

Report and Recommendation of the President to the Board of Directors

INTERNAL

Project Number: 54017-001 September 2022

Proposed Loan and Administration of Grant Republic of Uzbekistan: Integrated Urban Development Project

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Asian Development Bank

CURRENCY EQUIVALENTS

(as of 1 September 2022)

Currency unit	_	sum (SUM)
SUM1.00	=	\$0.000091
\$1.00	=	SUM10,940.43

ABBREVIATIONS

ADB	_	Asian Development Bank
CAREC	_	Central Asia Regional Economic Cooperation
COVID-19	_	coronavirus disease
DST	_	Djizzak Suvtaminot
DTH	_	Djizzak Toza Hudud
EMP	_	environmental management plan
FIRR	_	financial internal rate of return
ha	_	hectare
HLTF	_	High-Level Technology Fund
IEE	-	initial environmental examination
km	_	kilometer
KTH	_	Khorezm Toda Hudud
MIFT	_	Ministry of Investments and Foreign Trade
MOF	-	Ministry of Finance
NRW	-	nonrevenue water
O&M	-	operation and maintenance
OP	_	operational priority
PAM	-	project administration manual
PIU	-	project implementation unit
PRF	-	project readiness financing
STH	_	Sirdaryo Toza Hudud
SUE	_	state unitary enterprise
SWM	_	solid waste management
ТА	-	technical assistance
WASH+H	-	water, sanitation, hygiene, and health
WSS	_	water supply and sanitation

NOTE

In this report, "\$" refers to United States dollars.

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CONTENTS

PROJECT AT A GLANCE

MAP

I.	THE PROPOSAL	1
II.	THE PROJECT	1
	 A. Rationale B. Project Description C. Value Added by ADB D. Summary Cost Estimates and Financing Plan E. Implementation Arrangements 	1 4 5 5 7
III.	ATTACHED TECHNICAL ASSISTANCE	8
IV.	DUE DILIGENCEA.TechnicalB.Economic and Financial ViabilityC.SustainabilityD.GovernanceE.Poverty, Social, and GenderF.SafeguardsG.Summary of Risk Assessment and Risk Management Plan	8 8 9 10 10 11
V.	ASSURANCES AND CONDITION	12
VI.	RECOMMENDATION	12
APP	PENDIXES	
1.	Design and Monitoring Framework	13
2.	List of Linked Documents	17

Page

PROJECT AT A GLANCE

4	Pagia Data		Dra	is at Number 54017 001
1.	Basic Data Project Name	Integrated Urban Development Project	Department/Division	oject Number: 54017-001 CWRD/CWUW
	Country	Uzbekistan	Executing Agency	Ministry of Investments
	Borrower	Republic of Uzbekistan		and Foreign Trade
				(MIFT)
	Country Economic	https://www.adb.org/Documents/LinkedDocs/		
	Indicators	<u>?id=54017-001-CEI</u>		
	Portfolio at a Glance	https://www.adb.org/Documents/LinkedDocs/ ?id=54017-001-PortAtaGlance		
		<u>{IU=54017-001-POILALAGIANCE</u>		
2.	Sector	Subsector(s)	AI	DB Financing (\$ million)
1	Water and other urban	Other urban services		25.180
	infrastructure and services	Urban policy, institutional and capacity develo	pment	6.373
		Urban sanitation		0.115
		Urban sewerage		2.460
		Urban solid waste management		6.877
		Urban water supply		17.995
			Total	59.000
•				
	Operational Priorities OP1: Addressing remaining po	werty and reducing inequalities	Climate Change Infor GHG reductions (tons)	
	OP2: Accelerating progress in	· · · ·	annum)	0,020.000
		building climate and disaster resilience, and	Climate Change impac	t on the Medium
1	enhancing environmental susta		Project	
1	OP4: Making cities more livable			
	OP6: Strengthening governand		ADB Financing	
	OP7: Fostering regional coope		Adaptation (\$ million)	7.000
•			Mitigation (\$ million)	0.760
			Cofinancing	
			Adaptation (\$ million)	0.000
			Mitigation (\$ million)	0.000
	Sustainable Development Go	bals	Gender Equity and Ma	
	SDG 1.4 SDG 5.2, 5.5		Effective gender mains	streaming (EGM) 🧳 🦨
	SDG 5.2, 5.5 SDG 6.1, 6.2, 6.4		Poverty Targeting	
	SDG 10.2		General Intervention or	n Povertv 🧹
	SDG 11.1, 11.3, 11.4, 11.6, 11	.7		•
	SDG 12.5			
	SDG 13.a			
4	Risk Categorization:	Low		
			aattlamanti D. Indigang	
5.	Safeguard Categorization	Environment: B Involuntary Re	settlement: D indigend	bus reoples: C
6.	Financing			
	Modality and Sources		Amount (\$ milli	on)
	ADB			59.000
	Sovereign Project (Conces	ssional Loan): Ordinary capital resources		59.000
	Cofinancing			0.500
	•	Ind - Project grant (Full ADB Administration)		0.500
	Counterpart	, , , , , , , , , , , , , , , , , , , ,		8.650
	Government			8.650
				68.150
	Total			00.100

Currency of ADB Financing: US Dollar



21-0196 19UZB ABV

I. THE PROPOSAL

1. I submit for your approval the following report and recommendation on a proposed loan to the Republic of Uzbekistan for the Integrated Urban Development Project. The report also describes the proposed administration of a grant to be provided by the High-Level Technology Fund (HLTF) for the Integrated Urban Development Project,¹ and if the Board approves the proposed loan, I, acting under the authority delegated to me by the Board, approve the administration of the grant.

2. The proposed project will support inclusive, resilient, and sustainable urban infrastructure and services in four secondary cities (Djizzak, Havast, Khiva, and Yangiyer) experiencing low livability and lagging growth exacerbated by the coronavirus disease (COVID-19) pandemic.² It will demonstrate integrated and innovative solutions, and strengthen institutional capacity for "building back better".³ These measures will (i) enhance livability for residents and visitors, including persons with disabilities; (ii) support green and resilient economic recovery targeting women; (iii) accelerate digital transformation, particularly in the tourism and water sectors; and (iv) increase the quality, coverage, efficiency, and reliability of urban services. The project supports the government's national development strategy, 2022–2026,⁴ which aims to accelerate growth and reduce poverty through improved urbanization and balanced regional development.

II. THE PROJECT

A. Rationale

3. **Sector context and trends.** Since Uzbekistan became independent in 1991, urbanization has lagged, leading to significant regional imbalances.⁵ More than half of the urban population is concentrated in its easternmost regions—around the capital city of Tashkent and in the Fergana Valley, an industrial center. Although a considerable share of the urban population lives in the largest cities, the fastest population increases have been in medium-sized cities with untapped potential for generating jobs.⁶ The lifting of internal mobility restrictions in 2020 and a significant youth bulge will continue to put pressure on the internal labor market and drive migration. To absorb this growth and provide livability, secondary cities must confront challenges of urban sprawl, polluted environments, degraded infrastructure, water insecurity, and the lingering economic impact of COVID-19, particularly on the poor and women. The project will demonstrate how urban planning concepts—embodying smart, green, resilient, inclusive urbanism—and integrated solutions can improve livability and economic competitiveness in secondary cities.

4. **Government strategy.** In 2019, the government issued Presidential Decree No. 5623 to support the integrated development of cities.⁷ In 2020, the government established the

¹ Financing partner: the Government of Japan.

