Concept Environmental and Social Review Summary
Concept Stage
(ESRS Concept Stage)

Date Prepared/Updated: 03/08/2020 | Report No: ESRSC01177
BASIC INFORMATION

A. Basic Project Data

<table>
<thead>
<tr>
<th>Country</th>
<th>Region</th>
<th>Project ID</th>
<th>Parent Project ID (if any)</th>
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<td>India</td>
<td>SOUTH ASIA</td>
<td>P170811</td>
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Project Name: Punjab Urban Governance and Water Supply Improvement Project

Practice Area (Lead): Urban, Resilience and Land

Financing Instrument: Investment Project Financing

Estimated Appraisal Date: 4/15/2020

Estimated Board Date: 6/24/2020

Borrower(s): The Republic of India

Implementing Agency(ies):
- Ludhiana Municipal Corporation, Punjab Municipal Infrastructure Development Company
- Amritsar Municipal Corporation (AMC)

Proposed Development Objective(s):
To support strengthening of urban governance, finances and delivery of sustainable water services in the cities of Amritsar and Ludhiana.

Financing (in USD Million)

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<th>Amount</th>
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<td>Total Project Cost</td>
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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]

PUGWISP supports the Government of Punjab’s efforts to deliver 24/7 water supply in the cities of Amritsar and Ludhiana and strengthen the urban governance and finance systems in the two cities. In line with the World Bank's India Country Partnership Framework for 2018-2022, the project is part of the broader medium-term World Bank–
Punjab State Partnership, and will link the upstream policy, regulatory and institutional prior actions under a proposed state-level DPL with downstream city-level results. The project will support the following:

Component 1: Urban Management Strengthening and Project Management
• Sub-component (i): Institutional improvements in urban governance, finance and water supply. This sub-component will strengthen the systems and capacities of Amritsar Municipal Corporation (AMC) and Ludhiana Municipal Corporation (LMC) in a number of priority areas that enhance their capabilities in urban management. This will include but is not limited to strengthening the MCs’ ability to enhance own-source revenues, developing and operationalizing capital investment and asset management plans and systems, strengthening public financial management systems in the MCs, enhancing the efficiency of MC operations through targeted e-governance measures and establishing and operationalizing city-based WSS utilities.
• Sub-component (ii): Project management, including fiduciary and safeguards management. This sub-component will support various project management activities, including but not limited to, the operations of the Project Management Unit in PMIDC and Project Implementation Units in the two MCs, as well as communications and outreach activities at various levels.

Component 2: Water Supply Improvements
• The project will support replacing groundwater-based small independent systems which are spread across the cities and drawing contaminated water (Arsenic is present in Amritsar and Nitrates and Heavy metals are present in Ludhiana) with new bulk water supply systems. This will include construction of raw water systems from canals (MBT canal in Amritsar and Sarhind canal in Ludhiana) of the Sutlej river system and technology-based water treatment plants (440 MLD in Amritsar and 580 MLD in Ludhiana) to meet water demand of the year 2050 as per GoI norms. The treated water will be distributed through two new transmissions lines with pumping systems: one covering the northern part of the city and another covering the southern part. The water shall be pumped in such a way that central computerized supply management systems will ensure that water is always available for distribution to consumers in the supply reservoirs (mostly the overhead reservoirs) making continuous water supply (24/7) possible in the cities. The entire system will be packaged into one Design, Build and Operate contract and implemented through the MCs which will set up their own city-based utilities for constructing and delivering services to consumers with well-defined service delivery accountabilities.

D. Environmental and Social Overview
D.1. Project location(s) and salient characteristics relevant to the ES assessment [geographic, environmental, social]
Amritsar is situated at about 455 km northwest of New Delhi. It is at about 28 km from the Indian border with Pakistan, near Attari village. The city has an area of about 210 Sq Km with a population of about 1.1 million (2011 census). The city is flat, gently sloping from north east with an average elevation of 230 m above sea level. Surface water abstracted from the Upper Bari Doab Canal (UBDC), diverted from Ravi River, will be used for supplying Amritsar. The UBDC system is spread over a length of over 3000 Km with a cultivable command area of 573 000 hectares. No additional water will be diverted from Ravi river to the canal as the canal will have sufficient amount of water to satisfy the needs for both water supply and irrigation.

