



<b>1. Project Data:</b>		<b>Date Posted :</b> 08/07/2002	
<b>PROJ ID :</b> P004800		<b>Appraisal</b>	<b>Actual</b>
<b>Project Name :</b> Highways V	<b>Project Costs (US\$M)</b>	325.52	89.02
<b>Country :</b> Thailand	<b>Loan/Credit (US\$M)</b>	150.00	74.58
<b>Sector(s) :</b> Board: TR - Roads and highways (98%), Central government administration (2%)	<b>Cofinancing (US\$M)</b>	6.00	0.00
<b>L/C Number :</b> L3968			
	<b>Board Approval (FY)</b>		96
<b>Partners involved :</b> ADB	<b>Closing Date</b>	06/30/2000	12/31/2001
<b>Prepared by :</b>	<b>Reviewed by :</b>	<b>Group Manager :</b>	<b>Group:</b>
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## 2. Project Objectives and Components

### a. Objectives

The general objective was to provide the transport capacity that Thailand required after 10 years of economic growth, while mitigating externalities such as environmental pollution and traffic safety. Specific objectives were to:

- (a) Promote the implementation of actions aimed at reducing environmental degradation and vehicular accidents attributable to fast growing motorization through the establishment of a privately operated vehicle inspection system
- (b) Improve the quality of service of the inter-urban road network through increased road capacity and improved safety standards of existing roads
- (c) Provide a systematic basis for the establishment of environmental assessment criteria at the design stage as well as environmental management during and after new road construction and capacity increases.

### Revised Objectives :

At the Mid-term review in 1998, general objectives were reconfirmed, while specific objectives were rephrased :

- (a) Continue providing support to Government's efforts to reduce vehicular air and noise pollution and develop road safety competence in the relevant agencies in the pilot provinces so road safety action plans can be implemented in these provinces.
- (b) Improve the quality of service of the inter-urban road network through increased road capacity and improved safety standards on existing roads. [Unchanged]
- (c) Strengthen capacity of Department of Highways (DOH) and Office of Environmental Policy and Planning (OEPP) to integrate environmental concerns into road development projects.

### b. Components

- (i) Road Widening (92% of total Project cost at appraisal): Civil works sub-projects for capacity increases involving the widening to four lanes and rehabilitation of the existing two lanes of sections of major inter-urban national highways. Also included were consulting services for design and supervision.
- (ii) Institutional Strengthening of DOH: Implement follow-up actions to a 1995 study undertaken to assist the Government with strategies for road financing (including restructuring road user charges and the collection of tolls) and institutional reform (revising the organizational structure for road management).

(iii) Environmental Capacity Strengthening of DOH and OEPP: Training, preparation of guidelines and manuals, and program development to strengthen DOH's capacity for environmental assessment as well as the EA oversight capacities of OEPP.

(iv) Improvements to DOH's Training Facilities: ADB agreed to provide financing to add housing for teaching staff at the Chon Buri center and to furnish and equip the center to make it fully operational.

(v) Action Plan Implementation: Technical assistance, training, and minor equipment purchases to assist MOTC, LTD, DPC and associated agencies to implement Action Plans to reduce motor vehicle emissions, noise, and traffic safety.

**Revised Components :**

The Project's scope and cost were reduced by budget austerity measures in response to the economic crisis of 1997. The institutional strengthening of DOH and the improvements to training facilities were removed -- to be financed separately by the Government and ADB.

(1) Road Widening: Project financing of civil works for road widening, and consulting services for design and supervision, was reduced from \$299.62 million to \$99.5 million.

(2) Environmental Capacity Strengthening of DOH: Financing was reduced from \$5 million to \$1.9 million.

(3) Action Plan Implementation: Financing was reduced from \$17.9 million to \$5.6 million.

**c. Comments on Project Cost, Financing and Dates**

Project cost was reduced dramatically in reaction to the Asian economic crisis that hit in 1997, from \$325.52 million at appraisal to \$89.02 million (actual). The Bank's share of total project financing grew from 46% (at appraisal) to 84% (actual). Delays in implementation caused the closing date to be extended over a year.