² The government requested the Asian Development Bank (ADB) to demonstrate international good practices in integrated development in the four project cities. The cities were selected by the government as a representative sample of secondary cities in terms of size, geographic coverage, and strategic potential: Djizzak, a growing industrial hub (177,000 population) in the center of the country; Khiva, a tourist city (92,400 population) with Silk Road heritage; and Havast (28,400 population) and Yangiyer (43,600 population), neighboring cities with agglomeration potential near the border of Tajikistan. The government aims to replicate lessons from the project in other cities.

³ ADB. 2020. *Livable Cities: Post-COVID-19 New Normal.* Manila.

⁴ Government of Uzbekistan. 2022. <u>Presidential Decree No. 60. On New Uzbekistan Development Strategy for 2022–</u> <u>2026</u>. Tashkent.

⁵ From 2010 to 2019, Uzbekistan's urban population declined from 51.5% to 50.5% of total population (Government of Uzbekistan. 2020. <u>State Committee on Statistics: Demographic Indicators.</u> Tashkent.)

⁶ World Bank. 2018. <u>Project Document: Medium-Size Cities Integrated Urban Development Project.</u> Washington, DC.

⁷ Government of Uzbekistan. 2019. Presidential Decree No. 5623 On Measures to Fundamentally Improve the Process of Urbanization. Tashkent.

Department of Urbanization Policy Development under the Ministry of Economic Development and Poverty Reduction to oversee its urban agenda. Reforms in the last 3 years include a new urban planning code requiring citizen participation, fiscal decentralization, and new agencies for public–private partnership, water supply, solid waste management (SWM), and cadaster.⁸ However, weak institutional capacity and coordination for strategic urban development remains a significant challenge for cities. To enhance coordination, the government appointed the Ministry of Investments and Foreign Trade (MIFT) as the focal agency to work with development partners in formulating integrated urban development projects that demonstrate international practices in sustainable urbanization for further replication.

5. Key issues in project cities. The three project regions of Djizzak, Sirdaryo, and Khorezm have historically ranked at the bottom nationally in terms of quality of life, economic competitiveness, and infrastructure development.⁹ Key issues facing the project cities include (i) an economic slowdown because of COVID-19 combined with a lack of economic diversity, unskilled workforce, and high unemployment, especially among women and youth; (ii) underinvestment in aging infrastructure leading to poor guality of water supply and sanitation (WSS) services with a lack of universal coverage and limited operation and maintenance (O&M); and (iii) a deficit of green, usable, and safe public spaces, especially for women and persons with disabilities. In Diizzak, high in-migration, inadequate basic services, and the poor quality of the urban environment contribute to low livability and imbalanced socioeconomic development. In Khiva, a 90% decrease in tourists because of COVID-19, a lack of visitor services, weak linkages with other "Silk Road" destinations, and disconnected tourism value chains prevent diversified, inclusive growth.¹⁰ In Havast, low-quality solid waste services, a lack of public spaces, and a young, unskilled workforce constrain competitiveness; and in Yangiyer, poor solid waste collection services inhibit livability.

6. Water supply services delivery in the project cities is constrained by intermittent supply (4–8 hours per day), low pressure, aging pipelines built 40–50 years ago, high nonrevenue water (NRW) estimated at 40%, and defective disinfection systems.¹¹ These pose health risks, with a disproportionate impact on women and the poor. Sewerage and solid waste collection coverage are low in the four project cities. Sewerage coverage ranges from 13% to 37% while solid waste collection ranges from 41% to 91%, with no formalized recycling programs and limited public awareness in waste minimization. There is a need to upgrade Soviet-era infrastructure with modern solutions to improve efficiency, O&M, asset management, and to support water, sanitation, hygiene, and health (WASH+H) measures in communities to reduce the spread of infectious diseases such as COVID-19.

7. **Institutional issues.** A legacy of centralized governance left city *hokimiyats* (local governments) with technical, organizational, and financial capacity constraints, inhibiting their ability to effectively manage, plan, invest, and deliver services in an integrated manner. Utility operators operate with low efficiency, weak O&M, low revenues, outdated technology, poor financial and asset management, weak customer service, and limited knowledge of modern

⁸ ADB. 2021. *Harnessing Uzbekistan's Potential for Urbanization. National Urban Assessment*. Manila.

⁹ Center for Economic Research. 2009. <u>Urbanization and industrialization in Uzbekistan: Challenges, Problems and Prospects.</u> Tashkent.

¹⁰ Government of Uzbekistan. 2020. Ministry of Tourism and Cultural Heritage. <u>Statistics.</u> Tashkent.

¹¹ The project's WSS investments focus on Djizzak, while other development partners are supporting WSS in the other project cities. In Djizzak, water service is 4 hours per day intermittent, piped water coverage is 87%, NRW is estimated as high as 46% with limited bulk flow meters, household metering is about 72%, and sewerage coverage is 37%. ADB's ongoing project (ADB. 2015. <u>Report and Recommendation of the President to the Board of Directors:</u> <u>Proposed Loan to the Republic of Uzbekistan for the Djizzak Sanitation System Development Project</u>. Manila.) is improving sewerage coverage to 70%, and the project will fill coverage gaps in the project area.

solutions and best practices. There is a need to professionalize their capacities in strategic planning and budgeting, operational efficiency, O&M, municipal finance, citizen participation (particularly women), high-level technology, and private sector cooperation, to ensure high-quality, responsive, and sustainable urban services delivery.

8. **Climate change risks.** Average temperatures are expected to increase by 2°C–3°C in the next 50 years in Uzbekistan.¹² The project areas are vulnerable to more extreme and frequent heat waves particularly in the western provinces. Water scarcity is a significant risk linked to climate change that is expected to worsen and severely affect the country's urban water supplies. There is a need to improve the efficiency of water supply systems, expand water-saving technologies, and support green spaces to counteract the heat-island effect in urban areas.

9. **Lessons.** This is the first integrated urban development project of the Asian Development Bank (ADB) in Uzbekistan, as past projects focused separately on water supply, sanitation, or SWM. Key lessons include (i) aligning with the government's reform agenda for greater impact; (ii) supporting capacity building in O&M and revenue generation to improve sustainability; (iii) building ownership through local participation; (iv) improving project readiness to avoid start-up delays;¹³ and (v) providing technical assistance (TA) support throughout project implementation.¹⁴

10. **Development partner coordination.** ADB is closely coordinating with other partners in the urban sector, including the World Bank, the Asian Infrastructure Investment Bank, the European Bank for Reconstruction and Development, and the Islamic Development Bank. The World Bank's ongoing Medium-Size Cities Integrated Urban Development Project (footnote 6) supports strategic city investments and provides institutional support at the national level.¹⁵

11. **Strategic relevance.** The project is aligned with (i) the national development strategy, 2022–2026 (footnote 4); (ii) updated national climate change strategies;¹⁶ (iii) ADB's country partnership strategy for Uzbekistan, 2019–2023;¹⁷ (iv) the Central Asia Regional Economic Cooperation (CAREC) Tourism Strategy 2030;¹⁸ and (v) the following operational priorities (OPs) of ADB's Strategy 2030: OP1—addressing remaining poverty and reducing inequalities; OP2—accelerating progress in gender equality; OP3—tackling climate change, building climate and disaster resilience, and enhancing environmental sustainability; OP4—making cities more livable; OP6—strengthening governance and institutional capacity; and OP7—fostering regional cooperation and integration.¹⁹ The project is aligned with the overall goals of the Paris Agreement, through improved SWM to reduce greenhouse gas emissions, improved water management to enhance water security, and greening of urban areas to adapt to more intense heatwaves.²⁰

¹² ADB. 2020. <u>Technical Assistance for Supporting Ambitious Climate Action through Implementation of Developing</u> <u>Member Countries' Nationally Determined Contributions (Subproject 1)</u>. Manila.

