Project Information Document (PID)

Appraisal Stage | Date Prepared/Updated: 26-Jun-2022 | Report No: PIDA32788

BASIC INFORMATION

A. Basic Project Data

Country	Project ID	Project Name	Parent Project ID (if any)
India	P175728	Gujarat Resilient Cities Partnership: Ahmedabad City Resilience Project	
Region	**Estimated Appraisal Date**	**Estimated Board Date**	**Practice Area (Lead)**
SOUTH ASIA	27-Jun-2022	15-Mar-2023	Urban, Resilience and Land
Financing Instrument	**Borrower(s)**	**Implementing Agency**	
Investment Project Financing	India	Ahmedabad Municipal Corporation, Gujarat Urban Development Mission, Urban Development and Urban Housing Department	

Proposed Development Objective(s)

To strengthen institutional, financial and service delivery performance in Ahmedabad

Components

Strengthening AMC's institutional and financial systems
Improving wastewater management services
Developing state level institutional systems and capacities

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Project Cost	400.00
Total Financing	400.00
of which IBRD/IDA	280.00
Financing Gap	0.00

DETAILS

World Bank Group Financing	
International Bank for Reconstruction and Development (IBRD)	280.00
Non-World Bank Group Financing	
Counterpart Funding	120.00
Borrowing Agency	120.00

Environmental and Social Risk Classification

Substantial

Decision

The review did authorize the team to appraise and negotiate

B. Introduction and Context

Country Context

1. The growth rebound in FY21/22 was quick, pulled up by investment, recovering consumer demand and, a low base. Real GDP growth moderated from an average of 7.4 percent during FY14/15-FY18/19 to an estimated 3.7 percent in FY19/20[1], mostly due to (i) shocks to the financial sector, and (ii) decline in private consumption growth[2]. Against this backdrop, the outbreak of COVID-19 had a significant impact, with real GDP contracting by 6.6 percent in FY20/21[3]. On the fiscal side, the general government deficit widened significantly in FY20/21, owing to higher spending and lower revenues[4]. However, with the easing of Covid-19 restrictions, Goods and Services Tax (GST) collections have crossed the INR 1 trillion mark every month since July 2021, reaching as high as INR 1.67 trillion in April 2022. The robust GST revenue collections are expected to continue as the economic recovery gathers momentum. The real GDP in FY21/22 expanded by 8.7 percent and exceeded the FY19/20 level, on the back of increased capital expenditure by the government and recovering consumer demand. Given the global concerns on significant uncertainty around the pandemic, elevated inflation, geo-political tensions, and extended supply disruptions, growth in FY22/23 is expected to be 7.5 percent[5]. The expected recovery will put India among the world's fastest-growing emerging economies over the next two years.

2. Although India has made remarkable progress in reducing absolute poverty in recent years, the COVID-19 outbreak has delayed the course of poverty reduction[6]. Between 2011-12 and 2020-21, India's poverty rate has declined from 22.5 percent[7] to values estimated to range between 9 to 12.3 percent[8]. However, projections of GDP per capita growth suggest that this estimated decline also includes a reversal of poverty reduction due to the

[1] National Accounts Data, National Statistical Office, Ministry of Statistics and Program Implementation (MOSPI).
[2] National Accounts Data, National Statistical Office, MOSPI.
[3] National Accounts Data, National Statistical Office, MOSPI.
[4] Union budget 2021, 2022, Ministry of Finance.
[5] World Bank real GDP forecasts for FY22/23 published in June 2022.
[6] World Bank projections. The Government of India has deployed significant resources for social assistance, including towards urban poor households and migrants.
[7] Consumption Expenditure Survey 2011-12, National Sample Survey Office (NSSO), Government of India
[8] World Bank estimates. Macro Poverty Outlook, October 2021.

pandemic[9]. Labor market indicators from high frequency surveys -including from the Centre for Monitoring Indian Economy (CMIE)- suggest that vulnerability has increased after the pandemic, particularly for urban households, with a moderate recovery in 2021. Overall, the pandemic and its economic impacts are estimated to have raised urban poverty, creating a set of "new poor" that are relatively more likely to be engaged in the non-farm sector and to have received at least secondary education. In order to respond to the pandemic, GoI has deployed significant resources as part of the Prime Minister Garib Kalyan Yojana (PMGKY) for social assistance, including for urban poor households and migrants.

