Project Concept Paper

Project Number: 52045-001
February 2019

Proposed Loan
Uzbekistan: Tashkent Province Sewerage Improvement Project

Asian Development Bank
CURRENCY EQUIVALENTS
(as of 6 February 2019)

Currency unit – sum (SUM)
SUM1.00 = $0.0001190259
$1.00 = SUM8,401.53

ABBREVIATIONS

ADB – Asian Development Bank
CSA – Agency ‘Kommunkhizmat’ (Communal Services Agency)
F-TRTA – transaction technical assistance facility
GIS – geographic information system
km – kilometer
m³ – cubic meter
O&M – operation and maintenance
PPP – public-private partnership
TPS – Tashkent Provincial Suvokova
TRTA – transaction technical assistance
WSS – water supply and sanitation
WWTP – wastewater treatment plant

NOTES

In this report, "$" refers to United States dollars, unless otherwise stated.
In preparing any country program or strategy, financing any project, or by making any designation of or reference to a particular territory or geographic area in this document, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.
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</tbody>
</table>
# Project Classification Information Status: Complete

## PROJECT AT A GLANCE

### 1. Basic Data

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Tashkent Province Sewerage Improvement Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country</td>
<td>Uzbekistan</td>
</tr>
<tr>
<td>Borrower</td>
<td>Republic of Uzbekistan</td>
</tr>
<tr>
<td>Department/Division</td>
<td>CWRD/CWWU</td>
</tr>
<tr>
<td>Executing Agency</td>
<td>Agency &quot;Kommunhizmat&quot;</td>
</tr>
</tbody>
</table>

### 2. Sector

<table>
<thead>
<tr>
<th>Water and other urban infrastructure and services</th>
<th>ADB Financing ($ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban sanitation</td>
<td>60.00</td>
</tr>
<tr>
<td>Urban sewerage</td>
<td>100.00</td>
</tr>
<tr>
<td>Total</td>
<td>160.00</td>
</tr>
</tbody>
</table>

### 3. Strategic Agenda

#### Subcomponents

- Inclusive economic growth (IEG)
- Environmentally sustainable growth (ESG)

#### Climate Change Information

- Climate Change impact on the Project: Medium
- ADB Financing: Adaptation ($ million) 35.00

### 4. Drivers of Change

#### Components

- Governance and capacity development (GCD)
- Knowledge solutions (KNS)
- Partnerships (PAR)
- Private sector development (PSD)

#### Gender Equity and Mainstreaming

- Effective gender mainstreaming: ✓

### 5. Poverty and SDG Targeting

#### Location Impact

- Geographic Targeting: No
- Household Targeting: No
- Yes
- SDG Goals: SDG3, SDG6, SDG8, SDG11

### 6. Risk Categorization:

- Low

### 7. Safeguard Categorization

- Environment: B
- Involuntary Resettlement: B
- Indigenous Peoples: C

### 8. Financing

<table>
<thead>
<tr>
<th>Modality and Sources</th>
<th>Amount ($ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADB</td>
<td>160.00</td>
</tr>
<tr>
<td></td>
<td>Sovereign Project (Concessional Loan): Ordinary capital resources 160.00</td>
</tr>
<tr>
<td>Cofinancing</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>None 0.00</td>
</tr>
<tr>
<td>Counterpart</td>
<td>25.00</td>
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<tr>
<td></td>
<td>Government 25.00</td>
</tr>
<tr>
<td>Total</td>
<td>185.00</td>
</tr>
</tbody>
</table>

**Currency of ADB Financing:** USD
Problem Tree
Tashkent Province Sewerage Improvement Project

EFFECTS
- Increasing environmental pollution and contamination of rivers
- Deteriorating health conditions and poor hygiene
- Constrained economic growth

CORE PROBLEM
- Degraded wastewater infrastructure and insufficient services*

CAUSES
- Policy and planning
  - Ineffective sector regulation and enforcement (discharge compliance deficiency including pretreated industrial wastewater monitoring)
- Operations and sustainability
  - Limited sector planning, coordination, and monitoring capabilities
  - Poor interagency coordination and oversight
  - Deficient utility performance-oriented management and technical capabilities**
- Infrastructure and financing
  - Inadequate service delivery accountability and compliance**
  - Degradation of existing wastewater collection, treatment, and disposal facilities**
- Awareness and engagement
  - Limited financing in the public sector
  - Limited public knowledge of environmental, public health and climate change issues relating to wastewater provision
  - Lack of stakeholder engagement and compliance

* Currently about 55% of urban population connected; 0% rural population served. In total, only about 16% province’s population have access to sewers. All existing collection and treatment facilities are in extremely poor conditions and require rehabilitation/upgrading. Sewerage expansion is needed.

** Prioritized in Presidential Resolution on Additional Measures on Development of Water Supply and Sanitation System in Uzbekistan, December 2018.
I. THE PROJECT

A. Rationale

1. Uzbekistan is one of Central West Asia’s fastest growing economies, having sustained rapid economic growth over the past decade.\(^1\) The nation’s growth is primarily attributable to Tashkent Province, the nation’s most economically advanced region and largest agglomeration. With a population of 2.8 million,\(^2\) and spanning an area of over 15,000 square kilometers (km\(^2\)), the province is endowed with rich natural resources and vibrant industries.\(^3\) It generates about one quarter of the nation’s entire gross domestic product. Tashkent province has 14 districts and six major cities—Akhangaran, Almalyk, Angren, Bekabod, Chirchik, and Yangiyul cities—that are regarded as key economic centers. Within the province there are 97 semi-urbanized settlements and 885 rural villages. There are three strategically important rivers, Chirchik (north catchment), Akhangaran (central catchment), and Syr Darya (south catchment) serving as the main sources for irrigation and drainage in the province.

