Appraisal Environmental and Social Review Summary

Appraisal Stage

(ESRS Appraisal Stage)

Date Prepared/Updated: 06/29/2022 | Report No: ESRSA01801

BASIC INFORMATION

A. Basic Project Data

Country	Region	Project ID	Parent Project ID (if any)
India	SOUTH ASIA	P175728	
Project Name	Gujarat Resilient Cities Partnership: Ahmedabad City Resilience Project		
Practice Area (Lead)	Financing Instrument	Estimated Appraisal Date	Estimated Board Date
Urban, Resilience and Land	Investment Project Financing	6/27/2022	10/25/2022
Borrower(s)	Implementing Agency(ies)		
India	Ahmedabad Minicipal Corporation, Gujarat Urban Development Company, Urban Development and Urban Housing Department, Ahmedabad Municipal Corporation, Gujarat Urban Development Mission		

Proposed Development Objective

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

Financing (in USD Million)	Amount
Total Project Cost	400.00

B. Is the project being prepared in a Situation of Urgent Need of Assistance or Capacity Constraints, as per Bank IPF Policy, para. 12?

No

C. Summary Description of Proposed Project [including overview of Country, Sectoral & Institutional Contexts and Relationship to CPF]

GRCP will support AMC in addressing key institutional, financial, and service delivery constraints to strengthen the resilience and sustainability in Ahmedabad. The project will provide a combination of technical and financial assistance to AMC in pivoting towards an integrated service delivery approach – one that is resilient, green,

sustainable, and inclusive. In line with the three pillars of the urban sector partnership framework - the institutions pillar will focus on strengthening the systems, implementing critical reforms, and building the capacity of AMC for planning, delivering, and managing urban services; the finance pillar will focus on strengthening the investment planning and financial management systems, strengthening the revenue base, expanding access to finance; and the service delivery pillar will focus on improving the infrastructure coverage and service levels for wastewater management in Ahmedabad leveraging on the institutions and finance pillars. GRCP will adopt a results-focused financing approach to deliver financial assistance as incentives to AMC for implementing reforms, strengthening systems and enhancing practices. The results-focused approach will establish some of the critical service delivery, institutional and financial systems and performance improvements of the operational as Performance-Based Conditions (PBCs), linking the achievement of these results to full disbursement of IBRD financing. PBCs identified under GRCP are particularly targeted on areas that (i) require significant effort to change established practices, (ii) require strong inter-departmental coordination and collaboration within AMC (which has proven elusive in the past), and (iii) will provide the foundations for long-term sustainability of the infrastructure investments that will be financed using IBRD resources and enable sustained improvements in quality of service. To this end, GRCP comprises three components as described below:

Component 1: Strengthening AMC's institutional and financial systems (Total Financing: USD 15 million; IBRD Financing: USD 15 million)
This component will support AMC to address key capacity, systems and policy constraints which affect its institutional and financial performance, hence ability to invest in and maintain urban infrastructure services in a sustainable and resilient manner. Component 1 comprises six subcomponents focused on: (i) improving municipal revenue performance, specifically in property tax, (ii) reforming and strengthening land-based financing instruments, (iii) strengthening institutional systems for wastewater and stormwater management services, (iv) developing an integrated GIS system for urban management, financing, and service delivery across AMC's departments, (v) strengthening municipal financial management systems, and (vi) developing and institutionalizing a climate-smart capital investment planning system.

Component 2: Improving wastewater management services (Total Financing: USD 366.30 million; IBRD Financing: USD 246.30 million, Government Financing: USD 120 million)
This component will focus on improving the coverage, quality, efficiency, sustainability, and resilience of wastewater management services, following an integrated approach for service delivery. Wastewater management has been prioritized based on a detailed technical assessment of AMC's infrastructure and service delivery performance, that highlighted significant infrastructure gaps, suboptimal service levels, regulatory non-compliance, substantial resource sustainability and resilience risks, and negative environmental and social externalities. Component 2 will comprise five activities: (i) expanding and upgrading wastewater treatment systems to address the major capacity gaps, operational inefficiencies and regulatory non-compliances – this includes shifting to more efficient treatment technologies and resilient technical designs; (ii) integrating and improving wastewater network systems including household connections to enhance the wastewater carrying capacities in line with rising wastewater generation, limit infiltration & inflows into the network, augment their structural adequacy and improve operational efficiency of the overall wastewater system; (iii) developing integrated facilities for secondary and tertiary treatment of wastewater for industrial reuse 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 70% treated wastewater reuse as per state's wastewater recycling and reuse policy, (iv) establishing 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; and (v) upgrading and operationalization of 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.

Interventions in wastewater management systems will be (i) prioritized based on integrated service-catchment based system planning that would focus on coordinated end-to-end systems improvement including wastewater network and treatment systems in priority catchments in the core city area – two catchments (Pirana and Vasna) have been prioritized based on the needs and challenges identified during technical assessments, and (ii) spatially integrated and balanced in terms of rehabilitating, upgrading, and expanding the systems in the core city area; and developing new systems in the peripheral urban areas within the prioritized catchment areas. The long-term city-wide wastewater management master plan currently being prepared by AMC will serve as a sound basis to identify and prioritize the investments under this component – following the approach outlined here. Priority will be accorded to investments that are urgently required to mitigate environmental pollution, ensure regulatory compliance and address capacity gaps. The technical design and implementation process will ensure that most resource-efficient, climate-resilient and green technological solutions and infrastructure systems are adopted – that not only enhance service performance and sustainability but also reduce GHG emissions and develop adaptive capacity to manage climate risks. This would serve as a model of integrated planning, infrastructure development and service delivery, that can be scaled-up across all other service catchments of the city – in line with the long-term wastewater management master plan.