3. India's urban transition is unprecedented in scale. By 2040, India's urban population will grow by an estimated 270 million people, while its rural population is expected to fall by 40 million.[1] Despite the scale and speed of its urbanization, India is expected to reach 50 percent urbanization only by 2051.[2] If managed well, urbanization can contribute effectively to India's future growth trajectory and contribute to national climate targets. Much of India's urbanization is yet to occur and most infrastructure that will exist in 2040 is yet to be built. Consequently, India has an opportunity to shape its future urban growth and opt for a more resilient and lower-carbon urban future. Three areas need special attention. First, it is important to plan for and manage the emerging urban footprint—its physical location, extent, and form. Urban growth needs to be directed away from high-hazard and high-vulnerability areas and key planning decisions need to be taken – compact versus sprawling, high-rise versus low-rise, formal versus informal. Second, infrastructure and service delivery—including water, sanitation, solid waste management, mobility — approaches need a quantum shift to ensure inclusive coverage, reliability, efficiency, and sustainability. Third, institutional systems and financial performance needs to be strengthened at the local level to ensure that Urban Local Bodies (ULBs) are well-equipped to undertake necessary actions for pivoting towards resilient, green, and sustainable urban development.

Sectoral and Institutional Context

4. Gujarat is one of the most urbanized states in India with a total population of approx. 71 million, of which approx. 34 million (~48 percent) lives in urban areas. The state has experienced a high rate of urbanization for about four decades with its urban population increasing from 34 percent in 1991 to ~48 percent in 2020. The urbanization level in the state is anticipated to increase to 55 percent by 2036 – adding ~11.4 million urban population over the period 2021-36. Economically, Gujarat is one of India's most prosperous states, accounting for ~8.1 percent of India's GDP. The state has had an average annual GDP growth rate of 12.87 percent between 2015-21 that outpaced India's national GDP growth, resulting in gross state domestic product (GSDP) of $243.45 billion in 2020. Its ranking in per capita income among Indian states has risen from 9th in 2011 to 3rd in 2018, with per capita income (in term of constant 2011 prices) of US$2,074 in 2018 that is ~76 percent higher than national average of US$1,182. Gujarat is a leading Industrial and manufacturing state in the country, accounting for 17% of India's manufacturing output. The Government of Gujarat identifies ongoing rapid urbanization as a key driver for state's economic growth[3] in coming decades. This growth will be primarily driven by economic activities linked to industries and manufacturing sectors such as petrochemicals, pharmaceuticals, automotive manufacturing, cement, textiles, and diamond polishing. The state has prioritized infrastructure investments and urban reforms for accelerated growth and development in the four largest cities - Ahmedabad, Surat, Vadodara, and Rajkot, which cover more than 50 percent of the total urban population of the state. The goal is to develop good quality infrastructure in these major economic centers and position them competitively for attracting foreign trade and investments in the state.

5. Ahmedabad has the potential to become a globally competitive city if its urbanization can be leveraged to its full potential. Ahmedabad is the largest city in the state, with an estimated current (2020) population of 7.3 million.

[9] World Bank estimates. Source: Macro Poverty Outlook, 2020.
[1] International Energy Agency (IEA), India Energy Outlook, 2021.
[2] Revi et al., 2015, as cited in IIHS 2020.
[3] State government committee report on economic revival measures post COVID19 pandemic

The population has grown at an annual rate of 3 percent in the last three decades[4], increasing four-fold since 1980. Ahmedabad is projected to become the first mega city (i.e., population more than 10 million) in Gujarat between 2025-30. The city area has spatially expanded from 161 sq km in 1989 to 505 sq.km in 2020, in a concentric growth pattern centered around Sabarmati River, with a density around 14,450 people/sq.km. The city is the largest inland industrial center in India, the second largest Industrial center in Western India and a prominent industrial hub for textiles, pharmaceuticals, and automobile industries. In addition, it is also a center for IT and financial services, driven by growth of IT parks and GIFT city[5], and an important educational hub in the country. As per Government of India's Ease of Living Index[6] covering 111 Indian cities, Ahmedabad ranks 4th in the highest population category (> 4 million), and is placed second amongst Indian cities on the institutional and economy indices.

