People’s Republic of China: Preparing the Guangxi Wuzhou Urban Development Project
CURRENCY EQUIVALENTS
(as of 13 July 2007)

Currency Unit — yuan (CNY)
CNY1.00 = $0.13
$1.00 = CNY7.57

ABBREVIATIONS
ADB — Asian Development Bank
EIA — environmental impact assessment
FYP — five-year program
PLG — project leading group
PMO — project management office
PRC — People’s Republic of China
RP — resettlement plan
SEIA — summary environmental impact assessment
TA — technical assistance
WMG — Wuzhou municipal government

TECHNICAL ASSISTANCE CLASSIFICATION

Targeting Classification — General Intervention
Sector — Multisector
Subsectors — Water supply and sanitation, and waste management
Themes — Sustainable economic growth, inclusive social development, environmental sustainability
Subthemes — Developing urban areas, human development, urban environmental improvement

NOTE
In this report, "$" refers to US dollars.

<table>
<thead>
<tr>
<th>Vice President</th>
<th>C. Lawrence Greenwood, Jr., Operations Group 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director General</td>
<td>H. Satish Rao, East Asia Department (EARD)</td>
</tr>
<tr>
<td>Director</td>
<td>R. Wihtol, Social Sectors Division, EARD</td>
</tr>
<tr>
<td>Team leader</td>
<td>Y. Fei, Senior Social Sector Economist, EARD</td>
</tr>
<tr>
<td>Team member</td>
<td>M. Gupta, Social Development Specialist, EARD</td>
</tr>
</tbody>
</table>
GUANGXI WUZHO URBAN DEVELOPMENT PROJECT
IN THE PEOPLE'S REPUBLIC OF CHINA

Boundaries are not necessarily authoritative.
I. INTRODUCTION

1. During the country programming review conducted in November 2006, the Government of the People's Republic of China (PRC) requested the Asian Development Bank (ADB) to provide lending support for the Guangxi Wuzhou Urban Development Project. A project preparatory technical assistance (TA\(^1\)) has been included in the ADB assistance program for 2007 to help the Government prepare the project to meet ADB policy, operational, and loan processing requirements. At the request of the Government, ADB fielded a pre-fact-finding mission to visit Wuzhou City (Wuzhou), Guangxi Zhuang Autonomous Region (Guangxi) on 24–27 April 2007 to undertake reconnaissance for the TA. The Fact-Finding Mission followed on 4–5 July 2007. Through these visits, the missions reached an understanding with the Government and Wuzhou municipal government (WMG) on all the aspects of the TA, including the impact, outcome, outputs, implementation arrangements, cost estimates and financing plan, and the outline terms of reference for consulting services to be provided. The agreed-upon TA design and monitoring framework is in Appendix 1.

II. ISSUES

2. Wuzhou is a medium-sized city of Guangxi—one of the 12 less developed western provinces and autonomous regions that are targeted by the Government for support under the National Strategy for Development of the West. WMG has three urban districts, three counties, and one county-city under its jurisdiction. Wuzhou has a population of 3.11 million in a land area of 12,588 square kilometers (km\(^2\)). In the context of the project, Wuzhou refers only to the city proper comprising the three urban districts of Changzhou, Dieshan, and Wanxiu. Wuzhou has an urban population of 452,000 and a developed urban area of 32.5 km\(^2\). The city is located at the conjunction of two major rivers, Xunjiang River and Guijiang River, which then combine into Xijiang River, upstream of Zhujiang River in the well-known Zhujiang Delta, one major growth engine of the PRC. Over the centuries, Wuzhou has served as a regional transportation hub connecting Guangxi with national and international markets, particularly through river transportation.

3. Wuzhou has developed very fast these years through the strengthening of its economic integration with Zhujiang Delta. From 2000 to 2005, Wuzhou achieved an annual gross domestic product growth of 11.3%, and a steady increase of per capita income at an average rate of 10.6%. Registered unemployment is low at about 3%. According to the 11th Five-Year Program (FYP) 2006–2010, Wuzhou will develop into a regional multimode transportation center to connect Guangxi with Zhujiang Delta through six ongoing domestically funded major transport projects comprising three expressway projects, two railway projects, and one river transport strengthening project. A significant urban expansion is required to accommodate these infrastructure facilities and to support their operations. Urban development in Wuzhou is severely constrained, however, by its geological conditions. The city is located in a mountainous region divided by the two rivers into three parts. The city proper is on the north bank of Xunjiang River, and is further divided by Guijiang River into (i) the old urban center on the east side, and (ii) a fast-growing urban center on the west side. The south bank of Xunjiang River remains to be developed. Before the development of the new urban area on the west side of Guijiang River in the 1980s, due to the limited level ground available around the old urban center, the residents tended to build their houses on the marginal lands that were gradually expanding upward on the mountains along the major valleys. The mountains in Wuzhou are mainly formed from loose earth, eroded granite, and clastic rocks, and thus are vulnerable to geological disasters.