This component will introduce performance-based Design, Build, Operate and Transfer (DBOT) contract modalities for private sector participation that include outcome-oriented service delivery and sustainable O&M for 15 years in addition to infrastructure development. Targeted support in this sector will enable improvements in the coverage, service levels and performance; enhance resource efficiency and sustainability through circular approaches such as recycling and reuse; ensure regulatory compliance and mitigate risks related to water pollution and resource degradation; enhance climate resilience and reduce GHG emissions.

Component 3: Developing state level institutional systems and capacities (Total Financing: USD 18 million; IBRD Financing: USD 18 million)
This component will focus on developing a state level platform to leverage AMC's good practices for building capacity and systems of other emerging cities in Gujarat. Component 3 will comprise two subcomponents focused on: (i) developing state-level systems and an urban knowledge ecosystem for emerging cities along with a state level project and financial management system for other ULBs, and (ii) technical support for project implementation and management.

D. Environmental and Social Overview

D.1. Detailed project location(s) and salient physical characteristics relevant to the E&S assessment [geographic, environmental, social]

Gujarat State, in the North-Western coast of India, is among its most urbanized states with a strong industrial base. Located between 22°55' & 23°08' North latitudes and 72°30' & 72°42' East longitudes at an elevation of 53 meters above MSL is its largest city, Ahmedabad contributing about 60% of the State's productivity and well known for its architecture, and textile industry. With an estimated population of 7.3m residing in the municipal area spread over 505 sq. km, under the jurisdiction of Ahmedabad Municipal Corporation (AMC), it is the country's seventh-largest

metropolis. The city area has spatially expanded from 161 sq km in 1989 to 505 sq.km in 2020. The city is divided into seven administrative zones - Central, East, West, North, South, southwest, and northwest; and depicts a concentric compact city around the Sabarmati River, with a density of around 14,450 people/sq.km. The population has grown at an annual rate of 3 percent in the last three decades , with population increasing four-fold since 1980. The city could be segmented as a) the 'walled' city (within the fort walls) – old city of Ahmedabad in the central area to the east of River Sabarmati; b) industrial and residential localities to the Eastern peripheral areas of the Old City; and c) plotted residential colonies and institutional areas in the 'new city' to the west of the old city across Sabarmati.

Ahmedabad is sited in a dry sandy area of moderately deep, loamy textured soil; with plain topography, except the small hills of Taltej and Jodhpur Tekhra. River Sabarmati, the most important water body in the region, bifurcates Ahmedabad into the western and the eastern parts, connected via many bridges and also spanned across by Vasna Barrage holding water mainly from Narmada Main Canal in its beautified Riverfront, and releasing intermittently for downstream irrigation through the Fatehwadi Canal. Climate is dry, with summer (march to June; with heat waves), monsoon (southwesterly from mid-June to mid-September), and winter (October to February; with chills) seasons. The Khari River runs almost parallel to the Sabarmati towards the east, beyond the city limits. One of the oldest irrigation schemes of Gujarat 'Kharicut canal scheme' passes through the eastern part of the city, also serving as a storm-water drain during monsoon, draining into Khari River passing through the east and south – east of the city. The Kankaria, Vastrapur, Thaltej, and Chandola are among the many important ponds/lakes in the city. Thol Lake Sanctuary is at around 27Km from the city. There are many city-level gardens, parks, ponds in Ahmedabad. Gujarat is located in the "Himalayan Collision Zone" with Ahmedabad in a severe earthquake intensity zone - Seismic Zone III. The city and its region are heavily industrialized with many thriving textile, pharmaceutical and chemical units among others and sprawling state sponsored industrial estates around, and strong industrial corridors including the Delhi Mumbai Industrial Corridor in its immediate region.

The city has 54 heritage monuments (many dating back to the 15th century) protected by the Archaeological Survey of India - 32 in the Central Zone including fort walls and gates, traditional houses ('pols') and their features, public wells, mosques, tombs, and Hindu and Jain temples of later periods. With these, the historic walled city of Ahmedabad appeared in the UNESCO's World Heritage City list of 2017. Proposed infrastructure developments may be in different parts of the city. Proposed sewerage networks will be along the main city roads, some in the congested parts. Some of the sites may have nearby sensitive land uses, receptors, heritage buildings, and Sabarmati or Khari rivers or Lakes. Proposed subprojects include upgradation of existing Vasna 240 MLD STP, Construction of new 375 MLD STP in the premises of existing Vasna 126 MLD STP (and demolition of existing STP after first stream is completed to receive the wastewater treated in the existing STP); upgradation of existing sewer network (through micro-tunneling), construction of new 60 MLD STP at Koteshwar, and 75 MLD STP at Vinzol, in the urban settings.

Due to vibrant economic activities, the city attracts a significant number of migrants from within the state, adjoining ones as well as other parts of the country. Nearly 695,000 or 12.4 percent of the population comprises of people who have come to the city from outside the state for employment. The total scheduled caste (SC) and scheduled tribe (ST) population of the city as per Census 2011 was 11.85 percent, of which SCs comprised 10.5 percent or 594,000, making them the second-largest vulnerable population of the city. The urban poverty rate of the city has declined from 28 percent in 1993–1994 to 10 percent in 2011–2012. However, there are still challenges related to lack of access to sanitation, improved water, and electricity. About 34 percent of the residents live in slums or chawls (tenements for industrial workers).

D. 2. Borrower's Institutional Capacity

The country has a robust legal and regulatory environment to address potential environmental and social risks and impacts of proposed investments including Environmental Protection, Water, Air, Noise Pollution, Management of Wastes, and Occupational Health and Safety.

