

### RISK ASSESSMENT AND RISK MANAGEMENT PLAN

<b>Risk Description</b>	<b>Rating</b>	<b>Mitigation Measures</b>	<b>Responsibility</b>
<b>Technical</b>			
Lack of technical skill of executing and implementing agencies in operating integrated hydrological and river basin models and flood forecasting.	M	The project will provide technical training for agency staff in the operation of software, flood-forecasting and warning systems, and flood and environmental risk management.	CMG, CPMO, implementing agencies, PMOs, PIUs, consultants
Households are not connected to the new sanitary sewers installed under the project in a timely manner.	M	Connection of wastewater pipes to the households is to be completed by the end of the project. The relevant covenant is included in the loan and project agreements.	CMG, CPMO, implementing agencies, PMOs, PIUs, consultants
The population projection in project area exceeds forecasts and exerts more pressure, such as a heavy pollution load on the Longxi River.	M	The project will draft short-, medium-, and long-term flood and environmental risk management plans for Longxi River watershed. The plans will consider different scenarios, including population growth, aided by spatial planning.	CMG, CPMO, implementing agencies, PMOs, PIUs, consultants
Bio-shield, a densely grown vegetation layer along the edge of the farmland and adjacent to the riverbanks, cannot be fully developed and maintained.	M	Bio-shield will be developed in parts with special care promoting native plant species and a proper irrigation system with farmers to develop and maintain the layers.	Implementing agencies, PMOs, PIUs, consultants
<b>Governance (financial management, procurement, institutional, and anticorruption)</b>			
Weak capacity of the implementing agencies and PIUs to withdraw ADB loan proceeds effectively, resulting in disbursement and construction delays.	M	CMG or CPMO, which is familiar with ADB requirements, will closely monitor and provide guidance to implementing agencies and PMOs on project procurement and disbursement matters.  The project will provide capacity-building training workshops for the staff of implementing agencies, PIUs, and relevant government agencies.	CMG, CPMO, implementing agencies, PMOs, PIUs, Chongqing Finance Bureau, consultants
Implementation delays caused by simultaneous implementation of other projects by the executing agency.	M	Advance project management and communication tool will be employed in project management to address slow implementation progress.	CMG, CPMO, implementing agencies, PMOs, PIUs
Lack of adequate capacity in the Internal Audit Bureau.	M	Contracting of external audit and inspection services.	CMG, CPMO, implementing

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			agencies, PMOs, PIUs
Implementing agencies and PIUs do not have sufficient capacity or experience with the new ADB procurement procedure, resulting in poor preparation of the procurement plan and bidding documents, poor management of the procurement process, and delays in procurement.	M	<p>During project preparation, (i) ADB missions provided the CPMO and PMOs with briefings on ADB's new procurement guidelines, and (ii) two capacity development training workshops on procurement were organized by an ADB procurement specialist and specialist engaged under the transaction technical assistance.</p> <p>The CPMO will engage an independent national project procurement consultant with significant experience in ADB projects.</p>	CMG, CPMO, implementing agencies, PMOs, PIUs, consultants
Change of project management staff of CPMO, implementing agencies, and PIUs can disrupt project management and project implementation.	M	Assurance from CMG, CPMO, implementing agencies, PMOs, and PIUs to implement the institutional strengthening and maintain the stability of the management staff.	CMG, CPMO, implementing agencies, PMOs, PIUs, consultants
Corrupt practices may affect project design, procurement, and implementation, leading to poor quality projects.	M	<p>ADB's Anticorruption Policy (1998, as amended to date) has been explained to and discussed with CMG, CPMO, implementing agencies, PMOs, and PIUs.</p> <p>CMG and implementing agencies will undertake the following anticorruption actions: (i) execute with the civil works both an anticorruption contract and civil works contract; and (ii) periodically inspect the contractors' fund withdrawals and settlements. The project will introduce a dual-signing system in which the civil works contract winner also signs an anticorruption contract with the employer during implementation.</p>	CMG, CPMO, implementing agencies, PMOs, PIUs
Limited enforcement of anti-corruption measures.	M	Assist the CPMO, implementing agencies, and PIUs to ensure good	CMG, CPMO, implementing agencies,

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		<p>governance, accountability, and transparency in project operations.</p> <p>In consultation with relevant central government ministries, the executing agency will update rules and regulations on local and corporate governance and anticorruption and enhance the transparency of implementing agency operations.</p>	PMOs, PIUs, consultants
<b>Safeguards</b>			
<p>Delay of land acquisition and resettlement due to the shortage of counterpart funding or unforeseen problems raised during LAR negotiation.</p>	M	<p>Assurance from CMG and implementing agencies on the availability of counterpart funding with detailed financing plan.</p> <p>Assurance from CMG and implementing agencies to have effective coordination with local governments to carry out LAR in a timely manner.</p> <p>CPMO will update the resettlement plans based on the final design and survey.</p> <p>The project management consultant will provide institutional strengthening and training to implementing agencies for carrying out LAR tasks.</p>	CMG, CPMO, implementing agencies, PMOs, PIUs, consultants
<p>Construction and management of components are undertaken without regard to the impact mitigation and management measures recommended.</p>	M	<p>CMG, CPMO, implementing agencies, and PMOs must implement the project in strict conformity with all the PRC laws and regulations on environmental protection, health, labor, occupational safety, and ADB's Safeguard Policy Statement (2009). The relevant assurance is included in the loan and project agreements.</p>	CMG, CPMO, implementing agencies, PMOs, PIUs, consultants

ADB = Asian Development Bank, CMG = Chongqing Municipal Government, CPMO = Chongqing project management office, LAR = land acquisition and resettlement, M = moderate, PIU = project implementing unit, PMO = project management office, PRC = People's Republic of China.

Source: Asian Development Bank.