

1. Project Data:		Date Posted : 03/03/2008	
PROJ ID :	P058843	Appraisal	Actual
Project Name :	Cn-guangxi Highway	Project Costs (US\$M):	522.71
			556.76
Country :	China	Loan/Credit (US\$M):	200.0
			180.3
Sector Board :	TR	Cofinancing (US\$M):	
Sector(s):	Roads and highways (97%) Sub-national government administration (3%)		
Theme(s):	Rural services and infrastructure (34% - P) Infrastructure services for private sector development (33% - P) Municipal governance and institution building (33% - P)		
L/C Number :	L4541		
		Board Approval Date :	03/28/2000
Partners involved :		Closing Date :	06/30/2006
			06/30/2007
Evaluator :	Panel Reviewer :	Group Manager :	Group :
Antti P. Talvitie	Kris Hallberg	Soniya Carvalho	IEGSG

2. Project Objectives and Components:

a. Objectives:

1. Provide an effective transport link between the Borrower's land -locked provinces of Guizhou, Yunnan and Sichuan and its southern coastal areas through Guangxi Zhuang Autonomous Region; and
2. Strengthen the institutional capacity of Guangxi's highway sector agencies to enable them to administer, regulate, manage and operate the sector with greater effectiveness and efficiency .

The objectives were worded slightly differently in the PAD but the meaning and intent were the same . The ICR and the LOA had identical wording and are used .

b. Were the project objectives/key associated outcome targets revised during implementation?

No

c. Components (or Key Conditions in the case of DPLs, as appropriate):

1. Highway Capacity Expansion. Estimated cost at appraisal US\$404.65 million; cost at completion US\$503.34 million. Construction of 238 km Shuiren-Nanning Highway (SNH) in Guangxi consisting of (a) about 97 km of Class 2 highway between Shuiren and Duan and related interchanges; (b) about 141 km of expressway between Duan and Nanning and related interchanges; (c) toll stations, service and parking areas, and administration and maintenance

facilities; and (d) the supply and installation of electrical, electronic and mechanical equipment for toll collection, traffic monitoring, lighting and telecommunication.

2. Highway Network Improvement and Maintenance Program (HNIMP). Estimated cost at appraisal \$56.72 million; cost at completion US\$48.61 million. A program of rehabilitation and maintenance of ten selected sections of provincial roads totaling some 236 km.

3. Highway Safety Program. Estimated cost at appraisal US\$2.58 million; cost at completion US\$2.26 million. A black spot improvement program in twelve selected locations in the provincial highway network in Guangxi .

4. Institutional Development. Estimated cost at appraisal US\$2.96 million; cost at completion US\$2.55 million.

A program to develop highway sector agencies and institutions in Guangxi in areas of planning, design, construction supervision, operation and maintenance, project management, and environmental and resettlement monitoring, through the provision of training and equipment . Studies on the design of slopes on road embankments and environmental protection and highway construction and economic development in poor areas .

The appraisal cost estimates do not include the contingencies US\$ 55.80 million, and interest during construction and IBRD front-end fee of US\$44.11 million. The completion costs figures do not include interest during construction and IBRD front-end fee of US\$45.62 million.

d. Comments on Project Cost, Financing, Borrower Contribution, and Dates:

The Borrowers--the Central government and the provinces--paid 70% of the project costs; a significant share . The project costs were estimated conservatively . All the components were fully implemented . There were significant design changes to Shuiren-Nanning Highway (SNH) in Guangxi in response to engineering design studies . These changes involved geotechnical design, location of maintenance depots, service and parking areas, an interchange configuration, and added a toll, a monitoring station, and two maintenance offices . These changes increased costs . The HNIMP component was also revised following a review . Five of the roads were replaced with ones that better met the PAD selection criteria . The changes in HNIMP reduced road length from 236 km to 231 km . Highway Safety component was implemented as planned . The Institutional Strengthening Component was expanded and exceeded its planned outputs .

The loan closing date was extended by one year due to delay in processing by the State Council, resulting in unsatisfactory rating in one early ISR, and due to poor contractor performance in one of the HNIMP subprojects . Although the total project costs were 6% higher than estimated, the loan disbursement was less than planned due to reduced costs in categories with higher disbursement percentages . At project completion US\$19.7 million was cancelled at the request of the borrower .