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\(^1\) The TA first appeared in *ADB Business Opportunities* on 13 April 2007.
including collapse, landslides, and mud and debris floods. Many of these valleys are densely populated and have been classified as areas prone to geological hazards. Another major natural disaster that Wuzhou faces is floods. Guijiang and Xunjiang rivers bring with them more than 85% of the total annual rainfall across the whole Guangxi, which flows by the city during the rainy season every summer. Historical data shows that the city was regularly flooded at an average of once every 1.7 years between 1900 and 2006. Each time, the flooding resulted in human casualties and tremendous economic losses.

4. With support from the central and autonomous region governments, WMG has made huge investments to strengthen disaster prevention and management over the past 50 years. Major achievements include the construction of a flood protection dike along the riverbanks, numerous engineering control projects to stabilize the mountain slopes, and building and rebuilding of the landslide protection walls. These measures have played an important role in combating natural disasters. However, some traditional control and prevention measures, particularly the repeated building of landslide protection walls, have proven to be an uneconomical and suboptimal solution to the geological hazard. People living in the geological hazard-prone valleys remain vulnerable to landslides despite the existence of a concrete wall. In June 2006, Wuzhou was hit by a heavy rain that triggered a number of landslides in its downtown area. This disaster alone took 14 lives and affected 640,000 people in Wuzhou and its surrounding counties. To strengthen urban sustainability and to provide the people with safer and more secure living conditions, Wuzhou needs to combat the flood and geological hazards in a thorough and systematic manner.

5. Using lessons learned, WMG has proposed the project that represents a new strategy for disaster management, which places emphasis on prevention and avoidance through integrated public interventions combining efforts for disaster prevention, human habitat improvement, and urban development. The project will have the following major components: (i) building a resettlement community and evacuating about 2,000 households from Pingmingchong valley, a high-risk landslide-prone valley; (ii) implementing engineering control measures to develop the evacuated valley into a piece of landslide-free land for urban redevelopment; (iii) providing transport infrastructure including a bridge across Xunjiang/Xijiang River and the basic municipal infrastructure to enable the city to expand into new areas that are far from zones prone to flood and geological hazards; and (iv) a new wastewater treatment plant to treat both the industrial and municipal wastewater generated in the fast-developing Wuzhou Industrial Park, located upstream of Guijiang River, the source of drinking water for the city. The initial poverty and social analysis is in Appendix 2.

6. Promoting inclusive growth in the interior provinces and autonomous regions like Guangxi has been a major strategic thrust of ADB so as to address the regional imbalance in the PRC. ADB has provided several loans and TAs to support economic development in Guangxi Zhuang Autonomous Region. The first ADB-funded urban project in Guangxi is for Nanning, the capital city of Guangxi—the Guangxi Nanning Urban Environmental Upgrading Project,\(^2\) which is under smooth implementation. With the TA, WMG will, for the first time, work with an international financial institution.

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III. THE TECHNICAL ASSISTANCE

A. Impact and Outcome

7. The impact of the TA will be reduced exposure to natural disasters and water pollution in Wuzhou. It will be achieved through the design and implementation of an integrated public intervention combining efforts in three areas: disaster prevention, human habitat improvement, and urban development. The outcome of the TA will be a project design that is agreed upon by ADB, the Government, and WMG, and will be suitable for ADB lending support.

B. Methodology and Key Activities

8. The TA will engage international and national consultants to help the Government and WMG undertake the following major activities:

(i) **Sector and strategic analysis.** The consultants will make a comprehensive review of the Wuzhou Urban Development Plan (2002–2020) and the Wuzhou Geological Hazard Prevention and Control Master Plan (2007–2020) in the context of the 11th FYP and the national urbanization strategy. On the basis of the review and taking into account national and international best practices, the consultants will assess the rationale and justification of the project and give recommendations for further strengthening the project design.

(ii) **Economic analysis.** The consultants will review the draft feasibility study prepared by WMG for the project and undertake independent economic analysis of the project, including least-cost analysis and affordability analysis, where applicable, to ensure that the economic analysis prepared for the project can fully meet ADB processing requirements.

(iii) **Financial analysis.** The consultants will review the draft feasibility study prepared by WMG and undertake an independent financial impact analysis to ensure that the cost estimates, financing plan, and financial analysis prepared for the project can fully meet ADB processing requirements.