6. Ahmedabad has a coherent urban governance system to manage urban growth. The state of Gujarat has developed a horizontally integrated, autonomous, and locally accountable urban governance and institutional framework for its main cities. It is one of the most autonomous institutional arrangements in India. The Ahmedabad Municipal Corporation (AMC) is the single agency responsible for all major urban services (water supply, wastewater, and drainage; urban roads, transport, and mobility; SWM; and social services e.g., public health, education). There is no competing agency at the local or state level with overlapping mandates in urban services. Urban planning is the only function performed by the Ahmedabad Urban Development Authority which has a well-established mechanism to co-ordinate with AMC (with the executive heads of both being the same officer). AMC operates with a high degree of autonomy in fiscal planning & budgeting, resource mobilization and decision-making, wherein the key powers are vested with the Commissioner and/or the locally elected Municipal Council. This ULB-centric institutional framework for urban management and service delivery is further strengthened by two key innovations, which are unique to Gujarat: (i) Ahmedabad has adopted an integrated framework for urban utilities/Special Purpose Vehicles (SPVs), wherein all city-level SPVs/utilities (except metro-rail SPV) involved in urban service delivery are owned fully[7] or partially[8], managed, and coordinated by AMC. SPVs have clearly defined institutional mandates and are integrated to ensure coordinated service delivery; and (ii) land-use and spatial planning is carried out jointly by AMC and the Ahmedabad Urban Development Authority[9] (AUDA). 10-year development plans are prepared and once finalized, the land-use planning, development control regulation, management and investment functions within the AMC's jurisdictional boundaries are delegated from AUDA to AMC. The state government has taken an executive decision to designate Municipal Commissioner as the ex-officio Chairman of Urban Development Authorities (such as AUDA) to ensure well-coordinated and integrated planning and development of the larger metropolitan areas around key cities. Despite the robust institutional framework, AMC is now starting to face institutional capacity constraints: primarily, lack of adequate institutional systems to plan, deliver and manage urban services sustainably and efficiently in the context of rapid urbanization, rising service demands, natural resource scarcity and climate change risks.

7. Ahmedabad has relatively good urban infrastructure and network coverage for most of the core urban services but lacks in service performance from an efficiency and sustainability perspective. The city has i) 98 percent water supply network coverage with adequate bulk treatment infrastructure capacity, which supplies ~150-160 lpcd of drinking water to the existing population (national benchmark: 135 lpcd). AMC is currently in the process of piloting

[4] The 2011 census population was 5.6 Mn

[5] Gujarat International Finance Tech-City house is spread over 3.6 sq. km and houses Multi Services Special Economic Zone (SEZ) as well as India's 1st International Financial Services Centre (IFSC).

6 Ease of Living 2019

[7]This model has been adopted for urban service delivery and area-based development such as (i) Ahmedabad Janmarg Ltd, AMC-owned SPV for operating Bus-Rapid Transit System (BRTS), (ii) Sabarmati Riverfront Development Corporation Ltd for redevelopment of the riverfront, (iii) Heritage City Management Trust responsible for the management of the historic old city as a UNESCO world heritage site; and (iv) Medical Education Trust responsible for the management of medical facilities.

[8] Ahmedabad Municipal Transport Services (AMTS) and Jalvihar SPV (Smart Cities SPV).

[9] Gujarat Town Planning and Urban Development Act (GTP&UD Act), 1976 provides legal authority to independent city urban development authority (Ahmedabad Urban Development Authority) for overall land-use planning, spatial planning and development control.

24*7 water supply system and plans to scale-up to the entire city in a phased manner under national urban mission[10]; ii) 94.5 percent sewerage network coverage, and 100 percent access to toilets; iii) urban road network with high percentage of motorable surface roads – 3,051 Kms of urban roads, 90 percent of which are surfaced roads; and iv) adequate infrastructure and systems for collection, transportation, processing/recycling and safe disposal of solid waste as well as remediation of legacy waste dump-sites. However, there are substantial gaps in coverage and quality of wastewater management services. High levels of water consumption have led to rising service demands for wastewater management that have been largely unmet and have manifested into complex issues related to environmental pollution, natural resource degradation and resource efficiency, due to lack of adequate infrastructure and systems.

8. **Wastewater management is constrained by inadequate treatment capacities, aged network systems, and severe operational inefficiencies.** 82 percent of existing[11] wastewater treatment capacity (a cumulative capacity of 817 million Liters Per Day (MLD) needs immediate system upgrade (in terms of efficient technologies, physical infrastructure, and monitoring systems) to comply with the national regulatory requirements related to wastewater discharge, improve operational performance, and enhance resilience to evolving risks. In addition, the capacity of the wastewater management system needs to be expanded to respond to Ahmedabad's rising wastewater management service requirements– the city requires additional 810 MLD of treatment capacity to meet the future service needs as the wastewater generation is projected to increase to approx. 2200 MLD by 2039. The mismatch between wastewater flows and treatment capacities is leading to underutilization of existing treatment facilities as well as significant levels of untreated wastewater discharge into city water bodies -average capacity utilization of treatment facilities is 71 percent, but some facilities are performing at significantly lower levels (~37 percent). In addition, AMC's sewerage network systems suffer from major constraints: (i) aged network leading to frequent network breakdowns and leakages, (ii) constrained capacities as compared to increasing wastewater generation, (ii) mismatch between network conveyance capacity and treatment capacity due to fragmented planning, and (iv) poor structural adequacy. Lastly, AMC needs to develop a sustainable model for reuse of treated wastewater and pivot towards water resource circularity to achieve the state government's policy target of 100 percent recycling & reuse by 2030 and mitigate freshwater demand from bulk non-residential consumers. Water resource efficiency is critical to address the anticipated water scarcity issues, abating ground water deterioration (a major issue due to over-exploitation by bulk consumers) and heavy dependence on Sabarmati for all residential, commercial, and industrial use.