3. Relevance of Objectives & Design:

The objectives were consistent with the Bank's Country Assistance Strategy (CAS-1998): (i) alleviating infrastructure bottlenecks and increasing road network capacity and (ii) helping to alleviate poverty in China . The project did not include a poverty component nor was the project a poverty targeted intervention . However, the project was informed of and affected by the Poverty Impact Assessment Report and there were poverty impacts . The project benefited poor communities with lower than average national income --average income of the affected counties increased 23% during the project--and served ethnic minorities in Guangxi province . The objectives were and remain relevant and relate to all pillars of the CPS-2006: Reducing poverty, inequality, and social exclusion; Financing sustained and efficient growth; Improving public and market institutions; Integrating China to the world economy; and Managing resource scarcity and environmental challenges . However, its relation is implied rather than explicit.

The project design was consistent with China's transport development strategy and the Bank's sector study findings (Operations Evaluation Department -- now IEG -- evaluation of the Bank's transport program in China, and the Region's issue notes for China's highway strategy) . Project components are logically connected to these strategies, but the link to project objectives is less clear, because the objectives are somewhat fuzzy and the monitoring indicators do not cover the full scope of the project .

4. Achievement of Objectives (Efficacy):

1. Provide an effective transport link between the Borrower's land -locked provinces of Guizhou, Yunnan and Sichuan and its southern coastal areas through Guangxi Zhuang Autonomous Region . This objective was achieved . Travel time between Shuiren and Nanning (via the new SNH), the key project component, reduced from about 8 hours to about 3 hrs . Traffic diversion to the new SNH was less than anticipated, but congestion on the existing road (NR210) was nonetheless greatly reduced as the travel speeds increased by 60% . The tonnage transported to provinces on the coast was 15% greater than the target . The network improvements under HNIMP were technically on target and even exceeded their section criteria, but for the targeted traffic volumes the results are mixed . The project had a positive effect on poverty and social development . Although not attributable solely to the project, better access and resettlement to new areas made cultivation and marketing of higher value crops possible resulting in higher incomes in the affected counties and the resettled families were able to triple the size of their homes . The achievement of the objective is high .

2. Strengthen the institutional capacity of Guangxi's highway sector agencies to enable them to administer, regulate, manage and operate the sector with greater effectiveness and efficiency. This objective was largely achieved. More staff was trained than planned, the technical studies were relevant to human resource development and capacity building of the Guangxi Communications Department (GCD). There was five-fold increase in the maintenance budget. However, there is no indicator to gauge whether the increased budget is being applied effectively. The traffic safety component, which was restricted to NR 210 rather than the provincial roads in general, was effective and dropped to 1-5% of pre-project figures on the measurement locations (on NR210). Section 10 comments on the less-than-perfect indicator for institutional development. The indirect evidence for it, although satisfactory, supports a (conservative) rating of the achievement of the objective as substantial.

5. Efficiency (not applicable to DPLs):

Benefit-cost analyses showed slightly higher results than expected the PAD. The cost coverage of the benefit-cost analysis is also larger at completion. The total net benefits of the project are substantially higher (3x) than at appraisal.

a. If available, enter the Economic Rate of Return (ERR)/Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation :

	Rate Available?	Point Value	Coverage/Scope*
Appraisal	Yes	17%	81%
ICR estimate	Yes	23%	92%

* Refers to percent of total project cost for which ERR/FRR was calculated.

6. Outcome:

With few exceptions the project exceeded its planned targets or indicator values. The road works were implemented with good quality and in compliance with the Bank's guidelines for the environment and resettlement. Even with greater cost coverage, the ERR and the NPV are higher than estimated at appraisal. Accidents have been dramatically reduced in the black spots targeted for removal, institutional capacity was improved, and road maintenance budget was substantially increased. There were positive effects on poverty and social development. All these are important outcomes and relevant to the PDO achievement. The monitoring indicators could have had broader scope, however, as commented in Section 10.

a. Outcome Rating : Highly Satisfactory

7. Rationale for Risk to Development Outcome Rating:

The road works are of good quality; road maintenance budget has been increased; there were relevant studies and staff was trained; new high value crops are adopted for cultivation and economic activity has increased. As a result, because the SNH links three interior provinces to the several deep water ports, the traffic levels will be sustained and risk to maintaining positive outcomes is negligible.

a. Risk to Development Outcome Rating : Negligible to Low

8. Assessment of Bank Performance:

Analysis and justification for the Project was sound and project preparation was comprehensive. Bank supervised the project well and approved modifications to the components in response to better information. The Bank monitored the project to ensure achievement of project outputs and results, and compliance with the safeguard requirements.