(iv) **Technical review.** The consultants will review the technical design of all the components under the project to make sure that they are technically sound, meet all the relevant technical standards and safeguard requirements, and are suitable for ADB lending support. On the basis of the review, the consultants will make recommendations for improving the technical design of each project component, considering best national or international practice.

(v) **Poverty and social analysis.** The consultants will help WMG engage a qualified survey institute to conduct the household survey for poverty and social analysis in accordance with the requirements of ADB. On the basis of the findings and recommendations of the analysis, the consultants will give recommendations to further strengthen the development impact of the project.

(vi) **Environmental impact assessment.** The consultants will review the environmental impact assessment (EIA) prepared for each project component and make sure that all the EIAs meet ADB environmental safeguard policy.
requirements. Using the EIA review, the consultants will help prepare a summary EIA (SEIA) in the ADB required format and quality standards.

(vii) **Resettlement plan.** The consultants will review the draft resettlement plan (RP) and help WMG engage a qualified survey institute to conduct survey and public consultations, and improve and finalize the RP in accordance with ADB requirements.

(viii) **Institutional review.** The consultants will review the institutional arrangements proposed for the project and conduct a financial management assessment of the project management office (PMO) and the implementing agencies to assess their capability to implement the project. On the basis of the review and assessment, the consultant will give recommendations for training and other capacity development measures to strengthen the capacity to meet the needs of the project.

C. **Cost and Financing**

9. The total cost of the TA is estimated at $650,000 equivalent. The Government has requested ADB financing of $500,000. The TA will be financed on a grant basis by ADB’s TA funding program. The Government has been informed that approval of the TA does not commit ADB to finance any ensuing project. The Government will finance the balance of the TA costs, equivalent to $150,000, through in-kind contributions of office space and facilities, as well as salaries for counterpart staff. Details of the cost estimates and financing plan are in Appendix 3.

D. **Implementation Arrangements**

10. WMG will be the Executing Agency of the TA. WMG has established a project leading group (PLG) to provide policy guidance in implementing the TA. The PLG is chaired by a deputy mayor with members drawn from the Wuzhou Development and Reform Commission, Wuzhou Finance Bureau, Wuzhou Construction and Planning Commission, Wuzhou Land Resources Management Bureau, Wuzhou Environmental Protection Bureau, and Wuzhou Dongtai State Assets Investment and Management Corporation. Under the PLG, WMG has established a PMO to provide interagency coordination support for day-to-day operation of the TA. The TA will be implemented over a period of about 8 months, starting from November 2007 and ending in July 2008.

11. The TA is expected to provide about 10.5 person-months of international consulting services (person-months in parentheses) in the fields of urban development (3.5), economic analysis (1.5), financial analysis (2.0), poverty and social safeguards (2.0), and environmental impact assessment (1.5); and 23 person-months of national consulting services in the fields of urban development (2.0), economic analysis (2.5), financial analysis (2.0), poverty and social assessment including ethnic minorities (2.0), resettlement (3.0), environmental impact assessment (2.5), bridge engineering (2.0), civil engineering (3.0), industrial wastewater management (2.0), geological disaster management (1.0), and institutional analysis (1.0). The outline terms of reference for the consultants are in Appendix 4. The consultants will be engaged by ADB in accordance with ADB’s *Guidelines on Use of Consultants* (2007, as amended from time to time) using quality- and-cost based selection method at a quality-to-cost ratio of 80:20 through biodata proposals.
12. The consultants are expected to submit the inception report at the end of the first month of fieldwork, and the interim report at the end of the fourth month of fieldwork. They are expected to provide officials of the PMO and implementing agencies with initial training in ADB procedural and operational requirements, and conduct workshops for participatory consultation on the draft documents. Considering the comments received on the interim report, the consultants will prepare the final report and submit the draft final report at the end of the sixth month of fieldwork. A Chinese translation of the report will be provided to the Government for its file and easy reference. The TA will also provide limited office equipment for use during TA implementation (including computers, overhead projector, copy machine, printer, facsimile machine, scanner, etc.). The equipment will be procured in accordance with ADB’s *Procurement Guidelines* (2007, as amended from time to time) and will be handed over to the Government upon completion of the TA.

13. The TA deliverables will include the following project documents: feasibility study report, SEIA, and the RP. All these documents will be published on the ADB website for disclosure and dissemination. The outcome of the TA will be evaluated by both ADB and the Government in accordance with their respective evaluation policies and requirements.