**3. Achievement of Relevant Objectives:**

The Project objectives were partially achieved, as summarized below:

- (a) Reduce pollution and develop road safety so action plans can be implemented.
  - When the Project components were revised, financing for Action Plan Implementation was reduced 69%. Because the Government was already implementing an air pollution control program, technical assistance concentrated on road safety. While there were road safety developments under the Project, most of the actions recommended in the Safety Action Plan were not implemented. Moreover, the Government did not use \$2 million of the Bank loan allocated to procure badly needed equipment for enforcement and accident database management, which would have considerably strengthened the implementation of the road safety program in the pilot areas.
- (b) Improve road capacity and safety standards on the inter-urban road network.
  - 123 km of priority roads were widened (from 2 to 4 and 6 lanes) on a cost-effective, environmentally acceptable, and traffic safe fashion. Traffic flows increased and accident rates dropped on Project roads.
- (c) Strengthen capacity to integrate environmental concerns into road development projects.
  - The capacity, qualifications, and performance of DOH's Environmental Unit staff improved significantly over the past five years, and are considered satisfactory. However, capacity-building efforts must continue, to ensure that DOH integrates environmental and social concerns into its operations and that proposed mitigation measures are effectively executed. In addition, the capacity of OEPP to carry out post-environmental assessment evaluation and monitoring was strengthened.

**4. Significant Outcomes/Impacts:**

Environmental, social, and safety concerns have become a regular part of operations in DOH and are addressed at the design stage of new projects.

**5. Significant Shortcomings (including non-compliance with safeguard policies):**

- A major shortcoming was the extensive delay in the implementation of physical works, which resulted from several causes:
  - o Review and downsizing of subprojects following the onset of the economic crisis
  - o The duration of the contract approval process in Thailand, which takes one year on average to process a

<ul style="list-style-type: none"> <li>civil works contract from bid opening to signature</li> <li>o The lack of clear and specific legal provisions indicating that the Bank 's procurement guidelines should override Government regulations when there are differences between the two</li> <li>o Introduction of new sample bidding documents by the Bank in January 1995</li> </ul>
<ul style="list-style-type: none"> <li>• Most of the actions recommended in the Safety Action Plan were not implemented, and the Government did not use \$2 million of the Bank loan allocated to procuring equipment that would have considerably strengthened the implementation of the road safety program in the pilot areas .</li> </ul>

6. Ratings :	ICR	OED Review	Reason for Disagreement /Comments
<b>Outcome :</b>	Satisfactory	Satisfactory	
<b>Institutional Dev .:</b>	Substantial	Substantial	
<b>Sustainability :</b>	Likely	Likely	While maintenance expenditures decreased as a result of the economic crisis, the major inter-urban highways widened in this Project are likely to be maintained because they are priorities in the sector.
<b>Bank Performance :</b>	Satisfactory	Satisfactory	
<b>Borrower Perf .:</b>	Satisfactory	Satisfactory	Nevertheless, Government commitment was weak, both during preparation and implementation, resulting in excessive delays.
<b>Quality of ICR :</b>		Satisfactory	

NOTE: ICR rating values flagged with '\*' don't comply with OP/BP 13.55, but are listed for completeness.

#### 7. Lessons of Broad Applicability:

- Simplify action plans. Complex action plans requiring coordination between ministries, between agencies under the same ministry, or even between divisions under the same department are difficult to implement effectively . It is easier to obtain commitment on a few well agreed-upon actions by a few agencies than on myriad disconnected actions by many agencies .
- Agree early on procurement procedures and documents . This project illustrates the importance of agreeing on procurement issues in the early stages of a project --it took years from appraisal for the first contract to be signed because this was not done .

8. Assessment Recommended? ☐ Yes ☒ No

#### 9. Comments on Quality of ICR:

The quality of the ICR is satisfactory . It provides a candid analysis of implementation experience and outcome .