The AMC is the largest municipal corporation of Gujarat and it implements schemes and programs for urban development infrastructure, provides municipal services, other public services including entitlements and benefits as part of the social safety net in the city. AMC has previous experience of working on investment projects and similar infrastructure development as proposed under the current operation. AMC will implement the city level activities and Gujarat Urban Development Mission (GUDM) of the Government of Gujarat will implement the state-level activities; which are mainly on capacity building. AMC will take up the overall program implementation, monitoring, reporting, and coordination role, and will coordinate with GUDM as necessary.

Though AMC was part of the Gujarat Water Supply and Sewerage Project (P009810) supported by the World Bank which included extension of the sewerage system and treatment works in the AMC area, they have no prior experience or exposure to World Bank ESF, Safeguards or WBG EHS. AMC has in-house engineers / environmental engineers in its Water Resources Department (Drainage) which manages Sewerage and Storm Water / Drainage projects. It arranges consents from the pollution control board and compile the environmental monitoring data of various STPs as part of their routine works. There is no dedicated social experts in department. Assessment during the preparation reveals low to moderate capacity and tools of the implementing agencies/departments and contractors to implement and monitor E&S aspects including Occupational and Community Health and Safety. Program Implementation Units (PIU) have been established in AMC and GUDM with a Program Director and a Deputy Program Director. Environmental Engineers of AMC have been designated to work on environmental aspects, in addition to their other routine works and supporting the technical aspects and various studies as part of this project. It is agreed that AMC PIU will be staffed with dedicated Environmental and Social Experts including OHS experts to manage the project and will be supported by the Environmental, Health and Safety, Heritage, Hydrology and Biodiversity experts of Project Management Consultant (PMC) of AMC to manage the project and following national/state regulations and WB ESF and EHS, who will also co-ordinate with GUDM PIU in monitoring and reporting. GUDM has agreed to designate an Environmental Expert and a social expert to manage E&S aspects of its activities. All staffing requirements with due-dates are detailed in the ESCP. Key personnel of AMC engaged in project preparation in general and E&S preparation in particular have received a virtual training on ESF offered by the World Bank. During the implementation of the project, further training and capacity building activities will be organized following the Environmental and Social Commitment Plan (ESCP) and Environmental and Social Management Framework (ESMF).

II. SUMMARY OF ENVIRONMENTAL AND SOCIAL (ES) RISKS AND IMPACTS

A. Environmental and Social Risk Classification (ESRC)

Substantial

Environmental Risk Rating Substantial

At this stage, environmental risks are rated as ‘Substantial’. Civil works planned include up-gradation of existing STPs and construction of new ones (demolition of old ones) and support infrastructure, rehabilitation of existing networks, and expanding sewerage and drainage networks. Other activities with limited risks and impacts include providing technical support for municipal revenue mobilization, developing a GIS-based real-estate asset inventory

management system, appropriate tariff strategy for core urban services, technical support for land-based financing, and capacity building by supporting GUDM as lighthouse. There are no international waterways in the project area, as identified during preparation, and any works on international waterways will be ineligible under the project. Expected risks and impacts due to construction and upgradation of sewerage and drainage networks, and treatment plants if facilities are not properly planned, designed, and managed; include (i) impacts on water environment of the water body receiving treated sewage / waste water, sludge or wastes or near construction / storage areas, (ii) increased possibilities for pedestrian-vehicular conflicts during utility shifting and laying of networks mainly through congested city areas both during construction and O&M stages, (iii) noise and vibration due to construction activities disturbing surrounding structures including heritage structures if in the vicinity; (iv) noise, light, water, dust, air, land pollution and disturbance to fauna/flora and nearby communities due to construction, activities, usage, O&M activities; (v) occupational health and safety (OHS) risks on workers during construction, demolitions / decommissioning and operations (including due to non-availability / lack of use of PPEs or trainings to contractors and subcontractors), shifting of utilities, material transport, storage, construction and maintenance of proposed infrastructure, (vii) liquid and solid wastes generated during network laying, upgradation and construction of treatment plants and operations, large amount of construction and demolition waste some of which may be fouled with sewage/sludge, and may include existing asbestos, batteries, hazardous wastes and e-wastes which need to be disposed carefully, (viii) labor camp related pollution and burden on shared resources; (ix) disturbances to activity spaces, parks, open spaces, habitats in the vicinity of work areas due to storage of materials and parking and movement of laborers, and construction vehicles,(x) disaster and flooding impacts on the investments along the river Sabarmati, mainly during monsoons also due to flooding and dam safety aspects related to the Vasna barrage. Proposed activities will involve several interdependent components, and all may not be financed under the project. Hence, the impacts of associated facilities are relevant and will be identified and assessed during the design stage. For initial investments planned, no associated facilities have been identified at the Feasibility stage, but will further be confirmed during the detailed design stage. These potential risks can be avoided, mitigated, or minimized through good planning and engineering design. Considering that the impacts are mostly reversible, the environmental risk of the project is considered as "substantial".

