<table>
<thead>
<tr>
<th>Project Name</th>
<th>China-Guangxi Highway Project (@)</th>
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<td>Sector</td>
<td>Transport</td>
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<tr>
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<td>Borrower(s)</td>
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<td>Implementing Agency</td>
<td>Guangxi Communication Department</td>
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<td>March 2000</td>
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Country and Sector Background

1. China’s strong and sustained economic growth over the last 20 years has resulted in transport demand grew faster than the capacity and ability of the system to deal with it. However, China has historically under-invested in transport (less than 1.3% of GDP during 1980s compared to 3% in 1998) and its road network ranks among the sparsest in the world relative to geographic area and population. A few inter-provincial expressways have been built to date and about 20 percent of rural communities have no all-weather vehicular access. In recent years, governments at all levels have embarked on a major highway capital investment and improvement program.

2. Started in early 1990’s the focus of the national highway investment strategy is to complete the National Trunk Highway System (NTHS) of some 35,000 km of high-grade highways by 1998-2015 at a total costs of US$150 billion. Government attaches high priority to completing two north-south, two east-west corridors and several corridors serving border areas and cross-border trade. The Ministry of Communications (MOC) has been developing the NTHS, consisting of 12 inter-provincial trunk expressways, spanning China and connecting the countries 100 biggest cities. At the provincial and county levels, the strategy is to concentrate on the expansion, upgrading and maintenance of national, provincial and rural road networks, to provide greater mobility and to stimulate socioeconomic development.

3. In 1997 China invested US$13 billion in highways of which US$0.7 billion was in World Bank loans (or about 5%). In 1998, to support the government’s economic stimulus program (8 percent growth rate), highway spending was raised to US$26 billion, a 100% increase from 1997. Some 55% of this investment (or US$14 billion) was allocated to NTHS construction, 30% (or
US$8 billion) to provincial road development and the remaining 15% (US$4 billion) to rural road improvement. World Bank lending for highways in 1998 reached US$0.68 billion (or about 2.5% of the total). Annual multi- and bilateral lending to the sector in recent years is about US$1.2-1.5 billion, with about 45 percent from the World Bank, 30 percent from ADB and the remaining 25 percent from JBIC (the new entity after the merge of OECF and J-EXIM Bank).

4. The Bank has prepared a highway sector strategy report dated February 1994 (CHINA - Highway Development and Management Issues, Options and Strategies) which forms the basis for World Bank assistance in the sector. The Bank’s Country Assistance Strategy (CAS) for China, presented to the Board on March 18, 1997 and the progress note presented on May 28, 1998 supports China’s needs to rapidly modernize and expand its highway system. A major objective of the China CAS is to alleviate infrastructure bottlenecks and to overcome regional disparities.

The Project province

5. Guangxi Zhuang Autonomous Region, located due south, is bordered with Guangdong, Yunnan, Hunan, and Guizhou provinces. It also has an international border with Vietnam and has three coastal sea ports in its southern tip of the region at Fangcheng, Beihai, and Qinzhou. The region, with a population of 47.11 million and an area of 236,660 sq.km, is still among the poorer provinces of China with a per capita income in 1997 of RMB 4,350 (US$524) which is about 71% of the country’s average of RMB 6,080 (US$733). However, development in Guangxi in recent years has been encouraging with growth rates of over 10% during the past 4 years. Although it has a relatively short coastal line, it provides the shortest sea exit to those land-lock provinces in the southwest region of the country including Guizhou, Yunnan, Sichuan and Chongqing. With the central government policy emphasizing the need for providing sea exit to those land-lock provinces, development of its high-grade highway system has been accelerated since 1990. The completed length of Class I highway and expressway increase from 8 km in 1990 to over 100 km in 1997 while an additional 200 km are still under construction to be completed by end of 2000.

Project Development Objectives

6. The development objectives of the project is to assist the Guangxi government to strengthen the local institutional capacity, and provide an efficient, safe and cost effective inter-provincial transport link among land-locked hinterland provinces of Guizhou, Yunnan, Sichuan and the city of Chongqing with Guangxi and the coastal province of Guangdong. This will help stimulate the social and economic development of these provinces, reduce the poverty conditions and thus improve regional development disparity situation.