2. Core problem. The province suffers from persistent urban service limitations, particularly in wastewater. Of the province’s 2.8 million population, only 0.45 million (16%) inhabitants are connected to municipal wastewater systems. The remaining 2.37 million (84%) are forced to rely on rudimentary systems such as pit latrines and earth ditches, and practices that threaten public health and hygiene.\(^4\) The province’s Soviet-era centralized wastewater systems comprised of six large wastewater treatment plants (WWTPs) and 1,150 km of sewerage collectors and networks are dilapidated and in need of immediate rehabilitation. Vast quantities of wastewater are discharged into rivers, impoundments, agricultural areas, and groundwater resources causing environmental pollution and river contaminations.

3. The contamination of the rivers, caused by untreated sewage and polluted surface runoff, is of serious concern.\(^5\) The river water quality has deteriorated substantially, with infectious agents, toxic chemicals, pathogens and other organic bacterial organisms often dangerously exceeding national water quality standards.\(^6\) The recreational use of the rivers and their banks continues, but the consumption of raw river water is unsafe. Sewage discharge outfalls are dirty and with offensive odors impacting nearby receptors. Currently one water treatment plant under construction, and other plants being planned, will draw water from the rivers. Thus, protecting and improving the river water quality is essential.

4. The wastewater sector,\(^7\) previously under the Communal Services Agency (CSA) and now under the Ministry of Housing and Communal Services (MHCS), has endured dysfunctional and

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\(^1\) Uzbekistan’s gross domestic product grew at 7.8%, 5.3% and 4.9% annually to 2016, 2017 and 2018, respectively with growth being predicted at over 5% to 2019 (www.adb.org/countries/uzbekistan/economy).

\(^2\) Tashkent City, with a population of about 2.5 million, is a separate area bordering the Tashkent province.

\(^3\) The province’s economic activities and assets include (i) industry: metallurgy, machinery, energy production, chemicals, textiles and food processing; (ii) natural resources: coal, molybdenum, zinc, gold, silver and copper; and (iii) agriculture: cotton, wheat, grapes, potatoes, grain, rice, fruits, horticulture, poultry and cattle farming.

\(^4\) 2016 data from Tashkent Provincial Suvokova (TPS) and records from the Sanitary Epidemiological Services (Ministry of Health) for the period 2006-2015 indicate increasing trends of viral hepatitis and acute intestinal diseases in several of the project’s districts. Currently about 55% of urban population in the Tashkent province are connected to sewers while none rural population are served.

\(^5\) The Syr Darya river traverses over 2,200 km through the Kyrgyz Republic, Uzbekistan and Kazakhstan. It irrigates extensive areas of farmland throughout the region and is vitally important for hydropower generation, and domestic and industrial water supply needs.

\(^6\) Based on data obtained from Institute of Hydrology. Pretreated industrial wastewater discharges into public sewers.

\(^7\) The Suvokovas are responsible for all water supply and wastewater services and their improvements under their respective jurisdiction; both in the urban and rural areas.
fragmented regulatory and institutional frameworks, poor inter-agency coordination, limited sector planning, unclear regulatory compliance, and ineffective enforcement. Effluent discharge compliance is deficient throughout the province due to the following limitations: (i) laboratory funding and capacity, and (ii) monitoring and enforcement of state agencies. The performance of the local water and wastewater utilities (‘vodokanals’) has been poor, lacking a performance-based management focus and accountability resulting in limited staff incentives and high turnover. Funding constraints for capital investments and operation and maintenance (O&M) have been severely exacerbated by low tariff levels, limited public funding, and a virtually absent private sector. Significant urban-rural inequalities exist in wastewater service provision. Stakeholder involvement is limited. Concepts of environmental protection and climate adaptation and resilience are yet to be well understood. These deficiencies limit the wastewater service delivery, potentially posing environmental deterioration, public health threats, and constrained economic growth.

5. **Sector reforms.** With support from the Asian Development Bank (ADB) and other development partners, the Government of Uzbekistan (government) has responded by reorganizing water supply and sanitation (WSS) sector institutions along with implementing sector-wide management, financial and cost recovery reforms. In Tashkent province reforms have led to the operationalization of the Tashkent Provincial Suvokova (TPS) responsible for all WSS services in the province. A recent strategic presidential resolution prioritizes the continued modernization of the WSS in Uzbekistan by (i) adopting new and innovative business models for the utility management including public-private partnership (PPP); (ii) introducing information and communication technologies (ICT) such as geographic information system (GIS), supervisory control and data acquisition, and modern metering devices; (iii) adopting a new tariff policy that ensures full cost recovery over time, which will attract private sector participation and resources; and (iv) conducting advanced training programs. To ensure environmental sustainability, the government is considering expanding the mandate of the Clean Drinking Water Foundation to cover both the development of water supply and sewage systems. In recent years, the World Bank, the Islamic Development Bank, Arab Coordination Group, Swiss State Secretariat for Economic Affairs, and Swiss Agency for Development and Cooperation have also been working in the WSS sector in other regions of Uzbekistan.