9. **Ahmedabad's overall financial strength has been declining due to weakening revenue surplus, increasing recurrent expenditures, and stagnating transfers from state government.** AMC's overall financial performance has been better than most large Indian cities in the past. It received an AA credit rating in 2019. However, revenue performance is weak and its dependence on grants from State Government is high. Limited growth in own source revenue (OSR) mobilization is contributing to AMC's deteriorating revenue performance. While AMC has consistently generated an operating revenue surplus on an annual basis, this has declined significantly in last six FYs from US$ 66 million in FY 16 to US$ 3-6 million in FY 20-21. AMC's revenue expenditures have grown at a CAGR of 12 percent against 8 percent growth rate of revenue income over the period FY 16-21. Overall grant support from the state has stagnated since 2009-10. OSRs increased by a modest 7.5 percent over the period FY14-19 Fand have been largely static over FY15-18 in real terms. AMC's combined average per capita revenue from tax and non-tax sources is US$ 25 over FY16-18, which is the lowest amongst peer cities in India as well as in Gujarat.

10. **AMC has managed its financial performance with revenues from land-value capture (LVC) and limited commercial borrowing.** While Ahmedabad was the first Indian city to raise municipal bonds in 1998 and has since raised municipal bonds with a cumulative value of ~US$ 70 million through five separate issuances – its focus on sustained

[10] Atal Mission for Rejuvenation and Urban Transformation
[11] Comprising of 16 STPs of ~993 MLD installed capacity, additional 7 STPs of ~400 MLD that are under construction/advanced procurement stages, 3302 Km of sewage network with ~95 percent coverage and 66 pumping stations

borrowing has been limited despite sound financial health and capability to access capital market, representing only 2 percent of capital expenditure levels in FY 16-21. AMC has significant experience of implementing land-based financing (LBF) instruments – however income from LBF (as a fraction of revenue income) has been around 17 percent with an annual average of ~USD 80 million generated predominantly through sale of development rights (FSI) and sale of municipal land. Despite high revenue generation potential of existing municipal land assets (~US$ 22 bn[12]), LVC remains significantly underleveraged due to underperforming asset management and monetization system.

11. To tap the economic growth potential of rapid urbanization and enhance livability in the city, AMC needs to significantly improve the sustainability, resilience and efficiency of its infrastructure and service delivery systems. AMC needs to take urgent steps to address the critical sustainability and resilience challenges to ensure that increasing service demands are addressed in a sustainable and resource-efficient manner, without degrading the natural assets of the city – this is particularly vital in wastewater management sector, which poses a major risk to the water resource availability in the city. AMC needs to urgently strengthen its wastewater management systems to prevent any further pollution in surface and ground water sources, and to secure the water resources for meeting the long-term drinking water needs of the city in a resilient and sustainable manner. The key priorities for AMC include: (i) strengthening institutional and service delivery systems to better plan, deliver and manage urban services with a focus on improving efficiency, sustainability and resilience; (ii) improving and expanding resilient and low-carbon infrastructure in line with anticipated urban expansion, climate change projections and increasing service demands, and (iii) improving its financial performance in order to develop a robust fiscal base and leverage external sources of financing in a planned and phased manner, to sustainably meet expanding capital and O&M investment requirements.

C. Proposed Development Objective(s)

Development Objective(s) (From PAD)

PDO Statement

To strengthen institutional, financial, and service delivery performance in Ahmedabad

PDO Level Indicators

Progress towards the PDO will be tracked based on the following three outcome indicators

(1) Improved performance of AMC's property tax systems
(2) People with access to improved, climate-resilient wastewater services (Number, gender disaggregated)
(3) Improved performance of AMC's wastewater management systems

[12] Estimated considering the monetizable land bank (~ 2143 plots of 1778 h) with AMC and additional development rights potential

D. Project Description

12. The project will support AMC in addressing key institutional, financial, and service delivery constraints to strengthen urban resilience and sustainability in Ahmedabad. The project will provide a combination of technical and financial assistance to AMC to help it pivoti towards an integrated service delivery approach – one that is resilient, green, sustainable, and inclusive. The project comprises three components: (i) strengthening AMC's institutional and financial systems, (ii) improving wastewater management services, and (iii) developing state level institutional systems and capacities.

