

**JBIC ODA Loan Project Mid-Term Review Report**

Project Name: Vietnam “Binh Bridge Construction Project”

**[Outline of Loan Agreement]**

Loan Amount/Loan Disbursed Amount : 8,020million yen/5,688million yen (as of March 2003)  
 Signing of Loan Agreement : March 2000 (6th year)  
 Executing Agency : Hai Phong People’s Committee

**[Project Objective]**

The project’s objective is to construct a bridge over the Cam River in the vicinities of the ferry terminals in Hai Phong City in order to remove the bottleneck of the traffic network in the city, thus, to contribute to further expansion of the traffic network and a more efficient physical distribution in Northern Vietnam including Hai Phong City and to contribute to development of northern part of Hai Phong as the “Development Urban Area” as a center of politics, culture, economics and commerce.

Consultants: Chodai/Japan Overseas Consultants Contractors: Sumitomo Construction/Shimizu Corporation/Ishikawajima-Harima Heavy Industries

**[Outline of Results]** (Field Survey : February 2005)

Item	Appraisal (February 1998)	Mid-Term Review																									
<b>[Relevance]</b>	(1) In the Socio-economic Development Plan (2001-2005) as well as in the Socio-economic Development Strategy (2001-2010), development of transportation infrastructure was listed among priority policies. (2) Hai Phong City’s Master Plan for Urban Development 2020 set the objective of developing industries by inviting investment from abroad. For that purpose, development of new urban area in the northern part of Hai Phong City, which was expected to have better access by the improvement of traffic across the Cam River, needed to be tackled along with the establishment of infrastructure such as ports, national highways, and industrial complex. (3) As the ferry service is the only means of crossing the Cam River, the traffic in the city is divided by the river and smooth traffic is impeded. This project is to improve the traffic across the Cam River and establish a traffic network in the city, and therefore is of high priority.	(1) The plans mentioned on the left remain effective today. Also, in a resolution of the Political Bureau in 2003 and a cabinet resolution in 2004, it was decided to promote the establishment and development of the traffic infrastructure in major economic areas in the northern region as a priority policy. (2) The Master Plan for Urban Development 2020 remains effective. Hai Phong City’s 5-Year Plan for Socio-economic Development for 2001-05 sets the target for GDP growth rate in 2010 at 11%. Thus, further economic development is expected. In order to realize this level of growth, Hai Phong City has to deal with increasing traffic volume. Therefore expansion of the traffic network to the north area is indispensable. (3) This project is to address the increase in traffic and transportation volume driven by the economic development of Hai Phong City and to dissolve the bottle neck of the traffic network and to facilitate a smooth traffic flow, and therefore continues to be very important. *F/S Finnish Government 1994																									
<b>[Effectiveness]</b> (1) Improvement of traffic across the Cam River	(1) (i) Estimated volume of traffic across the river on the new bridge after completion <sup>1</sup> <table border="1"> <thead> <tr> <th></th> <th>2005</th> </tr> </thead> <tbody> <tr> <td>Automobile</td> <td>1,365</td> </tr> <tr> <td>Truck</td> <td>397</td> </tr> <tr> <td>Bus</td> <td>403</td> </tr> <tr> <td>Motorbike</td> <td>13,535</td> </tr> </tbody> </table> (Unit : vehicles/day) (1) (ii) Time required to cross the river using the new bridge after completion: no target is set.		2005	Automobile	1,365	Truck	397	Bus	403	Motorbike	13,535	(1) At the time of this monitoring research (Jan. to Feb. 2005), it was expected that the demand for this project (a new bridge) was high judging from the steady economic growth of over 10% per year in Hai Phong City. Traffic volume of the bridge right after the opening (May 13, 2005) is as follows (Toll is not collected.); <table border="1"> <thead> <tr> <th></th> <th>Average of May 31 &amp; June 1, 2005</th> <th>Average from July 19-25, 2005</th> </tr> </thead> <tbody> <tr> <td>Automobiles</td> <td>1,261</td> <td>1,337</td> </tr> <tr> <td>Trucks</td> <td>692</td> <td>672</td> </tr> <tr> <td>Buses</td> <td>599</td> <td>1,026</td> </tr> <tr> <td>Motorbikes</td> <td>31,667</td> <td>20,234</td> </tr> </tbody> </table> (Unit : vehicles/day) As long as judged by the figures of this table, the traffic volume of automobiles, trucks, buses and motorbikes resulted in above the projection at the appraisal. The traffic volume after the toll gate starts operation will not change because the other bridge that crosses Cam river the “Kien Bridge” is 15 km away from the Binh Bridge and the toll fare of both bridges will be set the same. In addition, after the toll gate starts operation, the ferry service will be terminated and be replaced by the service by small boats. Therefore, the transfer to ferry boats by tariff resistance will be limited. Since at present the toll is not collected, traffic flow is smooth.		Average of May 31 & June 1, 2005	Average from July 19-25, 2005	Automobiles	1,261	1,337	Trucks	692	672	Buses	599	1,026	Motorbikes	31,667	20,234
	2005																										
Automobile	1,365																										
Truck	397																										
Bus	403																										
Motorbike	13,535																										
	Average of May 31 & June 1, 2005	Average from July 19-25, 2005																									
Automobiles	1,261	1,337																									
Trucks	692	672																									
Buses	599	1,026																									
Motorbikes	31,667	20,234																									