6. **Priority needs.** Despite substantial progress in the water supply subsector, severe wastewater treatment deficiencies exist throughout the province. The existing wastewater systems in six major cities of (i) Akhangaran, Almalyk, and Angren (discharge into the Akhangaran river); (ii) Chirchik and Yangiyul (discharge into the Chirchik river); and (iii) Bekabod (discharges into the Syr Darya river) have been prioritized by the government for rehabilitation because of their relative size, economic significance, and the extent of environmental damage caused by wastewater effluent discharges. Immediate action is needed in the district urban center of Chinaz, located downstream Chirchik river where the existing centralized wastewater system failed,

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8 Although the State Sanitary and Epidemic Control Centers (Ministry of Health) and State Committee on Ecology and Environmental Protection (SCEEP) monitor water and wastewater quality, the penalties for noncompliance are reported to be so low that polluters often prefer to pay the penalties rather than limit their pollution.
10 ADB and the government have collaborated closely since 2000 with over $500 million invested in the rehabilitation and expansion of WSS infrastructure. Many of these projects are ongoing and will not be completed until 2022.
12 The Clean Drinking Water Foundation, a consolidated capital investment funds established in 2016 and managed by the Ministry of Finance, has recently renamed as "the Foundation for the Development of Water Supply and Sewerage Systems" per Presidential Resolution mentioned in footnote 11.
threatening public health. The rural areas also need sanitation improvement by transitioning to septic tank systems, rationalizing and expanding septage collection and disposal services, and improving public awareness and engagement. Further institutional support is required to strengthen TPS’ wastewater planning, help establish an industrial sewer inspection and monitoring system, explore possible wastewater reuse approaches, pilot decentralized wastewater system best practices and develop training programs for wastewater management capacity building.

B. Proposed Solutions

7. The project will upgrade the centralized wastewater systems of the six cities and the Chinaz urban center, improve sanitation practices in two districts’ rural areas, and build wastewater planning and operational capacity in the TPS. It is consistent with the ADB Water Operational Plan 2011-2020, ADB’s Country Operations Business Plan, 2019-2021 for Uzbekistan and aligns with previous and ongoing ADB-funded WSS projects contributing to key operational priorities such as livable cities, governance and institutional capacity improvement and environmental sustainability enhancement under ADB’s Strategy 2030 as well as the attainment of Sustainable Development Goals.

8. The project will be aligned with the following impact: environment, health and living conditions in Tashkent province improved. The outputs will result in the following outcome: access to reliable wastewater services in the cities of Akhangaran, Almalyk, Angren, Bekabod, Chirchik, Yangiyul and the Chinaz urban center, and the rural areas of Yangiyul and Chinaz districts improved and expanded. The project is expected to directly benefit one million people with the following proposed outputs.

9. Output 1: Centralized urban wastewater systems in the cities of Angren, Akhangaran, Almalyk, Chirchik, Bekabod, Yangiyul and the Chinaz urban center improved, including (i) rehabilitation and/or upgrading of five existing and one new WWTP with a combined capacity of 530,000 cubic meter (m³)/day, (ii) rehabilitation or construction of 69.3 km of sewerage collectors and 182.5 km of sewerage networks, and (iii) installation of 50,000 water meters.

10. Output 2: Decentralized wastewater disposal systems in rural settlements of Chinaz and Yangiyul districts improved through (i) installation of 23,500 individual household septic tanks; (ii) provision of 21 septage vacuum trucks to collect and deliver septage to WWTPs for treatment; (iii) operationalization of a septage management unit in the TPS; (iv) formulation of a septage management program to rationalize and expand septage collection and disposal services; and (v) design and implementation of a sanitation and hygiene awareness program to improve community awareness and understanding of sanitation best practices.

11. Output 3: TPS wastewater management and project implementation capacity strengthened in the six cities and the Chinaz urban center through: (i) corporate development (including asset management, financial management, procurement practices, public accountability measures, internal auditing, environmental management, human resource management, and PPP arrangements); (ii) established service standards and an advanced

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17 The preliminary design and monitoring framework is in Appendix 1.

18 These are preliminary quantities officially proposed by the Government for this project. Household connections are included in the project.
wastewater inspection and monitoring system; (iii) improved wastewater O&M capabilities; (iv) a piloted PPP initiative for O&M of WWTPs and sewerage networks; and (v) introduced mechanism for community-based decision making processes.

12. **ADB’s value additions.** The project will be the first ADB financed wastewater project in Tashkent province, and will supplement the previous WSS projects in Uzbekistan. This project will support all the prioritized items in the 2018 presidential resolution mentioned in paragraph 5. ADB’s intervention introduces the following key features:

(i) **Technology and innovation.** In urban areas, treatment facilities and collection systems will have modern inline analyzers for automatic data logging, supervisory control and data acquisition, GIS, computerized models, instruments, meters, and controls for advanced technology O&M. In rural areas, the project improves sanitation practices with modern septic tank systems, and builds public knowledge and awareness in sanitation;

(ii) **Institutional development.** The project will include: (i) detailed design engineering capacity development through on-the-job training and technical skills transfer; (ii) a pilot scale GIS system to initiate GIS capacity; (iii) a pilot O&M program using advanced technology for modern O&M capacity; (iv) piloted PPP arrangements in the wastewater sector; and (v) an exchange/internship program in collaboration with the Ministry of Education for advanced study in WSS; and

(iii) **Climate change.** The project is expected to include the application of energy efficient pumps and equipment, corrosion-resistant pipelines, and modern technologies for water savings and sludge reduction. New facilities will be engineered to withstand anticipated impacts of high temperatures, reduced water availability, and more frequent extreme weather events.

C. **Proposed Financing Plans and Modality**

13. The total project cost is estimated at $185.0 million. The government has requested a loan of $160.0 million.\textsuperscript{19} Cofinancing opportunities will be explored during the project preparation. ADB will finance 100% of the adaptation costs estimated at $35 million.\textsuperscript{20} The indicative financing plan is in Table 1.