Social Risk Rating Substantial

At this stage, the social risk of the Project is rated as “Substantial” based on the planned project activities throughout the city. The key social risks include: (i) Loss of land and assets; (ii) OHS risks for laborers and project workers; (iii) health and safety risk to communities close to and/or exposed to the rehabilitation works; (iv) CHS impacts on communities residing downstream of the Sabarmati river due to pollution of water; (v) SEA/SH risks faced by female project actors and women and girls within the communities; (vi) increased exposure to COVID 19 virus to workers working in proximity and communities due to lack of masks, social distancing, low vaccine coverage; and (vii) possible risks of excluding poor and vulnerable groups from accessing project benefits. Activities under component 2 will include infrastructure development work in densely-populated urban areas of Ahmedabad. While most upgradation and construction activities will take place in existing STP sites, additional land may be required for STPs that are yet to be identified. The upgrading of sewages network may also cause temporary impacts on income and assets. Influx of non-local labor at the construction sites, especially concentration of labor at the STP sites and their impacts on neighboring communities including gender-based violence (GBV), sexual exploitation and abuse and sexual harassment (SEA/SH) is another risk to consider in addition to OHS risks for project workers. Most important social risk is related to stakeholder engagement. Due to existing environmental issues associated with the STPs (discharge of untreated sewage by STPs), the AMC may face resistance from stakeholders including environmental activists, academics, think tanks, watchdog agencies etc resulting in further litigation and reputational risks to the AMC and the

World Bank. Finally, COVID19 pandemic may cause spread of disease among project workers living in labor camps and adjacent communities.

B. Environment and Social Standards (ESSs) that Apply to the Activities Being Considered

B.1. General Assessment

ESS1 Assessment and Management of Environmental and Social Risks and Impacts

Overview of the relevance of the Standard for the Project:

The project will provide improved sewerage for the city of Ahmedabad which in turn is expected to have long term positive effects on health through the reduction of incidence of water-borne diseases and reduced health expenditure, especially for the urban poor; resource conservation through recycling/reuse of treated water; and resilience of the city to disaster/climate events like floods.

Risks, and impacts associated with the above activities during construction and operation stages include (i) discharge of untreated or sub-optimally treated sewage into the environment/rivers, (ii) wastes (Construction/Demolition, Solid Wastes (incl. Plastics), Hazardous, e-wastes), products (eg: treated water), and byproducts (eg: Sludge, some of which may be hazardous incase of discharge of industrial effluent into the sewerage networks) while upgrading existing STPs, and constructing and operating STPs, drainage and sewerage networks, support facilities, (iii) disturbance (eg: traffic disruption, vibration, noise) and health and safety impacts to workers and communities, (iv) air emissions including Green House Gases and dust, and (iv) high use of energy and resources. These potential risks can be avoided, minimized, mitigated, or managed to a large extent if good planning, engineering design, and incorporation of good practices are adopted by the subprojects.

The project activities will also have adverse social impacts due to potential impacts on land and assets, labor influx, resistance from stakeholders, impacts on squatters and vulnerable groups especially women and girls related to air and noise pollution, road safety, risks of SEA/SH. AMC in co-ordination with GUDM has prepared the Environmental and Social Management Framework (ESMF) for managing E&S risks for the whole project. In addition, a Stakeholder Engagement Plan (SEP), Labor Management Procedure (LMP) and a Resettlement Policy Framework (RPF) have been prepared. The ESMF informed the E&S requirements of initial investments, namely upgradation of existing Vasna 240 MLD STP, and construction of 375 MLD STP at available land in the premises of Vasna 126 MLD STP (and demolition of existing Vasna 126 MLD STP in the same land). Site specific ESIAs including ESMPs have been prepared for both of these STPs.

There is a squatter settlement which is located near the two Vasna STPs between the Fatehwadi canal and the STP boundary. There are roughly 700 households residing in temporary structures in the squatter settlement. The settlement comprises of mainly migrant workers and poor and vulnerable population. The settlements will experience temporary impacts related to dust, noise, traffic movement, labor movement, insecurity of women and girls. Specifically, women in the nearby settlement are working, mainly in the unorganized sector as semi-skilled and unskilled labor, domestic workers, construction/masonry work. During the preparation of the ESIA, residents of the squatters were consulted. They raised concerns related to safety and security for women/children due to labor influx for construction activities. They have also raised other issues like lack of water, open defecation, lack of street lights, limited employment opportunities etc. The ESMP include adequate mitigation measures to address road safety, dust

and noise pollution, security risks, CHS risks. In addition, AMC will utilize other on-going government welfare programs (e.g Self-Help Groups, mobile toilets) to address the basic needs (e.g. sanitation, water supply, livelihoods opportunities) of the vulnerable communities living in these squatters. Specifically, ESMP includes h community health and safety measures, employment of labor, for both men and women from the informal settlement, setting up labor camp at suitable site to prevent any disturbance to the settlement, SEA/SH measures and provision of services etc. as part of the project and basic amenities such as drinking water supply and sanitation for the settlement through government schemes and programs.

The borrower has prepared an ESMF before appraisal based on-site and desk-based reviews, and stakeholder consultations (both real and in virtual mode, in consideration of the COVID 19 restrictions); to identify, assess and plan the management of the E&S risks/impacts that are likely to arise. An evaluation of the extent and scope of sub-project activities, locations, E&S risks, and impacts on and capacities of the implementing agency/ies to manage were undertaken. This helped in (a) understanding the possible risks and impacts envisaged from project activities, b) reviewing existing national/state/local level regulations, requirements under ESF, EHS and GIIP, and gaps; (c) arriving at mechanisms to avoid impacts, and reduce, manage and mitigate risks; d) evaluating institutional capacities and resources required for environmental management applying the ESF and applicable ESSs. ESMF includes procedures for undertaking E&S screening and exclusion criteria, guidance for incorporating best practices in design, identification of alternatives, guidance on sub-project level ESIAs (with ESMPs) (including required studies, modeling, and to assess and manage cumulative risks) while preparing DPRs/Feasibility studies, approval processes and resources, training/capacity building, schedule and arrangements to implement mitigation measures and best practices. ESMF also includes generic Environmental and Social Management Plan (ESMP) and environmental best practices. The Environmental, Health, and Safety (EHS) audit was conducted for the existing treatment facilities proposed for up-gradation under the project which informed the ESIAs, especially on upgradation activities.