¹³ ADB. 2019. <u>Technical Assistance to the Republic of Uzbekistan for Preparing Urban Development and Improvement Projects.</u> Manila; and ADB. 2019. <u>Project Readiness Financing Report to the Republic of Uzbekistan for Urban Services Projects.</u> Manila.

¹⁴ Independent Evaluation Department. 2021. <u>Validation Report. Water Supply and Sanitation Services Investment</u> <u>Program (Multitranche Financing Facility and Tranche 4) in Uzbekistan.</u> Manila: ADB.

 ¹⁵ The World Bank project supports reforms and capacity building of central agencies in areas of master planning, fiscal decentralization, and tourism strategy development. There is no overlap in cities supported under the projects.
 ¹⁶ Republic of Uzbekistan. 2021. <u>Updated Nationally Determined Contributions</u>. Tashkent.

¹⁷ ADB. 2019. <u>Country Partnership Strategy: Uzbekistan, 2019–2023–Supporting Economic Transformation.</u> Manila.

¹⁸ ADB. 2020. <u>CAREC Tourism Strategy 2030</u>. Manila. The project is aligned with strategic pillar 1 of this strategy.

¹⁹ ADB. 2018. <u>Strategy 2030: Achieving a Prosperous, Inclusive, Resilient, and Sustainable Asia and the Pacific.</u> Manila.

²⁰ Climate change mitigation investments include energy-efficient water pumps, waste minimization and recycling, energy efficiency audits, LED lights, and green building designs. Climate change adaptation investments comprise

B. Project Description

12. The project is aligned with the following impact: sustainable urbanization and welfare of the urban population enhanced (footnote 7). The project will have the following outcome: access to inclusive, resilient, and sustainable urban services in secondary cities enhanced.²¹

13. Output 1: Inclusive municipal and tourist infrastructure and services provided. Under this output, the project will (i) develop a new 6-hectare (ha) public park in Havast with green space and a multifunctional community center, including a public library and a livelihood training facility to support skills development for small and medium-sized enterprises targeting women and youth; (ii) construct a new two-story visitor center in Khiva featuring Uzbekistan's first digital museum, showcasing Silk Road-themed heritage, with women-friendly facilities and bicycle rental;²² (iii) create a new 2.4-kilometer (km) linear public greenway in Khiva linked to the new visitor center along an existing irrigation canal, with bicycle and pedestrian paths, green space. street furniture, signage, and playgrounds; and (iv) demonstrate holistic area-based development in three underserved mahallas (communities) in Djizzak (Ittifog, Dustlik, and Yoshlik) through the integrated development of street corridors, including drainage, lighting, street surfaces, pedestrian sidewalks, public open spaces with neighborhood parks and playgrounds, and a bus stand, and including WSS improvements under output 2. All facilities will be designed with universal access for persons with mobility impairments and will feature women-friendly designs. Local governments will own and operate assets under output 1.

14. **Output 2: Climate-resilient drinking water, sanitation, and solid waste services enhanced with smart systems.** In Djizzak city, the project will (i) support universal coverage of basic WSS services in three underserved *mahallas* (Ittifoq, Dustlik, and Yoshlik) through the development of about 21 km of water distribution networks with metered household connections, construction of about 14 km of sewerage networks with house connections,²³ and a climate-smart water pilot demonstrating water-saving technology and NRW management in new district metered areas;²⁴ and (ii) improve the bulk water supply transmission, distribution, and monitoring system for Djizzak city through the development of about 12.5 km of water transmission pipelines and about 27 km of distribution pipelines; installation of ultrasonic bulk water meters, energy efficient variable frequency controlled pumps, new pressure regulators and air vent valves; improvement of two intake facilities (chlorination and fencing); installation of a supervisory control and data acquisition system to optimize remote monitoring of water production; establishment of a geographic information system hydraulic model for the Djizzak city-wide water supply network; implementation of an asset management system; energy audit; and purchase of O&M equipment.

green parks to cope with the heat-island effect, water loss reduction to enhance water security, and improvements in the efficiency of waste collection to reduce adverse health effects from waste under increased temperatures.

²¹ The design and monitoring framework is in Appendix 1. The project was prepared by the Cities Development Initiative for Asia with funding support from Austria, the European Union, France, Germany, the Republic of Korea, the Rockefeller Foundation, Switzerland, the United Kingdom, and the Urban Climate Change Resilience Trust Fund. ADB. 2020. <u>Technical Assistance for Supporting the Cities Development Initiative for Asia: Project Preparation Study for the Integrated Urban Development Project in Uzbekistan.</u> Manila.

²² Women-friendly travel services include information on safety and security. The visitor center is near Khiva's train station and will complement ADB's Bukhara–Khiva rail electrification project, which will boost tourist arrivals in Khiva. ADB. 2021. <u>Report and Recommendation of the President to the Board of Directors: Proposed Loan and Administration of Loan to the Republic of Uzbekistan for the Central Asia Regional Economic Cooperation Corridor 2 (Bukhara–Miskin– Urgench–Khiva) Railway Electrification Project. Manila.</u>

²³ The WSS investments in the three *mahallas* form part of the holistic, area-based development approach under output 1 and will benefit 4,598 households (2,620 Ittifoq; 926 Dustlik; and 1,052 Yoshlik).

²⁴ The smart water pilot will be implemented in coordination with the proposed United States Trade and Development Agency grant-funded pilot on digital twin technology for remote monitoring of pressure and leaks in the pilot area. This pilot is a scaling up of <u>ADB's Digital Innovation Sandbox</u> (2020–2021) in Tashkent Province.

In the four cities, the project will implement a WASH+H program by providing toilet and handwashing facilities at project-area public facilities and public spaces complemented by community awareness and behavior change campaigns.²⁵ The output will enhance environmental-friendly SWM services in the four cities as follows: (i) provide collection equipment and waste containers; (ii) construct 25 community collection points with sorting areas for resource recovery in Yangiyer and Havast;²⁶ (iii) construct a shared transfer station for Havast and Yangiyer; and (iv) implement a public awareness campaign on waste minimization and recycling in all four cities. Assets under output 2 will be operated by the respective local utility operators.

Output 3: Urban governance, institutional capacity, and livelihood support 15. strengthened. The project will provide a structured capacity development program to improve sustainability, operational efficiency, and services delivery in the four project cities. The four city governments will receive comprehensive training in integrated urban development and governance, including strategic planning and budgeting, municipal revenue improvement planning,²⁷ public asset management, O&M, e-governance, citizen participation, and private sector cooperation, particularly for the operation of the new visitor center in Khiva. The water operator in Djizzak will receive training in key areas of utility management, including O&M, asset management, volumetric tariffs and cost recovery, financial management, service standards, digital tools, operational efficiency, and customer service. The solid waste operators and communities will be exposed to waste minimization and reduce, reuse, recycle (3Rs) awareness campaigns. This output will also provide livelihood programs, including tourism skills trainings in Khiva and support for small and medium-sized enterprises in Havast linked to output 1, targeting women and youth. Output 3 will incorporate climate resilience in urban planning, awareness building, and skills trainings. It will be supported by urban governance and institutional strengthening consultants, and TA experts.²⁸

C. Value Added by ADB

16. ADB's support will ensure the following international best practices and innovations: (i) supporting high-level technology in tourism with the country's first-ever digital museum as part of the new visitor center in Khiva; introducing state-of-the-art technology in the water sector in Djizzak, including a supervisory control and data acquisition system and online monitoring platforms to manage NRW in cooperation with the United States Trade and Development Agency (footnote 24); (ii) enhancing regional cooperation and integration by promoting Khiva's linkages to CAREC tourism clusters; (iii) climate adaptation features; and (iv) use of project readiness financing (PRF) for timely project startup.

