1. Country and Sector Background

Urbanization and urban development are central themes in China’s overall development strategy. The Tenth Five-Year Plan (2001 – 2006) emphasizes the importance of sustainable development and improvements in livability during the transition from a rural to an urban economy. During this period the Government will concentrate on the provision of environmental infrastructure to ensure the sustainability of the rapid industrialization and urbanization process.

The Government is promoting regional cluster development as one urbanization model, with a view to benefiting from the efficiencies that can be gained through economic integration of multiple urban areas. National and local governments will play an important role in cluster development by creating and supporting the necessary policy and planning framework for the region/cluster, providing infrastructure to assist physical integration, and supporting improvements to livability, thus increasing the overall competitiveness of the region and thereby attracting investments and facilitating economic growth. Regional integration and cluster development are relatively new concepts in China, and the administrative structure and legal system is changing very slowly to reflect the benefits of regional cooperation. Moreover, as is the case in many countries, China has experienced difficulty in establishing strong organizations to lead regional development across traditional boundaries of administrative authority.

Both the national and Hunan Province governments attach high priority to the economic development of the Changsha – Zhuzhou – Xiangtan (CZT) Region in Hunan Province as one of the examples of cluster based urban development in China. (Hunan Province, in south-central China, is at the median of Chinese provinces in most economic criteria with GDP per capita ranking seventeenth, 22% below national average.) Development of the CZT Region is intended to be the basis upon which Hunan Province will transform from a largely agricultural province into a more balanced economy, with growth in tertiary sectors and high technology development. The CZT Region has a total population of 12.1 million (of whom 3 million live in the three core city areas), and is the only significant urban agglomeration in the province. Changsha, Zhuzhou
and Xiangtan are physically linked by the Xiang River, an important tributary of the Yangtze River.

Considerable work has been done in the CZT Region on defining the concept of regional integration and cluster development, and there is strong support for economic integration amongst the officials of the three municipalities and the province, which will enable the cities to develop complementary economic roles, with each city building on its advantages. Hunan Province has provided leadership on CZT integration through the formation of a Leading Group (headed by the Governor, with high level representation from the three municipalities), and the establishment of the CZT Economic Integration Office (CZT EIO) within the Hunan Provincial Development and Planning Commission (HPDPC) to lead the policy and planning activities on behalf of the region.

A key focus of CZT integration has been the development of the Xiang River corridor as an economic and recreational resource, the minimization of the flood risk posed to the region by the Xiang River,\(^1\) and the provision of environmental and transportation infrastructure to support regional development. Significant investments are needed to meet the needs in these areas. Further, the environmental infrastructure sector in Hunan Province suffers from many of the same institutional, technical and financial deficiencies as in other areas of China - capacities need to be strengthened to improve efficiency and sustainability, inter alia through corporatization, full-cost recovery, and limited private participation.

2. Objectives

The objective of the project is to foster greater integration in the Changsha – Zhuzhou – Xiangtan (CZT) region of Hunan Province through support for a carefully selected set of priority investments to address specific regional needs in a sustainable manner.

3. Rationale for Bank Involvement

Hunan Province participated in the East Asia Region’s first cohort of City Development Strategies (CDS), and persuaded the Bank and the Cities Alliance to support the preparation of a Regional CDS for the CZT Region, instead of a single city CDS. It subsequently requested Bank support for this project, after obtaining internal clearances. In addition to providing financial support for the investment program, the Bank can provide international experience and support in the crucial capacity building of CZT EIO, so that it becomes an important and influential organization able to coordinate strategic regional development.

Further, the Bank will provide Hunan Province the benefit of its extensive global and China experience in urban development, flood protection, water pollution control, traffic management, cultural heritage, air quality improvement, logistics, institutional development, and financial management. Even though Hunan Province has worked with the Bank in other sectors, this is the first project in the urban sector; as such the province will benefit from the analytical rigor of Bank project preparation and appraisal to achieve optimal project design. Value-added during

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\(^1\) In 2001 during the launch of the Tenth Five-Year Plan, Premier Zhu Rongji recognized the development progress already achieved by Hunan Province, but also noted the economic cost of flooding in the region in the late 1990s.
project implementation would include cost savings through procurement under Bank guidelines, as well as improved project management, and construction quality.

4. Description

The project comprises six components:

- **The Corridor Component**, to strengthen flood protection and develop a recreational (scenic) road along the embankment, in four selected sections of the three municipalities.

