

Ex-ante Evaluation

1. Name of the Project

Country: The Republic of Guatemala

Project: ZONAPAZ Road Improvement Project

(Loan Agreement: February 20, 2006; Loan Amount: 7,357 million yen; Borrower: The Republic of Guatemala)

2. Necessity and Relevance of JBIC's Assistance

As a result of the internal conflict in Guatemala, which lasted 36 years, a low percentage of roads are paved, despite the fact that they are the major means of transportation (total 30,000 km). The lack of pavement impedes improvement of residents' living standards and the promotion of economic activities. In December 1996, the Guatemalan Government signed the Peace Accords with the rebels and designated as a ZONAPAZ (Peace Zone) the region which had been the rebel stronghold and was particularly affected by the conflict. The government made a commitment to reconstruct and develop ZONAPAZ, but progress has been slow. A factor particularly contributing to the lagging development of the region is the fact that the national highway RN-7 East, which traverses the department of Alta Verapaz in ZONAPAZ and the adjacent department of Izabal (approx. population of the two departments: 1.15 million), is still unpaved and becomes impassable during the rainy season, despite the fact that it is a major road. Moreover, the majority of residents in the project area are indigenous people who are engaged mainly in agriculture, and the poverty rate in municipalities along the roadway, at 70.3%, exceeds the national average of 54.3% by a considerable margin.

The Berger Administration, in power since January 2004, has positioned development of ZONAPAZ as a priority issue in the national development plan (2004-2008), in accordance with the Peace Accords. The government's goal is to establish peace by boosting residents' living standards, with emphasis on road improvement so that the development of ZONAPAZ is not obstructed by lack thereof, together with promoting national reconciliation through various social programs. This project also has a high priority in Guatemala's road development plan (2000-2010) as a project that contributes significantly to improved living standards in the region, where development is lagging. Moreover, national highway RN-7 East is designated as a complementary route in the comprehensive Central American initiative known as Plan Puebla Panama (PPP), together with RN-7 West, which is currently being improved through an ODA loan. The countries of Central America have high expectations for the completion of the route from southern Mexico through Guatemala to Honduras and Belize.

JBIC's Medium-Term Strategy for Overseas Economic Cooperation Operations places priority on "support for poverty reduction" and "infrastructure installation for sustainable growth," and emphasizes assistance for promotion of sustainable growth through development of economic and social infrastructure, including roads. Moreover, JBIC also places priority on "support for peace-building", and given that Guatemala has declared establishment of peace and poverty eradication in ZONAPAZ a priority issue, JBIC's assistance for economic and social development in the region is highly necessary and relevant.

3. Project Objectives

This project aims to ensure a means of transportation in ZONAPAZ, a region particularly damaged by the internal conflict, by improving national highway RN-7 East which traverses the region, improving access roads to municipalities in the area, and improving rural roads, thereby contributing to the improvement of local residents' living standards as well as the establishment of peace and the reduction of poverty through revitalization of the local economy.

4. Project Description

(1) Target Area

Departments of Alta Verapaz and Izabal (in eastern Guatemala)

(2) Project Outline

This is a project to improve national highway RN-7, which traverses the departments of Alta Verapaz and Izabal (the segment between San Julian and Rio Dulce), and to rehabilitate and improve related rural roads.

(a) Engineering Works

(i) Improvement of national highway RN-7 East (approx. 161 km)

(ii) Improvement of the access road to the city of Senahu (approx. 25 km)

(iii) Rehabilitation of rural roads (approx. 162 km) (implemented with funds from the Guatemalan government)

(b) Consulting Service (detailed design, construction management, strengthening of the capabilities of the municipalities with jurisdiction, support for educational activities, etc.)

(3) Total Project Cost/Loan Amount

9,810 million yen (Yen Loan Amount: 7,357 million yen)

(4) Schedule

January 2005-December 2009 (60 months)

(5) Implementation Structure

(a) Borrower: The Republic of Guatemala

(b) Executing Agency: Ministerio de Comunicaciones, Infraestructura y Vivienda (CIV) for national highway RN-7 East (including access road to Senahu); Instituto de Fomento Municipal (INFOM) for rural roads

(c) Operation and Maintenance System: CIV's road maintenance management bureau (COVIAL), for national highway RN-7 East (including access road to Senahu); Municipalities with jurisdiction for rural roads

(6) Environmental and Social Consideration

(a) Environmental Effects/Land Acquisition and Resident Relocation

(i) Category: A

(ii) Reason for Categorization

This project is classified as Category A because it is located in a region that is susceptible to

impact, as declared in “Japan Bank for International Cooperation Guidelines for Confirmation of Environmental and Social Considerations” (established April 2002).

