



# Concept Environmental and Social Review Summary

## Concept Stage

### ( ESRS Concept Stage)

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**BASIC INFORMATION**

**A. Basic Operation Data**

Operation ID	Product	Operation Acronym	Approval Fiscal Year
P180430	Investment Project Financing (IPF)	Pernambuco Rural Water and Sanitation	2024
Operation Name	Brazil: Pernambuco Rural Water and Sanitation Project (PROSAR)		
Country/Region Code	Beneficiary country/countries (borrower, recipient)	Region	Practice Area (Lead)
Brazil	Brazil	LATIN AMERICA AND CARIBBEAN	Water
Borrower(s)	Implementing Agency(ies)	Estimated Appraisal Date	Estimated Board Date
Government of the State of Pernambuco	Secretariat of Water Resources and WSS (Secretaria de Recursos Hídricos e Saneamento) , Pernambuco Water and Climate Agency (Agência Pernambucana de Águas e Clima - APAC) , Pernambuco Water and Sanitation Company (Companhia Pernambucana de Saneamento - COMPESA)	02-Oct-2023	14-Dec-2023

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Proposed Development Objective

To increase access to sustainable, safely-managed drinking water supply and safely-managed sanitation for selected rural communities in the state of Pernambuco; and to build State’s capacity for reaching universal RWSS services.

Financing (in USD Million)	Amount
<b>Total Operation Cost</b>	<b>113.00</b>

**B. Is the operation 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 Operation [including overview of Country, Sectoral & Institutional Contexts and Relationship to CPF]

The proposed Project is a US\$113 million Investment Project Financing (IPF) operation, financed by a US\$90 million IBRD loan and US\$23 million in State counterpart funds. The Project will support the State's higher-level goals of reaching universal WSS access; achieving the SDG reducing the public service and development gaps between urban and rural areas; slowing-down rural migration to urban areas and other states; improving the quality of life and health of rural population and their resilience to climate change risks. It will comprise three components: Component 1 – Increase access to climate-resilient, safely-managed rural drinking water supply and sanitation. It aims at increasing climate-resilient, safely-managed rural population's access to climate-resilient drinking water supply and on-site sanitation solutions, thereby contributing to the State universal WSS access goal. Component 2 – Build State capacity for reaching universal rural WSS access and sustainably manage RWS systems and their water sources. It aims at strengthening the organizational, management, knowledge, strategic and operational capacity of key entities (State, SISAR, community's associations) to deliver sustainable and safely managed drinking water and sanitation services to rural communities and to build State capacity for reaching universal rural WSS access. Component 3 - Support project management. It aims at supporting the State institutions to deliver the Project results. Activities include: strengthening and structuring the Project Management Unit (PMU) to develop preparatory activities, planning actions, studies, monitoring & evaluation, procurement and financial management, environmental & social management of the Project.

### D. Environmental and Social Overview

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

The State of Pernambuco, located in the Northeast Region, is one of the poorest in Brazil, with a Human Development Index (HDI) of 0.673 ranking the State 19th among the country's 27 states. Pernambuco is the third highest GDP per capita in the Northeast Region, it has a population of 9,674,793 inhabitants, 4.4 percent of the country's population, with 17.6 percent living in rural areas. 48.0 percent of the population of the state live under poverty (US\$6.85/day, 2017 PPP) and 12.4 percent under extreme poverty (US\$2.15/day, 2017 PPP). Among the extreme poor, 32.1 percent reside in rural areas. According to current IBGE data, the average monthly nominal household income per capita (BRL 1,010.00) in Pernambuco is among the lowest in the country. In the state, there are 10 different indigenous ethnic groups with, represents about 2% of the rural population and 0.5% of the total population. They occupy a territory of approximately 179,263 hectares located in 16 municipalities. (see ESS7)

Pernambuco is located in the semi-arid region, with a large part of its territory in the "Drought Polygon", an area characterized by a negative water balance, resulting from average annual precipitation of less than 800 mm, average annual temperatures of 23 to 29 °C, evaporation of 2,000 mm/year and an average relative humidity of around 50% (Lins & Burgos, 1985). The spatial and temporal irregularity in the State's rainfall regime is noteworthy, with annual values of around 2,200 and 1,000 mm in the Litoral and Zona da Mata, around 800 mm in the Agreste and between 600 and 400 mm in the Sertão, except in regions with specific microclimates.

There are 19 land use and occupation classes in the state, grouped based on the Technical Manual of Land Use (IBGE, 2013) into five major groups. There is a predominance of Natural Vegetation Areas (especially the areas covered by



savannah formations, occupying approx. 42% of the total area), followed by Anthropogenic Agricultural Areas (mainly the pasture areas, occupying with approx. 28% coverage).

As for the state's hydrography, the basins that flow towards the São Francisco river form interior rivers, the main ones being: Pontal, Garças, Brígida, Terra Nova, Pajeú, Moxotó, Ipanema. The basins that drain to the Atlantic Ocean constitute the coastal rivers, and the main ones are: Goiana, Capibaribe, Ipojuca, Sirinhaém, Una and Mundaú.

Currently, Pernambuco has 90 State Conservation Units (43 Full Protection - FP and 47 Sustainable Use - SU). Among the FP Units there are 3 Ecological Stations, 5 State Parks and 34 Wildlife Refuges and 1 Natural Monument. Among the SU Units there are 21 Environmental Protection Areas, 8 Urban Forest Reserves and 17 Private Natural Heritage Reserves and 1 Area of Relevant Ecological Interest. There are 15 Key Biodiversity Areas (KBA) mapped for Pernambuco, which are mainly concentrated in the center-eastern portion of the state.