**IV. THE PRESIDENT’S DECISION**

14. The President, acting under the authority delegated by the Board, has approved the provision of technical assistance not exceeding the equivalent of $500,000 on a grant basis to the Government of the People’s Republic of China for preparing the Guangxi Wuzhou Urban Development Project, and hereby reports this action to the Board.
## DESIGN AND MONITORING FRAMEWORK

<table>
<thead>
<tr>
<th>Design Summary</th>
<th>Performance Targets/Indicators</th>
<th>Data Sources/Reporting Mechanisms</th>
<th>Assumptions and Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Reduced exposure to natural disasters and water pollution</td>
<td>About 2,000 families currently living in the zone that is prone to geological disaster at Pingmingchong valley will be relocated to a landslide-free urban area with improved living conditions and livelihood opportunities. A 30 km long urban road network including associated municipal facilities and a bridge across Xunjiang River will be constructed to enable the city to expand into new areas that are far from zones of floods and geological hazards. A new wastewater treatment plant will be constructed at the main source of water supply to secure the safety of drinking water for the city.</td>
<td>WMG announcement of completion of the relevant project components for operation Project completion report</td>
<td>Assumptions</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• The project design is sound and solid. • The EA and the IA have the capability and the needed counterpart fund to ensure a smooth implementation of the project.</td>
</tr>
<tr>
<td>Outcome</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A project design that is agreed upon by ADB, the Government, and WMG, and is suitable for ADB lending support</td>
<td>The draft feasibility study report prepared under the TA has been approved by the Government and WMG as the basis for processing of the ensuing loan for the project.</td>
<td>Approval of the feasibility study issued by the concerned authorities of the Government</td>
<td>Assumption</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• ADB and the Government remain committed to using an ADB loan to finance the project.</td>
</tr>
<tr>
<td>Outputs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A draft feasibility study report, including the associated environmental impact assessment and</td>
<td>The draft feasibility study report prepared under the TA has been endorsed by ADB and WMG for submission to</td>
<td>Conclusion and recommendation of the tripartite meeting of ADB, WMG, and the consultants after a review of the final</td>
<td>Assumption</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• WMG provides all the counterpart support for the TA as committed.</td>
</tr>
</tbody>
</table>
### Design Summary
- Resettlement plan for the project, which has been prepared in accordance with policies and operational guidelines of ADB.

### Performance Targets/Indicators
- The concerned authority for approval.

### Data Sources/Reporting Mechanisms
- Draft report prepared under the TA.

### Assumptions and Risks

### Activities and Milestones

1. Undertake a sector and strategic review of Wuzhou Urban Development Master Plan and Wuzhou Geological Hazard Prevention and Control Master Plan to assess and propose recommendations for further strengthening the project design.

2. Undertake an independent economic analysis to ensure that the economic analysis of the project can fully meet ADB loan processing requirements.

3. Undertake an independent financial analysis to ensure that the financial analysis of the project can fully meet ADB loan processing requirements.

4. Conduct a technical review of the project design prepared by WMG to ensure that the design of all project components is technically sound and completed in accordance with relevant technical standards and safeguard requirements.

5. Conduct the household survey, stakeholder consultation, and poverty and socioeconomic analysis (including ethnic minority assessment) for the project and give recommendations for strengthening the development impact of the project.

6. Review the draft resettlement plans prepared by WMG and conduct the survey and public consultations to facilitate finalization of the resettlement plans in accordance with ADB resettlement safeguard requirements.

7. Review the draft environmental impact assessments prepared for the project and prepare a summary environmental impact assessment for the project in line with ADB environmental safeguard requirements.

8. Review the institutional arrangement proposed for the project and a financial management assessment of the project management office and the project IAs. Identify needs for capacity strengthening to ensure smooth project implementation.

### Milestones for Major Deliverables:

- Submit the inception report at the end of the first month of fieldwork.
- Submit the interim report at the end of the fourth month of fieldwork.
- Submit the draft final report at the end of the sixth month of fieldwork.
- Submit the final report within 1 month after receiving the comments on the draft final report from the Government, WMG, and ADB.

### Inputs

- **ADB:** $500,000
  - 10.5 person-months of international and 23 person-months of national consulting services
  - Financing support for surveys, stakeholder consultations, and limited office equipment

- **Government:** $150,000
  - In-kind contributions in the form of counterpart staff, office space and basic office facilities, plus coordination and logistics support for the consultants in the field.