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount ($ million)</th>
<th>Share of Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian Development Bank</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ordinary capital resources (Concessional loan)</td>
<td>160.0</td>
<td>86.0</td>
</tr>
<tr>
<td>Government\textsuperscript{a}</td>
<td>25.0</td>
<td>14.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>185.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

\textsuperscript{a} Government contribution includes taxes and duties. Source: Asian Development Bank estimates.

D. **Implementation Arrangements**

<table>
<thead>
<tr>
<th>Aspects</th>
<th>Arrangements</th>
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<tbody>
<tr>
<td>Indicative implementation period</td>
<td>December 2019–December 2025</td>
</tr>
<tr>
<td>Indicative completion date</td>
<td>December 2025</td>
</tr>
</tbody>
</table>

\textsuperscript{19} Exact amount to be confirmed following completion of project preparatory and feasibility activities.

\textsuperscript{20} Climate change adaptation measures will include climate resilient wastewater pipelines, energy efficient treatment facilities, and modern septage vacuum trucks.
14. The CSA will be the executing agency for the project. The CSA’s responsibilities will include supervision and support in procurement, contract management, financial management, project administration, safeguards compliance, and reporting. The TPS will be the implementing agency responsible for day to day project implementation functions.

15. Procurement under this project will include goods, works, nonconsulting and consulting services. Procurement (including consulting services) to be financed by ADB will follow ADB Procurement Policy (2017, as amended from time to time) and Procurement Regulations for ADB Borrowers (2017, as amended from time to time).

II. PROJECT PREPARATION AND READINESS

16. A transaction technical assistance (TRTA) will be sourced from the TRTA facility (F-TRTA). The TRTA is estimated to cost $0.8 million. The government has been advised that approval of the F-TRTA does not commit ADB to finance the ensuing loan.

17. The government will provide counterpart support in the form of counterpart staff, relevant government data and studies, and other in-kind contributions. The value of the government contribution is estimated to account for 3% of the total TRTA cost. To facilitate timely implementation, advance contracting and retroactive financing will be considered for certain preliminary, eligible expenditures, potentially including the recruitment of design engineering and project implementation support consultants. Advertisement of the latter will precede the ADB quality assurance meeting, wherever possible. Details are provided in the F-TRTA paper (Footnote 21).

III. DELIBERATIVE AND DECISION-MAKING ITEMS

A. Risk Categorization

18. The project is considered to be low risk. ADB has ongoing WSS sector investments in Uzbekistan. The CSA has experience of administering ADB funded projects in the WSS sector, and the loan amount will not exceed $200 million. The tentative safeguards categorizations are Category B for environment and involuntary resettlement, and Category C for indigenous peoples. The climate change impact is categorized as medium. The project is tentatively categorized as effective gender mainstreaming considering the potential to promote the female workforce in the TPS and CSA, and the need for female intervention in the project’s public awareness and hygiene initiatives.

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21 The project team may consider consolidating contract packages to the extent possible under the project to make procurement more efficient.


23 A team of international and national consultants will be recruited for (i) field surveys and analyses; (ii) institutional, financial, economic and procurement assessments; (iii) social, safeguards, and gender due diligence; and (iv) feasibility assessment report incorporating necessary technical, institutional, financial, economic, social, and environment documentation.
B. Project Procurement Classification

19. Due to the lengthy procurement process and delays in contract awards on previous projects, the tentative procurement classification is A.

C. Scope of Due Diligence

<table>
<thead>
<tr>
<th>Due Diligence Outputs</th>
<th>Undertaken by</th>
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<tbody>
<tr>
<td>Development coordination</td>
<td></td>
</tr>
<tr>
<td>Economic analysis</td>
<td></td>
</tr>
<tr>
<td>Financial management assessment, financial evaluation, and financial analysis</td>
<td>Staff and TRTA</td>
</tr>
<tr>
<td>Gender analysis, collection of baseline data, and gender action plan</td>
<td></td>
</tr>
<tr>
<td>Safeguard screening and categorization results</td>
<td></td>
</tr>
<tr>
<td>Initial poverty and social analysis</td>
<td></td>
</tr>
<tr>
<td>Project administration manual</td>
<td>Staff</td>
</tr>
<tr>
<td>Risk assessment and management plan</td>
<td>Staff and TRTA</td>
</tr>
<tr>
<td>Safeguard documents on environment, involuntary resettlement, and/or indigenous peoples</td>
<td></td>
</tr>
<tr>
<td>Sector assessment</td>
<td></td>
</tr>
<tr>
<td>Summary poverty reduction and social strategy</td>
<td></td>
</tr>
</tbody>
</table>

TRTA = transaction technical assistance.
Source: Asian Development Bank estimates.

D. Processing Schedule and Sector Group’s Participation

20. The project processing will be led by the Urban Development and Water Division of the Central and West Asia Department. Interdepartmental collaboration with the appropriate operational departments, such as the sector groups and Office of Public-Private Partnership, will be maintained.

<table>
<thead>
<tr>
<th>Milestones</th>
<th>Expected Completion Date</th>
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<tbody>
<tr>
<td>1. Concept Paper</td>
<td>February 2019</td>
</tr>
<tr>
<td>2. TRTA consultants mobilized</td>
<td>March 2019</td>
</tr>
<tr>
<td>3. Loan fact finding</td>
<td>June 2019</td>
</tr>
<tr>
<td>4. Management (Staff) review meeting</td>
<td>July 2019</td>
</tr>
<tr>
<td>5. Loan negotiations</td>
<td>August 2019</td>
</tr>
<tr>
<td>6. Board consideration</td>
<td>September 2019</td>
</tr>
<tr>
<td>7. Loan signing</td>
<td>November 2019</td>
</tr>
</tbody>
</table>

Source: Asian Development Bank estimates.