In Pernambuco, APAC is responsible for the supervision of the multiple use dams of the state domain. As for the waters of the federal domain, the supervisory body is the national water agency ANA. According to information from December 2021, available in National Dam Safety Information System (SNISB), the state of Pernambuco has a total of 470 dams, 407 of which are under the responsibility of APAC to inspect. The main dams' owners of the state are: Comesa (128), the Development Company of the São Francisco and Parnaíba River Basins - CODEVASF (87), and the Secretariat of Water Resources and Sanitation - SRHS (74), and the National Department of Drought Control - DNOCS (36). Currently the SNISB presents an analysis for 407 dams, including those to be inspected by APAC. 3 are considered under emergency; 53 under alert; 78 under attention; only 10 are rated as normal, the rest have no assessment. Only 53 dams have a Safety Plan. Also, 204 dams are of high risk and 223 have equally high potential damage.

#### D. 2. Borrower's Institutional Capacity

The Secretariat of Water Resources and Sanitation (SRHS) is composed of 3 Executive Secretariats: i) Water Supply and Sanitation (SESAN) – which will house the Project Management Unit (PMU); ii) Water Infrastructure (SEIH), and iii) Management. SRHS has been created in early 2023 with the incoming of the new State government administration. Secretariat's managers have had previous experience with Bank Projects. SRHS is still being staffed mainly with professionals from other institutions, i.e., Comesa and APAC, and from Academia. As a new Secretariat, the SRHS organizational structure is still being developed. E&S management staff are assigned to the Project as detailed below. Staff's previous experience with internationally financed projects varies.

The PMU's responsibilities will include: articulation with the other participating institutions, elaboration/finalization of ToRs, contract management, M&E, acquisitions and financial management, E&S management. An external consulting firm or individual consultants will be hired to support the PMU carrying out Project management activities, including E&S management, if necessary. The PMU will be composed of technicians from SRHS, Comesa and APAC. SRHS, through SEIH, will also participate in the technical elaboration of few specific activities, i.e., the water infrastructure platform.

APAC will participate as cooperating entity in its roles related to Subcomponent 2.2, by preparing ToRs/technical specifications, designs, studies, contracts supervision and management. In addition, APAC's technical support on dam safety and PISF use aspects will be needed. Comesa will participate in the Project as cooperating entity of the Project, bringing in the WSS expertise to deliver technical assistance to the SISAR and rural communities, prepare ToRs/technical specifications, designs, studies, contracts supervision and management; and manage the RWSS



platform. In addition, it is responsible for the implementation and supervision of the Arataca works and Botafogo system operation. Both APAC and Compesa have participated in previously Bank-financed projects.

Under Subcomp. 2.1, SISAR will receive support to fulfill its tasks for to 2-6 regional units. It would be expected to provide technical assistance for financed water systems and onsite sanitation infrastructure; and capacity building for supported associations in management of the systems.

For the preparation stage, in order to act as E&S counterparts of the Bank and also to support the development of the E&S instruments, the borrower has assigned a part-time dedicated E&S team comprised of 4 professionals from the SRHS staff (2 for environment, 2 for social). Although the team has experience on the E&S-related areas, they have not previously worked in development Banks' projects, nor are they particularly familiar with the E&S requirements of the WB's ESF. There is an exception which is one of the assigned social specialists who has indeed worked in a previous project with the Bank (Pernambuco Rural Economic Inclusion – P120139), however, for which the E&S safeguards of the Operational Policies were applied. Even though the Bank's E&S requirements have expanded with the ESF roll out, this previous experience is a good indicator, and something that the team can use and build from. E&S consultancy is also included in Component 3 to support capacity building, technical advisory, and supervision of E&S-related issues, including dam safety. After proper assessment, if the dam interventions are considered of high risk, the dam safety panel shall also be retained under the Project. On the Bank's side, a dam safety specialist is part of the TT to provide duly support and advisory. During preparation, the Bank team will closely support and follow-up on the development of the E&S instruments and also provide capacity building and training activities on the ESF. Formal Cooperation Agreements will be signed to set implementation arrangements.

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

**A. Environmental and Social Risk Classification (ESRC)** Substantial

**Environmental Risk Rating** Substantial

The Project is expected to generate a positive E&S impact in improving the quality of life of the benefited families, giving them access to drinking water/sanitation. As well as a broad environmental gain from the increase in the state's general capacity to manage and monitor water resources. Although the exact location of the Project's main interventions is yet to be defined, the typology and scale of such interventions are relatively well-known. So far, it is known that the Rural WSS systems will be designed and implemented for communities with a population between 500-1000 inhabitants, in rural areas. The WSS civil works do not entail higher-levels of complexity and will be located in rural areas with some level of anthropic activity (crops, pastures, etc.). Environmentally sensitive areas are not likely to be affected and, furthermore, the selection criteria for benefited rural communities – to be defined during implementation – will consider environmental-sound criteria to avoid any kind of significant impacts to environmentally sensitive and/or native forested areas. Other civil works include the renovation of APAC's headquarters and implementation of 2 regional units (in areas still to be defined). These interventions will be located in urban consolidated zones and/or areas already changed by anthropic interventions. Environmental impacts will potentially be linked to waste and wastewater generation, dust and noise emissions, vibration, traffic disturbances, erosion and soil carryover, handling of fuel/chemicals for heavy machinery. Overall, the potential adverse risks and impacts of activities under Comp. 1 and 2 on human populations and/or the environment are not likely to be significant. These interventions are not complex and/or large, do not involve activities that have a high potential for