D. Summary Cost Estimates and Financing Plan

17. The project is estimated to cost \$68.15 million, including physical and price contingencies,

²⁵ ADB. 2020. <u>Technical Assistance for the COVID-19 Infection Prevention and Control through an Integrated Water,</u> <u>Sanitation, Hygiene, and Health Approach</u>. Manila. This TA supports awareness building and behavior change in the project cities. Toilet facilities will be maintained by the city government.

²⁶ Waste collected in the project cities will be disposed of in new regional sanitary landfills, which the government, supported by other development partners, is constructing in parallel as part of its National Strategy of Solid Waste Management (2019–2028). Commissioning of new landfills coincides with project completion in 2027. In support of sustainable waste disposal, ADB is also training regional waste operators, including in the project area, in asset management, O&M, and formulating new business models for disposal operations as part of an ongoing SWM project (ADB. 2019. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Republic of Uzbekistan for Sustainable Solid-Waste Management Project.* Manila.)

²⁷ ADB. 2020. <u>Technical Assistance for Support to the Implementation of Strategy 2030 Operational Plans.</u> Manila. This TA supports capacity building in municipal finance and financial sustainability of project cities.

²⁸ Other areas of TA support under output 3 include tourism and livelihood development (para. 22).

taxes and duties, and financial charges during implementation (Table 1). The project cost will be financed by a \$59.00 million concessional loan from ADB's ordinary capital resources, a \$0.5 million HLTF grant (footnote 1), and a contribution of \$8.65 million from the Government of Uzbekistan to finance taxes and duties. The concessional loan will fund the civil works, equipment, consulting services, resettlement costs, project management costs, and interest charges. The HLTF grant will exclusively fund the costs of the digital museum goods and services. The stand-alone project will support a defined investment plan. Detailed cost estimates by expenditure category and by financier are included in the project administration manual (PAM).²⁹

Table 1: Summary Cost Estimates

(\$ million)

Item		Amount ^a
Α.	Base Cost ^b	
	 Inclusive municipal and tourist infrastructure and services provided. 	22.59
	2. Climate-resilient drinking water, sanitation, and solid waste services enhanced	
	with smart systems.	31.06
	3. Urban governance, institutional capacity, and livelihood support strengthened.	2.87
	Subtotal (A)	56.52
В.	Contingencies	8.50
C.	Financial Charges During Implementation ^d	3.13
	Total (A+B+C)	68.15

^a Includes taxes and duties of \$8.65 million. Such amount does not represent an excessive share of the project cost. The government will finance \$8.65 million of taxes through cash contribution and duties through exemption.

^b In mid-2022 prices as of 1 March 2022.

^c Physical contingencies computed at 9.0% of base cost estimates for civil works and equipment, comprising of minimum 7.5% physical contingency rate plus allowance arising from the impact of the Russian invasion of Ukraine on the Uzbekistan economy. Price contingencies computed at an average of 1.7% on foreign exchange costs and 7.5% on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^d Interest during construction for Asian Development Bank loan computed at 2% per year during the 5-year grace period.

Source: Asian Development Bank estimates.

18. The government has requested (i) a concessional loan of \$59.0 million from ADB's ordinary capital resources and (ii) a grant of \$0.5 million from the HLTF to help finance the project. The loan will have a 25-year term, including a grace period of 5 years; an interest rate of 2.0% per year during the grace period and thereafter; and such other terms and conditions set forth in the draft loan, grant, and project agreements. The HLTF grant cofinancing will be fully administered by ADB.

19. The summary financing plan is in Table 2. The proceeds of the loan will be relent to limited liability company Djizzak Suvtaminot (DST),³⁰ state unitary enterprise (SUE) Djizzak Toza Hudud (DTH), SUE Khorezm Toza Hudud (KTH), SUE Sirdaryo Toza Hudud (STH),³¹ Djizzak Hokimiyat, Khiva Hokimiyat, and Havast Hokimiyat in the amounts corresponding to their respective subprojects,³² on terms and conditions acceptable to ADB, including (i) interest at the rate

²⁹ Project Administration Manual (accessible from the list of linked documents in Appendix 2).

³⁰ DST is a limited liability company wholly owned by Uzsuvtaminot Joint Stock Company, which in turn is wholly owned by the Ministry of Finance (MOF), Government of Uzbekistan.

³¹ SUE or state unitary enterprise is a form of state ownership over business entities (such as DTH, KTH, and STH) whose assets are wholly owned by the state and who are mandated to perform certain public service/utility functions within designated areas of responsibility.

³² DST totaling an estimated \$22.69 million for WSS investments; DTH totaling an estimated \$2.20 million; KTH totaling an estimated \$1.30 million; STH totaling an estimated \$4.26 million for SWM investments; Djizzak Hokimiyat totaling an estimated \$14.43 million; Khiva Hokimiyat totaling an estimated \$6.23 million; and Havast Hokimiyat totaling an estimated \$7.89 million for municipal services investments.

applicable to the loan, plus a margin of not more than 1.0% for DST, DTH, KTH, and STH; (ii) foreign exchange risk being borne by subborrowers; and (iii) a term of up to 25 years, including a grace period of up to 5 years. The HLTF grant proceeds will be made available to Khiva Hokimiyat on terms and conditions acceptable to ADB. ADB will finance the expenditures in relation to civil works, goods, consulting and nonconsulting services, environment and social mitigation, project management, financial charges during implementation, and part of the administrative expenses exclusive of taxes and duties.

Source	Amount (\$ million)	Share of Total (%)
Asian Development Bank		
Ordinary capital resources (concessional loan)	59.00	86.6
High-Level Technology Funda	0.50	0.7
Government of Uzbekistan	8.65	12.7
Total	68.15	100.0

Table 2: Summary Financing Plan

^a Financing partner: the Government of Japan. Administered by the Asian Development Bank. Source: Asian Development Bank estimates.

20. Climate mitigation is estimated to cost \$0.76 million and climate adaptation is estimated to cost \$7.0 million (footnote 20). ADB will finance 100% of these costs. Details are in the PAM (footnote 29).

E. Implementation Arrangements

21. MIFT is the executing agency. MIFT's Center for the Development of Investment Projects will coordinate the project at the national level and a project implementation unit (PIU) will implement the project in coordination with city governments and service providers. These arrangements are summarized in Table 3 and described in detail in the PAM (footnote 29).