(iii) Environmental Permit

The environmental impact assessment (EIA) report for this project was approved by Guatemala’s Ministry of Environment and Natural Resources in September 2004 for the national highway and Senahu road portion and in July 2005 for the rural road portion.

(iv) Anti-Pollution Measures

This is a project to pave existing roads, and the negative effects following completion, such as air pollution, noise, and vibration, etc., are not expected to be serious. However, depending on the results of the monitoring, appropriate measures will be taken as necessary.

(v) Natural Environment

Part of the road is near wetlands protected under the Convention on Wetlands (Ramsar, Iran, 1971) and passes through a national park. However, no direct effects on the wetlands are foreseen from pavement construction, etc., and no serious effects on national park are foreseen because the area the road passes through is one of concentrated usage by stores and residences. To prevent soil outflow and water pollution, due to construction, in the rivers and streams that flow into the protected wetlands, protective measures will be taken on slopes by placing gabions and soil controllers.

(vi) Social Environment

CIV’s road bureau will follow the procedure for compensation in connection with the acquisition of approximately 2 ha of land for this project, but no resident relocation is expected to occur. Many indigenous people live in the planned project area, but their traditional way of life, customs, and culture have already melded with the modern way of life, and so no particular effects are foreseen.

(vii) Other/ Monitoring

Monitoring of air quality, noise, and water quality, etc., will be conducted by CIV’s road bureau and INFOM during construction and by COVIAL following completion of construction.

(b) Promotion of Poverty Reduction

The project area was impoverished by the internal conflict, and the poverty rate, as stated above, significantly exceeds Guatemala’s national average. Through this project, improvement of access to social services and markets in the area will be promoted, raising the living standards of the local residents and contributing to the establishment of peace and reduction of poverty through revitalization of the local economy.

(c) Promotion of Social Development (e.g. Gender Perspective)

The necessary technological support will be provided by the consultant to the relevant municipalities that will participate in planning the rural road rehabilitation and be the agents of operation and maintenance. Moreover, the consultant, in cooperation with INFOM and the relevant municipalities, will conduct traffic safety education, environmental education, and public health education including HIV prevention for the local residents. When these educational activities are implemented, gender will be taken into consideration, and a campaign will be conducted to promote participation by women.

(7) Other Important Issues

None

5. Outcome Targets

(1) Evaluation Indicators (Operation and Effect Indicator)

Indicator	Baseline (2004)	Target (2009, year project is completed)
Annual Average of Daily Traffic Volume (vehicles/day)	309-1,092	727-1,963
Required Travel Time, minutes (from San Julian to Rio Dulce)	383	214
Road Closure Time Due to Disaster (hours/year)	120-240	12-24

(2) Internal Rate of Return

Economic Internal Rate of Return: 35.9%

(a) Cost: Project cost (excluding tax), operation and maintenance expense

(b) Benefit: Reduction of required travel time, reduction of travel expense

(c) Project Life: 20 years

6. External Risk Factors

Natural disasters such as hurricanes and heavy rains.

7. Lessons Learned from Findings of Similar Projects Undertaken in the Past

In the project evaluations of past similar projects in the road sector, it has been pointed out that when selecting a contractor, not only should the contractor's experience and scale be taken into consideration, but sufficient consideration should also be given to the contractor's financial condition at the point in time when construction is to be implemented. Because local companies contracted for the ongoing Guatemalan project through international competitive bidding conducted without prior screening of qualifications have withdrawn in the middle of construction due to financial problems, contractors will be selected in this project through international competitive bidding that includes prior screening of qualifications, and in which financial condition will also be taken into consideration.

8. Plans for Future Evaluation

(1) Indicators for Future Evaluation

(a) Annual Average of Daily Traffic Volume (vehicles/day)

(b) Required Travel Time (minutes)

(c) Road Closure Time Due to Disaster (hours/year)

(2) Timing of Next Evaluation

After project completion