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**Notes:**
- ADB = Asian Development Bank, EA = executing agency, km = kilometer, IA = implementing agency, TA = technical assistance, WMG = Wuzhou municipal government.
INITIAL POVERTY AND SOCIAL ANALYSIS

A. Linkages to the Country Poverty Analysis

| Is the sector identified as a national priority in country poverty analysis? | ☑ Yes | Is the sector identified as a national priority in country poverty partnership agreement? | ☑ Yes |
| Is the sector identified as a national priority in country poverty partnership agreement? | ☑ Yes |

Contribution of the sector or subsector to reduce poverty in the People's Republic of China:

The project will help (i) establish a new model to combat landslides; (ii) provide basic infrastructure like roads, bridges, water pipelines, drainage, and sewerage to meet urban development needs; and (iii) strengthen water treatment capacity. The project will help reduce poverty through the provision of safer housing and better living standards to poor and low-income households who live in the geological disaster zone of Pingmingchong valley. The improved basic infrastructure on both sides of Xunjiang River would also improve access, which would benefit the people, especially the poor households in terms of availability of safer locations for housing, reduced transportation time and costs, and easy access to basic services. The project would also provide employment opportunities for both skilled and unskilled workers during the construction and operation phases of the project.

B. Poverty Analysis

Targeting Classification: General intervention

What type of poverty analysis is needed?

The poverty and social analysis should

(i) show how the project relates to national priorities as identified in the country poverty analysis, and the national development strategy;
(ii) identify project beneficiaries and the likely barriers to their participation in and benefiting from the project; and propose appropriate measures to maximize project benefits especially to the poor, vulnerable and elderly, including measures to improve affordability to the poor;
(iii) assess the gender impact of the project and identify specific measures to ensure the participation of women and other vulnerable groups; and
(iv) verify data on possible impacts on ethnic minorities and prepare specific actions/indigenous peoples development program if there are any issues.

C. Participation Process

Is there a stakeholder analysis?

☑ Yes

Through a series of meetings, workshops, seminars, and consultations on key issues related to prevention and management of landslides, the technical assistance (TA) will focus on building consensus among key stakeholders, namely, the city and district government's disaster prevention and control offices, Wuzhou Development and Reform Commission, Wuzhou Construction and Planning Commission, Wuzhou Land Resources Management Bureau, Wuzhou Civil Affairs Bureau, Community Residents’ Committees, Wuzhou Finance Bureau, Wuzhou Environmental Protection Bureau, and the project implementing agencies.

Is there a participation strategy?

☑ Yes

The TA will include the design of a participation strategy to apply before the construction and during the operation and maintenance phases.

D. Gender Development

Strategy to maximize impacts on women:

A strategy will be prepared to address opportunities for income and employment in construction activities with a view to setting targets for the number of women to be employed as well as ensuring equal pay for equal work. The strategy will address the core labor standards including HIV/AIDS awareness and prevention activities. The project will ensure
that women and men will have similar opportunities to participate in designing and implementing the project (including consultation on the resettlement component regarding issues such as housing design, etc.), and will receive similar wages for similar work.

Has an output been prepared?  No

### E. Social Safeguards and Other Social Risks

<table>
<thead>
<tr>
<th>Item</th>
<th>Significant/ Not Significant/ None</th>
<th>Strategy to Address Issues</th>
<th>Plan Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resettlement</td>
<td>☑ Significant</td>
<td>The project will resettle 2,000 households from an area that is prone to geological disasters to a new location, and provide better housing conditions and related infrastructure. The construction of roads, bridges, and other urban infrastructure will also lead to significant land acquisition—2,095 mu (unit of land measure, 667 m²)—and resettlement impacts.</td>
<td>☑ Full</td>
</tr>
<tr>
<td></td>
<td>☐ Not significant</td>
<td></td>
<td>☐ Short</td>
</tr>
<tr>
<td></td>
<td>☐ None</td>
<td></td>
<td>☐ None</td>
</tr>
<tr>
<td>Affordability</td>
<td>☐ Significant</td>
<td>No issue.</td>
<td>☐ Yes</td>
</tr>
<tr>
<td></td>
<td>☐ Not significant</td>
<td></td>
<td>☐ No</td>
</tr>
<tr>
<td></td>
<td>☑ None</td>
<td></td>
<td>☑ No</td>
</tr>
<tr>
<td>Labor</td>
<td>☐ Significant</td>
<td>The project will provide employment opportunities to both men and women during the construction and operation phases.</td>
<td>☐ Yes</td>
</tr>
<tr>
<td></td>
<td>☐ Not significant</td>
<td></td>
<td>☐ No</td>
</tr>
<tr>
<td></td>
<td>☑ None</td>
<td></td>
<td>☑ No</td>
</tr>
<tr>
<td>Indigenous Peoples</td>
<td>☐ Significant</td>
<td>The major population of Wuzhou is Han, with about 2.4% belonging to other ethnic minority groups. There are no differences in socioeconomic status and living standards between the Han and the ethnic minority groups. The TA will further verify and prepare specific actions/indigenous peoples development program if there are any issues.</td>
<td>☐ Yes</td>
</tr>
<tr>
<td></td>
<td>☐ Not significant</td>
<td></td>
<td>☐ No</td>
</tr>
<tr>
<td></td>
<td>☑ None</td>
<td></td>
<td>☑ No</td>
</tr>
<tr>
<td>Other Risks and/or Vulnerabilities</td>
<td>☐ Significant</td>
<td>No other social risks are anticipated as a result of the project.</td>
<td>☐ Yes</td>
</tr>
<tr>
<td></td>
<td>☐ Not significant</td>
<td></td>
<td>☐ No</td>
</tr>
<tr>
<td></td>
<td>☑ None</td>
<td></td>
<td>☑ No</td>
</tr>
</tbody>
</table>
### COST ESTIMATES AND FINANCING PLAN
($'000)

