

Internal Ex-Post Evaluation for Grant Aid Project

conducted by Indonesia Office: January 2015

Country Name	The Project for Bridge Construction in the Province of NUSA TENGGARA TIMUR
Republic of Indonesia	

I. Project Outline

Background	The economic gap between the urban and rural areas was a major issue to be addressed of the Government of Indonesia (GOI) in the early 2000s. The East Nusa Tenggara (NTT) and the West Nusa Tenggara (NTB), for example, were in the less developed regions with per capita Gross Regional Domestic Products being one third to a half of the average of the nation (2005). Insufficient infrastructure in the rural areas was regarded as a cause of the regional economic imbalance and the GOI put the high priority on establishing the road network.				
Objectives of the Project	To ensure all year smooth traffic in the southern part of NTT by constructing Menu Bridge and Fatuat Bridge				
Outputs of the Project	1. Project Site: NTT 2. Major Project Component: Construction of Menu Bridge (260m), and Fatuat Bridge (129.7m) 3. Indonesian Side: To secure the land necessary for the execution of the Project such as the land for site offices, working areas, storage yards, plant facilities and others.				
Ex-Ante Evaluation	2005	E/N Date	29 August, 2005	Completion Date	10 April, 2008
Project Cost	E/N Grant Limit: 938 million yen, Actual Grant Amount: 937 million yen				
Implementing Agency	Ministry of Public Works and Housing				
Contracted Agencies	Katahira & Engineers International and Hazama Corporation				

II. Result of the Evaluation

1 Relevance
<p>This project has been highly relevant with the Indonesia's development policies at both ex-ante and ex-post evaluations which prioritize improvement of access to road network and rectification of imbalance of road network as set in the national development plan (PROPENAS: 2000-2004), Medium Term Development Plan 2010-2014 and other documents. The project has also been highly consistent with development needs at both ex-ante and ex-post evaluations: Menu Bridge and Fatuat Bridge are part of main components across the overall arterial route of major cities in the southern part of NTT and the construction of the bridges supports the social and economic development of the target areas. It was also consistent with Japan's ODA policy which prioritizes providing assistance to set up the public goods (water, sanitation, roads, electricity, etc.) necessary for village development and local development under the Country Assistance Program to Indonesia (2004) at ex-ante evaluation. Therefore, relevance of this project is high.</p>
2 Effectiveness/Impact
<p>The project has partly achieved its objective, "to ensure all year smooth traffic in the southern part of NTT by constructing Menu Bridge and Fatuat Bridge". Indicators of quantitative effects, such as the number of days for bridge closure and travelling time from the sites to major cities show improvement at both target year and the time of ex-post evaluation in comparison with the time before the project. However, the approach road to Fatuat Bridge on the right bank collapsed and the the bride was not used accordingly from April 2011¹ until December 2013 when the reconstruction of approach road and minor repair of the main structure of the bridge was completed by Ministry of Public Works and Housing.</p> <p>Although no quantitative data was available, according to the provincial government, the bridges are used mainly by motorcycle and followed by dump truck and cars which distribute goods, such as agricultural products (beans, corn, and banana), plantation products (tamarind), livestock (sheep, pork, lamb, and chicken), and services for a weekly market near the project sites. The number of cargo trucks has increased compared to the situation before the project, especially those for distribution of Kolbano stone and manganese. Also access to basic services, especially to medical and education center/schools at New Autonomous District of Malacca has improved. However, it cannot be said that the number of road users, which was expected to increase as an impact of the project, increased as expected according to short-time site surveys after the completion of the project, including the one at the time of ex-post evaluation². The reason might be that the construction works of roads around Fatuat Bridge and Menu Bridge have not been fully completed due to the delay in contractor's construction work (although the budget is secured)³,</p>

¹ The main cause of the bridge damage is the erosion of river banks because of a huge flood after the continuous rainfall in April 2011 which also damaged the bridges nearby which were constructed by the Indonesian government. The bridges shared the common conditions that (1) the rivers were rapid stream river, and (2) the area is the debris flow prone area due to the geological and geomorphological conditions, (3) many landslides occurred after the heavy rainfall and ground became weak due to water permeation. In addition, in the case of Fatuat Bridge, unique causes of the damage were also found that (1) There was a huge landslide at upstream of Snuel river in 2010, a huge amount of debris was accumulated on river bed, (2) There was the irrigation channel at the right bank of Snuel river; this channel could guide the flood water to the river, and (3) The debris flow in Oeleo river which is neighboring Snuel river, overflowed and brought debris into Snuel river. The damage was caused by these multiple situations. Although a single cause might have been predicted, it can be said it was impossible to predict these multiple causes to happen simultaneously (JICA internal document).