The project's Environmental and Social Commitment Plan (ESCP) specifies the requirement for the Borrower to implement the ESMF, undertake sub-project level impacts assessment, and prepare their mitigation and management plans for implementation during the project cycle. All assessments and their recommended mitigation actions (including completion of resettlement and disbursement of compensation) will need to be completed and approved before the commencement of physical /civil works. For this, the Borrower will need to ensure that all required mitigation and management measures expected to be undertaken by the contractors as part of the ESMF appropriately are included in the bid documents and implemented.

Apart from ESCP, ESMF and sub-project-specific documents (based on the procedures outlined in ESMF), ESIAs/ESMPs (with translated summary in Gujarati) for initial investments (upgradation and/or construction of Vasna 240 and Vasna 375 MLD STPs) have been prepared, cleared by the Bank and disclosed on February 10, 2022 on the AMC website and the Bank's external website.

The Terms of Reference (ToRs) for TA activities will need to follow ESMF guidance on considering E&S aspects and best environmental practices comprehensively across the TA. The PIU/s will develop the required capacities to manage environmental aspects to prepare and manage project activities and proposed TAs using the ESMF.

ESS10 Stakeholder Engagement and Information Disclosure

AMC has prepared an SEP in accordance with ESS10. The overall objective of the SEP is to define a program for stakeholder engagement, including public information disclosure and consultation, throughout the implementation period of the Project. The SEP describes the strategy and specific methods of engagement that would facilitate effective participation of the different affected and interested groups. The SEP delineates the roles and responsibilities for the implementation of the SEP, as well as monitoring and reporting mechanism(s).

The key stakeholders include three broad categories:
a) Project affected and/or directly linked stakeholders: Residents/ Consumers of drainage which includes sewer network and services; Communities located near proposed STPs; Small businesses and hawkers along main line or in proximity to sites; Large commercial establishments along alignments main line; Hawkers/ Vendors urban poor along main line and in proximity to STP sites along existing drains/ networks; Squatters, Slums adjoining roads; Contractors; Laborers and Workers at the STP and main line; Villages/ Communities/ settlement located downstream of the STPs within or outside municipal limits; Revenue Department/ Estate Department of AMC/ Tax department; Staff of related line departments of AMC working on water resources, sanitation and water supply departments other than staff involved with the GRCP Project.

b) Vulnerable Groups: Urban Poor, People with Disabilities, Minorities and others, living in squatters along the alignment line and areas near the STP; Urban Migrants including women headed households, Minorities, PwD where their main wage earners have lost their lives due to recent COVID-19 Pandemic.

c) Other Interested Parties: Resident Welfare Associations (RWAs); Elected Representatives of Municipal Corporations; Civil Society Organizations; Zonal Heads; Taluka Development Officers; Media; Ahmedabad Urban Development Authority (AUDA); Gujarat State Pollution Control Board; Gujarat Industrial Development Corporation (GIDC); Heritage Department of AMC; Gardens and open spaces department.; Water Resources department; Solid Waste department; Transport Department, Environmental activists; Academics; Think tanks; Watchdog agencies and; legal experts.

As the existing STPs and overall sewerage management at present include environmental pollution and court cases, stakeholder consultations is extremely important for this project specifically on proposed upgrading/construction strategies, technologies and timelines. To this end, during the preparation of the SEP, AMC has consulted with 527 identified stakeholders between August, 2021 and March, 2022. In addition, AMC will organize a public meeting to share the overall project components and proposed design options for upgradation and/or construction of STPs by June 30, 2022. The meeting will help AMC to incorporate stakeholders' suggestions as well as address their concerns. In addition to identifying and inviting relevant stakeholders to join the session, AMC will issue a public notice of the event in the newspaper (both Gujarati and English) so that anyone interested to raise their concerns about the design may do so.

AMC has a functional complaint system (CCRS) which includes a web portal and a toll-free number. It records almost 40-50 thousand complaints every month. Any complaint registered in the system is forwarded to respective zones/departments for action. Each complaint has a unique number by which it can be traced and escalated/reopened if one is not satisfied with the action. If some complaints come directly to the zonal office (mostly from urban poor) they are recorded in the main system. To further strengthen the existing system and to give it a more broader base, the SEP proposes formation of a Grievance Redress Committee (GRC) at the zonal level.

Any Project related grievances, raised by the beneficiaries will be addressed by either the CCRS mechanism or at the zonal level GRC within one month. If any grievance is not settled to the satisfaction of the aggrieved party, it will be escalated to the commissioner. If the commissioner also fails to address the issue to the satisfaction of the aggrieved party, it can be further escalated to the state government. In case the aggrieved party is still not satisfied, he or she may take legal action and the decision of the court will be bound to all the parties. However, it should be noted that legal action is the last resort and only if all other levels of resolution grievances are explored. Finally, the GRM will be SEA/SH sensitive and will include protocols to address SEA/SH related complaints. Since Ahmedabad has a number of women's organization already working with the AMC, any grievances or issues on SEA/ SH would be reported where survivors feel safe and encouraged to come forward. Organizations like SEWA, Mahila Housing Trust would be roped in as service providers. A Standard Operating Procedure will be developed which will establish a clear and transparent SEA/SH reporting and referral system that is aligned with project grievance mechanism procedures so that survivors know to whom they should report; what the grievance management process entails; and what services they can expect to receive from the health, legal, psychosocial, security, and other sectors when accepting the referral made by the GM operator.