Project Description

7. The investment under the project will include the following components: Highway capacity expansion focusing on the construction of the 236km of NTHS connecting Shuiren and Nanning and its interconnecting sections of road. Highway Network and Improvement and Maintenance Program (HNIMP) to support and improve the much needed maintenance work on secondary and tertiary highway network - half of which are in relatively poor areas of Guangxi.
Highway safety component focusing on black spot improvement on some selected road sections pre-identified as critical for safety concerns.

Strengthening Highway management Capacity of GCD through various support and training aiming to improve the quality of planning, design, construction supervision, project management, environmental and resettlement monitoring, operation and maintenance of highways.

Project Cost and Financing

8. The project is estimated to cost about US$567 million. The cost include land acquisition and contingencies. The Bank loan of about US$200 million will be on-lent to the government of Guangxi Zhuang Autonomous Region. The central government, through MOC, will provide the equivalent of US$107 million, while Guangxi government itself will cover the remaining sum of US$260 million equivalent.

Implementation

9. The proposed project would be implemented by the Project Management Office (PMO) set up under the Guangxi Communication Department (GCD). The implementation period would be about 6 years from March 2000 to December 2005. Overall direction of the project at the central level would rest with the Ministry of Communications (MOC). Although this would be the first Bank-financed highway project for the province, the province is somewhat familiar with Bank project implementation requirement as it is currently implementing a Bank-financed inland waterway project, though in a much smaller scale. In the initial year of implementation MOC would assume a coordinating role and provide technical support as and when needed.

Rational for Bank Involvement

10. Ever since its first involvement in 1984 contribution from the Bank has continued being regarded as a positive catalyst in the development of highway sector in China. This is not only limited to its significant roles in direct resources transfer, but more importantly on the continued improvement of policy reforms and directive toward upgrading the relatively primitive road system of the early 1980s to the today’s NTHS network in less than 20 years.

The first 8 years of involvement in highway sector in China (1984-1992) the Bank saw its role in helping China with its speedy and more basic network expansion while, at the same time, acquiring all necessary information to properly positioning itself to move rapidly toward a more advance planning of NTHS development.

The following 8 years of involvement (1992-2000) the Bank saw its role in helping China fulfilling its master plan of linking all the provinces in the country with the modern NTHS highway system, while advancing itself into a more challenging areas of policy reforms as shown by the People’s Congress Resolution on November 1, 1999 to implement fuel tax law.

Embarking into the 21st century, and as the country intensify its reform policy toward a decentralization practice at local level and maintaining the central highway agency as a policy decision body. The Bank can see its role in helping to strengthen the capacity of local highway agencies to face up to
the challenging task entrusted to them, while assisting central agency thinking through many facets of policy consideration.

Lessons Learned from Past Operations in the Sector

11. With a good track record of 23 projects in highway sector, seven of them completed and 16 ongoing, the Bank has accumulated substantial experience through the preparation and implementation of these projects. Although the overall performance of these projects is by and large satisfactory, a number of problems have occurred. This has been taken into consideration in the design of the proposed project. The problems include:

- Compromise in construction quality for the speed of construction
- Open road to traffic once civil work is completed but without the installation of electrical and mechanical (E&M) facilities component (which usually were delayed). This has negative impact to road safety.

Change of policy and regulatory reform takes time (could be as long as a decade). This sometime is due to the readiness of the system development and some time due to political readiness to accept new idea.

TA study is done with great reluctance unless it is the kind of TA that the counterpart makes its own selection or those that don’t need much input from foreign consultant.

Environmental Aspects

12. An environmental assessment (EA) was carried out for the Suiren-Nanning Highway (SNH), the main highway investment under the project. During its preparation and evaluation, Chinese national procedures as well as those required by the Bank were followed. Documents such as the Environmental Impact Assessment Report (EIA), Environmental Action Plan (EAP) and Executive Summary (ES) were reviewed by the Bank and discussed with GCD during the Preparation Mission in March 1999 and the Pre-Appraisal Mission in August 1999. SNH’s final draft EA documents were submitted to the Bank in October 1999 and found satisfactory. A sectoral environmental assessment approach was applied to the HNIMP. The Initial Environmental Evaluation (IEE) Reports and EAPs were submitted to the Bank in October 1999 and considered satisfactory. More detailed information on the SNH environmental assessment as well as HNIMP components are available in the project files and released at Bank Public Information Center (PIC) on November 5, 1999. The followings are a summary of its impact and mitigation measures:

