>	
Project Objectives	<p>Outcome</p> <p>To repair the roads, construct bridges, and repair irrigation canal in Achacachi, La Paz prefecture by procurement of necessary equipment for infrastructure preparation and provision of construction training.</p>	
	<p>Output(s)</p> <p>Japanese Side</p> <ul style="list-style-type: none"> <li>- Procurement of necessary equipment for basic infrastructure preparation in Achacachi: Construction machinery (Bulldozer, Wheel Loader, etc.), Vehicles (Dump Truck, Motorcycle, etc.), Supporting machinery (Concrete Mixer, Vibratory plate compactor, etc.), Research equipment (Total station, Measuring staff, etc.), Building materials (Concrete pipes, Sluice gate, etc.),</li> <li>- Training on management skills for canal construction (Soft Component)</li> </ul> <p>Bolivia Side</p> <ul style="list-style-type: none"> <li>- Implementation of infrastructure preparation in Achacachi: Road repair: Trunk road 40.1 km, Connection road 3.1km, Construction of bridge: 5 steel bridges, Repair of irrigation canal: 52.1km of 4 systems</li> </ul>	

## II. Result of the Evaluation

### Summary of the Evaluation

Achacachi in La Paz prefecture, located at high land (4,000m above sea level), is the area where its population suffer from poverty due to the low agricultural productivity under sever natural environment. Majority of population is indigenous people. Therefore, preparation of basic infrastructure is expected to alleviate poverty for local residents through providing job opportunities as well as improving agricultural productivity.

This project has partially achieved repairing of the roads, constructing of bridges, and repairing of irrigation canal in Achacachi, La Paz prefecture by procured equipment necessary for infrastructure preparation due to the delay in irrigation canal because of lack of budget although roads and bridges have been completed at the ex-post evaluation.

As for sustainability, some problems have been observed in terms of structural/technical/financial/current status of operation and management aspects due to the delayed full utilization of the prepared motorcycles because of procedural issue, no existence of registration system and the plan that manages the equipment although O&M cost is covered by whole prefectural O&M budget upon each necessity and current status of operation and maintenance is generally good.

For relevance, the project has been 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, the project period was exceeded the plan.

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

1 Relevance

This project has been highly relevant with the Bolivian development plan (“Bolivia National Development Plan-Freedom, Democracy, Sovereignty and Productivity for Better Life”, “Plan for Agricultural and Forest Revolution” etc.), development needs (Agricultural/Rural infrastructure (roads, irrigation facilities) improvement in Indigenous/rural areas), 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

Although the project cost was as planned (100% against plan), the project period exceeded the plan(138% against plan). Therefore, efficiency of the project is fair.

3 Effectiveness/Impact

Although repairing of irrigation canal has not been achieved the target value (actual value:11.7km) due to financial scarcity of Bolivian side stemming from insufficient budget of each municipality that is in charge of small scale irrigation canal, the targeted situation of road repair (43.2km) and bridge construction (5 points) has been achieved as shown below.



The road by the prepared equipment of this project. Volume of traffic doubled.



(Right Photo) Quecca Bridge, constructed by the prepared equipment of this project. Creating easier access from Chachacomani to La Paz.

The following changes because of this project have been reported; Drastic alleviation (halving) in transportation cost for 37,000 population in Achacachi of La Paz prefecture(for example, decrease in travel distance by Quecca bridge enabled reduction in bus and taxi fares when going to La Paz), Increase (double) of traffic volume, Better distribution of agricultural products to markets through trucking, Better access to Omasuyo district, Los Andes district and La Paz, Improvement of regional transportation (Bus, Taxi), Increase of number of students who can commute to schools in Chachacomani community. Therefore, its effectiveness/impact is fair.

It was reported that the prepared equipment contributed to the construction of other roads (160km including this project covered road) in Omasuyo district.

Quantitative Effects

	baseline value 2004(Year of BD)	target value(2011)	actual value(2011) same as ex-post evaluation(2011)
Length of road repair -Trunk road 40.1km -Connection road 3 1km	N/A	43.2 km -Trunk road 40.1km -Connection road 3.1km	(actual value)43.2Km • Trunk road 40.1km • Connect road 3.1km
Bridge construction points	N/A	5 points	(actual value) 5 points
Length of irrigation canal	N/A	52.1km	(actual value)11.7Km (total52.1km(BD)) • Tamaraya: 4.5km(plan4.5km) • Butuni: 1km(Plan19km) • Beren:2km(Plan13.5km) • Corbabuto:4.2km (Plan15.1km)

(Sources: Interview results to the related staffs of SEDCAM, SEDAG, SEDEPPER and AUPA/representative of local residents.)

4 Sustainability

The responsibilities for operation and maintenance (O&M) of the construction equipment are given to SEDCAM , SEDEPPAR, SDEDETI, according to each sector.

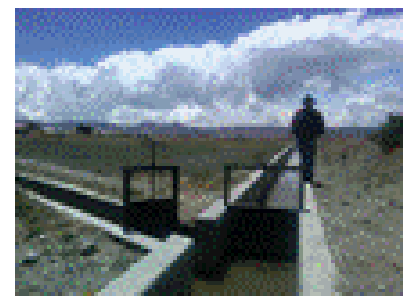
The structure of O&M agencies sustained substantially in the similar manner of the implementation period although it was partly changed in name due to entity conversion. This is considered enough for continuity of project effectiveness.

Each O&M agency has some problems in the technical aspect due to low remaining rate of the trained staffs by soft component of the Project and low participation of such staffs in O&M activities although each agency conducts O&M activities with its holding appropriate technical staffs in general.

The cost of O&M is covered with the each departmental budget in charge under implementing agency together with union due of AUPA. It was confirmed that SEDCAM reserves the budget for maintenance including procurement of necessary parts of whole equipment. As for SEDEPAR and SEDDETI, O&M budget for this Project is raised from whole prefectural O&M budget upon each necessity. Currently, any concerns are not appeared as for departmental level. However, as for AUPA has some problems in the financial aspects due to its unpredictable future collection of union due.

Current status of operation and maintenance, based on the interview with each department director and engineers, generally good. But O&M agencies have some problems in the status of operation and maintenance due to the following facts that the prepared motorcycles have not been fully utilized because of the delay in obtaining of number plate till 2011, that SEDDETI and SEDEPPAR do not have the registration system that manages the equipment, and that their participation level in the O&M activities is low. However, the site visit revealed that local residents are highly aware of as well as take care of constructed facilities by the prepared equipment.

Therefore, sustainability of the project is fair.



Irrigation facility in Tamaraya by the prepared equipment of this project as well as other Japanese ODA(Grass roots GA, Human security GA)

### **III. Recommendations & Lessons Learned**

Recommendations for Implementing agency:

SEDEPPAR is suggested to coordinate with municipalities and assist the plan especially on rehabilitation of irrigation canal.

Lessons learned for JICA:

The key factor for success on O&M is the high awareness and functioning control by local residents. Participation from local residents in project with consideration of residents' characteristics is considerably important.