Ludhiana, the largest metropolitan center in the state of Punjab, is located at about 100 km north west of Chandigarh and 310 Kms from New Delhi. Ludhiana is located at about 10 km south of the Satluj, one of the five major rivers of Punjab. Ludhiana is the largest city in Punjab, both in terms of area and population. The city is spread over an area of
about 200 sq km and accommodates about 16.2 million population (2011 Census). The topography of Ludhiana city and its surrounding areas is a typical representative of an alluvial plain. The city is centrally located in the plain region with an altitude ranging from 244 meters in the East to 248 meters above sea level. Surface water abstracted from the Sirhind Canal system will be used for supplying Ludhiana. The Canal and its distribution network are spread over a length of 3215 Km is used for irrigation. The raw water is proposed be drawn from the canal through a new diversion works to be constructed by the canal authorities.

Ludhiana is the manufacturing hub of the state and has a floating population of approx. 30,000 and an additional industrial workforce of 40,000 which caters to the industries based in the city. Amritsar is a holy city which witness large scale religious tourism and has a floating population of approx 0.2 million (largely national and international pilgrims/ tourists visiting the city). Floating population implies people that are not residents in the cities but either visit as tourists, laborers or traders. Majority of the floating population in the context of Amritsar is the pilgrims/ tourists that visit the city; in case of Ludhiana it is the non-local industrial workers who work in the local factories and other medium/ small enterprises. Both cities are characterized by a large, dense population, high decadal population growth driven mainly by inward migration. In both cities, communities that are particularly vulnerable are a) Scheduled Castes, who constitute nearly one-third of the total population of the state and are characterized by low asset ownership and poverty, have low human development indicators with labor force participation mainly in the informal/ unorganized sectors b) migrant populations from other states who undertake seasonal or extended periods of migration for work, mainly living in under-serviced settlements/slums, with poor access to public services and entitlements.

Locations for the large Water Treatment Plants (approx. 400 and 600 plus MLD) are still in the process of being identified and negotiated. Locations of a majority of Clear Water Reservoirs (CRWs) and Overhead Tanks (OHTs) are known while others are in the process of being identified. Likewise, while the final trunk network will depend on the site finalized for WTPs and CRWs in both cities, their broad transmission routes within the municipal areas are largely known at this stage. The investments to be made for improving and rehabilitating water supply systems will contribute towards enhanced access to safe drinking water for the city population and will improve access for the marginalized communities and contribute to reduced drudgery for women.

D. Borrower’s Institutional Capacity

Punjab Municipal Infrastructure Development Corporation (PMIDC) is the State Level Institution that implements urban reforms and investment programs. Consistent with this role, PMIDC will act as the nodal agency and Project Management Unit (PMU) for this Project and will be responsible for implementing relevant environmental and social standards under the current project. It will also also be responsible for supporting Municipal Corporations (MCs) in implementing environmental and social management at the city level.

The present capacity of PMIDC and Municipal Corporations to manage E&S risks and impacts is limited. While both cities are currently implementing urban reforms and infrastructure development schemes like Smart Cities Mission (SCM) and AMRUT and they employed part-time environmental and social experts to manage E & S risks, the overall capacities to manage E&S impacts remain weak. Neither PMIDC nor MCs has experience with World Bank Financed Project. It is envisaged that both the PMIDC and MCs will augment their capacities for managing E&S impacts and risks as part of project preparation, with the support being provided by the SCM, project under the MCs in the two cities. A PMU is proposed to be established in PMIDC and PIUs in the cities within 30 days of the project effectiveness to strengthen sub-project preparation and implementation, including hiring of environmental and social specialists. It
is expected that such specialists will be hired locally. The composition of E&S specialists in PMU and PIUs will be decided after deeper institutional assessment is conducted as part of project appraisal. The findings will be incorporated in the ESMF and the ESCP.