- **The Changsha Wastewater Component**, to increase the percentage of sewage treated in the municipality, and to develop the Changsha Municipal Drainage Company (CMDC) into an autonomous public utility operating on commercial principles.

- **The Zhuzhou Clean Coal Component**, to reduce air pollution in the CZT Region through the production and sale of low sulphur coal.

- **The CZT Logistics Center Component**, to better utilize Zhuzhou’s locational advantages as a major transport hub to promote economic development.

- **Zhaoshan Scenic Area Component**, to support improved livability in the CZT Region through the sustainable redevelopment of the Zhaoshan scenic area.

- **CZT EIO Institutional Development and Project Management**, to assist in project management, and to build capacity in the CZT Economic Integration Office.

5. Financing

<table>
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<tr>
<th>Source</th>
<th>($m.)</th>
</tr>
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<tbody>
<tr>
<td>BORROWER</td>
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<tr>
<td>INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT</td>
<td>180</td>
</tr>
<tr>
<td>Total</td>
<td>425</td>
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</tbody>
</table>

6. Implementation

A Project Leading Group (PLG) has been established to oversee the preparation and implementation of the overall project, with the Provincial Governor as director and four provincial vice governors as deputy directors. The Hunan Provincial Project Management Office (PPMO) has been established to act as the Executing Agency for the project and to co-ordinate the efforts of the municipal PMOs and component implementing agencies. The PPMO operates within the CZT EIO. The PPMO will be headed by a Director, with adequate seniority and relevant experience, and will be organized into functional divisions, i.e., environment, resettlement, technical, financial, and administration.

The Changsha, Xiangtan and Zhuzhou Municipal Governments have established municipal level Project Leading Groups (MPLGs) to direct the components of HUDP. Municipal Project Management Offices (MPMOs) within the Municipal Planning and Development Commissions report to these leading groups, and would coordinate project implementation in their respective municipalities. MPMOs will organized in functional divisions along the lines of the HPMO.

Agencies responsible for implementing individual components are:
• **Corridor Component:** Changsha Urban Development Investment Company, Xiangtan Urban Development Investment Company, Zhuzhou Urban Development Investment Company and Zhaoshan Tourism and Trade Development Company;

• **Changsha Wastewater Component:** Changsha Municipal Drainage Company

• **Zhuzhou Clean Coal Component:** Hunan Zhuxi Clean Coal Co. Ltd.

• **CZT Logistics Center Component:** Zhuzhou Chemical Industry Group Railway Transportation Ltd.

• **Zhaoshan Scenic Area Component:** Zhaoshan Tourism and Trade Development Co. Ltd.

• **CZT EIO Institutional Development and Project Management Component:** CZT EIO

A Project Implementation Unit (PIU) has been established within each of the agencies responsible for individual components. PIUs would work closely with the respective MPMO and PPMO on the preparation of detailed designs and preparation of bidding documents, construction supervision and construction management. Specific responsibilities of the PPMO, the MPMOs, and the PIUs for project implementation will be confirmed at appraisal.

The capacities of the PPMO, MPMOs and PIUs will be enhanced through a) training in Bank procedures, especially procurement, environment, resettlement and financial management; and, b) technical assistance from international project management consultants.

7. **Sustainability**

Hunan Province is strongly committed to the concept of integration in the CZT Region, and is very keen to prepare and implement the project as soon as possible. The Vice-Governor of Hunan Province, the Director of HPDPC, the Mayors of the three municipalities, and other senior provincial and city officials have actively participated in discussions with Bank missions during preparation.

The PPMO has adhered to the deadlines of the Project Preparation Plan. Timely preparation of the feasibility studies, the EA and the EMP, the Resettlement Policy Framework (RPF), and the Resettlement Action Plans (RAPs), as well as their prompt internal reviews, further demonstrates Government commitment to the project. Approval has been obtained from NDRC for the project proposal and Hunan Province has submitted all necessary project documentation to NDRC and SEPA for final project approval. The province has indicated a strong desire to commence project implementation in calendar 2004, through advance contracting and retro-active financing.

Bank appraisal from institutional, technical, financial, economic, social and environmental perspectives confirms that that the project would be sustainable if it is implemented as designed.