Component 1: Strengthening AMC's institutional and financial systems (Total Financing: USD 15 million; IBRD Financing: USD 15 million)

13. This component will provide technical assistance to AMC for strengthening institutional and financial systems. It focuses on the following six subcomponents:

14. Subcomponent 1.1: Improving municipal revenue performance. This subcomponent will support AMC in improving municipal revenue mobilization, focusing on property taxes which constitute the largest own source revenue (OSR) of AMC. Subcomponent 1.1 will provide technical assistance and policy reform interventions focused on AMC's revenue enhancement potential in relation to the revision of property tax rates within permissible limits as per state guidelines and provide a robust analytic basis for implementing evidence-based policy actions to improve property tax performance.

15. Subcomponent 1.2: Land-based financing. This subcomponent will support the AMC in developing systems to enable more effective and efficient use of land-based financing tools to resource infrastructure investments. It will comprise two activities: (i) technical assistance to improve the formula of Floor Space Index (FSI) premium charges to expand the use of FSI charges as a source of infrastructure funding, and (ii) technical assistance to improve the real estate data system for AMC and enhance the asset management and monetization practices for AMC's real estate portfolio. The support will provide a combination of analytical and advisory services focused on addressing the critical policy and systems constraints faced by the the Estates department of the AMC in managing its municipal real estate portfolio.

16. Subcomponent 1.3: Strengthening AMC's institutional systems for service delivery. This subcomponent will provide technical assistance to Water Resource Management (WRM) department of AMC for setting up systems that enable and enhance operational efficiencies and service performance. It will comprise three activities: (i) supporting the development and operationalization of systems for managing performance-based contracts; (ii) establishing systems for sector-level utility planning, budgeting and cost recovery for enhancing financial and operational sustainability – this will include policy reform to introduce wastewater tariffs in an incremental and phased manner starting with the bulk commercial and industrial consumers first as well as the budgeting reforms to establish a system that is able to account for all sector expenditures and identify the full cost of service; and (iii) strengthening planning, infrastructure development and asset management systems for stormwater management with a specific focus on adopting integrated nature-based solutions to enhance resilience to flood risks and support preparatory activities for future phases of engagement. The project will also support the development and operationalization of a GIS-enabled MIS to support asset management and the O&M systems for wastewater and stormwater management services, which is described in subcomponent 1.4.

17. *Promoting occupational mobility for informal women workers:* This subcomponent will also strengthen gender inclusion in service delivery systems by undertaking localized zone-level needs assessments and delivering on-the-job skills modular training over 3-6 months linked to a technical job role (f.i. masons, rod binders, sludge vehicle drivers, site-operators, etc.). The technical training on skills will be complemented by delivery of life skills training for women workers which includes digital literacy, financial literacy, reproductive literacy, and legal literacy.

18. Subcomponent 1.4: Integrated GIS-based system for urban management, financing, and service delivery. This subcomponent will support the establishment and institutionalization of GIS-enabled MIS for property taxation, the management and monetization of the AMC real estate portfolio, and asset management and O&M of wastewater services.

19. Subcomponent 1.5: Strengthening the municipal financial management system. This subcomponent will focus on strengthening the municipal financial management systems for budgeting, accounting, and auditing in AMC. It will comprise three activities: (i) technical assistance for improving municipal budgeting systems through the development and adoption of streamlined budget coding structures that will enable detailed functional classifications for capital and O&M expenditures, (ii) technical support to AMC for strengthening accounting systems in the Integrated Financial Management System (IFMS) through system upgrades, and (iii) technical support to institutionalize the practice of conducting external audits of AMC's annual financial statements and publish the same on their website, in line with the mandatory conditions for accessing fiscal transfers from XV Central Finance Commission (CFC).

20. Subcomponent 1.6: Climate-smart capital investment planning (CIP) system. This subcomponent will support AMC in developing and institutionalizing a climate-smart CIP system to (i) plan, prioritize and finance infrastructure investments in line with city's urban expansion and associated service demands, and (ii) address planning and financing related constraints in budget execution and fund utilization. The CIP system will be developed in a climate-risk informed manner to ensure that future infrastructure development and service delivery is climate resilient and emission-sensitive. The focus will be on establishing a structured process for cross-sectoral prioritization of new both capital investment and O&M expenditure needs to inform budgetary allocations at the AMC level and the department/zone level in a streamlined manner. To institutionalize the CIP system, AMC's organizational capacities will also be strengthened so that the CIP process is well-coordinated across all the departments of AMC.