² There is no complete official data set.

³ The construction by the Indonesian side was agreed at the time of Exchange of Notes.

No negative impact on natural environment has been observed. Land acquisition was completed in accordance with domestic law and with full consent of the landowner and there was no resettlement as the site was uninhabited. No dispute has happened before, during and after land acquisition. Positive impacts were found that after the completion, the construction base camp built by the Japanese contractor was provided to the local authority and is used as a local elementary school at the time of the ex-post evaluation.

Therefore, effectiveness/impact of this project is fair.

Quantitative Effects

Indicator	Year 2004 (before the project) Actual value	Year 2008 (target year) Target value	Year 2008 (target year) Actual value	Year 2014 (ex-post evaluation year) Actual value
Indicator 1 Number of days for bridge closure	90 days	0 days	0 days	0 days
Indicator 2 Travelling time from the sites to major cities	190 minutes from Boking to Kolbano (in dry season)	160 minutes from Boking to Kolbano (in dry season)	160 minutes from Boking to Kolbano (in dry season)	145 minutes from Boking to Kolbano (in dry season)

(Source) For 2004: Basic Design Study Report. For 2008: Provincial government of NTT. For 2014: measured during the project site visit on 16 October, 2014.

3 Efficiency

The outputs of the project were completed as planned, and both the project cost and the project period were within the plan (ratio against the plan: 99%, 87%). Therefore, efficiency of this project is high.

4 Sustainability

The operation and maintenance (O&M) of the bridges has been carried out by the provincial government of NTT, while the Ministry of Public Works is in charge of the road and bridge construction, and the reconstruction of approach road of Fatuat Bridge was carried out by the Ministry. The institutional set up of the both organizations remains the same as the status at the time of ex-ante evaluation, and assumed to be sufficient to cover all necessary infrastructure related activities. Technical level of the O&M related activities is not sufficient as those activities have not been conducted properly for the reasons mentioned below, and there are problems of lack of skilled human resources and lack of internal training.

Financially, the provincial government does not have sufficient budget for O&M as necessary budgetary steps cannot be taken until the internal administrative procedure is finished. Because the budget has not been allocated for the provincial government for the routine O&M for existing /new roads and bridges, regular maintenance activities have not been appropriately carried out. However, once the internal administrative procedure is completed, appropriate O&M activities are expected to be carried out since the other projects which had already terminated the procedure has successfully received their budget and been appropriately managed.

During the time of road closure, there was one traffic accident that a motorcycle travelling the approach road of Fatuat Bridge run off from the bridge and the driver was injured, as the traffic sign of the road closure had been destroyed. Both bridges were observed in good condition at the time of ex-post evaluation survey.

Thus, as some problems were observed in technical and financial aspects as well as the current status of O&M, the sustainability of the project effect is fair.

5 Summary of the Evaluation

The project has partly achieved its objective, "to ensure all year smooth traffic in the southern part of NTT by constructing Menu Bridge and Fatuat Bridge". The project solved the problem of the bridge closure in the rainy season and reduced the travelling time from the sites to major cities, which means the project achieved its objectives. However, since Fatuat Bridge was closed due to the collapse of the approach road from April 2011 to December 2013, while it has been already fixed, it can be said that it to some extent affects the effectiveness of the project. Although the road users such as motorcycle and dump truck have increased, the number of users is not increased as expected. Positive impacts were identified such as increase in the distribution of goods and services and improved access to basic services. As for sustainability, institutional set up is appropriate, however, there are problems in the technical and financial aspects as well as current status of operation and maintenance, as the budget for O&M is not sufficient and regular maintenance activities have not been appropriately carried out accordingly.

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

III. Recommendations & Lessons Learned

Recommendations to implementing agency:

1. The provincial government of NTT is recommended to accelerate the procedure for obtaining budget for O&M structure and to take an appropriate measure to improve technical capacity for O&M in order to secure sustainability of the bridges.
2. Ministry of Public Works and Housing should (a) complete their internal administrative procedure and (b) push contractors and provide them any incentive/penalty to accelerate the construction works of roads around the bridges as soon as possible in order to secure connectivity for traffic between major habitats.

Lessons learned for JICA:

JICA should confirm the Implementation Agency's budget allocation plan for O&M and construction plan for the roads around the project, to maximize the effectiveness of the project. In case of this project, sufficient budget for O&M should have been allocated continuously and construction of roads around the bridges should have been completed before/when NTT bridges construction were completed in order to secure connectivity for traffic between major habitats.



Fatuat Bridge



Menu Bridge