The SEP will remain a 'live' document. It will continue including additional stakeholders, impacts on them and their needs for engagement, spell out the mobilization, and the communication strategy for engaging with them. The ESCP will also include conditions for updating the SEP, as required, during project implementation.

B.2. Specific Risks and Impacts

A brief description of the potential environmental and social risks and impacts relevant to the Project.

ESS2 Labor and Working Conditions

The project will involve direct workers (government employees at the AMC and GUDM deputed to the project, professionals or subject matter specialists engaged from the market for different technical areas); contracted workers engaged in construction work and consultancy services (contractor staff, firms engaged in the preparation of E&S, technical documents, DPRs); and primary supply workers (vendors of different material). The project does not envisage the involvement of any community workers.

Given the reliance of the state on non-local labor in the construction sector, the program is expected to have a high reliance on them for meeting labor requirements during the implementation phase. Labor influx is expected at certain construction sites like wastewater and sewerage treatment plants (including construction of pumping stations); although, on a lower scale, laborers will be expected (for a limited duration) at the sites along sewerage alignments when up-gradation, expansion, modernization work is undertaken. .

The former (STP sites) will require setting up of labor camps and developing detailed labor-management procedures (LMP) for camp and worksite management and managing risks related to GBV and SEA following the Project level LMP that has been prepared and disclosed. Considering the pandemic related precautions, the LMP includes COVID 19 considerations and necessary precautions deployed at the construction sites and the labor camps. The LMP also includes an assessment of potential labor-related risks; an overview of labor regulations, policies and procedures; mechanisms to prevent GBV/SEA and harassment; contract terms, codes of conduct including on SEA/SH and

working conditions; age regulations; the mechanism for handling labor-related grievances including on SEA/SH complaints; and other requirements of ESS2 to ensure a safe environment for worker and community.

With regards to occupational health and safety, the LMP includes (i) identification of potential risks and hazards for workers (ii) provisions and enforcement of preventive and protective measures (iii) training of workers and maintenance of training records (iv) documentation and reporting of accidents and incidents (v) remedial and corrective actions (vi) emergency prevention and preparedness and response arrangements to emergencies; vii) Prevention of child labor, forced labor, non-discrimination, use vulnerable workers, etc; and (viii) remedies for adverse impacts such as occupational injuries, deaths, disability, and disease. Periodic site review and audit will be made mandatory to ensure compliance with ESHS procedures.

ESS3 Resource Efficiency and Pollution Prevention and Management

Screening and exclusion criteria have been included in the ESMF to avoid the financing of activities that generate significant risks and impacts on the natural and physical environment. Project activities involving the improvement and construction of sewerage and storm-water management facilities present opportunities to integrate resource efficiency and pollution management aspects during design, implementation, and O&M stages. In case of initial investments, energy/fuel, water, land, and other resource efficiency features and alternate technologies including solar (green house model) sludge drying, solar roof top, recycling of treated sewage for use in the plant premises (after disinfection) have been built into the designs.

For all subprojects, from a resource efficiency perspective, the ESMF will include considerations for energy efficiency, water use efficiency, and raw material usage consistent with ESHS and the borrower will adopt measures specified in the EHSGs to optimize energy, water, and raw material usage, to the extent technically and financially feasible. Resource efficiency measures were analyzed as part of the ESIA including availability of the resource, use of available natural light and ventilation, best alternate technologies such as the use of alternate energy sources / green fuels, energy-efficient pumps, use of solar power, etc.; and use of energy-efficient pumps and fixtures. Minimal use of raw materials and reuse /recycling of construction and demolition wastes (C&D), and reuse and recycle of material and wastes were ensured through ESMP and incorporated in the bid document for detailed design, construction and operations.

Water use efficiency will be incorporated in all project activities through minimizing runoff and ensuring water harvesting, protection of existing water sources, use of water conservation features in fittings, and recycling/reuse of water from Sewage Treatment Plants (for example: Tertiary Treatment Plant for secondary treated sewage is planned to be implemented under the project). To ensure pollution prevention and management, the project will attempt the prevention of the release of pollutants to air, water, and land due to routine, nonroutine, and accidental circumstances. Environmental pollution due to sewage and industrial effluents mixing in sewers / drains are under the purview of the Hon'ble High Court of Gujarat. Impact and risks of noncompliance of National Regulations and permit conditions (these regulations do not allow discharge of untreated / sub-optimally treated sewage into the rivers / environment) during construction and operations shall be avoided by the subprojects. Borrower plans to engage early and comprehensively with all stakeholders including nearby and downstream communities of the Rivers / environment which will be impacted by such discharge, regulators, NGOs, officials and all concerned; as part of this project stakeholder consultations. Special design considerations for storage of fuels and materials during construction

& operations, control of silt runoff & pollution due to storage and management of construction materials and raw materials, minimization and management of solid wastes (including plastics), batteries, and e-waste (including solar panels, electronic parts, etc.), hazardous waste (asbestos generated during demolition/rehabilitation works, refrigerants from air-conditioners and cooling systems, computers and peripherals, digital displays and announcement systems) and construction and demolition (C&D) wastes generated during preconstruction activities (eg: utility shifting), construction & operation stages. Infrastructure and arrangements for minimizing and managing wastes and disposal of inert/rejects and will be included in relevant contractual arrangements of the project. Impact of light, noise, and air pollution and impacts on land use/receptors will be managed by proper layout planning, incorporating the best practices and ESHS guidelines in detailed design and construction technology/mechanism/schedule to minimize its risks on the environment and the communities, and by using fixtures with low emissions and noise. These are included as environmental guidelines and best practices in the ESMF, to be followed during ESMP preparation/updating. Also at the subproject level, ESIAs will include (i) the baseline noise monitoring and operational phase noise disturbance to sensitive receptors around proposed treatment plants; (ii) identify all source of hazardous and non-hazardous waste (including (but not limited to) treated water, sludge, waste screenings, C&D wastes, electrical parts, any asbestos or other hazardous materials) and propose mitigation measures proportional to the level of risk, and management plans. ESIAs/ESMPs for initial investments incorporates these requirements.