Component 2: Improving wastewater management services (Total Financing: USD 366.30 million; IBRD Financing: USD 246.30 million, Government Financing: USD 120 million)

21. This component will follow an integrated service delivery approach and focus on improving the coverage, quality, efficiency, sustainability, and resilience of wastewater management services. More specifically, Component 2 will comprise the following five activities:

22. Subcomponent 2.1: Developing resilient and efficient wastewater treatment systems: This subcomponent will finance investments for expanding the treatment capacity and upgrading the treatment technology systems to address the major capacity gaps, operational inefficiencies and regulatory non-compliances in core city areas covering two priority service catchments spread around Sabarmati River – these will include approx. 6-7 wastewater treatment facilities with a cumulative capacity of more than 800 MLD. The investments will enable AMC to adopt energy efficient and low-carbon treatment technologies that will effectively reduce GHG emissions, optimize land requirements and improve system's resilience towards increasing industrial pollution risks and climate risks including flooding. Safe sludge management and disposal systems will be developed to enable sustainable and resource-efficient wastewater management practices. This will include adoption of efficient technologies to reduce sludge generation & mitigate GHG emissions, strengthening end-of-life use linkages (based on sludge quality) and promoting sustainable sludge management practices - this may include establishing energy recovery systems, sludge valorization and nutrient recovery management practices/technologies.

23. Subcomponent 2.2: Improving wastewater network systems including household connections: This subcomponent will finance rehabilitation and capacity expansion of existing wastewater networks in the core city area in line with the treatment capacity expansion in the two priority catchments – including trunk networks, secondary and tertiary networks with an approximate length of about 60-70 KMs, and household connections. The network systems improvements will enhance the wastewater carrying capacities in line with rising wastewater generation, limit infiltration and inflows into

the network, augment their structural adequacy and improve operational efficiency of the overall wastewater system. The project may also support expansion of the network systems in newly added peripheral areas and areas with Low Income Groups (LIGs) to provide quality wastewater services to newly added urban population and reduce inequities in access to services.

24. Subcomponent 2.3: Wastewater recycling and reuse for circularity and resource efficiency: This subcomponent will finance integrated wastewtaer treatment with the objective of promoting wastewater recycling and reuse for circularity and resource efficiency – this would mitigate the freshwater demand in city's major industrial clusters and contribute to the target of 100 percent treated wastewater reuse as per Gujarat state's wastewater recycling and reuse policy. The system will be developed in an integrated and efficient manner to align the recycling & reuse infrastructure with treated wastewater as well as with high water demand centers for industrial usage to minimize the conveyance network and pumping costs. The wastewater recycling and reuse system could potentially serve as a 'lighthouse model' to be adopted by other Indian cities, given the increasing water supply demands, and increasing scarcity of water resources.

25. Subcomponent 2.4: Industrial pollution abatement in city's wastewater systems: This subcomponent will establish systems and processes for industrial pollution monitoring and abatement – that would enable AMC to monitor the pollution risks on a real-time basis and protect the wastewater systems from frequent shocks and operational breakdowns. The key interventions to mitigate industrial pollution risks will include: (i) implementation of a water quality monitoring and mechanism to provide early warning system to monitor the industrial pollution instances on a real-time basis and issue warning to manage the treatment process, (ii) technical support to AMC to undertake studies, surveys and investigations in identifying pollution hotspots to support AMC in developing a systemic long-term approach for pollution abatement and (iii) Integrating necessary design, technology, response SOPs and O&M requirements as part of the wastewater investments to enhance the operational resilience of the system against industrial wastewater pollution. . These interventions will help AMC in protecting the urban wastewater systems from the operational risks (and associated financial costs) caused by the industrial wastewater pollutants (heavy metals & trade effluents) in a proactive and effective manner.

26. Subcomponent 2.5: City-wide integrated digital monitoring and control systems: This subcomponent will support upgrading and operationalizing a city-wide unified wastewater monitoring and quality control system for enhanced operational control, process optimisation and robust monitoring of wastewater system including conveyance and treatment processes, to enable city wide efficiency improvement. This activity will include a combination of a robust water quality monitoring system for enhancing water resource governance in the city as well as in operationalizing a dedicated management system for key industrial pollution hotspots.

Component 3: Developing state level institutional systems and capacities (Total Financing: USD 18 million; IBRD Financing: USD 18 million)

27. This component will focus on strengthening the overall state level institutional systems and capacities and developing a platform to leverage AMC's good practices for building capacity and systems of other emerging cities in Gujarat. Component 3 will comprise the following subcomponents:

28. Subcomponent 3.1: Developing state-level systems and urban knowledge ecosystem for emerging cities. This subcomponent will support the GoG in adopting a "lighthouse model" for strengthening the systems and performance of ULBs across other emerging cities in the state by leveraging good practices and lessons from Ahmedabad and other cities. It will comprise two activities: (i) building an urban knowledge ecosystem for emerging cities through the establishment of a Gujarat Center for Urban Innovation (G-CUI), and (ii) supporting GUDM through the development of a state-level integrated project and fiduciary management system that will streamline financial management and procurement practices across all the second and third tier ULBs in the state and will centrally track procurement and

funds flow.