The Borrower is commissioning the preparation of an Environmental and Social Management Framework and a Resettlement Policy Framework (RPF) for managing E&S risks for the whole project and ESIA for already identified infrastructure works at Amritsar. The ESMF will inform the preparation and implementation of site-specific documents such as Environmental and Social Impact Assessments (ESIAs) / Environmental and Social Management Plans (ESMPs) and Resettlement Action Plans (RAP). Additional instruments to be prepared include stakeholder engagement plan, labor management plan during construction (including gender-based violence (GBV) and sexual exploitation and abuse (SEA), resettlement and grievance redress mechanism (GRM).

II. SCREENING OF POTENTIAL ENVIRONMENTAL AND SOCIAL (ES) RISKS AND IMPACTS

A. Environmental and Social Risk Classification (ESRC)

Environmental Risk Rating Substantial

The proposed project will bring significant benefits to the local population in Ludhiana and Amritsar by shifting water supply from heavily Arsenic contaminated ground water to a safe surface water. While Components 1 and 3 of the proposed project have limited or no environmental risks, Component 2 of the project involves civil works that is limited to (a) construction of water intakes from canals; (b) construction of water treatment plants (including pumping stations); (c) laying of clean water distribution lines between WTPs and Overhead Service Reservoir (OHSRs); and (d) construction of new OHSRs and repairs of existing OHSRs. The adverse environmental impacts related to Component 2 activities include: (i) sludge from the WTPs during operation phase; (ii) emission of dust, noise, debris, waste products during construction; and (iii) health and safety of workers and traffic disruption during construction of WTPs and OHSRs. All these adverse potential risks can be effectively prevented, mitigated, or minimized on-site in a predictable manner through good engineering design. Considering that the impacts are reversible, localized and temporary, the environmental risk of the project is considered as "substantial".

Social Risk Rating High

The social risk is classified as ‘high’, considering that acquisition of large private land parcels (40 and 50 acres of farm land is required in Amritsar and Ludhiana cities respectively) are anticipated in the project for construction of Water treatment Plants for both cities, with potential land and livelihood related impacts. In addition, civil works including large scale road cutting/Right of Way (RoW) for laying the transmission lines through the dense-congested urban localities is likely to temporarily lead to economic displacement of street vendors, hawkers, roadside establishments with loss of income, apart from impacts on squatters and encroachers who occupy stretches of public land/RoW.
The state has a high in-migration of labor from other states (particularly UP and Bihar) for fulfilling the labor requirements in agriculture and construction. There may therefore have substantial labor influx, especially in sites of construction of Water Treatment Plants, which are expected to be located in suburban areas of municipalities or small villages with ‘low absorptive capacity’; and Clear Water Reservoirs/Zonal Reservoirs, which will be located within urban localities with proximity to residential colonies. Both these categories of sites may require setting up of labor camps and developing detailed procedures for camp and work site management and supervision, managing risks related to GBV and SEA for with a detailed assessment will be done as part of the ESIA. Hence, on this basis at the concept stage the risk of labor influx is expected to be high. The GBV risk assessment tool will be run during preparation to make a risk assessment by appraisal.

There are several competing downstream demands for the canal water which include irrigation, urban water supply, low scale pisci-culture and other water dependent livelihoods - with agriculture sector being the primary user. However, the amount of water abstracted for the water supply will not affect water demands for irrigation (see under ESS3). In addition, over the years, despite the intensive nature of Punjab’s agriculture, demand for canal based irrigation has come down due to rising use of groundwater in the state because of its timeliness/better control and relatively low cost of access. This ensures surplus for other activities and hence is not expected to trigger any social conflicts. The irrigation department has confirmed in writing there will be no downstream impact on irrigation users. However, conflicts may occur in residential areas when sites for OHT/ESR are being finalized over selection of site for OHT is densely populated areas. Extensive consultations with communities and stakeholders will need to take place before finalization of sites.

Existing low client capacities (including lack of precedence to judge IA’s/ State’s capacity) to manage social issues emerging from project investments, engaging with communities/citizens groups, understanding issues of equity and inclusion or undertake large scale social mobilization also raises the risks for the project.

It is proposed that the WTPs and distribution networks will be either connected to new storage constructed under the project, existing networks/storage or new constructions under other schemes like SCM/AMRUT. A detailed assessment will be required to understand if such convergence actions qualify as Associated Facilities under ESS1 and whether such activities would need to follow Bank procedures under the E&S requirements.