8. **Lessons Learned from Past Operations in the Country/Sector**

China has the largest portfolio in the Bank, and its quality is among the best performing. OED and QAG assessments have confirmed satisfactory project implementation, outcomes and project management. Experience from a full range of projects financed by the Bank in the urban sector
points to the importance of borrower ownership, appropriateness and efficiency of design of capital investments, as well as financing and institutional arrangements for proper operations and maintenance. The project will incorporate these lessons as it makes efficiency and sustainability a main project objective. Furthermore, Bank involvement would facilitate utility reform, financial sustainability of basic urban services, and in the case of the Zhuzhou Logistics Center, private sector participation.

A key lesson from previous Bank projects has been the tendency to over-design wastewater treatment plants and to invest inadequately in collection systems, resulting in the underutilization of the installed treatment capacity. In this project, the Changsha Wastewater component has been designed as a total system, with the project financing the entire catchment area primary network collection system such that the full dry weather flow will be delivered to the plant upon commissioning.

The current institutional arrangements for the operation and maintenance of the dyke flood control system are highly fragmented and the divisions of responsibility are unclear. Older urban projects in China have demonstrated the risks to long-term sustainability of such a fragmented approach, and therefore in the design of the Corridor component, responsibilities for ownership, and operation and maintenance of the assets have been clarified and legalized by the municipal and provincial governments.

Previous projects have highlighted the necessity of formulating project components and their design on suitable master plans. The overall project design is based on a series of plans commissioned by the CZT EIO for the development of the areas along the Xiang River, and on the municipal master plans of Changsha, Xiangtan and Zhuzhou. In addition, further studies and detailed master planning work has been carried out during preparation or will be extended during implementation.

Cost estimates have been a problem on many past and recent Bank urban projects in China, with adherence to traditional cost estimation methods (which are based on “norms” rather than on market prices) frequently resulting in the overall project cost estimates being too high. In this project, international consultants have conducted a rigorous independent check of cost estimations to ensure that the costs reported in the final feasibility study for all components are as close to market rates as possible.
9. **Safeguard Policies** (including public consultation)

<table>
<thead>
<tr>
<th>Safeguard Policies Triggered by the Project</th>
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<tbody>
<tr>
<td>Environmental Assessment (OP/BP/GP 4.01)</td>
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<td>Natural Habitats (OP/BP 4.04)</td>
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<td>Pest Management (OP 4.09)</td>
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<td>Cultural Property (OPN 11.03, being revised as OP 4.11)</td>
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<td>Involuntary Resettlement (OP/BP 4.12)</td>
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<td>Indigenous Peoples (OD 4.20, being revised as OP 4.10)</td>
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<td>Forests (OP/BP 4.36)</td>
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<td>Safety of Dams (OP/BP 4.37)</td>
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<tr>
<td>Projects in Disputed Areas (OP/BP/GP 7.60)*</td>
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<td>[X]</td>
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<tr>
<td>Projects on International Waterways (OP/BP/GP 7.50)</td>
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<td>[X]</td>
</tr>
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</table>

10. List of Factual Technical Documents

<table>
<thead>
<tr>
<th>Number</th>
<th>Name of Document</th>
<th>Date of the Document</th>
<th>Prepared by</th>
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<tbody>
<tr>
<td>01</td>
<td>Resettlement Action Plan</td>
<td>Jan. 2004</td>
<td>Chreod Ltd The Urban Institute International Centre for Sustainable Cities</td>
</tr>
<tr>
<td>02</td>
<td>China City Development Strategies</td>
<td>July 2001</td>
<td>North China Municipal Engineering Design and Research Institute; and Changsha Municipal Planning and Design and Research Institute for Water and Hydropower</td>
</tr>
<tr>
<td>03</td>
<td>Feasibility Study in Changshanyuan Sewage treatment plant project in Changsha</td>
<td>Jan. 2004</td>
<td>Matt MacDonald Hunan Provincial Development and Planning Commission</td>
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<tr>
<td>04</td>
<td>EIA</td>
<td>Jan. 2004</td>
<td>Hunan Research Institute of Environment Science</td>
</tr>
<tr>
<td>05</td>
<td>Report on Wastewater Quality and Quantity Survey in Changshanyuan Catchment</td>
<td>Jan. 2004</td>
<td>Matt MacDonald Hunan Provincial Development and Planning Commission</td>
</tr>
</tbody>
</table>

11. **Contact point**

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Email: Riyer@worldbank.org

* By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties' claims on the disputed areas
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