<sup>1</sup> Note: Those figures are the sums of the estimated traffic volume across the Cam River at Binh Ferry and the increase in traffic volume as a result of the development of Hai Phong City for 2005.

	<p>(2) Average estimate transportation volume at Binh Ferry (across the Cam River) per day before the opening of the Binh Bridge.</p> <table border="1"> <thead> <tr> <th></th> <th>1994</th> <th>1995</th> <th>1996</th> <th>1997</th> <th>1998</th> <th>2004 (Projection for planned completion year)</th> </tr> </thead> <tbody> <tr> <td>Automobiles</td> <td>391</td> <td>368</td> <td>250</td> <td>248</td> <td>278</td> <td>481</td> </tr> <tr> <td>Trucks</td> <td>85</td> <td>80</td> <td>163</td> <td>169</td> <td>181</td> <td>295</td> </tr> <tr> <td>Buses</td> <td>68</td> <td>64</td> <td>130</td> <td>135</td> <td>145</td> <td>200</td> </tr> <tr> <td>Motorbikes</td> <td>2,743</td> <td>2,725</td> <td>2,122</td> <td>2,672</td> <td>3,254</td> <td>7,684</td> </tr> <tr> <td>Bicycles</td> <td>6,879</td> <td>6,831</td> <td>8,615</td> <td>9,331</td> <td>9,383</td> <td>10,567</td> </tr> <tr> <td>Pedestrians</td> <td>6,625</td> <td>6,578</td> <td>6,512</td> <td>6,425</td> <td>6,342</td> <td>6,342</td> </tr> </tbody> </table> <p style="text-align: center;">(unit: vehicle, person)*The estimation for 2004 is based on F/S</p> <p>(3) Average time required to cross the river at Binh Ferry The traffic was increasing every year and the waiting time during peak hours was as long as one hour (*no quantitative indicator is available).</p>		1994	1995	1996	1997	1998	2004 (Projection for planned completion year)	Automobiles	391	368	250	248	278	481	Trucks	85	80	163	169	181	295	Buses	68	64	130	135	145	200	Motorbikes	2,743	2,725	2,122	2,672	3,254	7,684	Bicycles	6,879	6,831	8,615	9,331	9,383	10,567	Pedestrians	6,625	6,578	6,512	6,425	6,342	6,342	<p>(2) Average actual transportation volume at Binh Ferry (across the Cam River) per day before the opening of the Binh Bridge</p> <table border="1"> <thead> <tr> <th></th> <th>Average volume of May 9 &amp; 10, 2005</th> </tr> </thead> <tbody> <tr> <td>Automobiles and buses</td> <td>168</td> </tr> <tr> <td>Trucks</td> <td>43</td> </tr> <tr> <td>Motorbikes</td> <td>4,065</td> </tr> <tr> <td>Bicycles</td> <td>2,654</td> </tr> <tr> <td>Pedestrians</td> <td>3,463</td> </tr> </tbody> </table> <p style="text-align: center;">(unit: vehicle, person)</p> <p>As long as judged by the figures of this table, the volume of all types of cars and pedestrians which used Binh Ferry is less than that of projection. The reason for it would be diverted traffic volume to the Kien Bridge which was already opened in terms of automobile, bus, truck and motorbike. The Kien bridge was completed in 2003. While the traffic volume by ferry in 2002 was 259 per day, the traffic volume of cars which used the bridge in May 2005 was 3,258 per day.</p> <p>(3) Average time required to cross the river at Binh Ferry (results of the study conducted on May 2 &amp; 10, 2005) Time required to cross the river in the peak hour (including waiting time) was at a maximum 28 minutes for the ferry going to Hai Phong from Quangninh and at a maximum 22 minutes for the ferry going to Quangninh from Hai Phong. However, it should be taken into consideration that the number of ferries increased from four to eight after the appraisal.</p>		Average volume of May 9 & 10, 2005	Automobiles and buses	168	Trucks	43	Motorbikes	4,065	Bicycles	2,654	Pedestrians	3,463