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 water supply in Amritsar and Ludhiana is currently from ground water. Over 800 wells in Amritsar and over 1000 wells in Ludhiana supply water to the cities. The current water supply system is inefficient and allows for significant water loss and wastage as households are not incentivized to save water. A fixed tariff for water is charged however, due to low capacity of the MCs, a large fraction of households has been left out formal billing and tariff collection process. As a result, the cities of Amritsar and Ludhiana are experiencing over exploitation of scarce ground water resources, excessive water supply resulting in higher power charges, low cost recovery and high volumes of waste
water generation. Currently, the water supply from ground water is 300 Litter Per Capita per Day (lpcd), but with the shift to surface water and demand management (improved production and tariff) this amount is expected to reduce daily supply to 150 lpcd which will in turn reduce waste water volumes in both cities. With enhanced capacity of the MCs as planned under this project, these problems will be addressed significantly. However, on the flip side, there is a possibility that water use tariffs will be increased and/or households which are currently not paying for water will be required to start paying. While this might be necessary for financial viability and sustainability of the system, it still represents a potentially significant social impact specifically for poor and vulnerable water users that will be identified, assessed and mitigated. Though the scope of the current project is limited to transmission systems only and not household distribution, the ESIA will assess adverse impacts of enhanced tariff coverage on vulnerable groups and poor residents and suggest mitigation measures so that the MCs can address these issues during subsequent activities on distribution and connection from OHSRs to households.

Water quality is a serious concern as 72% of water samples tested by GoP’s Department for Water Supply and Sanitation (DWSS) labs in Amritsar was found to be contaminated with Arsenic, 27% of which had more than double the permissible limit. In Ludhiana, DWSS tested water from 40 sources show that 30% samples are contaminated with arsenic, 14% with Selenium and 22% with nitrate. Most of the ground water are supplied without appropriate water treatment. High arsenic levels in people may lead to cancer causing keratosis and hyperkeratosis. The quality of the canal water has been tested and found to be in treatable limits with conventional treatment.

The proposed project will migrate water supply from rapidly depleting and highly contaminated decentralized ground water sources to a centralized treated surface water source.

Project activities for improving water supply in the two cities will involve tapping of water from existing irrigation canals, to Water Treatment Plants (WTPs) with a capacity of 400 MLD in Amritsar and 600 MLD in Ludhiana. The WTPs will be connected with reservoirs by replacing and laying new water distribution networks. Distribution lines to connect OHSRs with households will not be financed by this project.

The adverse environmental impacts of the proposed project include: (i) the sludge generation from the WTPs during operation phase; (ii) emission of dust, noise, debris, waste products during construction; and (iii) health and safety of workers and traffic disruption during construction of WTPs and OHSRs.

The project will provide access to safe water to city residents. This improved water supply will have long term positive effects on human health as the likelihoods of water-borne diseases will reduce. The WTPs will also treat water to reduce the level of arsenic and other contaminants in water. Moreover, increased access to water will reduce the time and energy spent by poor people especially women and people with disability.

The potential social issues in the project include acquisition of large private land parcels (40 and 50 acres of farm land) for construction of Water treatment Plants, with potential land and livelihood related impacts. In addition, civil works including large scale road cutting/Right of Way (RoW) for laying the transmission lines through the dense-congested urban localities is likely to temporarily lead to economic displacement of street vendors, hawkers, roadside establishments with loss of income, apart from impacts on squatters and encroachers who occupy stretches of public land/RoW. Furthermore, there is a risk of large scale labor influx for the construction related activities. Further social issues could include exclusion of vulnerable communities from project benefits and lack of meaningful engagement
and consultation with communities, particularly vulnerable groups such as women, the elderly, minorities, the poor, people living in low-income settlements etc. As part of ESIA and Bank’ due diligence, the vulnerable and disadvantaged households will be identified and measures will be proposed in the ESIA on how these groups will benefit from the project’s improved water supply provisions. In addition, there may be resistance to institutional reform measures as proposed under the project. These social impacts will be assessed in ESIAAs and mitigation measures will be proposed in ESMPs and built into project design. The project will also support filling the gender gaps in the IA workforce, and a gender analysis will be conducted to prepare a gender action plan which will address these issues. The ESIAAs and ESMPs will also include an assessment of potential GBV risk and appropriate preventive measures will be developed.