Table 3: Implementation Arrangements			
Aspects	Arrangements		
Implementation period	November 2022–November 2027		
Estimated completion date	30 November 2027		
Estimated loan closing date	31 May 2028		
Estimated grant closing date	31 December 2025		
Management	·		
(i) Executing agency	MIFT		
(ii) Implementation unit	MIFT's Center for Development of Invest MIFT's PIU (19 staff) will implement the		
(iii) Key implementing entities	<i>Hokimiyats</i> in Djizzak, Havast, Khiva, and Yangiyer; <i>toza hududs</i> (SUEs) in Djizzak, Khiva (Khorezm), and Sirdaryo; and Djizzak Suvtaminot LLC will own and operate their respective assets developed under the project and receive capacity building.		
Procurement	Open competitive bidding (internationally advertised) for works	7 contracts	\$38.29 million
	Open competitive bidding (nationally advertised) for works	3 contracts	\$1.31 million
	Open competitive bidding (internationally advertised) for goods	1 contract	\$5.06 million
	Request for quotations for nonconsulting services	1 contract (audit firm) ^a	\$0.1 million
Consulting services	QCBS 90:10 Project management and supervision consultant	68 person-months (international), 241 person-months (national)	\$3.55 million
	QCBS 90:10 Urban governance and institutional strengthening consultant	54 person-months (international), 165 person-months (national)	\$2.67 million

Table 3: Implementation Arrangements

Aspects	Arrangements	
Retroactive financing and/or advance contracting ^b	Advance contracting applies to all civil works, goods, and consulting services packages. Retroactive financing will be allowed for up to 20% of the loan amount to cover eligible expenditures incurred under the project before the effective date, but not earlier than 12 months before signing.	
Disbursement	Disbursement of the loan and grant proceeds will follow ADB's <i>Loan Disbursemer Handbook</i> (2017, as amended from time to time) and detailed arrangements agreed between the government and ADB.	

ADB = Asian Development Bank, LLC = limited liability company, MIFT = Ministry of Investments and Foreign Trade, PIU = project implementation unit, QCBS = quality- and cost- based selection, SUE = state unitary enterprise.

^a The auditor will cover the audit of consolidated project financial statements and entity financial statements of the implementing entities starting from 2025; for LLC Djizzak Suvtaminot, the loan will cover audit costs from 2026.

^b All works, goods, and consulting services packages will be design or procurement ready with a minimum 30% of civil works contracts awarded by loan effectiveness. A PIU in MIFT was established under the project readiness financing (footnote 13) to support advanced contracting activities.

Source: Asian Development Bank.

III. ATTACHED TECHNICAL ASSISTANCE

22. ADB approved a transaction TA of \$400,000 on 16 February 2022, funded by the Regional Cooperation and Integration Fund, for Strengthening Silk Road Tourism and Economic Resilience in Secondary Cities.³³ The TA has two outputs: (i) capacity for inclusive and sustainable Silk Road tourism and economic resilience for project cities strengthened, and (ii) project implementation support provided. The first output will support tourism development in Khiva, including the establishment of the country's first-ever digital museum showcasing Silk Road–themed heritage. It will explore private sector participation for its operations and strengthen Khiva's regional links with CAREC tourism clusters, among other measures to accelerate green and sustainable economic recovery and livelihood development in project cities. The second output will support the PIU in areas of procurement, safeguards, financial management, and gender to ensure timely and high-quality project implementation in compliance with ADB policies.

IV. DUE DILIGENCE

A. Technical

23. ADB conducted technical due diligence to ensure robust designs and value addition, including a comprehensive review of feasibility studies, engineering designs, cost estimates, and site investigations. ADB appraised subprojects based on (i) rationale and relevance, benefits, and ease of implementation and operations; (ii) technical alternatives and their viability, including digital solutions and modern approaches such as NRW management; (iii) life-cycle costs, including capital and operating costs, and achievable cost savings through energy efficiency and climate-resilient measures; (iv) maximizing beneficiary area coverage, including of the poor and vulnerable, such as persons with disabilities; (v) minimizing adverse environmental and social impacts; and (vi) optimizing implementation timelines through project readiness. For existing facilities, ADB assessed their viability and supported renovation and expansion where possible.

B. Economic and Financial Viability

24. **Economic analysis.** The estimated base-case economic internal rates of return ranged from 10.68% to 15.42%, exceeding ADB's minimum discount rate of 9%, confirming the economic viability of the project. The quantified economic benefits were derived from the following sources: (i) for the municipal services subprojects, the economic analysis focused on quantifying

³³ ADB. 2022. <u>Technical Assistance to the Republic of Uzbekistan for Strengthening Silk Road Tourism and Economic</u> <u>Resilience in Secondary Cities</u>. Manila.

incremental tourism benefits in Khiva, and incremental annualized increases in market rental values from urban improvements in Djizzak and Havast; (ii) for the WSS subproject in Djizzak, the incremental consumption benefits were based on a consumer's willingness-to-pay, which was estimated from a household survey using the contingent valuation methodology; and (iii) for the SWM subprojects, the valuation focused on public health benefits using savings in disability-adjusted life years as a proxy for reduced incidence of related diseases. Sensitivity analysis indicated the economic internal rates of return remain robust against all adverse scenarios but are most vulnerable to a combined 10% increase in capital and O&M costs, and a 10% decrease in benefits. Significant cross-border spillover effects were unquantified in the cost–benefit analysis. Regional cooperation benefits will arise from upgrading tourist services to international standards, promoting Khiva's World Heritage site, strengthening Khiva's links with CAREC tourism clusters (footnote 18), and increasing private sector participation in regional tourism.

25. **Financial viability and sustainability.** A financial evaluation was conducted for revenuegenerating subprojects, including water supply, SWM, and Khiva visitor center. The financial analysis concluded the financial internal rate of return (FIRR) for DST, DTH, KTH, and STH ranging from 2.7% to 7.7% exceeds the estimated weighted average cost of capital of 1.48%, except for the Khiva visitor center, for which FIRR does not exceed the estimated weighted average cost of capital of 0.62%.³⁴ The sensitivity analysis for DST, DTH, KTH, and STH indicates the FIRRs remain robust against all adverse scenarios,³⁵ except for a combined 10% increase in capital and O&M costs, and a 10% decrease in benefits for DST, DTH, and STH. FIRR is closely linked to the average annual tariff increases, for which financial covenants have been agreed. The financial covenants cover operating and debt service coverage ratios, collection efficiency, and days receivables, which MIFT will monitor annually from 2025 until project closing.

26. Financial analysis of nonrevenue-generating municipal service components was prepared to assess whether the overall investment is fiscally sustainable. The analysis examines the impact of the investment on the *hokimiyats*' fiscal performance. The analysis indicates that the subproject in Khiva Hokimiyat is fiscally sustainable. The subprojects in Djizzak Hokimiyat will require provincial support for O&M and budget transfer for debt service by 2030, while Havast Hokimiyat will require budget transfer support for taxes and duties by 2023 until 2030 and provincial support for O&M and budget transfer support for debt service by 2027 until 2030 because of negative savings ratio. The government will support O&M costs, taxes and duties, and debt servicing.³⁶

C. Sustainability

27. Key sustainability constraints facing project cities and service providers include (i) low technical capacity for O&M; and (ii) weak cost recovery from irregular tariff increases, low own-source revenues, service coverage gaps, and inefficient billing and collection. Sustainability will be strengthened through a structured capacity development program for local governments and utility operators to bridge gaps in their technical, managerial, and financial capacities, as well as project financial covenants. Capacity building under output 3 will cover critical areas of O&M,

³⁴ Revenues for the new visitor center include 40% from rental income. As per government policy, 60% of rental income is allocated to the government budget to support private enterprises and state property O&M. Financial covenants will support financial sustainability, and private sector participation (para. 22) will be explored to enhance revenues.