<table>
<thead>
<tr>
<th>Item</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Asian Development Bank (ADB) Financing</strong>&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>1. Consultants</td>
<td></td>
</tr>
<tr>
<td>a. Remuneration and Per Diem</td>
<td></td>
</tr>
<tr>
<td>i. International Consultants</td>
<td>220.50</td>
</tr>
<tr>
<td>ii. National Consultants</td>
<td>115.00</td>
</tr>
<tr>
<td>2. Equipment&lt;sup&gt;b&lt;/sup&gt;</td>
<td>10.00</td>
</tr>
<tr>
<td>3. Survey, Workshop, and Consultation</td>
<td>21.10</td>
</tr>
<tr>
<td>4. Miscellaneous Administration, Local Transport, and Support Costs</td>
<td>10.00</td>
</tr>
<tr>
<td>5. Contract Negotiations</td>
<td>5.00</td>
</tr>
<tr>
<td>6. Contingencies</td>
<td>38.00</td>
</tr>
<tr>
<td><strong>Subtotal (A)</strong></td>
<td><strong>500.00</strong></td>
</tr>
<tr>
<td><strong>B. Government Financing</strong></td>
<td></td>
</tr>
<tr>
<td>1. Office and Logistics Support</td>
<td>100.00</td>
</tr>
<tr>
<td>2. Remuneration and Per Diem of Counterpart Staff</td>
<td>50.00</td>
</tr>
<tr>
<td><strong>Subtotal (B)</strong></td>
<td><strong>150.00</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>650.00</strong></td>
</tr>
</tbody>
</table>

<sup>a</sup> Financed by ADB’s technical assistance funding program.

<sup>b</sup> Includes two computers, a copy machine, a color printer, a facsimile machine, a scanner, an LCD projector, a video camera, and limited materials.

Source: ADB estimates.
OUTLINE TERMS OF REFERENCE FOR CONSULTANTS

A. Consulting Service Requirements

1. The project will require 10.5 person-months of international and 23 person-months of national consulting services. The consultants are expected to begin their fieldwork from early November 2007 and to complete the required tasks in about 8 months. The consultants’ final output is a feasibility study report prepared in accordance with the policies and guidelines of the Asian Development Bank (ADB). The report will serve as the basis for formulating an investment project entitled Guangxi Wuzhou Urban Development Project. The outline terms of reference of the consultants are described in the following sections.

B. Scope of Consulting Services

2. The inputs of the consulting services will be focused on, but will not necessarily be limited to, the following areas.

   (i) **Sector and strategic analysis.** The consultants will undertake a comprehensive review of the Wuzhou Urban Development Plan and Wuzhou Geological Hazard Prevention and Control Master Plan in the context of the 11th Five-Year Program and the national urbanization strategy. Considering the review and taking into account international best practices, the consultants will assess the rationale and justification of the project and give recommendations for further strengthening the project design.

   (ii) **Economic analysis.** The consultants will review the draft feasibility study prepared by Wuzhou municipal government (WMG) for the project and undertake an independent economic analysis of the project, including least-cost analysis and affordability analysis where applicable, to ensure that the economic analysis prepared for the project can fully meet ADB processing requirements.

   (iii) **Financial analysis.** The consultants will review the draft feasibility study prepared by WMG and undertake an independent financial impact analysis to ensure that the cost estimates, financing plan, and financial analysis prepared for the project can fully meet ADB processing requirements.