Since the specific sites for the WTPs (in Ludhiana) and OHRS in both cities are not known, an ESMF will be prepared by the borrower which will also include measures to enhance the IA’s capacity for management of E&S issues. A full detailed ESIA, including site-specific ESMP will be prepared for a WTP in Amritsar by appraisal.

Moreover, it is highly likely that there will be planned activities under AMRUT and SMART CITY Mission projects in both Amritsar and Ludhiana cities that will be considered as associated facilities. For example, the Municipal Corporation of Amritsar plans to construct 11 to 13 of the proposed 47 OHTs planned under the World Bank Project through the AMRUT Program. As these OHTs would be a critical part of the entire network served by the World Bank Project, these would be associated facilities and would come under the purview of all the other ESSs relevant for this project. Similarly, the SMART CITY Mission is planning to do trenching work alongside the main road encircling the densely populated walled city in Amritsar. These trenches will serve multiple purposes, including accommodating the water transmission lines from PUGWSIP. This would also be an associated facility as per the ESF. The ESMF will develop a screening criteria for associated facilities for the IAs to screen water related projects in both cities funded by other entities/sources. If the screening results identify a project as an associated facility, it will follow the E&S risk identification and mitigation process as spelled out in the ESMF and RPF that will be developed for this project.

The project’s Environmental and Social Commitment Plan (ESCP) will specify the requirement for the Borrower to implement the ESMF, as additional sub-projects are selected and designed throughout implementation. Assessments will be required to be completed prior to contracting of works, to ensure that all required mitigation and management measures falling to contractors are appropriately included in bid and contract documents.

Apart from ESP, ESMF and ESIA/ESMPs, other documents such as SEP, LMP, RAPs and ToRs shall be prepared, finalized, cleared by the Bank and disclosed by the Client prior to project appraisal and/or during implementation of the project.

**Areas where “Use of Borrower Framework” is being considered:**

The project will be implemented in accordance with requirements of the ESF Environmental and Social Standards (ESSs) and in accordance with applicable national and state level regulatory and legal requirements.

**ESS10 Stakeholder Engagement and Information Disclosure**

Since the geographic scope of the project is the entire urban area of the city and water conveyance routes right from the WTP to the OHTs, all citizen groups living across the city and along water conveyance alignments will be directly
or indirectly impacted and are considered key stakeholders for this project. These include a number of diverse stakeholders like consumer households, small businesses, hawkers/vendors, land owners, farmers, large commercial establishments, service providers/duty bearers; urban local bodies and their elected representatives; other line departments/agencies like PWSSB, irrigation/water resources/SPWD/CPWD etc. Stakeholders belonging to vulnerable categories include SCs, migrants, women, squatters/encroachers, slum dwellers, laborers, etc. Apart from this, active civil society and community based organizations (like Resident Welfare Associations- RWA) and media groups (print, electronic, social) in the two cities will take keen interest in the project, especially implementation of sub-projects.

ESS10 requires the client to conduct comprehensive analysis and design of an inclusive engagement process with the stakeholders. The IA will be required to prepare a detailed Stakeholder Engagement Plan (SEP) to identify and map key stakeholders and ensure that all stakeholders are engaged throughout the project cycle. PMIDC is currently in the process of setting up a project-specific GRM at the state level and in both the cities based on the advise of the Bank team and will include mechanisms for receiving feedback from the stakeholders/community and redressing grievances arising out of project investments. The IA will need to develop tools and mechanisms within the SEP for identifying and engaging with particularly vulnerable and disadvantaged groups like women, slum-dwellers, migrant settlements, minorities, the poor etc. and ensuring positive and equitable distribution of project benefits to these stakeholder categories. Consultation with stakeholders shall not be treated as a session for one-way disseminating project information, but as opportunities for meaningful consultations (as described in ESS10) to also inform the plan and project design.