Potential impacts. These include noise and air pollution during the construction and operation phases, water pollution during the construction phase, and the weakening of the limestone mountains. There are no natural habitats and environmentally protected areas along the SNH, no protected fauna and flora, and no cultural relics (as none have been found);

Mitigation measures. The EAP specified mitigation measures, environmental monitoring plans, institutional arrangements and the estimated cost to implement the EAP, and training. Mitigation measures include selecting the appropriate alignment, minimizing the cutting of limestone mountains and restoring vegetation, watering to prevent dust during construction, and adopting noise protection measures such as relocating villages and schools, and constructing noise barriers.
The engineering design and technical specifications for the SNH had incorporate measures to protect the environment. It was ascertained that the proposed highway would not affect ecologically sensitive areas, and that, by implementing the EAP, the construction and operation should have no significant adverse impacts on the environment.

Resettlement Aspects

13. Expected resettlement aspects are the following:

The project is located in one of China’s poorest areas and will complement the local government’s poverty alleviation efforts—particularly in agricultural development and rural roads—by providing easier, more efficient and less costly means of transport;

The HNIMP component is designed to be a poverty target intervention and selection criteria were used to choose the specific areas. A survey of its social impact was included as part of the component preparation and its report. A Poverty Impact and Social Assessment Report was included in the project files;

The road sections pre-identified under the HNIMP component does not involve any land acquisition and resettlement;

Land will need to be acquired and homes demolished, which will affect 29,302 residents—27,213 specifically by land acquisition. Planning for resettlement began in 1996, which included a detailed census and inventory of affected people, a sample socio-economic survey in the affected areas and a review of project impacts on poverty alleviation. Based on these reviews, a Resettlement Action Plan (RAP) was prepared according to local laws and the World Bank’s OD 4.30. The resettlement and rehabilitation strategy follows the traditional Chinese approach, which is based on land and agriculture, and plans village collectives as the basic unit to restore livelihoods. The RAP incorporates the census findings, inventory and analysis of impacts, along with the legal framework and resettlement principles, entitlements, institutional arrangements, grievance mechanisms, implementation arrangements and schedules, a budget and monitoring arrangements;

Over 80% of the population in the project area belong to different ethnic minority groups. Over 95% of those affected are Zhuang and Yao, with Zhuang accounting for over 85%. Thus, the RAP is targeting the ethnic groups, and ethnicity issues were particularly considered during preparation. The social assessment identified all the ethnic minority groups, villages and households and produced economic and cultural information, including history, current legal provisions on ethnic minority groups, land tenure, social organization, livelihood patterns, etc. Project information was provided to the groups affected and the RAP incorporated their needs and concerns. These aspects were summarized in a separate document, "Ethnic Minority People’s Development Plan (EMDP)," attached to the RAP and available in the project files. A summary of the RAP and the EMDP is in Annex 11. The RAP and EMDP has been made available locally and released at the Bank’s Public Information Center (PIC) on November 5, 1999.

Contact Points:
The actual investment for highway sub-sector in 1997 totaled RMB110 billion (US$13.25 billion), of which US$700 million (or 5.3%) were loan from the World Bank. In 1998, amid the Asia Crisis, the government implemented an economic stimulus program focusing on using investment in transport sector as fiscal spending instrument to stimulate spending in other sectors. Through this program investment in transport sector almost doubled to a total of RMB 210 billion (US$25.6 billion) in 1998, of which 55% were for NTHS construction, 30% were for provincial trunk road and 15% for low volume road. The portion of Bank’s investment was quite stable at US$680 million in 1998. Although this amount can not be considered high in the context of a sudden and unusual increased in demand for such investment in China, it is not insignificant in terms of its 5% contribution to the investment needed for NTHS. If investment from ADB and OECF are included, the past few years investment from the three agencies totaled about US$1.2 - 1.5 billion per year, of which about 45% were contribution from the Bank, 30% from ADB and the remaining 25% from OECF. It is estimated that an approximately equivalent amount of investment in 1998 will be needed for highway sector in the next 3-5 years. The country can hardly come up with that kind of investment resources without external assistance.

TA and policy reform, though doesn’t represent a huge contribution in monetary term, the Bank has continued to play an active role in the sector policy discussion with China ever since its first involvement in 1984. Take for example the current consideration of fuel tax. The Bank has been advising the government, through continued dialogue with MOC since 1987/88 to make an appropriate switch from road maintenance fee charged at local level to a general taxation levy through fuel tax.