harming people or the environment, and will be located away from environmentally or socially sensitive areas. As such, the potential risks and impacts are likely to be: i) predictable and expected to be temporary and/or reversible; ii) low in magnitude; iii) site-specific, without likelihood of impacts beyond the actual Project footprint; and iv) low probability of serious adverse effects to human health and/or the environment. Risks and impacts can be easily mitigated in a predictable manner, with well-known E&S control and mitigation measures. Thus, these activities are considered of Moderate risk. Project activities are not expected to generate significant cumulative impacts, however, these impacts will be further assessed during preparation. Although the Project will not include the construction of new dams, it will most likely rely on the performance of existing large dams, as water sources for the Rural WSS to be implemented. In this sense, the Project will fund measures necessary to upgrade the existing dams to an acceptable safety standard. Given the still-to-understand safety conditions of potential relevant dams, and as a precautionary approach, the risk is considered Substantial. Aiming to limit the Environmental Risk at a Substantial level, the Project will not fund WSS relying on existing dams with indications of serious safety issues or demanding complex rehabilitation works. The Arataca II System (counterpart) is concluded and currently under commissioning. The works were duly licensed according to the local environmental requirements. No environmental liabilities have been reported. During preparation, site visits and further assessment of technical soundness, and E&S compliance will be carried out. Other soft activities of Comp. 1, 2 & 3, i.e., preparation of feasibility studies, engineering designs, training and capacity building, acquisitions, etc. are considered Moderate risk, based on initial screening, due to potential downstream effects, mainly the ones resulting from technical studies and engineering designs which could entail civil works. This risk will be properly assessed during preparation.

**Social Risk Rating**

Moderate

The social risk is rated as Moderate at this stage. The social risk rating will be revisited during project preparation if there is new information and details that change the nature and risk of the project previously identified. The project interventions are small-scale and community based in nature which are not expected to have any significant or unmitigable social impacts and there will likely be no adverse impacts linked to resettlement or land acquisition. No significant adverse impacts are anticipated. The expected impacts are predictable, site specific, have minimal adverse impacts and easily mitigable. The Environmental and Social Framework (ESMF) will fully address all these areas to propose adequate mitigation measures and recommend modalities to maximize project benefits for the target population by aligning the project design with the socio-cultural and context specific needs of communities. There is a risk of exclusion of disadvantaged and vulnerable social groups from the benefits of the Project, especially indigenous peoples and other traditional communities. To reduce this risk, the Project will engage these groups as early as possible, and will discuss WSS selection criteria for communities that include these groups among the beneficiaries. As part of the ESMF and SEP, guidelines will be raised to remove barriers to participation aiming to ensure women’s and vulnerable groups views are considered and that they take part in and benefit from Project interventions. Project workers may be exposed to health and safety risks, which will also be assessed as part of the ESMF. Measures to ensure OHS compliance will be defined in the Labor Management Procedures (LMP). Although Project-supported activities can take place in remotely located communities, they are not expected to increase risks ordinarily associated with the influx of workers on small rural communities as this number is expected to be low. The project is expected to bring about better social outcomes through improved access to water and basic sanitation facilities, leading to better health and hygiene. Especially for women - menstrual hygiene, privacy, security, access and comfort will be greatly improved. Women are disproportionately affected with lack of access to water and sanitation. Therefore the project will address the gender gaps and will include among the indicators and targets to reduce the identified gaps. Improving access to water with adequate frequency, quantity and quality will improve the health quality of children, women and students in associated institutions (schools and health centers) in the intervention

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area that can benefit from the Project. The actions to improve the capacity to manage water resources will increase transparency and water security for families and communities. The Project also foresees pilot investments for innovations to promote resilience to climate change in selected communities.

**Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH) Risk Rating**

Low

The SEA/SH Risk Screening Tool was applied with a result of 11.5 - LOW RISK, relative to the works. The planned activities are small scale and with low likelihood of labor influx. Nevertheless, both the ESMF and the contracts will contain guidelines to combat SEA/SH, which will include actions to record, report, and combat harassment, training of workers, and include a broad communication/awareness raising campaign - including the dissemination of referral services.

**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 Operation:**

ESS1 is relevant to this Project. The Borrower will be required to assess, manage and monitor environmental and social risks and impacts associated with each stage of the Project, in order to achieve environmental and social outcomes consistent with the Environmental and Social Standards (ESSs).