³⁵ The adverse scenarios are (i) a 10% increase in capital cost, possibly arising from higher-than-expected inflation or price escalation; (ii) a 10% increase in O&M costs, which could result from a rate increase of the main expenditure categories; (iii) a 10% decrease in benefits; (iv) a 10% increase in capital costs plus O&M combined with a 10% decrease in benefits; and (v) a delay in project benefits by 1 year.

³⁶ The provincial government finance departments will request budget support from MOF to cover O&M shortfalls and allocate the funds to the project *hokimiyats*. MOF will pay for *hokimiyat* debt servicing since it is guaranteed by the government and will reallocate this amount as an expenditure of the *hokimiyat* local budget.

asset management, revenue improvement plans, operational efficiency (NRW management, energy audits), online billing and collection, financial management, human resource development, and private sector cooperation. City-level project steering committees, chaired by the respective mayors, will be established as new platforms for discussing sustainability and institutional measures supported under output 3. These measures will complement urban sector reforms at the national level, supported by the World Bank (footnote 15).

D. Governance

28. **Financial management.** The financial management pre-mitigated risk rating of the project, including the executing and implementing agencies, is *substantial* because of (i) a lack of accounting staff certified in International Public Sector Accounting Standards, (ii) limited experience of MIFT with financial management responsibilities for ADB-funded projects while having some experience implementing the ongoing PRF and a similar World Bank urban project (para. 10), (iii) accounting software not configured for project-specific accounting and financial reporting and monitoring requirements, (iv) limited experience with ADB procedures beyond the ongoing PRF (footnote 13), and (v) lack of internal audit function. The time-bound financial management plan will mitigate financial management risks as detailed in the PAM (footnote 29).

29. **Procurement.** The overall procurement risk is assessed as *medium*. Although the PIU has exposure to ADB procurement procedures under the ongoing PRF and experience in procuring works, goods, and services under the ongoing World Bank urban project (footnote 6), its procurement capacity was found to be inadequate as it has no experience with ADB investment projects. ADB will mitigate the procurement risk through procurement trainings and support from technical experts in preparing bidding documents and bid evaluations. Another risk to procurement is the prolonged approval procedures of the government; this risk is mitigated by high project readiness through the PRF (footnote 13). The strategic procurement plan ensures value for money through packaging designed to attract market interest and competition. As the HLTF grant is cofinancing the project, universal procurement will apply to the whole project.³⁷

30. **Integrity and anticorruption.** ADB conducted integrity due diligence on DST, DTH, KTH, and STH, and key members of their senior management.³⁸ They do not appear to constitute a significant or potentially significant integrity risk to the project, and it was confirmed that they do not pose potential integrity risks relating to money laundering or terrorism financing in the project jurisdiction. ADB's Anticorruption Policy (1998, as amended to date) was explained to and discussed with the government, MIFT, DST, DTH, KTH, and STH. The specific policy requirements and supplementary measures are described in the PAM (footnote 29). Combatting corruption is a priority of state policy, and the Anticorruption Agency of Uzbekistan was established to implement anticorruption standards and mechanisms in all spheres of state and public activities. The PIU will also undergo training in ADB's Anticorruption Policy.

E. Poverty, Social, and Gender

31. **Poverty and social.** The primary beneficiaries are the residents of the four project cities, particularly the poor, the elderly, women, children, and persons with disabilities who will directly benefit from improved access to reliable and inclusive urban services and overall living conditions.

³⁷ ADB. 2015. <u>Enhancing Operational Efficiency of the Asian Development Bank</u>. Manila; and ADB. 2013. <u>Blanket</u> <u>Waiver of Member Country Procurement Eligibility Restrictions in Cases of Cofinancing for Operations Financed from</u> <u>Asian Development Fund Resources</u>. Manila.

³⁸ ADB. 2003. <u>Enhancing the Asian Development Bank's Role in Combating Money Laundering and the Financing of Terrorism.</u> Manila.

32. **Gender.** The project is classified *effective gender mainstreaming* and addresses the following issues in the urban sector: (i) heavier household burdens on women brought about by poor WSS services, (ii) loss of jobs and income-earning opportunities because of COVID-19, and (iii) absence of women-friendly facilities in public spaces, which inhibits their movement outside the house. The gender action plan includes the following key features: (i) creation of women, children-, disabled-, and elderly-friendly public spaces, specifically parks, a visitor center, and a community center; (ii) improvement of women's access to WASH+H infrastructure and services in households and public spaces; (iii) women-targeted awareness raising and behavior-change campaigns on WASH+H and COVID-19 infection control and prevention; (iv) introduction of gender inclusion measures in institutional strengthening programs, such as staff capacity building in gender-inclusive urban management and development of anti-sexual harassment policy in the workplace; (v) training and livelihood services to local businesses targeting women and youth; and (vi) collection of sex-disaggregated data for gender action plan activities.

F. Safeguards

33. In compliance with ADB's Safeguard Policy Statement (2009), the project's safeguard categories are as follows.³⁹

34. **Environment (category B).** The environmental impacts are expected to be localized and insignificant after implementation of mitigation measures during the project's construction and operation stages. Draft initial environmental examinations (IEEs) with environmental management plans (EMPs) were prepared with meaningful public consultations for (i) WSS in Djizzak; (ii) urban development in Havast, Khiva, and Djizzak; and (iii) SWM in Djizzak, Khiva, Havast, and Yangiyer. The PIU will update these documents based on final designs with support from the engineering consultants and will seek ADB's clearance prior to award of relevant contracts. The EMPs will be included in civil works contracts and contractors will prepare site-specific EMPs, including a COVID-19 health and safety management plan. The PIU will translate the IEEs and summary IEEs into local language and post them on its website along with the full reports in English. The PIU will hire one full-time national environmental officer who will be supported by international and national environmental specialists under the project management and supervision consulting firm to oversee the implementation of the EMPs. The PIU will submit semiannual environmental safeguard monitoring reports to ADB for disclosure.

Involuntary resettlement (category B). Involuntary resettlement impacts will occur from 35. the rehabilitation of a 12.5 km water conduit in Djizzak. About 60 affected households with 383 household members will experience economic displacement because of temporary impacts on 9.17 ha of state-owned land. Impacts include crop losses on 2.61 ha of agricultural land, loss of 4,476 trees, loss of one private structure, and loss of one business activity. Six households are considered vulnerable because of disabled family members. No severely affected households are identified. Because of COVID-19, individual instead of group consultations were conducted. All affected households were consulted and provided project information which will continue during implementation. Based on final designs, the PIU, with support from the engineering consultants, will update the draft land acquisition and resettlement plan and draft social due diligence report and will seek ADB clearance of these documents prior to award of relevant contracts. The PIU will be responsible for social safeguards compliance, monitoring, and reporting, and will be staffed by a resettlement officer supported by a social safeguard expert from the project management and supervision consulting firm. The PIU will submit semiannual social safeguard monitoring reports to ADB for disclosure. Loan proceeds will be used to cover involuntary resettlement costs; the estimated resettlement budget is included in the land acquisition and resettlement plan. Any

³⁹ ADB. <u>Safeguard Categories</u>.

costs beyond this budget for unanticipated resettlement impacts will be borne by the government.

36. **Indigenous peoples (category C).** There are no indigenous peoples in the project areas as defined by the Safeguard Policy Statement.