ESS4 Community Health and Safety

Health and safety of the communities are important during the construction stage, mainly as networks will be laid in congested city areas, especially in walled city areas. Community health and safety (OCHS) risks and public inconvenience due to the shifting of utilities, material transport, storage, construction, and maintenance activities, are important. The ESIA has assessed the risk to communities during the pre-construction stage (eg: inconvenience, noise, disturbance, and pollution due to shifting utilities, arranging materials and labor), pedestrian-vehicular conflicts and disturbance during construction, and all other health and safety issues during its life cycle including the release of pollutants/wastes and propose management measures following the mitigation hierarchy, such as emergency response measures which have been included in site specific ESIAs. In case of initial investments, agreements on these highlighted by ESIAs have been incorporated in the ESCP.

One of the key CHS issue is ESS 4 requirement on Dam Safety, as applicable to the Vasna Barrage (a medium- large Dam as in National Dams Register of India by the Central Water Commission). In the particular landscape of Ahmedabad, initial STP investments were all concentrated on both sides of Sabarmati river. So, most STPs under consideration in this Project are concentrated here and are affected by flooding during monsoons. The barrage is nearly 50 year old, and the downstream areas beyond the Barrage (where STPs are concentrated) gets flooded annually during monsoons, therefore flooding and safety of the Barrage will be evaluated in details and results will be incorporated to design and construction bidding document. The borrower has agreed to prepare a Dam Break Analysis and Flood inundation mapping which will help strengthen the designs of the Bank supported facilities, construction schedule and emergency action plan to help in community health and safety, also considering the risk of potential outflow of untreated sewage and sludge into the environment (including slum settlements next door and downstream communities of River Sabarmati), safety of workers, labor camps, chemical stores, and structures during such events.

AMC will consider all community-related health and safety risks identified in the ESIA and include necessary mitigation plans. AMC along with the contractor will have to prepare a traffic management plan, community health and safety measures, waste management plans, life and fire safety plans, and emergency response preparedness to mitigate all possible health and safety risks during the construction and operation phase. This will also include ensuring that traditional storm-water drains and run-off channels don't get encroached by squatters and choked in the process, impacting the safety of those living on unplanned settlements in hazard-prone areas.

As guided by ESMF, TA and Construction and Operations/Maintenance will be planned, designed, and implemented to comply with the World Bank Group's Environment, Health, and Safety guidelines.
During the preparation of the project, an assessment of Sexual Exploitation and Abuse and Harassment (SEA/H) will be conducted following the World Bank's Good Practice Note on this issue. The AMC will prepare an Action Plan to mitigate SEA/SH caused by project activities.
Assessment of required COVID-19 response for all staff as well as workers involved in the project were assessed as part of ESMF.

ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

AMC plans to upgrade the existing STPs and construct new STPs only in land that are owned by AMC. However, as the all the sites have not been finalized, the land requirement for the project is not known. As the preparation advances the specific land requirements, sites will be known, as will be whether public/ municipal land is available for those requirements and whether private land will need to be acquired. Moreover, land may be required/impacted for construction of Intermediate Sewerage Pumping Stations (IPS/SPS). The size of the parcel will depend on the capacity of these plants and pumping stations. Upgrading of sewage network may also cause temporary restriction to land use and livelihoods impacts. Since land is a limited resource in the municipal area, to the extent possible, the AMC will seek to identify existing municipal lands for setting up these utilities or seeking transfer of land from other government departments/ agencies. To the extent possible, the project will try to get government land, and only in case of non-availability will it go for land procurement through voluntary transaction, negotiated settlement/ direct purchase from a willing buyer etc. Eminent domain will be used by the state as a last resort after other alternatives have been explored and will not be used on the same parties with which negotiations have been conducted in the past. AMC has prepared an RPF which has been cleared by the Bank and has been disclosed. Subsequent subproject-specific RAPs will be prepared based on the RPF if required. The RAP and site specific ESIAs will include livelihood related impacts on vendors and hawkers, impacts on encroachments/ squatters along the alignments/ RoW, and access related inconveniences to neighboring communities and propose mitigation measures if relevant.

ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources

Lakes, ponds, parks, canals, rivers (Eg: Sabarmati bifurcating the city, Khari River) are present in the city area, though there are no protected areas or critical natural habitat areas. All lakes, canals and rivers are heavily modified being in high dense city and its moderately to highly dense suburbs/peri-urban areas. River Sabarmati today gets its natural flow only during peak monsoons, while the water in the riverfront is retained by the barrage from the inflow it receives (water meant for irrigation in drought prone areas of Gujarat, purchased by AMC and siphoned into the riverfront) from Narmada Main Canal. These hydrological alterations and continuous inflow of sub-optimally or

untreated wastes, sewage and industrial effluents over the past two decades have completely altered the morphology, features and the habitats. By improving the sewage quality reaching the river, it is expected that there will be net gain in biodiversity in the region.

ESMF includes environment screening and exclusion criteria to be used for subprojects to avoid critical habitats, forest / protected areas, or other such areas for proposed works.