   (iv) **Technical review.** The consultants will review the technical design of all the components of the project to make sure that they are technically sound, meet all relevant technical standards and safeguard requirements, and are suitable for ADB financing support. On the basis of that review, the consultants will also make recommendations for improving the technical design of each project component based on the best national or international practice.

   (v) **Poverty and social analysis.** The consultants will help WMG engage a qualified survey institute to conduct the household survey for poverty and social analysis in accordance with the requirements of ADB. Considering the findings and recommendations of such analysis, the consultants will give recommendations to further strengthen the development impact of the project.

   (vi) **Environmental impact assessment.** The consultants will review the environmental impact assessment (EIA) prepared for each project component
and make sure that all EIAs meet ADB environmental safeguard policy requirements. On the basis of the EIA review, the consultants will help prepare summary EIAs (SEIA) in the ADB required format and quality standards.

(vii) **Resettlement plan.** The consultants will review the draft resettlement plan (RP) and help WMG engage a qualified survey institute to conduct a survey and improve and finalize the RP in accordance with ADB requirements.

(viii) **Institutional review.** The consultants will review the institutional arrangements proposed for the project and conduct a financial management assessment of the project management office (PMO) and the implementing agency to assess their capability to implement the project. Using the review and assessment, the consultants will give recommendations for training and other measures to strengthen the capacity to meet the operational needs of project implementation.

C. **Outline Terms of Reference for Each Consultant Position**

1. **Urban Development Specialist** (international, 3.5 person-months)

3. The urban development specialist should have a background in urban transport engineering and planning. The specialist will serve as the leader of the consultants; guide, coordinate, and supervise the inputs of individual consultants on the team; and be responsible for preparing and finalizing the inception report, interim report, draft final report, and final report on behalf of the team. The specialist will give special emphasis to the sector and strategic analysis described in (i) of para. 2, particularly in terms of introducing the best international practice for WMG to further strengthen the project design. The specialist is further expected to develop the project design and monitoring framework to guide the project design and to incorporate in it the lessons and experiences acquired from the operation and evaluation exercise done on other urban projects of ADB.

2. **Project Economist** (international, 1.5 person-months)

4. With support from the national project economist, the international project economist will conduct the economic analysis for each project component and for the overall project in accordance with ADB’s *Guidelines for Economic Analysis of Projects* and other relevant policies and guidelines. The analysis will include demand analysis, least-cost analysis, affordability analysis, quantification of economic benefits and costs, evaluation of the economic viability of each project component and of the project as a whole, and risk and sensitivity analyses.

3. **Financial Management Specialist** (international, 2.0 person-months)

5. With support from the national financial management specialist, the international financial management specialist will conduct the financial analysis of each revenue-generating component of the project, review the cost estimates and financing plan prepared for the project, and assess the financial viability of each component and the project as a whole. Further, this specialist will undertake a financial management assessment of the financial performance of the relevant implementing agencies under the project in accordance with ADB’s *Framework for the Economic and Financial Appraisal of Urban Development Sector Projects* and *Guidelines for the Financial Governance and Management of Investment Projects Financed by the Asian Development Bank*. The analysis should include a review of the cost recovery mechanism and
tariff structure of the wastewater treatment plant and give recommendations for strengthening the financial sustainability of the project components concerned.

4. **Poverty and Social Safeguard Specialist** (international, 2.0 person-months)

6. The poverty and social safeguard specialist will have two general responsibilities: (i) to guide and supervise the household survey and conduct poverty and social economic analysis of the project impact, and (ii) to guide and supervise the national resettlement specialist to organize the survey and help finalize the RP for the project in accordance with ADB safeguard requirements. As an international consultant, the poverty and social safeguard specialist will be responsible for ensuring that both the presentation and the substance of the poverty and social economic analysis and the RPs prepared under the project preparatory technical assistance (TA) fully meet the quality standards set by ADB for such documents.

5. **Environmental Specialist** (international, 1.5 person-months)

7. With the support of the national environmental specialist, the international environmental specialist will review the EIA prepared for each component of the project to ensure that the project will fully meet ADB environmental safeguard requirements. A special focus of the review should be on analysis of alternatives and risks during construction. The international consultant will also be responsible for preparing and finalizing the SEIA in accordance with ADB environmental safeguard requirements for timely submission to ADB. The international environmental specialist will be responsible for ensuring that both the presentation and the substance of the SEIA prepared under the project preparatory TA will meet the quality standards set by ADB for such documents. In addition, the specialist is expected to prepare the presentation materials for the peers’ review of the SEIA at ADB.