G. Summary of Risk Assessment and Risk Management Plan

37. Significant risks and mitigating measures are summarized in Table 4 and described in detail in the risk assessment and risk management plan.⁴⁰

Table 4. Summary of Kisks and Millyaling Measures		
Risks	Mitigation Measures	
Prolonged government approval procedures delay procurement.	High project readiness achieved under the project readiness financing will mitigate start-up delays. Technical experts will support the PIU and facilitate bid evaluation. ADB will provide procurement training to officials involved in procurement decisions.	
Limited financial management capacity of the executing agency and implementing entities in budgeting, accounting, reporting, and auditing may negatively impact the project's financial performance.	The TA for Strengthening Silk Road Tourism and Economic Resilience in Secondary Cities will provide financial management capacity building to (i) support the PIU in project financial management, (ii) support implementing entities to transition to international standards for financial reporting, and (iii) monitor compliance with the financial management action plan. Auditors will be recruited to review project and entity financial statements following international standards.	
Weak cost recovery by implementing entities risks financial sustainability and viability.	Financial covenants include operating and debt service coverage ratios, collection efficiency, and days receivables. Output 2 will support operational efficiency improvements for cost savings. Output 3 will support capacity building in revenue improvement. ADB staff will closely monitor compliance with financial covenants.	

ADB = Asian Development Bank, PIU = project implementation unit, TA = technical assistance. Source: Asian Development Bank.

V. ASSURANCES AND CONDITION

38. The government and MIFT have assured ADB that implementation of the project shall conform to all applicable ADB requirements, including those concerning anticorruption measures, safeguards, gender, procurement, consulting services, financial management, and disbursement as described in detail in the PAM and legal agreements. The government and MIFT have agreed with ADB on certain covenants for the project, which are set forth in the draft loan, grant, and project agreements. Loan and grant disbursement is conditioned with PIU having been duly established and staffed in a manner acceptable to ADB.

VI. RECOMMENDATION

39. I am satisfied that the proposed loan would comply with the Articles of Agreement of the Asian Development Bank (ADB) and recommend that the Board approve the loan of \$59,000,000 to the Republic of Uzbekistan for the Integrated Urban Development Project, from ADB's ordinary capital resources, in concessional terms, with an interest charge at the rate of 2% per year during the grace period and thereafter; for a term of 25 years, including a grace period of 5 years; and such other terms and conditions as are substantially in accordance with those set forth in the draft loan and project agreements presented to the Board.

Masatsugu Asakawa President

19 September 2022

⁴⁰ Risk Assessment and Risk Management Plan (accessible from the list of linked documents in Appendix 2).

DESIGN AND MONITORING FRAMEWORK

Impact the Project is Aligned with

Sustainable urbanization and welfare of the urban population enhanced (Government of Uzbekistan, Presidential Decree 5623, 2019)^a

		Data Sources and	
Results Chain	Performance Indicators	Reporting Mechanisms	Risks and Critical Assumptions
Outcome Access to inclusive, resilient, and sustainable urban services in secondary cities enhanced. ^b	 By 2028: a. At least 142,068 people in Khiva, Havast, and Djizzak benefit from access to new or improved public parks and open green spaces with EWCD-friendly features to cope with more extreme heat waves (2020 baseline: 0) (OP 1.3, OP 3.2.5, OP 4.1.2, OP 4.3)° b. At least 173,636 people in Djizzak benefit from sustainable and resilient potable piped water supply with at least 8 hours continuous service/day and an average of 113 lpcd (2020 baseline: 4 hours intermittent service per day and an average of 98 lpcd supply) (OP 3.2.5, OP 4.1.2, OP 4.3)^d c. 100% household coverage of solid waste collection and environmentally sustainable SWM services benefiting at least 341,400 	ac. PIU quarterly reports, project completion report, asset owner annual reports	R: COVID-19 recovery is slower than expected, creating project delays.
Outputs 1. Inclusive municipal and tourist infrastructure and services provided.	 people in the four project cities (2020 baseline: Average of 76% waste collection coverage in four project cities) (OP 3.3.1, OP 4.1, OP 4.1.2, OP 4.3)^e By 2027: 1a. New or improved public parks and green open spaces with EWCD features in Khiva, Havast, and Djizzak to cope with extreme heat waves, including new greenway in Khiva, new park in Havast, and improved neighborhood open spaces in Djizzak (2021 baseline: 0) (OP 1.3, OP 2.1.4, OP 2.4.1, OP 3.2.5, OP 4.1.2)^c 1b. Improved street corridors in three mahallas (communities) in Djizzak 	1a.–d. PIU quarterly reports	R: Procurement delays caused by prolonged government approval procedures delay timelines.
	 (Ittifoq, Dustlik, Yoshlik) with new surfacing, drainage, streetlights, pedestrian sidewalks (2021 baseline: 0) (OP 1.3, OP 2.4.1, OP 3.2.5, OP 4.1.2) 1c. New visitor center with digital museum, cycle facility, and EWCD features constructed in Khiva (2021) 		

			Data Sources and Reporting	Risks and Critical
<u>Re</u>	sults Chain	Performance Indicatorsbaseline: 0) (OP 1.3, OP 2.4.1, OP7.2.2) ^{c,f} 1d. New multifunctional community center with livelihood training facility constructed with green building designs and EWCD 	Mechanisms	Assumptions
2.	Climate-resilient drinking water, sanitation, and solid waste services enhanced with smart systems.	 By 2027: 2a. At least 12 km of bulk water transmission pipeline and 48 km of distribution pipeline modernized in Djizzak (2021 baseline: Rehabilitated 0, new 0) (OP 4.1.2)^h 2b. Smart NRW management pilot with new district metered areas in three mahallas (Ittifoq, Dustlik, Yoshlik) in Djizzak operationalized with SCADA (2021 baseline: 0) (OP 3.2.5, OP 4.1.2, OP 4.3)ⁱ 2c. Rehabilitated or new metered household water connections installed at 992 residential buildings in pilot mahallas in Djizzak (2021 baseline: 0) (OP 4.1.2) 2d. Five public toilets with handwashing facilities constructed (at least 50% for women and unisex toilets for the disabled) in Djizzak (2021 baseline: 0) (OP 2.1.4, OP 4.1.2)^c 2e. 14 km of new sewer pipelines constructed with 775 new household sewer connections in Dostlik mahalla of Djizzak (2021 baseline: 0) (OP 3.3.1, OP 4.1.2) 2f. City-wide solid waste collection systems in four project cities upgraded with (i) new solid waste collection points in Havast and Yangiyer, (ii) new waste containers, (iii) new shared waste transfer station for Yangiyer and Havast, and (iv) new waste collection trucks and vacuum sweeper trucks in four cities (2021 baseline: 0) (OP 3.3.1, OP 4.1.2, OP 4.3) 	2a.–f. PIU quarterly reports	
3.	Urban governance, institutional capacity, and livelihood support strengthened.	By 2027: 3a. Four mayors and 80% of municipal staff (of whom at least 15% are women) from project cities reported increased knowledge in gender- and social-inclusive urban management, climate-resilient	3ad. PIU quarterly reports	R: High staff turnover of city officials inhibits local capacity building.