Locations for initial 30% of investments have been identified and following the ESS6 requirements, potential adverse risks and impacts on natural resources due to implementation works were determined during the preparation stage. Mainly, existing STP sites have been selected for proposed upgradation and construction. ESIA identified possibilities of risks and impacts as minimal and benefits as more as most of the subprojects essentially intends to effect net improvement in the discharge of sewage into the river / region over the project period.

Subproject ESIAs identified risks (including cumulative risks) on aquatic and terrestrial biodiversity areas and communities dependent on these and prepared ESMPs for managing/mitigating risks. ESMP conditions have been incorporated in the bid documents, includes monitoring measures, and environmental guidelines for detailed design in areas near sensitive receptors/biodiversity/living natural resources, and sourcing of materials from these areas, to minimize, mitigate and manage impacts and risks.

Generic ESMP in the ESMF and subproject ESMPs includes measures to prevent risks and impacts on land, fauna, flora, and water bodies (including rivers, lakes, ponds, and life therein) due to (i) runoff from material storage areas, (iii) depletion of tree cover during the development of Treatment Plants or laying of networks, (iv) pollution from worksites including the deposition of fuel/wastes from construction sites, labor camps, fuel storage, vehicle maintenance areas during construction; and (v) flow of pollutants from treatment plants and O&M of facilities created. In case of need for tree felling, the permit will be sought from respective departments / agencies as applicable and compensatory afforestation will be ensured and as in the case of other ESMP and monitoring measures, these will be included in ESMP cost estimates. the project will not convert lands under sensitive wetlands, sacred groves, designated parks, and open spaces for proposed facilities, labor camps or material storage areas. Supervising and monitoring arrangements for sub-projects near/around sensitive areas will include the services of a biodiversity specialist. Biodiversity Management Committee of AMC will be involved in case of projects involving any sensitive habitat. Consultants & PMC will also have biodiversity management specialist to monitor, supervise and guide the subproject preparations and implementation.

ESS7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities

Less than two percent of the city population comprises of the scheduled tribes. They belong to different tribal groups, originate in different regions of the state and outside. They are dispersed across the city. Since they don't carry any distinct social and cultural identity, ESS7 is not relevant in this case.

ESS8 Cultural Heritage

ESS 8 is relevant. Ahmedabad is a World Heritage City with many heritage precincts, monuments, and features, mostly in the 'old city' area. During preparation stage, it was understood that works related to sewerage network augmentation are proposed only in select areas of the city, based on the Master Plan prepared and hence the Heritage City and its demarcated buffer are excluded from the project; also since the heritage city has very well laid out sewerage networks. However, some of the proposed subproject may be in areas that have structures with religious, cultural, archaeological, and historical significance. The risks and impacts to cultural heritage include vibration and activities such as drilling, excavations, demolitions, causing a disturbance, or other physical changes, including air or water pollution-related damage and risks to heritage structure, access restrictions to communities during works, etc.

During ESIA for initial subprojects, screening for potential cultural heritage features –protected assets and those non-protected but significant to the communities, possible impacts, and legal/other requirements were undertaken, and the same will be followed for all subprojects. At the DPR stage, the project will use a screening matrix and community consultations to screen and exclude areas near key heritage features to avoid impacts. During sub-project preparation, such identified direct, indirect, and cumulative cultural heritage related risks and impacts, and chance finds will be managed as per the national regulations and ESF; with the involvement of Heritage/Conservation experts.

A Cultural Heritage Management Framework (CHMF) including Chance Find Procedure has been prepared and disclosed. The Chance Find Procedure has been included in ESMP and the Bidding Documents. Once the DBOT contractors are recruited, AMC will organize training of the key personnel of the contractors on handling chance findings, reporting/ notifying authorities, cordoning sites, and seeking the services of cultural heritage experts to manage the finds.

ESS9 Financial Intermediaries

ESS 9 is not relevant as no Financial Intermediaries are envisaged at this stage.

B.3 Other Relevant Project Risks

1. Varying capacities of contractors on E&S management and low adherence to regulations

2. The ongoing COVID-19 global pandemic presents a risk for preparation and implementation of the project; mainly to visit and evaluate various sites in the pipeline and ongoing activities owing to COVID 19 related travel restrictions. Also, impacts/risks of labor availability and composition incase of COVID 19 related restrictions are additional risks.

C. Legal Operational Policies that Apply

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

B.3. Reliance on Borrower's policy, legal and institutional framework, relevant to the Project risks and impacts

Is this project being prepared for use of Borrower Framework? No

Areas where "Use of Borrower Framework" is being considered:

The project will apply the Bank's Environmental and Social Framework (ESF) and associated Environmental and Social Standards (ESSs) in addition to regulations at the National and State levels related to environment and social aspects. Borrower frameworks will not be pursued for this project.

IV. CONTACT POINTS

World Bank

Contact:	Harsh Goyal	Title:	Young Professional
Telephone No:	+1-202-458-0402	Email:	hgoyal@worldbank.org
Contact:	Roland White	Title:	Lead Urban Specialist
Telephone No:	+1-202-458-5980	Email:	rwhite@worldbank.org

Borrower/Client/Recipient

Borrower: India

Implementing Agency(ies)

Implementing Agency: Ahmedabad Minicipal Corporation

Implementing Agency: Gujarat Urban Development Company

Implementing Agency: Urban Development and Urban Housing Department

Implementing Agency: Ahmedabad Municipal Corporation

Implementing Agency: Gujarat Urban Development Mission

V. 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

VI. APPROVAL

Task Team Leader(s):	Roland White, Harsh Goyal
Practice Manager (ENR/Social)	Kevin A Tomlinson Cleared on 26-May-2022 at 08:53:31 GMT-04:00