a. Ensuring Quality -at-Entry:Satisfactory

b. Quality of Supervision :Satisfactory

c. Overall Bank Performance :Satisfactory

9. Assessment of Borrower Performance:

The Ministry of Communications (MOC) and the Ministry of Finance (MOF), at the central level, supported project

preparation and, after some initial delay, followed the project and coordinated its supervision in its early phases . The GCD implemented the project efficiently and at cost, and largely on time . Extensive design changes could probably have been avoided had the design consultants had better oversight . GCD could also have been more "earnest" to begin the processes to implement the HNIMP and the safety component . These rather normal blemishes aside, the GCD implemented the large project well, and the project outputs were completed as planned and the project objectives achieved .

a. Government Performance :Satisfactory

b. Implementing Agency Performance :Satisfactory

c. Overall Borrower Performance :Satisfactory

10. M&E Design, Implementation, & Utilization:

Key indicators for monitoring performance : (i) Average daily traffic (ADT) on proposed and existing highways in selected high priority corridors; (ii) Average speed on proposed and existing highways; (iii) Traffic accident rates on provincial roads; and tonnage of goods transported to coastal provinces . In addition, the rate of progress in implementing each component was measured against planned targets for each year of project . These served as bench-marks for monitoring project implementation progress . An income growth indicator (for poverty alleviation) was referred to in the ICR text but not included in the framework . It also would have been useful to have an indicator on road condition as well as the maintenance budget, the latter also mentioned in the ICR text . The intermediate outcome indicator for institutional development--"number of person-months of completed training"-- does not capture its full scope . Admittedly, in the absence of benchmarks, it is difficult to devise a measurable indicator for the effects of training during the same project . Could benchmarks have been established for future reference, rather than rely on the indirect evidence for achieving the "concrete" part of PDO?

ICR is silent on whether arrangements for the collection of data were instituted to assure the sustainability of their collection and usage for monitoring performances beyond the project implementation period .

The M&E design was pragmatic and many are good proxies for outcomes, and they are measurable . The intermediate outcome (or, more appropriately, output) indicators were useful and used to monitor project implementation progress . The caveat above regarding the institutional development applies, but, nonetheless, the indirect evidence for it supports and justifies the overall rating ..

a. M&E Quality Rating : Substantial

11. Other Issues (Safeguards, Fiduciary, Unintended Positive and Negative Impacts):

Safeguards and the fiduciary responsibilities were managed satisfactorily . Loan covenants were complied with on time . Environmental management was built into the overall project management system, and the Environmental Action Plan was implemented and monitored with the works' progress . At conclusion acceptance and compliance was certified by the National Environment Protection Center .

Adequate Resettlement Action Plan (RAP) compensation for land required Bank intervention . Follow-up surveys showed that the affected persons were better off after the resettlement in terms of income and home size . An independent monitor concluded that the resettlement and associated village infrastructure works were done satisfactorily .

Procurement was undertaken in accordance with Bank procurement procedures . However, in this case the Borrower believes that where it is obvious that the unit rates have not been reasonably priced there should be some flexibility in the procurement guidelines in respect of the award of contracts . It is recommended that since there is some disagreement on this matter, there should be further dialogue between the Bank procurement specialists and the Borrower .

12. Ratings:	ICR	IEG Review	Reason for Disagreement /Comments
Outcome:	Satisfactory	Highly Satisfactory	The project targets were exceeded and, although not directly and solely attributable to the project, the project was associated with significant poverty impact.

Risk to Development Outcome:	Negligible to Low	Negligible to Low	
Bank Performance :	Satisfactory	Satisfactory	
Borrower Performance :	Satisfactory	Satisfactory	
Quality of ICR :		Satisfactory	

NOTES:

- When insufficient information is provided by the Bank for IEG to arrive at a clear rating, IEG will downgrade the relevant ratings as warranted beginning July 1, 2006.

- The "Reason for Disagreement/Comments" column could cross-reference other sections of the ICR Review, as appropriate .

13. Lessons:

1. An up-front cash deposit by the contractors strengthens the likelihood that environmental safeguard measures contained in civil works contracts will be carefully executed .

14. Assessment Recommended? Yes No

15. Comments on Quality of ICR:

The ICR was concise, clear and to the point. As is usual for projects in China, the benefit-cost analysis was well done and supported by the financial analysis, which always illuminates other important features of the project . The ICR could have discussed more the relationship between project objectives, the components, and the monitoring indicators. There also is a slight difference in project component costs between the ICR text (which figures come from the PAD) and the ICR table in Annex 1.

a. Quality of ICR Rating : Satisfactory