E. Key Processing Issues and Mitigation Measures

<table>
<thead>
<tr>
<th>Key Processing Issues</th>
<th>Proposed Approaches and/or Mitigation Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>High staff turnover and limited institutional capacity of TPS.</td>
<td>(i) recruitment of an accounting staff, financial management specialists;</td>
</tr>
<tr>
<td></td>
<td>(ii) development of a financial management training plan and training project financial staff;</td>
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<tr>
<td></td>
<td>(iii) preparation of a financial management manual;</td>
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<tr>
<td></td>
<td>(iv) Project Coordination Unit staff change requiring ADB’s prior approval; and</td>
</tr>
<tr>
<td></td>
<td>(v) establishment of performance-based incentive structure.</td>
</tr>
<tr>
<td>Lengthy and frequently changed government procedures</td>
<td>Close coordination with concerned government agencies</td>
</tr>
</tbody>
</table>

ADB = Asian Development Bank, TPS = Tashkent Province Suvokova.
Source: Asian Development Bank estimates.
## PRELIMINARY DESIGN AND MONITORING FRAMEWORK

### Impact the Project isAligned With:
Environment, health, and living conditions in Tashkent province improved (Project defined).

<table>
<thead>
<tr>
<th>Results Chain</th>
<th>Performance Indicators with Targets and Baselines</th>
<th>Data Sources and Reporting Mechanisms</th>
<th>Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcome</strong></td>
<td>By 2026:</td>
<td>a-d. EA project completion report and survey report</td>
<td>Prolonged government approval procedures by oversight agencies delay project implementation</td>
</tr>
<tr>
<td>Access to reliable wastewater services in the cities of Angren, Akhangaran, Almalyk, Chirchik, Bekabod, Yangiyul and the Chinaz urban center of Tashkent province improved and expanded</td>
<td>a. At least 800,000 inhabitants of the six cities and the Chinaz urban center receive centralized wastewater services that meet environmental discharge standards (2018 Baseline: 360,000)</td>
<td></td>
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<tr>
<td></td>
<td>b. At least 23,500 households in rural areas of Chinaz and Yangiyul districts receive improved decentralized wastewater disposal services (septic tanks) (2018 Baseline: 0)</td>
<td></td>
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<tr>
<td></td>
<td>c. Consumer (sex-disaggregated) satisfaction with the quality of wastewater services increased to &gt;40%(^1) (2018 Baseline: &lt;10%)</td>
<td></td>
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<tr>
<td></td>
<td>d. Wastewater tariff revenue from more than 85% user’s population collected (2018 Baseline: &lt;50% from households, and &lt;70% from institutional and commercial establishments)</td>
<td></td>
<td></td>
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<tr>
<td><strong>Outputs</strong></td>
<td>By 2026:</td>
<td>1a-1d. Quarterly TPS project progress reports, EA project completion report</td>
<td>Insufficient institutional capacity of implementing agency may cause delay in project implementation</td>
</tr>
<tr>
<td>1. Centralized urban wastewater systems in the cities of Angren, Akhangaran, Almalyk, Chirchik, Bekabod, Yangiyul and the Chinaz urban center improved</td>
<td>1a. Six existing WWTPs with a combined treatment capacity of 530,000 m(^3)/day rehabilitated/upgraded and commissioned (2018 Baseline: five existing poor performance WWTPs and one existing nonfunctional)</td>
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<td></td>
<td>1b. 69.3 km of sewerage collectors, and 182.5 km of sewerage networks constructed (2018 Baseline: 0)</td>
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<td></td>
<td>1c. Water meters installed in 50,000 households and commercial and institutional establishments (2018 Baseline: 0)</td>
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<td></td>
<td>1d. All new energy efficient pumps and equipment installed in six WWTPs (2018 Baseline: 0)</td>
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<tr>
<td>2. Decentralized wastewater disposal systems in rural settlements of Chinaz and Yangiyul districts improved</td>
<td>2a. One septage management unit operationalized and one septage management program developed (2018 Baseline: 0)</td>
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<td>2b. 21 septage vacuum trucks commissioned (2018 Baseline: 0)</td>
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<td>2c. 23,500 individual household septic tanks installed(^2) (2018 Baseline: 0)</td>
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<tr>
<td></td>
<td>2d. 23,500 households in rural areas of Chinaz and Yangiyul (of which at least 50% are</td>
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</tr>
</tbody>
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\(^1\) Women working in kindergartens, schools, and hospitals bear the responsibility to clean toilets several times a day where sewer connections are unavailable. Improved wastewater services will significantly reduce women’s time in these tasks.

\(^2\) The clear and transparent selection criteria for the beneficiaries of this project intervention will be identified during the next stage of the project preparation. The access of vulnerable groups (poor, women-headed, and disabled) will be considered carefully during the development of these criteria.
represented by women) and public schools including youth have increased awareness on sanitation and hygiene (2018 Baseline: not applicable)

3. TPS wastewater management and project implementation capacity strengthened

| By 2026: | 3a. At least four training modules in corporate development completed (2018 Baseline: 0) |
| 3b. KPI-based reporting for the wastewater operations implemented (2018 Baseline: 0) |
| 3c. A computerized water quality model for the Chirchik, Akhangaran, and Syr Darya rivers developed (2018 Baseline: Not established) |
| 3d. Supervisory control and data acquisition systems and GIS for the wastewater operations implemented (2018 Baseline: 0) |
| 3e. At least four TPS officers (of which at least two officers are women) trained and professionally certified by an accredited international training center in wastewater utility management and wastewater O&M (2018 Baseline: 0) |

3a-3e. Quarterly TPS project progress reports, EA project completion report

Key Activities with Milestones

1. Centralized urban wastewater systems in the cities of Angren, Akhangaran, Almalyk, Chirchik, Bekabod, Yangiyul, and the Chinaz urban center improved

