

RISK ASSESSMENT AND RISK MANAGEMENT PLAN

Risk Description	Risk Assessment	Mitigation Measures or Risk Management Plan
A. Governance		
1. Financial Management		
Government internal audit does not meet recognized professional standards; recommended measures do not address the underlying cause of the problems.	Medium	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.
Consolidated government statements prepared are not fully compliant with recognized international accounting standards.	Medium	A PMO with additional financial management staff will implement the project. The PMO staff will be experienced in preparing project financial statements following cash-basis IPSAS, and 1C accounting software has been used.
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.
Lack of capacity for the PMO to manage ADB funds.	Medium	Current PMO staff will be experienced in implementing World Bank and ADB-financed projects. Additional accounting and financial management staff will be recruited to strengthen PMO capacity. Project implementation group will also assign an accountant for the project. Training on ADB's disbursement policies and procedures and consultant support should be provided.
Fund flow risks concerning delays of payments to contractors, which will delay project implementation activities.	Medium	The majority of funds for the project will be under the control of the PMO to avoid delays.
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 are rotated every 3–5 years in line with international best practice.
Low governance and public management on procurement may allow misconduct regarding project funds.	High	The government and the two executing agencies have assured ADB that project implementation will conform to all applicable ADB policies, including those concerning anticorruption, procurement, and disbursement as described in detail in the PAM. The grant and loan agreements and cofinancing grant and TA agreements provide certain covenants for the executing agencies, including separate accounts, quarterly and annual reporting, annual audits of financial statements, and spot checks.
Weak transparency on project information including financial management may allow subjective selection of contractors and consultants which will adversely affect sound financial management	Medium	The two executing agencies will disclose project information on ADB's website, including project description, selection criteria and procedures, project achievements, financial statements of the project, procurement activities, and details of the bidding procedures.

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2. Procurement		
Executing agencies have weak capacity for timely and appropriate preparations and/or evaluations of tender documents, which may lead to misprocurement.	Medium	ADB 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 PMO. ADB will support the training of PMO 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.
B. Project Management		
The executing agencies' less-competent staff may not manage project implementation appropriately or in a timely manner.	Medium	ADB will finance implementation support through consulting services to meet M&E and reporting requirements. The executing agencies will engage an officer in the PMO for proper M&E and his or her tasks will be supported by an M&E expert under consulting services. ADB's periodic missions will facilitate the PMO's timely implementation of the project, identify potential implementation risk, and suggest remedial actions. Further, the project steering committee to be established will provide strategic guidance to the executing agencies and the PMO.
Delays in construction schedule	High	Using advance contracting, the consultant for detailed design, bid preparation, and construction supervision will be fielded from January 2017 to enable the PMO to initiate bid process for the major contract in the second quarter of 2017. 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.
There is a limited number of qualified engineers on site in the executing agencies and this may not keep the required standard of construction quality.	Medium	The project includes provisions for engaging engineering experts under consulting services to assist the executing agencies, PMO, and PIOs in preparing detailed engineering designs, construction supervision of the civil and mechanical works, and modernization of pump stations. The executing agencies have sufficient capacity and experience to handle such activities. Their capacity will be further strengthened through support from consultants.
Security risk near the border with Afghanistan may hamper project implementation.	Medium	The executing agencies will provide NGOs, contractors, and suppliers with security information in a timely manner for their advanced mitigation actions. For output 1, workshops, seminars, and conferences will be held in less security-sensitive places such as Dushanbe, the capital of Tajikistan. For output 2, the project implementation consultant will be formed by national specialists who know the security situation, as well as international specialists. For output 3, (i) NGO(s) with extensive knowledge of local conditions

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<p>C. Sustainability Seasonal changes in Pyanj River flows due to climate change may impact water diversions to the CIS. Insufficient available funds for system O&M may threaten CIS sustainability.</p>	Low	<p>and security mitigation measures in the PRB will be recruited; and (ii) most required materials will be procured through national competitive bidding or shopping and will be supplied by local contractors and suppliers that know the security situation well. Historically, water diversions to the CIS are only 4%–5% of the Pyanj River flows for at least last ten years. Hence, seasonal changes in Pyanj River flows due to climate change are not likely to impact water diversions to the CIS.</p>
	High	<p>The project will reduce required O&M and increase O&M fund availability. Required O&M will be substantially reduced by construction of a sediment removal facility. The sediment deposit in the CIS from the Pyanj River has been a major O&M requirement. Required O&M will also be reduced by replacing energy inefficient and degraded pump and motor sets with energy efficient ones in target pump station groups. The availability of O&M funds will be substantially increased by increasing the collection rate of irrigation service fees from the current 46% to 80% by project intervention. The government agreed that CIS asset management and an O&M plan including the increases in the irrigation service fees and budget allocation will be developed by ALRI and approved by the government for full cost-recovery in the CIS after completion of modernization and rehabilitation works, but before project completion. The main system operators and WUAs will be trained for efficient CIS O&M.</p>
Overall	Medium	<p>Overall, the risks appear manageable, and if mitigation measures are implemented effectively, the project's benefits are expected to outweigh the potential risks.</p>

ADB = Asian Development Bank, CIS = Chubek Irrigation System, IPSAS = International Public Sector Accounting Standards, M&E = monitoring and evaluation, O&M = operation and maintenance, PAM = project administration manual, PIO = project implementation office, PMO = project management office, TA = technical assistance.
 Source: Asian Development Bank.