

RISK ASSESSMENT AND RISK MANAGEMENT PLAN

Risk Description	Rating	Mitigation Measures	Responsibility
Procurement			
1. The GCC's lack of experience with ADB-financed projects could cause delays or noncompliance with ADB procurement requirements.	Low	The project team held a strategic procurement planning workshop to help the GCC develop optimal procurement arrangements. Advance contracting has been processed smoothly, with support from ADB procurement specialists and project preparatory TA experts.	GCC
Project implementation			
2. Delays in the completion of other planned water body restoration and channel rehabilitation projects under the PWD could limit full realization of the expected benefits. ^a	Moderate	The project steering committee, led by the chief secretary of the Government of Tamil Nadu and including the secretary of the PWD, will coordinate the timely implementation of related project components.	State government and GCC
3. Lack of political will to endorse development regulations could result in suboptimal performance of flood management systems.	Moderate	Guidelines for integrating flood hazard zoning with spatial plans and land use, building and development regulations will be prepared and endorsed.	State government and GCC
4. Lack of government funds may lead to delayed implementation.	Moderate	The state government issued an order to accommodate the project costs. The state budget earmarked for the expanded area of Chennai can be used for developing stormwater drains in the project area.	GCC
5. Heavy monsoons, exceeding projections, delay construction.	Moderate	Work will be scheduled considering the monsoon. The use of ready-mix concrete, manufactured indoor in plants, and mechanization for excavation, can speed up construction.	GCC
6. The COVID-19 pandemic could lead to substantial delays in contract execution.	Moderate	Civil works have resumed in Tamil Nadu. Most construction materials and labor are available in Tamil Nadu. Health and safety provisions, incorporating IPC measures for COVID-19, will be included in works contracts.	GCC
7. A surge in the price of materials, and the prolonged impact of COVID-19 on the movement of goods and services, could result in	Moderate	Estimates are based on the latest schedule of rates. Adequate contingency is also provided.	GCC

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cost overruns and delays in project completion.			
8. Competing priorities and turnover of key GCC staff disrupt business continuity and delay the completion of target outputs.	Moderate	The state has accorded top priority to providing infrastructure in the expanded areas of the city through programs such as the Chennai Mega City Development Mission. Dedicated PIU staffing is in place. The PSC and ISRC will provide implementation support to the PMU and PIU.	GCC
9. Change in leadership may affect momentum on the reform program.	Moderate	The state has accorded top priority to providing infrastructure in the expanded areas of the city through programs such as the Chennai Mega City Development Mission. A larger participation base, which includes all zonal offices and incentivizes reforms, will help retain momentum.	GCC
Project operation			
10. Delays in any subproject components could affect the operation of other completed subproject components.	Low	The subprojects have been arranged such that each package is independent of the other subprojects.	GCC
11. Lack of adequate O&M arrangements and budget allocation could hamper the operational and financial sustainability.	Moderate	A KPI-based stormwater drainage operation performance improvement system will be established. A sustainable operation and management improvement plan will be prepared with the help of consultants and adopted by the GCC. A road map of municipal resource mobilization for the GCC will be prepared.	GCC
Financial management			
12. GCC lacks experience with ADB-financed projects which could result in noncompliance with ADB's financial management requirements as well as delays in disbursements.	Substantial	The project will (i) engage an accounts and finance expert to support the PMU and PIU, (ii) provide continuous training to the PMU and PIU accounts staff in ADB's disbursement procedures and systems as well as financial reporting and audit requirements; (iii) include comprehensive financial management information in quarterly progress reports submitted to ADB; and (iv) engage an independent auditor to audit the project financial statements annually following audit standards acceptable to ADB.	GCC

Risk Description	Rating	Mitigation Measures	Responsibility
Overall	Moderate		

ADB = Asian Development Bank, COVID-19 = coronavirus disease, GCC = Greater Chennai Corporation, IPC = infection prevention and control, ISRC = institutional strengthening and reform consultant, KPI = key performance indicator, O&M = operation and maintenance, PIU = project implementation unit, PMU = project management unit, PSC = project support consultant, PWD = Public Works Department, TA = technical assistance.

Note: The four possible ratings are high, substantial, moderate, and low.

^a Other planned projects include (i) water body restoration in Ambattur Lake, Korattur Lake, Retteri Lake, Sadayankuppam Lake, Ariyalur Lake, Kadapakkam Lake, Madhavaram Periyathoppu Lake, and Kolathur Lake; and (ii) channel rehabilitation in Ratteri South channel, Ratteri North channel, and Puzhal channel.

Source: Asian Development Bank.