RISK ASSESSMENT AND RISK MANAGEMENT PLAN

Risk Description	Risk Assessment	Mitigation Measures or Risk Management Plan	Responsibility
A. Institutional			
High demand for technically skilled staff in the labor market may compromise staff recruitment and retention and reduce the benefits of institutional development and capacity building.	Moderate	The project will support the increase in the State Agency for Hydrometeorology (Hydromet) staff salary packages through (i) government commitment for adequate core budget for staff salaries during project implementation, (ii) facilitating Hydromet to support O&M budget with additional commercial revenues, and (iii) enabling Hydromet to provide housing benefits to key technical staff.	PIG
Change of government leadership, organization, or priorities at a national and/or local level may result in project refocus, delays, and part or whole project cancellation.	Moderate	ADB has consulted extensively with a broad range of stakeholders on the project, including at the deputy prime minister level, and has received a request and support for the project. Project covenants will detail the process for legal transformation, confirm Hydromet's exclusive use of modernized assets, and ensure longer-term partnership between Hydromet and ADB on oversight and budgeting issues.	PIG
B. Governance			
1. Financial			
Government internal audit does not meet recognized professional standards; recommended measures do not address the underlying cause of the problems.	Moderate	Capacity building and information system development are essential to improve internal control. The project will not use government internal audit and will be audited by independent private auditors in accordance with International Standards on Auditing.	PIG
Consolidated government statements prepared are not fully compliant with recognized international accounting standards.	Moderate	A PIG with financial management staff will implement the project. The PIG staff will be experienced in preparing project financial statements following cash-basis IPSAS, and 1C accounting software has been used. Independent private auditors will audit the project annually in accordance with International Standards on Auditing.	PIG
Supreme audit institution has not yet been established; external audit not yet in place	High	The project will be audited annually by independent private auditors in accordance with International Standards on Auditing.	PIG

Risk Description	Risk Assessment	Mitigation Measures or Risk Management Plan	Responsibility
Lack of capacity for the PIG to manage ADB funds	Moderate	Hydromet staff have experience in implementing World Bank-financed projects. A new PIG will be established, and accounting and financial management staff will be recruited to strengthen capacity. A start-up consultant and project implementation consultant will provide support and training on ADB's disbursement policies and procedures.	Hydromet
Fund flow risks concerning delays of payments to contractors delay project implementation activities.	Moderate	Most project funds will be under the control of the PIG to avoid delays, with direct payment to key contractors, consultants, and suppliers.	PIG
Risks of complacency and familiarity with management and staff if same audit firm is used to audit an organization for a long period of time.	Low	It is proposed that auditors rotate every 3–5 years in line with international best practice.	PIG
Low governance and public management on procurement may allow misconduct regarding project funds.	Moderate	Hydromet has experience with World Bank procurement, and the World Bank PIG has conducted procurement without known misconduct. Project implementation will conform to all applicable ADB policies, including those concerning anticorruption, procurement, and disbursement as described in detail in the project administration manual. The grant agreement provides certain covenants for the executing agency, including a separate advance account, quarterly and annual reporting, annual audits of financial statements, and spot checks.	PIG
Weak transparency on project information, including financial management, may allow subjective selection of contractors and consultants, which will adversely affect sound financial management.	Moderate	The PIG and project implementation consultant will follow up and Hydromet will disclose project information on ADB's website, including project description, selection criteria and procedures, project achievements, project financial statements, procurement activities, and details of the bidding procedures.	Hydromet and PIG

Risk Description	Risk Assessment	Mitigation Measures or Risk Management Plan	Responsibility
2. Procurement			
The executing agency has weak capacity for timely and appropriate preparations and/or evaluations of tender documents, which may lead to mis-procurement.	Moderate	The project will finance implementation support through consulting services to meet procurement requirements. The project provides procurement experts for the bid preparation and tender phase, and will appoint local procurement officers in the PIG. The ADB Resident Mission in Tajikistan has indicated it will support the training of PIG procurement officers on ADB procedures for consultant selection and procurement, if necessary. The procurement plan comprises clearly defined packages. A time monitoring sheet for each project implementation milestone will be available and updated by supervision consultants.	Hydromet and PIG
C. Project Management			
The executing agency's less competent staff may not manage project implementation appropriately or in a timely manner.	Moderate	The project will finance implementation support through consulting services to meet M&E and reporting requirements. The executing agencies will engage an officer in the PIG for M&E, and an M&E expert will support the officer's tasks under consulting services. ADB's periodic missions will facilitate the PIG's timely implementation of the project, identify potential implementation risk, and suggest remedial actions. The project steering committee to be established will provide strategic guidance to the executing agencies and the PIG.	Hydromet and PIG
Delays in construction schedule	High	Using advance contracting, the consultant for detailed design, bid preparation, and construction supervision will be fielded from December 2018 or January 2019 to enable Hydromet to initiate the bid process for the major contract by mid-2019. The bidding document will include performance incentives and penalties to avoid delays in the construction schedule. ADB is improving its efficiency in project management and has shortened the disbursement time lag. A time monitoring sheet for each project implementation milestone will be available and updated by supervision consultants.	Hydromet and PIG

Risk Description	Risk Assessment	Mitigation Measures or Risk Management Plan	Responsibility
The limited number of experienced managers and technical specialists at Hydromet may prevent the required standard and progress of institutional and organizational transformation from being met and sustained.	Moderate	The project includes provisions for engaging institutional specialists and lawyers under consulting services to assist the executing agencies and PIG in preparing development plans, legal documents, and operational manuals. Hydromet's capacity will be strengthened through support from consultants.	PIG
Security risk near the border with Afghanistan may hamper project implementation.	Moderate	The executing agencies will provide consultants, contractors, and suppliers with security information in a timely manner for their advanced mitigation actions. Sites and areas for installation of equipment and training and consultation activities will be chosen with appropriate distance from the border areas.	PIG
Major extreme weather or seismic event may hamper civil works or consultation and training activities in the project area	Low	A detailed structural assessment has been undertaken on the new Hydromet office building to confirm integrity and compliance with seismic standards, and the area has low risks from climate impacts. Pyanj River Basin activities will incorporate appropriate risk mitigation, including appropriate site selection.	PIG
D. Sustainability			
Hydromet may not be able to diversify income sources or provide sufficient incentives to attract and retain qualified staff.	Moderate	The project will strengthen the commercial and business operations of Hydromet and transform Hydromet to a state entity that can seek, retain and use its commercial revenue. Housing benefits will be provided to staff. Core budgetary support is expected to come from government.	Government of Tajikistan
Insufficient core government funding may threaten the sustainability of the modernized campus, equipment, and staff retention.	High	The government has agreed to contribute adequate O&M budget. A sustainable O&M plan, including annually updated budget projections, will be developed. The project will provide capacity building to senior staff on management and administration.	Government of Tajikistan, Hydromet, and PIG
Overall	Moderate	Overall, the risks appear manageable, with covenants built into the grant agreement to mitigate high risks. If mitigation measures are implemented effectively, the project's benefits are expected to outweigh potential risks.	

ADB = Asian Development Bank, Hydromet = State Agency for Hydrometeorology of Tajikistan, IPSAS = International Public Sector Accounting Standards, M&E = monitoring and evaluation, O&M = operation and maintenance, PIG = project implementation group.

Source: Asian Development Bank.