1.1. Mobilize Project Design and Supervision Consultants by Q4 2019
1.2. Commence civil works contract procurement by Q3 2020
1.3. Award civil works contract(s) by Q2 2021
1.4. Complete equipment procurement by Q1 2024
1.5. Complete civil works contract(s) by Q4 2025
1.6. Conduct consumer satisfaction sex-disaggregated survey by Q4 2021
1.7. Conduct WASH practices campaign in schools and hospitals by Q4 2022

2. Decentralized wastewater disposal systems in rural settlements of Chinaz and Yangiyul districts improved

2.1. Develop the training plan on public health, environmental management, sanitation, and waste water management by Q2 2020
2.2. Conduct the training program with at least 30% of training participants to be women by Q3 2021
2.3. Conduct first sanitation and hygiene awareness campaign by Q3 2021
2.4. Establish septage management unit by Q3 2021
2.5. Develop septage management program by Q2 2022
2.6. Complete installation of decentralized wastewater disposal systems by Q3 2024

3. TPS wastewater management and project implementation capacity strengthened

3.1. Mobilize consultants by Q1 2020
3.2. Complete detailed design engineering capacity development by Q4 2020
3.3. Complete training modules in wastewater utility management and wastewater O&M by Q1 2022
3.4. Develop performance benchmarking system by Q1 2022
3.5. Pilot GIS system by Q1 2022
3.6. Pilot O&M program using highly advanced technology by Q1 2022
3.7. Facilitate an exchange/internship program for 20 participants in water supply and sanitation education by Q1 2022

Project Management Activities
CSA and TPS strengthened
Project progress reports prepared and submitted
<table>
<thead>
<tr>
<th>Inputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADB: $160.0 million</td>
</tr>
<tr>
<td>Government: $25.0 million</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Assumptions for Partner Financing</th>
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</thead>
<tbody>
<tr>
<td>Not Applicable</td>
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</tbody>
</table>

ADB = Asian Development Bank, CSA = Communal Services Agency ‘Kommunkhizmat’, EA = executing agency, GIS = geographic information system, km = kilometer, KPI = key performance indicator, O&M = operation and maintenance, PPP = public-private partnership, Q = quarter, TPS = Tashkent Province Suvokova, WASH = water, sanitation and hygiene, WWTP = wastewater treatment plant.

Source: Asian Development Bank estimates.
## PROJECT PROCUREMENT CLASSIFICATION

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Assessor’s Rating:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the procurement environment risk for this project assessed to be high based on the country and sector and/or agency risk assessments?</td>
<td>☒ Yes ☐ No Procurement environment risk for the project is rated as high. It can be reconfirmed or reduced at the project approval stage.</td>
</tr>
<tr>
<td>Are multiple (typically more than three) and/or diverse executing agencies and/or implementing agencies envisaged during project implementation? Do they lack prior experience in implementation under an ADB-financed project?</td>
<td>☐ Yes ☒ No ☐ Unknown</td>
</tr>
<tr>
<td>Are multiple contract packages and/or complex and high-value contracts (compared with recent externally financed projects in the developing member country [DMC]) expected?</td>
<td>☒ Yes ☐ No ☐ Unknown The project has number of civil works, goods, IT systems and consulting services packages.</td>
</tr>
<tr>
<td>Does the project plan to use innovative contracts (public–private partnership, performance-based, design and build, operation and maintenance, etc.)?</td>
<td>☐ Yes ☒ No ☐ Unknown PPP arrangement is expected to be reflected as part of the project components.</td>
</tr>
<tr>
<td>Are contracts distributed in more than three geographical locations?</td>
<td>☐ Yes ☒ No ☐ Unknown</td>
</tr>
<tr>
<td>Are there significant ongoing contractual and/or procurement issues under ADB (or other externally) financed projects? Has misprocurement been declared in the DMC?</td>
<td>☒ Yes ☐ No ☐ Unknown No misprocurement or significant contractual issues under CSA (the project EA) has been experienced.</td>
</tr>
<tr>
<td>Does the DMC have prolonged procurement lead times, experience implementation delays, or otherwise consistently fail to meet procurement time frames?</td>
<td>☒ Yes ☐ No ☐ Unknown The ongoing projects delegated to URM have been experiencing significant implementation delays especially in small procurements for goods and consulting services. However, such delays were caused mostly by the frequently policy changes which are beyond EA/IA’s control.</td>
</tr>
<tr>
<td>Do executing and/or implementing agencies lack capacity to manage new and ongoing procurement? Have executing and/or implementing agencies requested ADB for procurement support under previous projects?</td>
<td>☒ Yes ☐ No ☐ Unknown Due to high turnover of staff.</td>
</tr>
</tbody>
</table>

**Regional department’s overall recommendation (Jung Ho Kim, Senior Urban Development Specialist, CWUW)**

We recommend category B. However, despite the fact that the EA/IA have much experience of administering ADB funded projects in the WSS sector, the tentative procurement classification of A is also acceptable provided that PFP1 will provide hand holding supports to the project team during processing and implementation to ensure suitable procurement arrangements and monitoring mechanism.