The Project will majorly involve civil works in locations yet to be defined. Thus, a draft Environmental and Social Management Framework (ESMF) will be prepared and disclosed by Project appraisal. The ESMF shall include:

- Assessment of potential environmental and social risks and impacts, including OHS hazards and community health and safety risks;
- Social analysis of vulnerable groups (as explained under the social risks).
- Guidelines for the E&S management and screening procedures for the Project interventions, taking into consideration the national and state environmental legislation, including the need for environmental licenses and permits, as applicable. These guidelines will also observe the national OHS regulations, the ESF requirements and the World Bank Group EHS Guidelines, including Life and Fire Safety (L&FS) measures for buildings and compliance with the legislation on data privacy.
- Guidelines and templates for the preparation of specific E&S instruments for the Project interventions, as deemed necessary, such as, E&S impact assessments, E&S management plans, etc., as per the Bank’s ESF, WB EHS Guidelines, and national/state legislation.
- Dam safety requirements and assessment procedures for the dams included as part of the Project.
- E&S eligibility criteria for feasibility studies aimed at identifying rural communities to benefit from the Project, including a Project’s exclusion list – The interventions with high E&S risk will be excluded from the Project, as well as the ones that could potentially increase the overall risk profile of the Project.
- An E&S monitoring and reporting arrangements.
- Institutional strengthening activities, including capacity building for E&S risks and impacts management;

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- An assessment of the technical assistance activities, taking into consideration the requirements set out in ESS1. The ESMF shall provide guidance for the preparation of terms of reference, work plans or other outputs of technical assistance activities, in line with the applicable ESSs.
- A tentative budget for carrying out the E&S activities defined in the ESMF, including the budget for the SEP.

The risk of potential exclusion of persons with disabilities will also be assessed as part of the Project’s ESMF, both from the aspects of infrastructure design as well as education/awareness services, cultural context, as per the concept of universal access.

Although the works of the Arataca II pipeline (counterpart funds), part of Botafogo system, are already concluded and the borrower has reported that no E&S liabilities have been identified after project completion, the borrower will be required to submit to the Bank an E&S assessment report by Appraisal to evidence the compliance with applicable E&S requirements of such project. The counterpart funds will finance the entire value of contracts for ongoing works that contribute to the project results: there will not be contracts co-financed by the IBRD loan and the counterpart funds.

It is noteworthy that Arataca II pipeline and Botafogo system are not considered associated facilities of the Project as they do not meet all three criteria described in the ESF. They are existing, under commissioning/operation urban water systems which the Project will not rely on, that would have been implemented in spite of the Bank’s operation.

The previous assessment of the borrower’s dam safety management system and capacity identified a dam safety pending issue in the post-closing action plan (PCAP) of the Pernambuco Sustainable Water Project PSHPE – P108654. The borrower is yet to conduct the rehabilitation of the Pirapama Dam (it supplies water to the metropolitan region of Recife), as agreed in 2020, per the requirements of the PCAP, as an obligation from Compesa as the dam owner. The issue was discussed in the identification mission and followed up by email and letter. The borrower, through SRSH and Compesa, is working on a new work plan for the Pirapama Dam rehabilitation to be reported to the Bank. The Project will include actions to strengthen the state’s capacity on dam safety, and may use supervision activities and the team to closely monitor the progress of dam rehabilitation. Pirapama Dam rehabilitation works are not envisioned under the current Project.

### **ESS10 Stakeholder Engagement and Information Disclosure**

Stakeholder engagement, consultation and communication, including grievance redress and disclosure of information will be required throughout the project life. In consultation with the Bank team, the borrower will prepare and implement an inclusive Stakeholder Engagement Plan (SEP) proportional to the nature and scale of the project and associated risks and impacts identified. Specific identification of vulnerable groups and their inclusion in stakeholder engagement will be addressed. A draft of the SEP will be prepared and disclosed as early as possible allowing enough time for review and feedback from interested parties. The draft version of the SEP will be disclosed prior to Appraisal. The borrower will engage in meaningful consultations with all stakeholders throughout the project life cycle taking into account the different access and communication needs of various groups and individuals particularly the vulnerable and disadvantaged groups (indigenous and other traditional communities, persons with disabilities, gender groups, elderly and vulnerable children).





Stakeholder consultations will be essential to providing inputs to the project design, environmental and social assessment and mitigation plans, Environmental and Social Commitment Plan (ESCP), monitoring reports, and further evaluation of the Project.

Through the primary screening, the principal stakeholders are: Secretariat of Water Resources and Sanitation (Secretaria de Recursos Hídricos e Saneamento), Pernambuco Sanitation Company (Companhia Pernambucana de Saneamento - COMPESA), Pernambuco Water and Climate Agency (Agência Pernambucana de Águas e Clima - APAC); SISAR - Integrated Rural Sanitation System - Municipal Water and Sanitation Management Units, Councils (state and municipal) of water resources, NGOs, and mainly the communities where construction activities will occur and who must join the SISAR (new or existing), and families (individual level) served directly by the Project. More stakeholders will probably be identified as a detailed mapping is undertaken.

A comprehensive and project-wide GRM needs to be designed which will enable a broad range of stakeholders to channel concerns, questions, and complaints related to the Project. The GRM will be cognizant of and follow required levels of discretion, and cultural appropriateness, especially when dealing with cases of sexual harassment and GBV. Specific GRMs relevant to ESS2 will be set up. Prior to Appraisal, the following measures will be implemented: 1) stakeholder identification and analysis 2) developing the SEP 3) disclosure of information and 4) consultation with stakeholders on the project overall info., as well as on the ESMF and meaningful consultations tailored to Indigenous Peoples will be conducted as per ESS7.

The final version of the SEP – updated with the feedback collected through the consultation process – would be publicly disclosed on a dedicated Project website within 30 days of Project effectiveness.