The draft SEP will be disclosed, reviewed by the Bank prior to project appraisal. The SEP will be a ‘living’ document and will bring out the differentiated impacts of the project on different stakeholder groups, spell out the mobilization strategy for engagement and for receiving their feedback, views, concerns and suggestions about the project. The output of this exercise will be captured in a stakeholder matrix defining the perceptions and expectations of each stakeholder category and will be tracked through the project cycle. 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 (IA employees transferred to the PIU, professional specialists engaged from the market); contracted workers engaged in construction work and consultancy services (e.g. for preparation of E&S, technical specifications documents, DPRs); and perhaps, primary supply workers (e.g. materials such as sand aggregate). However, the engagement of the primary supply workers will be known once the implementation of the project starts. The project does not visualize involvement of any community workers to be engaged as laborers,
though a detailed assessment of the number of workers, their duration and requirement during the project cycle will be done during preparation of Labor Management Procedures.

The project is also expected to have a high reliance on non-local labor for meeting the labor requirements during the implementation phase for all construction, augmentation and repair activities, including road cutting works and laying down of pipelines. Punjab is a prosperous state, locals are better off and therefore 90 percent of wage-based laborers in all sectors usually come from outside the state. Even for agriculture, the farmers of the state are dependent on agricultural laborers from outside the state. Due to this, it is expected that there may be large scale labor influx in certain construction sites like WTPs (in the peri-urban/ sub-urban areas) and Clear Water Reservoirs/Zonal Reservoirs (within the city). This will require setting up of labor camps and developing detailed labor management procedures (LMP) for camp and work site management and supervision, managing risks related to GBV and SEA. The LMP will include an assessment of potential labor related risks; an overview of labor regulations, policies and procedures; mechanisms to prevent GBV/SEA and harassment; contract terms and working conditions/facilities; working age regulations; mechanism for creating a GRM for handling labor related grievances; and other requirements of ESS2 to ensure a safe environment- both for the workers and host/ neighboring communities.

The LMP will include (i) identification of potential risks and hazards (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 emergency situations; (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 review of OHS policies and procedures will be made mandatory with clear accountability within the IA for operational procedures.

In addition to project workers, a number of IA employees will also work (full-time or part-time) with the project without being formally transferred to the project. ESS2 will not apply to such workers and they will remain subject to the terms and conditions of their employment with IA. However, the provisions of ESS2 related to protection in the work force (i.e. regarding child labor, minimum age and forced labor) and OHS will apply to such IA employees.

**ESS3 Resource Efficiency and Pollution Prevention and Management**

ESS3 is relevant as the proposed project activities will have implication on water use and energy efficiencies as well as pollution management. Water will be extracted from existing canals in Amritsar and Ludhiana. According to the feasibility study, the amount of water that will be abstracted from the canals are less than 10% in Amritsar and 7% in Ludhiana. The irrigation department confirmed in writing that there will be no downstream impact on irrigation-users or eco systems. Potential pollution would come from disposal of construction wastes, spoils, and hazardous wastes, as well as sludges from the water treatment plants during the operation phase. The ESIA will assess the potential impacts of sludge handling and disposal and inform the ESMP of the requirements for appropriate disposal practices. The ESIA will also assess energy efficiency options of pumping station.
ESS4 Community Health and Safety

ESS4 is relevant as impacts related to community health and safety may include road and traffic safety issues during construction works in residential areas, parks, villages where WTPs are located. This will lead to exposure to dust, noise/vibration, hazardous and non-hazardous waste and other health and safety risks for nearby communities. Since the project involves the provision of water supply improvement, it is critical to ensure safe drinking water supply to users and avoid any potential leakages in the supply network or its contamination from sewerage pipes. Therefore, the IA will be required to consider all potential health and safety risks associated in the ESIA and include necessary mitigation plans in the ESMPs. Proportionate to the risks identified, the IA will have to prepare a traffic management plan, community health and safety measures and emergency response preparedness plan to mitigate all the health and safety risks of the project during construction and operations. In addition, given the water in the two canals is diverted by an existing barrages in the two rivers, it is necessary to assess the safety condition of the barrages and their operation and maintenance status in coordination with the irrigation department. Information on operation and maintenance is being gathered and requirements for safety of dams will be provided in the appraisal stage ESRS.

ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

The project will require land for setting up large WTPs close to reliable water sources for supplying to the respective cities. As large government, public land parcels are not available in the potential sites, the IA has decided to purchase land from private land owners at market rate. At the concept stage, the IA has identified one site each for both the cities and are in the process of negotiating voluntary private land purchase with the owners. The land purchase negotiation has been concluded in Amritsar. The IA is confident that it has a ‘willing buyer- willing seller’ situation in both cities expects to proceed with legally recorded land transaction within March, 2020. The IA has been advised to ensure complete transparency in the negotiation along with complete documentation of the process including consultations with the sellers. The WTPs will only proceed once both lands have been acquired per willing buyer willing seller condition. If negotiation fails with the seller[s] in any of the cities, the IA will work on securing alternative pieces of land for the infrastructure. The sale deed for land transaction will be completed in favor of Government prior to issues of bids for civil works.

ESS5 is not applicable to legally recorded voluntary transactions. The principles of voluntary transactions described in para 6 of ESS5 will be made applicable and explained to the client and inform to the potential sellers on the process of voluntary transactions (para 6 specifies that ESS 5 does not apply to voluntary, legally recorded market transactions in which the seller is given a genuine opportunity to retain the land and to refuse the sell it and is fully informed about the available choices and their implications). The ESIA will cover the potential impacts associated with this land purchase. Site specific ESIA will also need to assess the potential economic and social impacts of land transaction on the sellers to ensure that such transaction does not affect the sellers and their households adversely.

There may be temporary economic displacement due to alignment works in the city, direct/indirect livelihood impacts on land owners around the WTPs. Such impacts will need to be captured in the ESIA.
Other than land for the WTPs, land may be required for OHRS. The land acquisition requirement and approach for many of these infrastructure have not been decided yet. Transmission alignments are planned along the village roads, state/national highway and municipal roads and are not likely to require any land/RoW. However, there are likely to be significant, cumulative-city level impacts of the transmission works on establishments/communities/squatters and/or encroachers along the alignment routes. Thus, ESS 5 is relevant for this project. An RPF will be prepared by appraisal which will specify the process to identify and mitigate land-related adverse impacts. Once the design and alignments have been finalized, during project preparation, RAP will be prepared with a census of affected population to draw a baseline on the number of PAPs, nature and scale of impacts of temporary physical and/or economic resettlement and develop a entitlement and compensation mechanisms based on prevailing norms and community consultations.

IAs have also identified several sites for constructing reservoirs, storage tanks many of which are located on available public lands/residential parks and are owned either by the municipal corporations or public entities under it (or affiliated to it) like District Urban Development Agency-DUDA or City Area Development Authority. The ESIA will also have to look at safety and well-being related impacts of OHTs in residential areas/parks as these are a) likely to impact the valuation of their assets, b) acquisition of substantial proportion of parks for constructing OHTs will reduce the usable area (playing area for children and walking area for elderly) and impact their overall safety and well-being. Consultations will need to be conducted when the parks will be converted to service reservoirs and alternative sites for parks will need to be proposed. The MCs will need to arrange funds for developing these alternative sites for parks. The project ESMF and RPF will detail the process of stakeholder consultation, transparency requirements, access to a grievance redress mechanism that would be made available to all concerned for registering their grievances related to LA and resettlement impacts and these commitments from the IAs will be included in the ESCP. As substantial land acquisition and impacts on informal settlers will be involved in Ludhiana, the RPF will need to outline how the land acquisition and resettlement related impacts and risks will be addressed once the sites and routes are identified. The RAP for WTP in Amritsar city will be prepared for which the specific site will be decided prior to appraisal.

ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources
The areas for the proposed WTPs and distribution networks are agricultural lands and urban environment. Preliminary observation revealed that there are no existence of sites crucial for biodiversity conservation.

