



1. Project Data:		Date Posted : 05/04/2001	
PROJ ID : P003504		Appraisal	Actual
Project Name : Hebei/henan National	Project Costs (US\$M)	894.7	873.7
Country : China	Loan/Credit (US\$M)	380	358.2
Sector(s) : Board: TR - Roads and highways (89%), Sub-national government administration (11%)	Cofinancing (US\$M)	112.3	155
L/C Number : L3748			
	Board Approval (FY)		94
Partners involved :	Closing Date	06/30/2000	06/30/2000
Prepared by :	Reviewed by :	Group Manager :	Group:
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2. Project Objectives and Components

a. Objectives

The objectives of the project were to:

- relieve transport congestion and improve the integration of inter-regional commerce through the development of principal North-South Corridor of the National Trunk Highway System (NTHS);
- facilitate access within the area of influence, ensuring that the benefits of improving the trunk road extend to a wide area by rehabilitating and expanding sections of roads interconnecting with the National Highway 107;
- strengthen the interprovincial coordination of trunk road operations and promote the free flow of goods and travelers between the two provinces; and
- strengthen the provincial highway agencies in road investment planning by improving highway capacity guidelines, construction management, and maintenance.

b. Components

The main components of the project were:

- (a) construction of the 340 km, four-lane, access-controlled highway between Shijiazhuang and Xinxian, of which 216 km are in Hebei and 124 km in Henan, including service facilities and equipment for tolling, traffic monitoring, telecommunications and lighting;
- (b) an "Interconnecting Roads Improvement Program" (IRIP) for upgrading and rehabilitation of 160 km in 14 provincial highways interconnecting at interchanges with the expressway;
- (c) construction supervision for the Shijiazhuang-Xinxian Expressway and the IRIP components;
- (d) technical assistance for strengthening Hebei and Henan's coordination of expressway operations and for a study of facilitation of inter-provincial traffic flows;
- (e) technical assistance to carry out a study of highway capacity; and
- (f) training in highway planning, design, construction, operation and maintenance.

Revised Components:

The IRIP component was substantially modified. In Hebei, the program was expanded to accommodate six additional interconnecting roads including a new interchange, while in Henan one road was deleted from the program because it was to be improved under local funding. In addition, there were two modifications to the Henan portion: (i) the upgrading works between Xinjiang (the southern end of SAXE) and Zhengzhou were added to the project, and (ii) because of delays in the procurement of the E&M works on the Henan section, their financing was transferred from the loan to local funding.

c. Comments on Project Cost, Financing and Dates

The total project cost was US\$873.7 million, slightly lower than the appraisal estimate of US\$894.7 million.

The decrease from the appraisal cost estimate was in large part due to the substantial devaluation of the Chinese Renminbi. The project closed on June 30, 2000 as originally scheduled.

3. Achievement of Relevant Objectives:

The project satisfactorily achieved its key objectives.

- The physical targets for the construction of the expressway were met, relieving the traffic congestion in the Corridor.
- The IRIP component of the project has substantially increased the influence of the expressway. 19 interconnecting roads were improved (versus the 14 roads projected at appraisal). The agricultural and industrial output value index shows a steady increase in all counties affected by the project. The ERR for this component was re-estimated at 22.3% versus the appraisal estimate of 39.9%.
- Coordination between the two provinces has substantially improved. The two provinces coordinated in the design, construction, and operations phases of the project. A joint toll station at the provincial boundary was set up and became a model for such collaboration in other Chinese provinces. The two provinces also collaborated in toll studies, narrowed the gap between the tolls charged in the two provinces, and developed a joint handling of major traffic accidents and expressway policing.
- Staff training, technical assistance and the provision of specialized equipment has improved the institutional performance and enhanced the capacity of the Provincial Communications Department (PCD) of the two provinces. Several recommendations from the Traffic Facilitation Study have been implemented, and the Highway Capacity Study has produced a useful document to be used by the PCDs of Hebei and Henan, and the Ministry of Construction (MOC).

4. Significant Outcomes/Impacts:

The significant impacts of the project are:

- the construction of the Shijiazhuang-Anyang-Xinxiang Expressway (SAXE) and improvements of provincial roads interconnecting at the interchanges with the expressway has considerably improved the inter-provincial flow of traffic;
- successful inter-provincial coordination of highway planning, management and construction; and
- the introduction of modern methods in toll road organization and management.

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

The main shortcomings of the project are:

1. The installation of the electrical/mechanical system (EMS) comprising the surveillance/control system, toll system and the communication system, were substantially delayed. In Hebei, it took place in May 2000, much later than the December 1997 opening of the expressway. In Henan, the EMS has yet to be supplied and installed and its financing was transferred to local funding, as the 1996 tendered bids were rejected in 1999 because they were considered no longer valid. These delays have resulted in lower service efficiency level of the expressway.
2. Increase in the cost of construction of expressway and less than anticipated traffic increase resulted in much lower ex-post ERR. The ex-post ERR for the expressway is estimated at 14.1%, compared to 22.9% estimated at appraisal.
3. The project achieved limited success in improving traffic safety.

6. Ratings:	ICR	OED Review	Reason for Disagreement /Comments
Outcome:	Satisfactory	Satisfactory	
Institutional Dev.:	Substantial	Substantial	
Sustainability:	Likely	Likely	
Bank Performance:	Satisfactory	Satisfactory	
Borrower Perf.:	Satisfactory	Satisfactory	
Quality of ICR:		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:

The ICR identifies the following lessons of broad applicability:

- Inter-provincial cooperation and coordination is important to facilitate the development of national trunk/highway system and promoting long distance transit traffic.

- Stricter control of the procurement schedule of electrical/mechanical system (EMS) components should be maintained so that the system can be installed before the road is opened for regular operation.
- Commercialization of expressway management companies can substantially enhance expressway operations.
- Planning and designs of expressways should consider both the medium and long term development around the corridor.

The borrower adds the following important lesson - Separate expressway maintenance specifications should be developed, as the highway maintenance specifications that were prepared (for ordinary roads) were not suitable for maintenance of expressways.

8. Assessment Recommended? ☐ Yes ☒ No

9. Comments on Quality of ICR:

The quality of ICR is satisfactory. It covers all the relevant and important issues relating to the implementation experience and the outcome of the project.