29. Subcomponent 3.2: Technical support for project implementation and management. Under this subcomponent, project management, coordination and monitoring support will be provided to the project's implementing agencies (AMC and GUDM).

30. Lending instrument and performance-based conditions. The lending instrument is Investment Project Financing (IPF) with Performance Based Conditions (PBCs). Disbursements will be triggered by the documented execution of eligible expenditures and verification of achievement of PBCs which will provide incentives for achieving results. The project will have seven PBCs covering disbursements with a total allocation of US$ 120 million.

Legal Operational Policies

	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

Summary of Assessment of Environmental and Social Risks and Impacts

31. Relevant Environment and Social Standards (ESS): The relevant ESSs: ESS1 (Assessment and Management of Environmental and Social Risks and Impacts), ESS2 (Labor and Working Conditions), ESS3 (Resource Efficiency and Pollution Prevention and Management), ESS4 (Community Health and Safety), ESS5 (Land Acquisition, Restrictions on Land Use and Involuntary Resettlement), ESS6 (Biodiversity Conservation and Sustainable Management of Living Natural Resources), ESS8 (Cultural Heritage) and ESS10 (Stakeholder Engagement and Information Disclosure).

32. ESF Documents: As the locations, designs, and capacities of the STP and sewerage network improvement investments that will be supported under the project are not fully known at this stage, the borrower has prepared and disclosed the required Environmental and Social Management Framework (ESMF) which lays down procedures to be followed during planning, design, implementation, and O&M of subprojects. The ESMF has been prepared based on assessments including possible impacts on local biodiversity, cultural heritage, pollution, health and safety; other aspects studied include cumulative risks and impacts, regulatory aspects, institutional capacity assessment, and stakeholder consultations. The ESMF sets out the mechanisms to assess and manage the E&S risks and impacts of the Gujarat Resilient Cities Partnership: Ahmedabad City Resilience Project (G-ACRP) which includes criteria and procedures to screen, identify, and mitigate potential E&S risks of the proposed activities and interventions. AMC has also prepared a Stakeholder Engagement Plan (SEP), Gender Based Violence (GBV) action plan, Biodiversity Management Framework, Cultural Heritage Management Framework, Labor Management Procedures (LMP), and a Resettlement Policy Framework (RPF). Although the project will rely primarily on the use of already available public land for civil works activities, a RPF has been prepared as precautionary measure in case land acquisition is needed during implementation.

33. Site-specific ESIAs and ESMPs have been prepared for two subprojects: (i) rehabilitation of Vasna 240 MLD STP (Moderate Risk) and (ii) construction of a new Vasna 375 MLD STP (Substantial Risk) to assess and manage the E&S risks and impacts of identified subprojects. The ESIAs include E&S management plans for all civil works, management of sludge and Construction and Demolition wastes, and discharge of treated sewage, including plans for community health and safety, Occupational Health and Safety (OHS), labor management, GBV/Sexual Exploitation and Abuse, and grievance redress mechanism. ESIA/ESMPs will be included in procurement documents to procure the services of the DBOT

contractor and will be updated for the final designs prepared by the contractor after required investigations and suggested technology and the results of Flooding and Dam Safety Study for the Vasna Barrage to be undertaken by AMC. E&S requirements and capacities will also be incorporated in the TORs for procurement of hardware, software, upgradation of monitoring systems, support to local planning, development of the center of excellence, capacity building, and technical support activities.

34. Arrangements for implementation, monitoring, and supervision of E&S management plans and instruments have been agreed and described in the disclosed ESMF. The AMC PIU shall have an environmental and social management unit named the Sustainable Urban Development Unit (SUDU) with four E&S specialists. GUDM PIU shall have two E&S specialists to support the management of E&S risks and the implementation of the E&S instruments. The Project Management Consultant (PMC) shall also have E&S experts (including Heritage, Biodiversity, and Hydrology experts) to coordinate and support ESF specialists of PIUs during the preparation, implementation, supervision, monitoring, and reporting of E&S aspects. An Environmental and Social Management Information System (ESMIS) will be developed to link and monitor project details and schedule with the ESIA / ESMP schedule, integration of E&S aspects in design, ESMP in bid documents, and ESMF implementation to ensure effective preparation and updating of ESF instruments, implementation, supervision, and monitoring. Additional E&S institutional arrangements and requirements will be reflected in the Environmental and Social Commitment Plan (ESCP), prepared, and to be disclosed by the borrower before appraisal, and scheduled to be updated by negotiations and as required during the project.