ESS7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities
ESS7 is not relevant as there are no affected stakeholders that meet the definition of IPs in the project area.
ESS8 Cultural Heritage

ESS8 is relevant. Both cities, especially Amritsar, are old cities with rich histories and equally valuable cultural heritage. The core of Amritsar is the walled city which has a large number of sites and structures with significant religious, cultural, archaeological and historical importance. Since the project will involve extensive earth work, excavation and related physical works for laying new water distribution lines and repairing/ augmenting existing ones, it poses direct, indirect as well as cumulative risks to cultural heritage, especially in the walled part of Amritsar city. ESIA to be prepared by the IAs will consider risks and potential impacts on cultural heritage, and, if required, a Cultural Heritage Management Plan will be prepared. Moreover, the IAs will ensure suitable orientation/ sensitization to the contractors working near sites with high probability of chance findings on procedures for reporting/ notifying authorities, fencing off the sites and hiring cultural heritage experts where potential risks and impacts on cultural heritage are high. Risks to cultural heritage will become clearer once the sites and alignments for the project are finalized.

ESS9 Financial Intermediaries

ESS9 is not relevant as the Project does not include inclusion of any financial intermediaries.

B.3 Other Relevant Project Risks

The project risk is classified as high due to limited capacity to deal with E&S risks and impacts, land and labor related risks. At the concept stage, other key risks identified include:

1. Political will to ensure implementation of requisite institutional reform in IA for the management of E&S issues and sustainability of the project.
2. Risk related to activities under associated activities under AMRUT and SMART CITY Mission.

C. Legal Operational Policies that Apply

<table>
<thead>
<tr>
<th>OP 7.50 Projects on International Waterways</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>OP 7.60 Projects in Disputed Areas</td>
<td>No</td>
</tr>
</tbody>
</table>

III. WORLD BANK ENVIRONMENTAL AND SOCIAL DUE DILIGENCE

A. Is a common approach being considered?  

Financing Partners

The project does not have any other financing partners.

B. Proposed Measures, Actions and Timing (Borrower’s commitments)
**Actions to be completed prior to Bank Board Approval:**

The following will need to be prepared before project appraisal:

- Preparation and disclosure of ESCP

- Preparation, consultation and disclosure of ESIA including ESMP for Amritsar WTP for which technical details and location are available prior to project appraisal.

- Preparation of RAP for Amritsar WTP for which the location and design are known

- Preparation, consultation and disclosure of the Project level ESMF

- Preparation, consultation and disclosure of SEP

- Consultation, Preparation and disclosure of RPF

- Setting up of functional project specific GRM and mechanisms for Citizens Engagement

- Sending a notification letter to inform the riparian countries in compliance with OP 7.50

**Possible issues to be addressed in the Borrower Environmental and Social Commitment Plan (ESCP):**

- ESCP will refer to various safeguards documents that need to be prepared during implementation including but not limited to site specific ESMPs, LMPs, Resettlement Action Plan, Traffic and road safety management plan, emergency response preparedness plan, biodiversity action plan, cultural heritage management plan, GBV Action Plan.

- Provisions to implement and update SEP (including the GRM) during project life cycle

- Provisions to prepare as well as update and monitor the LMP including the GRM for labor during project life cycle

- Implementation of capacity building plan and ESF training to all supply-side stakeholders

**C. Timing**

**Tentative target date for preparing the Appraisal Stage ESRS**  

20-Mar-2020

**IV. CONTACT POINTS**

World Bank
<table>
<thead>
<tr>
<th>Contact:</th>
<th>Title:</th>
<th>Email:</th>
</tr>
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<tbody>
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</tr>
</tbody>
</table>

**Borrower/Client/Recipient**

Borrower: The Republic of India

**Implementing Agency(ies)**

Implementing Agency: Ludhiana Municipal Corporation

Implementing Agency: Punjab Municipal Infrastructure Development Company

Implementing Agency: Amritsar Municipal Corporation (AMC)

**V. FOR MORE INFORMATION CONTACT**

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Telephone: (202) 473-1000
Web: http://www.worldbank.org/projects

**VI. APPROVAL**

Task Team Leader(s): Srinivasa Rao Podipireddy, Balakrishna Menon Parameswaran, Yarissa Lyngdoh Sommer

Practice Manager (ENR/Social) David Seth Warren Recommended on 08-Mar-2020 at 10:54:27 EDT

Safeguards Advisor ESSA Agi Kiss (SAESSA) Cleared on 08-Mar-2020 at 23:23:21 EDT