	1994	1995	1996	1997	1998	2004 (Projection for planned completion year)																																																									
Automobiles	391	368	250	248	278	481																																																									
Trucks	85	80	163	169	181	295																																																									
Buses	68	64	130	135	145	200																																																									
Motorbikes	2,743	2,725	2,122	2,672	3,254	7,684																																																									
Bicycles	6,879	6,831	8,615	9,331	9,383	10,567																																																									
Pedestrians	6,625	6,578	6,512	6,425	6,342	6,342																																																									
	Average volume of May 9 & 10, 2005																																																														
Automobiles and buses	168																																																														
Trucks	43																																																														
Motorbikes	4,065																																																														
Bicycles	2,654																																																														
Pedestrians	3,463																																																														
<b>Reference Information</b>																																																															
<p><b>[Efficiency]</b> (1) Project Scope</p> <p>(2) Project Period</p> <p>(3) Project Cost</p>	<p>(1) • Bridge construction: total length: 1,300m, width: 22.5m (4 lanes), approach roads (south side: 600m, north side: 900m), intersection facilities on the south side • Consulting service : 619.9M/M</p> <p>(2) March 2000 - February 2004 (46 months)</p> <p>(3) 9,435 million yen</p>	<p>(1) Almost as planned</p> <p>(2) March 2000 – July 2007 (89 months) (Reason for Delay) • In the selection of the consultants, the approval procedure at the Vietnam Government took time. • After the approval for the investment decision of this project, the funding source changed to the Japan's ODA from the other country's ODA, which required re-approval of a series of matters such as investment decision, designing or cost estimates.</p> <p>(3) Same as the estimation at appraisal</p>																																																													
<p><b>[Lessons Learned and Recommendations]</b></p>	<p>This project is one of the series of projects to improve traffic conditions in Hai Phong City. In order to evaluate the overall effects for ex-post evaluation, it is possible to take into account the effectiveness of other projects such as the National Highway Route 10 Project (including the construction of the Kien Bridge).</p>																																																														
<p><b>[Indicators set for the ex-post evaluation]</b></p>	<p>n.a.</p>	<p>1. Traffic Volume 2. Time required to cross over the bridge (Consultation between JBIC and implementing agency is needed regarding target value.)</p>																																																													