## **B.2. Specific Risks and Impacts**

### **A brief description of the potential environmental and social risks and impacts relevant to the Operation.**

#### **ESS2 Labor and Working Conditions**

This standard is relevant. The Project will involve physical works related to water supply and sanitation facilities, in addition, to support for improving the state's technical capacity, with most of the works expected to take place only in rural areas. Due to the nature of the activities, these works may pose a (low and manageable) safety risk to workers. Furthermore, issues such as child labor in the supply chain, forced labor, gender discrimination, GBV, occupational health and safety will be addressed in the Environmental and Social Management Framework (ESMF).

The nature of the civil work is manageable through the usage of localized labor, which expands the possibilities of engagement, income improvement, and appropriation of the works in the communities served.

The contractors in charge of Project implementation will receive training (covering all above topics) prior to starting the civil works to ensure proper understanding of applicable requirements under the ESS2. Given the activities of sanitation and water schemes under the Project, the number of workers is expected to be low in size mostly supplied by local labor from the community who will be Contracted Workers (as per ESS2 definition). Required construction



materials for very limited civil works will be sourced from legal business entities with permits. Potential risks associated with Project's primary suppliers will also be further assessed as part of the ESMF.

The guidelines and requirements of a Labor Management Procedures (LMP) will be included as part of the ESMF, and will cover all requirements of ESS2. The LMP will be issued by the Borrower no later than 30 days after Project Effectiveness. It will include the assessment and required mitigation measures to ensure health and safety of the workers (Occupational Safety and Health or OHS measures) of the relevant stakeholders that may be exposed to health and other associated risks. The latter will cover ESF requirements pertinent to direct, contracted, community workers. Therefore, to ensure health and safety of the Project workers during construction and operation phases, contractors will need to prepare and implement their OHS Plans, as applicable, following the WBG EHS Guidelines. The LMP will include a Code of Conduct guidelines/template that will be used by the contractors during work execution, and also procedures on incident investigation and reporting, recording and reporting of non-conformances, emergency preparedness and response procedures and continuous training and awareness to workers.

The Project will also include: (i) state government staff who are civil servants; (ii) PMU staff who are government employees and contracted workers (consultants); (iii) localized private firms hired by the Project for carrying out construction works, and other contracted works (consultants) - are expected to be covered under the LMP. The relevant points will be addressed in the ESMF, and appropriate requirements will be incorporated in the ESCP as required and in Management of Contractors documents. A separate GRM will be provided for direct and contracted workers.

Hired contractors will be subject to the requirements of ESS2 including occupational health and safety and grievance mechanisms. Should the Project require the employment of (skilled) workers from outside the local area, worker accommodation and influx will need to be managed in line with ESS2 (and ESS4). Likewise, any technical consultants contracted by the Project will also need to adhere to such standards.

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

This standard is relevant. The Project will also finance the implementation of pilot-projects linked to energy efficiency tools, sludge treatment innovations, grey water reuse. All these initiatives, including the RWSS systems implementation themselves, will bring about overall positive impacts for the environment, potentially reducing pollution loads to the soil/waterbodies, landfill pressure and contributing to optimized energy use. The new buildings to be implemented under the Project (APAC's units) will also consider the implementation of energy-efficient measures, to the extent technically and financially feasible.

Although the water sources for the Rural WSS are yet to be defined, as per the technical and feasibility studies under Subcomponent 1.1, in order to achieve the objective of the Project – of increasing access to water supply and sanitation in rural areas of the state – water use will constitute one of the impacts of the Project. This impact, however, is not considered significant in the implementation phase, due to the scale of the Rural WSS that will be implemented. In the long run, it comprises an important action to decrease the water shortage risks of the rural areas of the state, majorly associated with recurring water scarcity and droughts. Because of this context, the feasibility assessment of the WSS systems' implementation, from the perspective of water availability and its regional impacts,



will also be key factors to be considered in the feasibility/technical studies of Subcomponent 1.1. The implementation of sanitation solutions in rural communities is also expected to bring about positive impacts as to prevent soil, ground and surface water pollution. The Rural WSS are not considered projects with a high-water demand that have potentially significant adverse impacts on communities, other users or the environment. The planned WSS will benefit communities/groups of communities of approx. 100 families. As per Compesa data on similar operating systems, average water consumption per community ranges from 1-2 l/s, and will (mainly) use water from existing water supply systems (i.e., PISF). Nevertheless, water consumption will be metered in every WSS, and awareness campaigns will be carried out in the beneficiary communities. All water withdrawal of the Project will also be subject to the legal requirements/grants of the comprehensive national/state water framework.

Other risks and potential impacts of the Project are commonly attributable to civil works of low to medium complexity, and are associated with, inter alia, waste and wastewater generation, dust and noise emissions, vibration, soil erosion and carryover, handling of chemicals and fuel for vehicles and machinery operation, fugitive emissions. Measures to avoid, reduce and mitigate these impacts are well-known and readily available. The Project's ESMF will define the guidelines and requirements to be included in the plans and programs that will address each of the risks and potential impacts of Project's activities, including downstream effects of the TA activities.

Impacts related to the management of pesticides are not currently a significant risk for the Project's interventions, neither in the rural areas (WSS), nor in the urban sites (APAC's units). The Project GHG emissions are not likely to be significant, they are mainly linked to combustion engines' emissions due to the use of machinery in the work fronts and vehicles for workers' transportation, and also to decentralized wastewater treatment solutions – from biological processes. GHG estimations will not be required.

All raw materials to be used in the Project, such as sand, gravel, and wood, shall have the proper authorization for extraction and proof of origin. Service providers for waste and wastewater management and disposal shall also provide proof of compliance with the environmental legal framework. It is not foreseen the use of important quantities of hazardous materials, other than fuel for heavy equipment if any.