6. **Urban Development Specialist** (national, 2.0 person-months)

8. The national urban development specialist will be responsible for ensuring that all components are designed in line with the Government’s policy framework and technical standards, including those that guide land management and urban development in the People’s Republic of China (PRC). The specialist should give special emphasis to technical design and feasibility analysis of infrastructure development for the resettlement community.

7. **Project Economist** (national, 2.5 person-months)

9. Under the guidance of the international project economist, the national specialist will help collect data, prepare an economic analysis model, and conduct initial evaluation of the economic viability of the project in accordance with ADB’s *Guidelines for Economic Analysis of Projects* and other relevant policies and guidelines.

8. **Financial Management Specialist** (national, 2.0 person-months)

10. Under the guidance of the international financial management specialist, the national specialist will help collect and undertake initial processing of the data needed for financial analysis and financial management assessment for the project. The national specialist will also help prepare all the documents needed for the project and also the detailed cost estimates and financing plan for the ensuing loan, in format and standards acceptable to ADB.
9. **Poverty, Social Assessment, and Ethnic Minority Specialist** (national, 2.0 person-months)

11. Under the guidance of the international poverty and social safeguard specialist, the national specialist will help collect and undertake the initial processing of the data needed for poverty and socioeconomic analysis for the project. The national specialist will also help the international specialist prepare all the documents needed for the project and the ensuing loan, in format and standards acceptable to ADB.

10. **Resettlement Specialist** (national, 3.0 person-months)

12. Under the guidance of the international poverty and social safeguard specialist, the national resettlement specialist will review the draft RPs prepared by WMG, conduct related survey and stakeholder consultation, and help finalize the RPs in accordance with ADB resettlement safeguard requirements for the project.

11. **Environmental Specialist** (national, 2.5 person-months)

13. Under the guidance of the international environmental specialist, the national specialist will help collect and undertake the initial processing of the data needed for reviewing and updating the EIAs prepared for the project. The national specialist will also provide inputs needed for preparing the SEIA for the project.

12. **Bridge Engineer** (national, 2.0 person-months)

14. Under the guidance of the team leader, the national bridge engineer will undertake a technical review of the design and feasibility analysis prepared for the bridge component to make sure that the bridge is properly designed and fully meets the technical standards including safety and environmental requirements of the Government. Using the review and taking into account the national best practice, the bridge engineer should give recommendations for further strengthening of the design and implementation arrangements for the bridge component. The engineer should also review the contract packaging arrangement for the bridge component, help prepare a procurement plan, and provide guidance and support in preparing the procurement document for this component.

13. **Civil Engineer** (national, 3.0 person-months)

15. Under the guidance of the international urban development specialist, the civil engineer will serve as the team coordinator to facilitate cooperation among the team members and between the consultants and the PMO. The civil engineer will conduct a technical review of the road network components to ensure that all designs are technically sound and meet the national technical standards and policy and regulatory requirements of the Government. On the basis of that review and taking into account national and international best practices, the civil engineer will give recommendations to further improve project design. The civil engineer will also review the contract packaging proposed for the road networks and other civil works component, help prepare the procurement plan for the civil works, and provide guidance and support in preparing the procurement documents.
14. **Industrial Wastewater Treatment Specialist** (national, 2.0 person-months)

16. The specialist will conduct a survey of the existing and planned enterprises in Wuzhou Industrial Park and analyze the volume and nature of the wastewater that needs to be treated at the proposed wastewater treatment plant. On the basis of the findings of the survey, the specialist will conduct a technical review of the design of the wastewater treatment plant component to ensure that it is technically sound and suitable, and meets all the technical and operational standards set by the Government. Considering the survey and technical review, the specialist will make recommendations for further strengthening the project design. The specialist will also review the contract packaging proposed for the wastewater component, help prepare the procurement plan for this component, and provide guidance and support in preparing the procurement documents for the component.

15. **Geological Hazard Management Specialist** (national, 1.0 person-month)

17. The geological hazard management specialist will conduct a technical review of the designs prepared in the draft feasibility study for the various investment components, particularly the geological prevention component, to ensure that all the designs meet the national geological hazard prevention standards and geological safety requirements. On the basis of such reviews and taking into account international and national best practices, the specialist will give recommendations to further strengthen the project design.

16. **Institutional Specialist** (national, 1.0 person-month)

18. The institutional specialist will review the institutional arrangements made for the project, particularly the capacity of the implementing agencies. On the basis of the review, the specialist will make recommendations for improving the capacity of those agencies to meet the operational needs for project implementation. Taking into account the best international practice, the specialist will also give recommendations on how to promote and strengthen private partnership in service delivery, particularly in the case of the wastewater treatment plant component.