Results Chain	Performance Indicators	Data Sources and Reporting Mechanisms	Risks and Critical Assumptions
	urban planning, and municipal finance (2021 baseline: Not applicable) (OP 2.3.1, OP 4.2.1, OF 6.2.2) ^j		
	 3b. At least 50% of utility staff (of whom at least 30% are women) in the project cities reported increased knowledge in smart water management or 3Rs (2021 baseline: Not applicable) (OP 2.1.1, OP 2.3.1, OP 4.2.1)^k 		
	 3c. At least 65% of start-up micro, small, and medium-sized enterprises (of whom 10% are owned/managed by women) in Havast report increased knowledge from eight climate-friendly enterprise skills development and livelihood training programs (2021 baseline: 0) (OP 1.1.1, OP 2.1.1)^I 		
	 3d. At least 80% of local government and utility staff (of whom at least 30% are women) in the project cities and tourism enterprises in Khiva reported increased awareness on 3Rs, climate change risks, infection prevention and control, and WASH+H approaches (2021 baseline: Not applicable) (OF 2.1.1, OP 6.1.3)^m 		
	3e. Khiva digital museum website developed and linked to the Central Asia Regional Economic Cooperation tourism web portal to promote its Silk Road visitor attractions (2022 baseline: Not applicable) (OP 7.2.2) ⁿ	3e. Central Asia Regional Economic Cooperation tourism web portal	

Inclusive municipal and tourist infrastructure and services provided.
 Complete engineering designs, bidding documents, and tendering of all civil works packages by Q4 2022.

- 1.2 Complete all civil works by Q3 2026.
- 2. Climate-resilient drinking water, sanitation, and solid waste services enhanced with smart systems.
- 2.1 Complete engineering designs, bidding documents, and tendering of all civil works packages by Q4 2022.
- 2.2 Complete all civil works by Q1 2027.

3. Urban governance, institutional capacity, and livelihood support strengthened.

- 3.1 Advertise terms of reference for urban governance and institutional strengthening consultants by Q1 2023.
- 3.2 Complete all consulting services by Q2 2027.

Project Management Activities

Establish fully staffed PIU office by Q4 2022.

Award project management and supervision consultant package by Q2 2023.

Inputs

Asian Development Bank: \$59.0 million (ordinary capital resources concessional loan)

High-Level Technology Fund: \$0.5 million (grant)

Government of Uzbekistan: \$8.7 million

Regional Cooperation and Integration Fund Technical Assistance: \$0.4 million (grant)

3Rs = reduce, reuse, recycle; COVID-19 = coronavirus disease; EWCD = elderly, women, children, and disabled; km = kilometer; lpcd = liters per capita per day; NRW = nonrevenue water; OP = operational priority; PIU = project implementation unit; Q = quarter; R = risk; SCADA = supervisory control and data acquisition; SWM = solid waste management; WASH+H = water, sanitation, hygiene, and health.

- ^a Government of Uzbekistan. 2019. Presidential Decree No. 5623 On Measures to Fundamentally Improve the Process of Urbanization. Tashkent.
- ^b The secondary cities are Djizzak, Khiva, Havast, and Yangiyer.
- ^c EWCD-friendly features in public parks and facilities include adequate lighting of footpaths and parking areas; universal access in public areas, including wheelchair facilities (ramps, wider doors and spaces, handrails, and unisex toilets for people with disabilities); playgrounds with sitting areas for mothers; designated breastfeeding areas; and segregated (between female and male) bathrooms, with diaper-changing stations, signage for hygiene awareness, and menstrual hygiene facilities (hygienic shower, feminine hygiene disposal bins) in the female restrooms. The city-wide beneficiary population for public spaces: Khiva (92,400); Havast (24,400); and Djizzak (three mahallas: 21,268).
- ^d Sustainable and resilient water supply and sanitation features include energy efficiency improvements and water loss reduction through NRW management in three pilot *mahallas* (Dustlik, Yoshlik, and Ittifoq), smart bulk metering, bulk water supply operated through a SCADA system; and household sewerage connections.
- ^e Environmentally sustainable SWM services include campaigns to raise public awareness on waste minimization and recycling, 100% waste collection coverage, and provision of waste-sorting areas at community collection points. Waste collection coverage per project city: Khiva 88%, Djizzak 86%, Yangiyer 91%, and Havast 41% (State Committee on Ecology of the Republic of Uzbekistan on Ecology and Environment Protection, 2021 figures).
- ^f Women-friendly visitor facilities under EWCD (footnote c) include separate public bathrooms with baby-changing and menstrual hygiene facilities (hygienic shower, feminine hygiene disposal bins); information services to address the interests of female tourists, including contact phone numbers for police; healthcare; and emergency services.
- ^g Green building features may include white roofs, optimal building orientation, air tightness, double-glazing, and provision of ventilation and/or efficient cooling to adapt to increased heat in buildings and support energy efficiency.
- ^h Modernizing water supply system includes replacing aged transmission and distribution pipelines, providing automated pressure and flow control valves, introducing SCADA, and introducing smart bulk water meters to reduce NRW.
- ⁱ The smart water NRW management pilot in the three *mahallas* to reduce water loss, manage pressure, and improve energy efficiency and services will be implemented in close coordination with a proposed United States Trade and Development Agency grant–funded pilot on digital twin technology for remote monitoring of pressure and leaks.
- ¹ Increased knowledge measured through post-training assessments of participants rating the trainings useful.
- ^k Smart water training targeted for Djizzak water operator and 3Rs training and awareness building targeted for SWM operators (three regional *toza hududs* (solid waste operators) and public. Increased awareness measured through post-training assessments of participants rating the programs as *useful*. Capacity building in municipal finance and financial sustainability is also supported by the Technical Assistance for Support to the Implementation of Strategy 2030 Operational Plans (footnote 27).
- ¹ Climate-friendly enterprise skills development and livelihood programs to include courses on climate-friendly business practices such as green products, value chains, and business models, including branding for green markets. Increased awareness measured through post-training assessments of participants rating the programs *useful*.
- ^m Awareness-building and behavior-change activities in WASH+H are implemented under the Technical Assistance for the COVID-19 Infection Prevention and Control through an Integrated Water, Sanitation, Hygiene, and Health Approach (footnote 25). Increased awareness measured through post-training assessments of participants rating the programs *useful*.
- ⁿ Capacity building for Khiva digital museum, including website development and links to the CAREC web portal, are supported by Technical Assistance for Strengthening Silk Road Tourism and Economic Resilience in Secondary Cities (footnote 33).

Contribution to Strategy 2030 Operational Priorities:

Expected values and methodological details for all OP indicators to which this operation will contribute results are detailed in Contribution to Strategy 2030 Operational Priorities (accessible from the list of linked documents in Appendix 2).

Source: Asian Development Bank.

LIST OF LINKED DOCUMENTS

http://www.adb.org/Documents/RRPs/?id=54017-001-3

- 1. Loan Agreement
- 2. Grant Agreement
- 3. Project Agreement
- 4. Sector Assessment (Summary): Water and Other Urban Infrastructure and Services
- 5. Project Administration Manual
- 6. Financial Analysis
- 7. Economic Analysis
- 8. Summary Poverty Reduction and Social Strategy
- 9. Risk Assessment and Risk Management Plan
- 10. Contribution to Strategy 2030 Operational Priorities
- 11. Climate Change Assessment
- 12. Gender Action Plan
- 13. Initial Environmental Examination: Water Supply and Sanitation Subcomponent
- 14. Initial Environmental Examination: Urban Development Component
- 15. Initial Environmental Examination: Solid Waste Management Subcomponent
- 16. Land Acquisition and Resettlement Plan
- 17. Social Due Diligence Report

Supplementary Documents

- 18. Detailed Financial Analysis
- 19. Detailed Economic Analysis
- 20. Financial Management Assessment
- 21. Strategic Procurement Plan
- 22. Participation Plan