#### **ESS4 Community Health and Safety**

This standard is relevant. The civil works envisaged under the Project are likely to cause minor impacts related to traffic and road safety in rural areas. Circulation of heavy equipment and vehicles tend to be small, considering the scale of the WSS systems to be implemented. Nevertheless, control measures shall be taken such as alert signaling and safety barriers, whenever applicable, in order to avoid any type of risks for nearby population.

Due to the implementation of the Rural WSS, community exposure to health issues, i.e., exposure to water-borne, water-based, water-related, and vector-borne diseases are expected to be controlled/reduced as a direct result from proper sewerage collection, treatment and disposal. Project activities are not likely to entail higher influx of temporary or permanent workers that could lead to increase of transmission of communicable diseases in Project areas.

During implementation, hazardous materials to be used for Project activities will most likely comprise fuel and lubricating oil for machinery, and paints for painting the finished structures. Neither are expected to pose any type of



material risk to the community. On the other hand, for the operation of communities' water treatment plants (part of the WSS systems) chemicals will be used for the treatment processes. Sludge is also expected to be generated as a result of the wastewater treatment. These risks will be further assessed in the Project's ESMF and proper capacity/training will be planned for the engaged workers.

Where technically and financially feasible, the Borrower will also apply the concept of universal access and climate change considerations to the design of new buildings (e.g., APAC's units). Security personnel are not expected to be used under the Project.

The Project will not include the construction of new dams, however, it will (potentially) rely on the performance of existing large dams as water sources) for the new rural water supply systems funded by the Project. The borrower has not concluded the identification of dams related to the Project. The requirements defined in ESS4—Annex 1. Safety of dams will need to be complied with, including (a) inspection and evaluation the safety status of the existing dams related to the Project, (b) revision and evaluation of the owner's operation and maintenance procedures, and (c) an independent report with recommendations for any remedial work or safety related measures necessary to upgrade the existing dams to an acceptable standard of safety. The Project preparation will follow the Good Practice Note on Dam Safety (hereafter GPN) and quality control checklist for projects involving rehabilitation or upgrading of existing dams. The revision of the related dams' key features and the inspection of the dams is planned to be carried out by the Bank's team during preparation, aiming to finalize the action plan/program for further studies and investigations, as required to meet an acceptable standard of safety of the selected dams. Aiming to limit the Environmental Risk to Substantial, the Project will not fund water supply systems relying on existing dams with indication of serious dam safety issues, demanding a Tier II examination, as defined in the GPN Appendix 6 - Sample Terms of Reference Independent Safety Assessment for Existing Dams. It is noteworthy that the Project has a specific Subcomponent 1.2 – Improvements of selected water infrastructures for ensuring rural water supply – which will include studies, design and rehabilitation of dams to guarantee human supply in the rural communities selected in the Project. The design of a specific subcomponent to deal with the dam safety aspects raised by the Project is part of the CMU's lessons learned with previous engagement with the state, and also with other water supply projects of Brazil's portfolio.

During feasibility stage, water quality and quantity will be tested. After works implementation and during service provision, regional SISARs will be responsible for collecting water samples which are to be tested by Compesa to check on water potability to follow Brazil's Health Ministry's norms. The ESMF will include safety of services considerations, describe the aforementioned arrangements and the responsibilities of each implementing agency.

The ESMF will carry out an overall screening for any potential health and safety risks to the Project affected people due to construction activities, traffic and road safety, disruption to access to ecosystem services, and its associated risks including GBV, exposure to hazardous material or equipment, and potential emergency scenarios. Subsequent measures will be prepared, adopted, and implemented (Community Health and Safety measures) according to the relevant risks. Significant labor influx is not expected for this Project, instead, local labor will most likely be used. WBG EHS guidelines will also be followed in the preparation of the ESMF.

### **ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement**



This standard is relevant. No civil works activities under the Project are expected to have any impacts that result in involuntary resettlement, economic displacement, or impacts on livelihoods, however, it is possible that land acquisition (small scale) or land use restrictions (in water catchment areas) may be required. Whenever necessary, land acquisitions will be in unoccupied areas and preferably in non-productive use or established on land that either belongs to the local government or is voluntary community donation. Assessment of land ownership type, community engagement to disseminate information, establish a feedback loop, assess community willingness, participatory site selection and design will be conducted.

As part of Project preparation, the Borrower will prepare and disclose prior to Appraisal, a Draft Resettlement Framework (RF) following the requirements of this Standard. The final version of the RF is to be issued and disclosed within 60 days after Effectiveness. The requirements for preparing RAPs (if needed) will be described in the RF and ESCP, and cover measures also for economic displacement (if any).

After the proposed sites are identified and based on the screening and selection criteria of communities to be served by the project, a Resettlement Action Plan (RAP) or an abbreviated version of it will be prepared (if necessary) for those communities where land acquisition is required. Site-specific RAPs will address issues of inclusion, social vulnerability, GBV, consultation and communication strategy (developed in the SEP), and any other issues identified through the ESMF and stakeholder consultations.

Site-specific RAPs shall be prepared and implemented prior to the execution of works in communities where land acquisition is required, following the requirements of this Standard.