35. Citizen engagement. During the preparation of the environmental and social documents of the project (ESMF, ESIAs and SEP), extensive consultations were held with 527 stakeholders that included project affected people, interested parties and vulnerable groups including women and marginalized groups. A Stakeholder Engagement Plan (SEP) has been prepared and disclosed to obtain feedback from all stakeholders. The SEP describes the strategy and specific methods of engagement that would facilitate effective participation of the different affected and interested groups and delineates the roles and responsibilities for the implementation of the SEP. The AMC has a functional complaint system that can be accessed using a web portal and toll-free number, recording an average of 40,000-50,000 complaints each month. Each complaint has a unique case number by which it can be traced and escalated or reopened if the complaint remains unresolved. Under this Project, AMC will implement accountable and citizen-centric service delivery and grievance redressal system including a survivor centric approach to address SEA/SH related grievances. AMC will set up systems that would enable systemic shifts in service delivery performance monitoring, feedbacks, reporting and disclosure mechanisms to enhance performance, accountability, and transparency of AMC services. These will include (i) developing geo-tagged database of customer/household connections and customer complaints, and integrating with the GIS platform and mechanisms to regularly update it, (ii) conducting necessary consumer feedback surveys and developing annual consumer survey reports that will enable a systemic shift towards enhancing customer engagements for wastewater and stormwater management services, and (iii) public disclosure of annual performance reports covering the service performance and consumer feedback. AMC will hire a consultant to design the performance disclosure and citizen feedback systems; and survey agencies to conduct annual citizen satisfaction surveys.

36. Public consultation and disclosure of information. Stakeholder consultations (mostly virtual due to Covid 19 pandemic) on the ESMF, CHMF, BMF, LMP, RPF, SEP, and ESCP were conducted during the period June 2021 - January 2022. After disclosure of draft ESF documents, consultations were held with the stakeholders on June 7, 2022, and comments/suggestions were incorporated to finalize all documents. Feedback from the consultations has been reflected in the revised E&S documents. To comply with disclosure and access to information requirements, AMC disclosed these instruments, with translated (to Gujarati) summary of ESMF, and ESIA on their official website on Feb 8, 2022, available at the following link: https://ahmedabadcity.gov.in/portal/index.jsp. These documents have also been disclosed on the external website of the WB as follows: ESIA: *h*ttp://documents.worldbank.org/curated/en/099400102102233784/ESIA01260MLD0STP0withSumm 0in0Eng0Guj*;* and

ESMF: http://documents.worldbank.org/curated/en/099400002102232171/ESMFwithSumm 0in0Eng0Guj.

E. Implementation

Institutional and Implementation Arrangements

37. Gujarat Government's Urban Development and Urban Housing Department (UD&UHD) will be the nodal department responsible for G-ACRP implementation and monitoring at the state level. AMC will be the primary implementation agency responsible for management, implementation, coordination, and monitoring of all the city-level (Ahmedabad) project activities. A dedicated Project Implementation Unit (PIU) has been established in AMC with the Deputy Municipal Commissioner (Projects) as the Project Director (PD) supported by the City Engineer (WRM) as the Deputy PD and a team of core technical, fiduciary, environment, and social experts. PIU structure is fully integrated within AMC's organization structure and focal points have been designated from all the relevant departments to lead the critical institutional, and financial reform activities in component 1, while all the activities in component 2 will be led by WRM department team comprising staff at the headquarters and zonal offices. The PIU will be supported by a Project Management Consultant (PMC) for overall project management and design review and implementation supervision of infrastructure investments and service delivery systems proposed under the project.

38. GUDM will lead the implementation of all state level activities under component 3. A PIU at GUDM has been set up under the Additional CEO, GUDM and will consist of core technical, fiduciary, environment, and social experts. Overall institutional arrangements for project implementation, coordination, monitoring and reporting will be detailed out in Project Implementation Manual (PIM).

CONTACT POINT

World Bank

Harsh Goyal
Young Professional

Roland White
Lead Urban Specialist

Borrower/Client/Recipient

India

Implementing Agencies

Ahmedabad Municipal Corporation
Lochan Sehra
Municipal Commissioner
mc@ahmedabadcity.gov.in

Gujarat Urban Development Mission

Raj Kumar Beniwal
CEO
mca.guj@gmail.com

Urban Development and Urban Housing Department
Mukesh Kumar
Principal Secretary
securban@gujarat.gov.in

FOR MORE INFORMATION CONTACT

The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 473-1000
Web: http://www.worldbank.org/projects

APPROVAL

Task Team Leader(s):	Harsh Goyal Roland White

Approved By

Practice Manager/Manager:		
Country Director:	Hemant Pawar	29-Jun-2022