**Overall project categorization recommended** ☒ Category A ☐ Category B

**Procurement, Portfolio, and Financial Management Department’s recommendation (Minhong Fan, Procurement Specialist, PPFD)**

Based on the initial findings of the Uzbekistan Country and Sector procurement Risk Assessment (under final report preparation stage) and the past performance of the subject project EA (CSA), PPFD still recommends the proposed project’s procurement classification to be Category A at this stage (the high risk category can be reconfirmed or reduced at the project approval stage if the procurement due diligence at the project preparatory stage results in positive changes/updates in procurement risk compositions and mitigation measures). The due diligence at the project preparation shall include the project procurement risk assessment as well as the relevant market risk assessment as required under ADB’s Guidance Notes on Procurement Risk Framework and Strategic Procurement Planning. The project processing team shall involve the national procurement officer of URM, who will assist the team in procurement related activities under PFP1 staff guidance. Our experience in the last 2 years shows that the EA needs further capacity improvements in handling both large and small procurements in full compliance with ADB procurement procedures. PFP1 and URM will provide hand holding supports to the project team during processing and implementation to ensure suitable procurement arrangements and monitoring mechanism are adopted and effectively implemented. URM and CWUW need to consider country and sector-wide long-term capacity development approach in reducing procurement risks for future projects in WSS sector in Uzbekistan.

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CSA = Uzbekistan Agency ‘Kommunkhizmat’, CWUW = Urban Development and Water Division, DMC = developing member country, EA = executing agency, IA = implementing agency, PFP1 = Procurement Division 1, PPFD = Procurement, Portfolio and Financial Management Department, PPP = public-private partnership, URM = Uzbekistan Resident Mission, WSS= water supply and sanitation.

INITIAL POVERTY AND SOCIAL ANALYSIS

Country: UZB  Project Title: UZB 52045-001: Tashkent Province Sewerage Improvement Project
Lending/Financing Modality: Project  Department/ Division: CWRD / CWUW

I. POVERTY IMPACT AND SOCIAL DIMENSIONS

A. Links to the National Poverty Reduction Strategy and Country Partnership Strategy

The project will support expanded and improved urban sewerage and sanitation. The project is consistent with the Strategy of Actions on Further Development of Uzbekistan, a national development strategy for 2017–2021 in its objectives for inclusive and sustainable growth and access to basic urban services. The project design is in line with the Developing Strategy, Road Map and Investment Program for the Water Supply and Sanitation Sector of the Republic of Uzbekistan till 2020. The project supports ADB’s Country Operational Business Plan 2019-2021, which aims to provide continued assistance to develop Uzbekistan’s municipal infrastructure and services. The project is fully consistent with the municipal services sector prioritized in the CPS which calls for ADB investments in water supply and sanitation, linked with regulatory and institutional reform, to ensure long-term sustainability. The project will also contribute to the achievement of the Sustainable Development Goals, to which the Government of Uzbekistan and ADB are committed.

B. Targeting Classification

The project will improve sanitation services in the six cities and one urban center of Tashkent province by financing the construction of municipal wastewater treatment plants, piped sewerage systems, and on-site sewage treatment benefitting all residents which promotes job creation in the project cities. The public health impacts from increased access to wastewater services and the reduction of overflows, leaks and blockages will benefit the population who often live near polluted inland waterways. The Project also includes a subcomponent to institutionalize pro-poor and gender-inclusive sanitation services in rural settlements in the Yangiyul and Chinaz districts, and to pilot alternative and unconventional on-site sanitation in project areas.

C. Poverty and Social Analysis

1. Key issues and potential beneficiaries.

Tashkent province is Uzbekistan’s fourth largest province with a registered population of 2.8 million and an urban population in project area of 800,000. Poverty incidence is significant at 27%. By 2025, the registered population in Tashkent province is estimated to grow to about 3.2 million with 75% living in cities. These industrial and residential developments will cause significant increase in demand for urban services, including piped water supply, resulting in increased wastewater flow. Investment in infrastructure is needed to meet this present and future demand from improved and expanded urban services and to support clustering of new businesses and industries. The project outputs will be rehabilitation and/or upgrading of five existing and one new WWTP with a combined capacity of 530,000 m³/day, rehabilitation or construction of 69.3 km of sewerage collectors and 182.5 km of sewerage networks, and installation of 50,000 water meters; (ii) installation of 23,500 individual household septic tanks, provision of 21 septage vacuum trucks, operationalization of a septage management unit in the TPS, formulation of a septage management program to rationalize and expand septage collection and disposal services, design and implementation of a sanitation and hygiene awareness program; and (iii) project management and implementation support, institutional capacity development and training in utility management, operation, and service provision, policy dialogue on tariff, sanitation, and public awareness campaigns to improve community awareness and understanding of sanitation best practices, and encourage community support for the centralized wastewater systems. Direct beneficiaries of the project are all households in the apartment areas and public and private entities working in the six cities and one urban center. The total number of the project’s direct and indirect beneficiaries will be confirmed during project processing.

2. Impact channels and expected systemic changes.

The project is designed to (i) improve wastewater treatment and management for domestic and industrial users in six cities and one urban center of Tashkent province, and (ii) create direct short-term employment for construction and indirect long-term income generating opportunities, including industrial development in project area. The project will

benefit the low income and urban households by improving their health conditions and reducing health care expenditure
due to illness caused by unsanitary environment conditions.

3. Focus of (and resources allocated in) the PPTA or due diligence.
The TA consultants will conduct a poverty, social and gender analysis and address social safeguards. A socio-
economic survey and poverty and gender assessment, stakeholder workshops, focus group discussions, and key
informant interviews will be conducted. One of the objectives of the study is the affordability of improved wastewater
services.

4. Specific analysis for policy-based lending. Not applicable

II. GENDER AND DEVELOPMENT

1. What are the key gender issues in the sector/subsector that are likely to be relevant to this project or program?
The project benefits men and women equally, including improved housing conditions and living environment, health
benefits, and job creation. The project will have some added benefits for women, as adequate sanitation facilities at
the home will ease the burden of women on tasks related to sanitation, health, and hygiene and will likewise reduce
medical costs on waterborne and other infectious diseases.