### **ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources**

This standard is relevant. The Project will not support activities that lead to the conversion or degradation of natural habitats. Even though the exact location of the WSS systems are yet to be defined, due to the scale and characteristics of the Project's area of influence (mainly rural) – already subject to anthropic pressure and agribusiness activities – Project's works are not likely to cause significant impacts on native flora and fauna. Mitigation hierarchy and precautionary approach will be considered during the design and implementation of Project, to ensure minimal risks and impacts to flora and fauna, precisely any environmentally sensitive area, i.e., native forest remnants, environmentally protected areas, conservation units, etc.

Small water-abstraction works may be necessary in environmental protected areas (APP), if the water sources are rivers, streams, reservoirs, and other cases defined in the national legislation. However, the activities would be of punctual, low impact, and foreseen in the legislation, since they would fall into the category of "public interest" (water supply). In these cases, as well as in other situations that may require the suppression of specific individuals, the Brazilian legislation has well-established requirements that adequately address these impacts, including demanding compensation actions, when applicable.

The ESMF will consider potential cumulative impacts on biodiversity and will determine whether further Cumulative Impact Assessment (CIA) will be required or not. It will include clear guidance regarding direct and indirect impacts on modified/natural habitats, including guidelines to be followed as forest clearing procedures, when necessary, as well as measures to be carried out if activities of fauna rescue and dispersing are required during Project works. Should



significant risks and adverse impacts on biodiversity are identified, the ESMF will set the guidelines and requirements for the development and implementation of a Biodiversity Management Plan.

The feasibility studies and eligibility criteria for selecting the communities to be covered by the Project will incorporate environmental-sound requirements that will allow for preventing and reducing any biodiversity-related impacts of the interventions. The Project exclusion list will include any activities that could adversely impact environmentally sensitive areas and, therefore, increase the environmental risk of the Project, as well as any intervention in areas that would adversely affect habitats with significant biodiversity values and could incentivize land use changes that could put pressure on, or directly threaten natural habitats and/or the sustainable management of natural living resources.

The technical assistance activities of the Project will also incorporate the ESS6 requirements, as relevant, e.g., the preparation of feasibility/technical studies, regional water supply, and sanitation plans. As per Brazilian regulation, the water resources management plans and related documents already consider within their analysis the vegetation cover and other biodiversity-related aspects/inputs in an integrated manner, in order to preserve and increase water availability and achieve overall environmental benefits.

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

This standard is relevant. At this stage, it is not known if the Project will work in areas where concentrations of IPs live since the specific sites are not expected to be defined by Project Appraisal. There are 10 Indigenous Peoples in the State of Pernambuco - Truká (municipality of Cabrobó); Atikum-Umã (municipality of Carnaubeira da Penha); Pankará (municipality of Carnaubeira da Penha); Pipipã (municipality of Floresta); Kambiwá (municipality of Ibimirim, Inajá and Floresta); Pankararu (municipality of Tacaratu and Petrolândia); Tuxá (municipality of Inajá); Kapinawá (municipality of Buíque, Tupanatinga and Ibimirim); Fulni-ô (municipality of Aguas Belas); Xukuru (municipality of Pesqueira).

There are 12 Indigenous lands in the state territory in the Agreste and Sertão regions, historically arid areas, which will probably include them as potential beneficiaries of the Project.

The Project is not expected to have any adverse impact on Indigenous Peoples. On the contrary, it aims to contribute to promoting water supply interventions that would benefit Indigenous Peoples in a manner that respects their aspirations, unique cultural identities, traditional knowledge, and natural resource-based livelihoods and is culturally appropriate and inclusive.

As part of Project preparation, the Borrower will prepare and disclose prior to Appraisal, a Draft Indigenous Peoples Planning Framework (IPPF) following the requirements of this Standard, which will define criteria for the selection of communities, technically feasible, for inclusion of indigenous peoples among the possible beneficiaries. The final version of the IPPF to be issued and disclosed within 60 days after Effectiveness.

The requirements for subsequent development of IP Plans (if needed) will be described in the IPPF and ESCP. Project activities that may affect IPs will not start until these specific plans are finalized and approved by the Bank.

#### **ESS8 Cultural Heritage**



This standard is currently relevant. However, its relevance might be reconsidered by Appraisal as a result of the Project’s ESMF assessments. At this stage, impacts on known cultural heritage are not expected due to Project activities. As the intervention sites are still unknown, the ESMF will conduct an overall assessment and anticipate the potential risks and impacts of the proposed activities of the project on cultural heritage.

Every effort will be taken to make sure that the physical works are not located near any heritage sites. Should the E&S risk assessment identifies potential risk to heritage sites, Chance Finds Procedures (CFP) guidelines will be included in the ESMF, considering the national/estate legal regulations and ESS8. If and whenever necessary, the requirement for CFP will be included in work contracts and bidding documents. The CPF would set the procedures for contractors to stop construction if cultural heritage is encountered during any work and to notify and closely coordinate with relevant mandated country/state authorities for the salvaging and restoration of such cultural heritage.

The ESMF will also address specific considerations of intangible cultural heritage which may be a direct or indirect impact on Project-supported activities. This aspect will be identified during community consultations as part of the SEP and IPPF.

**ESS9 Financial Intermediaries**

Not applicable.

**C. Legal Operational Policies that Apply**

**OP 7.50 Operations on International Waterways** No

**OP 7.60 Operations in Disputed Areas** No

**III. WORLD BANK ENVIRONMENTAL AND SOCIAL DUE DILIGENCE**

**A. Is a common approach being considered?** No

**Financing Partners**

None.

**B. Proposed Measures, Actions and Timing (Borrower’s commitments)**

**Actions to be completed prior to Bank Board Approval:**

Considering the nature of the proposed project activities, the team recommends the following actions:

- The Borrower will develop and disclose a draft Environmental and Social Management Framework (ESMF) during the project preparation by Appraisal. The Borrower will make sure that the draft ESMF includes information related to the



potential risks and impacts of the project on local communities, and the proposals for mitigating these, in a manner that enables consultation with stakeholders, that will be carried out prior to Appraisal in order to incorporate feasible suggestions into the final version of the ESMF. This information should highlight potential risks and impacts that might disproportionately affect vulnerable and disadvantaged groups and describe the differentiated measures taken to avoid and minimize these.

- A draft Stakeholder Engagement Plan (SEP) will be prepared and disclosed prior to Appraisal and shall comprise: a stakeholders' mapping; a strategy for information disclosure and stakeholder engagement (considering Project stakeholder needs and methods, tools and techniques for stakeholder engagement), the resources and responsibilities with regards to the implementation of stakeholder engagement activities, a description of the GRM and a description of the monitoring reporting approaches.

- A draft version of the Indigenous Peoples Planning Framework (IPPF) will be prepared and disclosed by the Borrower prior to Appraisal.

- A draft version of the Resettlement Framework (RF) will be prepared and disclosed by the Borrower prior to Appraisal.

- The E&S assessment report regarding the Arataca II Water System to evidence the compliance with applicable E&S requirements will be issued by the borrower prior to Appraisal.

- A draft version of an Environmental and Social Commitment Plan (ESCP) will be agreed between the Bank and the Borrower and disclosed prior to Appraisal. This ESCP will define specific measures and actions to address potential environmental and social risks and impacts associated with the proposed activities, a timeframe, and the institutional responsibilities for ensuring the implementation of these provisions.

- The Bank will (i) review any additional or newly prepared safety assessment reports, or other related documents, of the existing dams provided by the borrower and agree on required safety assurance measures; (ii) review borrower-submitted dam safety plans, if applicable, and agrees on the preparation schedule of full-fledged ones, and (iii) provide dam safety-related technical inputs for risk classification and agreed actions in the ESRS and ESCP. By Appraisal, the Bank and the borrower will agree upon a Dam Safety Action Plan, which will include the set of actions the borrower will need to complete in order to comply with the Bank's requirements on dam safety, including the recommendations of the independent evaluation of the dams, as per the Bank's GPN on Dam Safety.

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

The ESCP shall incorporate the Borrower's following commitments:

-The establishment of a Project Management Unit (PMU), including the designation of an E&S risk management team comprised, at minimum, of: 1 (one) environmental specialist, 1 (one) social development specialist, and 1 (one) communication and stakeholder engagement specialist. These staff members will be responsible to report to the Bank on all relevant Environmental and Social aspects (including incidents, accidents and fatalities that can be associated with the execution of project-related activities).





- The review of the ESMF based on the feedback gathered through the consultation process and the final disclosure of its final version 60 days after Project Effectiveness. Based on ESMF, assessment of risks and impacts for the works of each contract, and preparation and implementation of relevant management plans.
- The submission to the Bank of regular monitoring reports on the environmental, social, health and safety (ESHS) performance of the Project.
- Promptly notification of any incident or accident related to the Project which has, or is likely to have, a significant adverse effect on the environment, the affected communities, the public or workers, including, inter alia, cases of sexual exploitation and abuse (SEA), sexual harassment (SH), and accidents that result in death, serious or multiple injuries.
- The core elements and principles for adequate stakeholder engagement and information disclosure set in ESS 10, including the operationalization of a grievance mechanism. The final version of the SEP will be presented within 30 days after Project Effectiveness. Operationalization of the Project's Grievance Mechanism will be required for 30 days of Project Effectiveness.
- The LMP, including the core elements and principles for adequate management of project (direct and contracted) workers set in ESS 2, that will apply to all direct and contracted workers engaged to perform work related to the core functions of the project (including grievance redressing procedures). Its final version shall be presented 60 days after Project Effectiveness.
- The final version of the Indigenous Peoples Planning Framework (IPPF), consistent with the ESS7 requirements, to be issued and disclosed within 60 days after Effectiveness.
- The final version of the Resettlement Framework, consistent with the ESS5 requirements, to be issued and disclosed within 60 days after Effectiveness.
- Assurance that the consultancies, studies, capacity building, training, and any other technical assistance activities under the Project will be carried out in accordance with terms of reference acceptable to the World Bank, that are consistent with the ESSs.
- Definition of capacity building calendar (as needed);

### **C. Timing**

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

**31-Aug-2023**

## **IV. CONTACT POINTS**

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**Borrower/Client/Recipient**

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**Implementing Agency(ies)**

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Implementing Agency: Pernambuco Water and Climate Agency (Agência Pernambucana de Águas e Clima - APAC)

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Implementing Agency: Pernambuco Water and Sanitation Company (Companhia Pernambucana de Saneamento - COMPESA)

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**V. FOR MORE INFORMATION CONTACT**



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## VI. APPROVAL

Task Team Leader(s):	Juliana Menezes Garrido, Marie-Laure Lajaunie
Practice Manager (ENR/Social)	Genevieve Connors Recommended on 08-Jun-2023 at 09:03:44 EDT