2. Does the proposed project or program have the potential to make a contribution to the promotion of gender equity
and/or empowerment of women by providing women’s access to and use of opportunities, services, resources,
assets, and participation in decision making?

☐ Yes  ☐ No  At least 50% of persons trained as hygiene promoters will be women. Employment opportunities
for women will potentially be created (e.g. 10% are female staff of six cities of Suvokova and indirect opportunities
for small business creation). Gender specific elements will be incorporated into hygiene awareness campaigns and in the
design of sewerage infrastructure. Improvement of sanitation services and hygiene in social institutions (schools,
kindergartens and rural health clinics) will improve school attendance rates for girls. Female staff from six cities of
Tashkent Provincial Suvokova will benefit from training and mentoring through the project. A Gender Action Plan will
be prepared through due diligence.

3. Could the proposed project have an adverse impact on women and/or girls or widen gender inequality?

☐ Yes  ☐ No

4. Indicate the intended gender mainstreaming category:

- GEN (gender equity theme)
- EGM (effective gender mainstreaming)
- SGE (some gender elements)
- NGE (no gender elements)

III. PARTICIPATION AND EMPOWERMENT

1. Who are the main stakeholders of the project, including beneficiaries and negatively affected people? Identify how
they will participate in the project design.

Stakeholders include (i) project area populations; (ii) social institutions (schools, kindergarten, hospitals and rural health
clinics; (iii) local businesses; (iv) local cities of khokimiyats and government institutions; (v) local non-government
organizations which may be involved in community consultation activities. Lessons learned from prior interventions
suggest that assistance will need to be directed towards building the capacity of communities and implementing
partners, so that both government and community may be equipped to effectively engage each other on a mutual
cooperative undertaking. The local populations will be engaged in the identification of suitable locations for
infrastructure, including pipelines, household connections and communal facilities, and participation will continue to be
undertaken in all phases of the project from planning, implementation and monitoring and evaluation. The households
of the project area will benefit from the Water, Sanitation and Hygiene training program.

2. How can the project contribute (in a systemic way) to engaging and empowering stakeholders and beneficiaries,
particularly, the poor, vulnerable and excluded groups? What issues in the project design require participation of the
poor and excluded? During TRTA implementation, public consultations will be held to design the resettlement plan with
active participation of women, low income population and communities. The project will ensure that low income
households will participate also in consultations on tariff reform to ensure service charges are at affordable levels.

3. What are the key, active, and relevant civil society organizations in the project area? What is the level of civil
society organization participation in the project design?

- Information generation and sharing
- Consultation
- Collaboration
- Partnership

4. Are there issues during project design for which participation of the poor and excluded is important? What are they
and how shall they be addressed?  ☐ Yes  ☐ No

IV. SOCIAL SAFEGUARDS

A. Involuntary Resettlement Category  ☐ A  ☐ B  ☐ C  ☐ FI

1. Does the project have the potential to involve involuntary land acquisition resulting in physical and economic
displacement?  ☐ Yes  ☐ No

The project has the potential to involve temporary land acquisition impact due to construction of new sewerage mains
in the project areas. No permanent impact is expected as the project works for reconstruction of wastewater treatment
plants will be implemented within perimeters of existing wastewater treatment facilities. The project works will not lead to any physical displacement.

2. What action plan is required to address involuntary resettlement as part of the PPTA or due diligence process?

|                    | Resettlement plan | Resettlement framework | Social impact matrix | None
|--------------------|-------------------|------------------------|----------------------|------

B. Indigenous Peoples Category

1. Does the proposed project have the potential to directly or indirectly affect the dignity, human rights, livelihood systems, or culture of indigenous peoples?  Yes  No
2. Does it affect the territories or natural and cultural resources indigenous peoples own, use, occupy, or claim, as their ancestral domain?  Yes  No  The country in general does not have indigenous people’s communities as defined in the Safeguard Policy Statement for operational purposes.
3. Will the project require broad community support of affected indigenous communities?  Yes  No
4. What action plan is required to address risks to indigenous peoples as part of the PPTA or due diligence process?

|                    | Indigenous peoples plan | Indigenous peoples planning framework | Social Impact matrix | None
|--------------------|-------------------------|--------------------------------------|----------------------|------

V. OTHER SOCIAL ISSUES AND RISKS

1. What other social issues and risks should be considered in the project design? None
   - Creating decent jobs and employment
   - Adhering to core labor standards
   - Labor retrenchment
   - Spread of communicable diseases, including HIV/AIDS
   - Increase in human trafficking
   - Affordability
   - Increase in unplanned migration
   - Increase in vulnerability to natural disasters
   - Creating political instability
   - Creating internal social conflicts
   - Others, please specify ________________
2. How are these additional social issues and risks going to be addressed in the project design? Not applicable

VI. PPTA OR DUE DILIGENCE RESOURCE REQUIREMENT

1. Do the terms of reference for the PPTA (or other due diligence) contain key information needed to be gathered during PPTA or due diligence process to better analyze (i) poverty and social impact; (ii) gender impact, (iii) participation dimensions; (iv) social safeguards; and (vi) other social risks. Are the relevant specialists identified?
   Yes  No
2. What resources (e.g., consultants, survey budget, and workshop) are allocated for conducting poverty, social and/or gender analysis, and participation plan during the PPTA or due diligence? An International Social Safeguards (Resettlement) Specialist (1 person-month), National Resettlement Specialist (6 person-months) and National Social Development and Gender Specialist (4 person-months) will be engaged. Budget for conducting surveys and workshops related to conducting poverty, social and/or gender analysis is included.