

TC Document

I. Basic Information for TC

▪ Country/Region:	REGIONAL
▪ TC Name:	Preparation of AquaRating innovation and digitization plans in Public Water and Sanitation Utilities.
▪ TC Number:	RG-T4028
▪ Team Leader/Members:	Cathala, Corinne (INE/WSA) Team Leader; Basani, Marcello (INE/WSA) Alternate Team Leader; Barbosa Taves De Gouvea, Heleno (ORP/REM); Guiza Ceron, Carlos Andres (INE/WSA); Natalia Almeida (LEG/SGO); Nicolas Moreno (ORP/GCM); Sasaki, Keisuke (INE/WSA)
▪ Taxonomy:	Research and Dissemination
▪ Operation Supported by the TC:	
▪ Date of TC Abstract authorization:	November 5, 2021
▪ Beneficiary:	LAC countries
▪ Executing Agency and contact name:	Inter-American Development Bank
▪ Donors providing funding:	Cofinancing Special Grants(COF)
▪ IDB Funding Requested:	US\$150,000.00
▪ Local counterpart funding, if any:	US\$0
▪ Disbursement period (which includes Execution period):	24 Months
▪ Required start date:	January 2022
▪ Types of consultants:	Firms and Individuals
▪ Prepared by Unit:	INE/WSA-Water & Sanitation
▪ Unit of Disbursement Responsibility:	INE/WSA-Water & Sanitation
▪ TC included in Country Strategy (y/n):	N
▪ TC included in CPD (y/n):	N
▪ Alignment to the Update to the Institutional Strategy 2020-2024:	Environmental sustainability; Productivity and innovation

II. Description of Associated Operation

- 2.1 The present TC is financed by the Source of Innovation: A Facility for Fostering Innovation in the Water, Sanitation and Solid Waste Sector in Latin America and the Caribbean (RG-O1693) approved on November 4, 2021. The general objective of the facility is to enable the development and integration of innovative solutions in the water, sanitation, and solid waste (WSS) sector that contribute to safely managed water, sanitation, and solid waste management services for all. Its specific objectives are to: (i) strengthen the demand-side of innovative solutions and products; (ii) boost the supply of innovative solutions; (iii) stimulate productive partnerships between startups and entrepreneurs, water utilities, and investors; and (iv) promote a culture and an enabling environment for innovation in the WSS sector.
- 2.2 To ensure a holistic approach to innovation, in each of its components, the facility supports through a series of technical cooperation projects: (i) technology innovation, including digital transformation, which brings a wide possibility of improvements for WSS providers; (ii) governance and service innovation, which makes utilities more efficient and enhances corporate governance; (iii) innovative financing, which opens new opportunities for funding; (iv) social innovation and design thinking, which

addresses how services can be delivered, incorporating users' insights and addressing people's needs.

- 2.3 The TC is aligned with the general objective of Source of Innovation (RG-O1693), which is to enable the development and integration of innovative solutions in the water, sanitation and solid waste sector that contribute to safely managed water, sanitation, and solid waste management services for all. In particular, the operation aligns with the specific objectives of:
- (i) Strengthen the demand-side of innovative solutions and products (through the financing of assessments; pilots; use of AquaRating focused analysis and tool for innovation plans, etc.)
 - (ii) Promote a culture and an enabling environment for innovation in the sector (through the development and publication of knowledge products and new tools; use of Aquarating tool to measure innovation culture; training and capacity building activities).

III. Objectives and Justification of the TC

- 3.1 The objective of this Technical Cooperation operation (TC) is to promote an increased sustainability of water and sanitation services. To contribute to that objective, the TC will foment a new culture of innovation and support the development of innovation plans in water and sanitation utilities using new AquaRating tools created specifically to improve service providers' capacity to adopt innovative solutions. In addition, the TC will include a digitalization of the AquaRating platform (which will be co-financed with a parallel AquaRating TC to be financed with AquaFund resources). Finally, the TC will finance the preparation and publication of knowledge products.
- 3.2 AquaRating is a flagship knowledge product of the Inter-American Development Bank (IDB or Bank), consisting of a rating system that assesses the performance of water and sanitation utilities to foster process improvements.¹ It was developed as an initiative of the IDB, in collaboration with the International Water Association (IWA), to apply AquaRating in water and wastewater utilities in Latin America and the Caribbean (LAC) through the IDB and in the rest of the world through IWA, and to promote its use. The Bank's main goal at this point is, given the high demand for the tool in the LAC region, to continue supporting the implementation and improvement of the AquaRating Program until it becomes a reference for all utilities in LAC and a world-wide standard. AquaRating is a voluntary and universal system that offers a comprehensive assessment of the performance of water and sanitation services providers, based on reliable information and validated by independent and accredited agents. In the last three years, AquaRating increased the offer of its products, to include tools to address specific issues, such as innovation, gender, water losses. This TC will complement the AquaRating TC in execution (RG-T3377), which will finalize execution this year and the new AquaRating TC in preparation as well as innovation TCs (RG-T3843 and RG-T3410). One of the components of this TC operation is to support the development of the digitalization of AquaRating through the design of an application to prioritize investments areas for the utilities and highlight key indicators to be used by management and relevant staff in water utilities. The TC will also support

¹ The AquaRating tool was implemented in over 115 water utilities in the LAC region and other parts of the world with the goal to improve the efficiency of water and sanitation utilities. Water utilities such as EPMAPS of Quito has used the AquaRating tool to establish a baseline, which the utility used to design a transformation plan.

as the testing of the application in a selected number of water and sanitation utilities in LAC.

- 3.3 The main outputs obtained from the technical cooperation include: (i) implementation of the AquaRating innovation plans in at least 6 selected water utilities in Colombia and other LAC countries, based on demand; (ii) feasibility study for the digitalization of AquaRating; and (iii) dissemination of knowledge through the preparation of publications and blogs. The implementation of the AquaRating innovation plans is demand driven and is carried out with the support of the division water specialists in the country offices.
- 3.4 This TC is consistent with the Second Update to the Institutional Strategy 2020-2023 (AB-3190-2). In addition, the TC is aligned with the development challenges of (i) “Productivity and Innovation”, as it will support the strengthening and an improved performance of water and sanitation utilities through the digitalization of an innovative tool developed by the Bank and through the design and implementation of innovation plans in utilities. In addition, the TC is aligned with the cross-cutting theme of “Climate Change and Environmental Sustainability” since it will support utilities in that it includes the assessment of the water utilities’ environmental sustainability. In addition, this TC is aligned with the five dimensions defined in the Water and Sanitation Sector Framework Document (SFD) (document GN-2781-10) approved by the Bank in 2021. In the SFD, the dimensions of success and lines of action for the sector were defined, including achieving universal access to water and sanitation, improving the quality of the service, incorporating good practices in the management of infrastructure and the use of appropriate technologies and innovation. The TC is aligned with the Vision 2025 (AB-3266) in the areas of digital transformation and climate change, as it supports water utilities to become more innovative, competitive, as they build resilience to climate change impacts.
- 3.5 **Sustainability of activities:** The empowerment of staff and the transfer of new technologies will enable the sustainability of IDB’s invested resources. The team will ensure that the activities to be financed by the TC are sustainable pursuant to the implementation of innovation plans in water utilities conducted within the selected water utilities with their own staff and their top management. The AquaRating dashboard will be designed to be used by water utility boards, top management and technical staff as necessary, remaining as a tool to improve decision-making and performance while innovation plans will enable the utility to identify key improvement areas for innovation with the goal of improvement the utility’s efficiency.
- 3.6 **Gender considerations:** Overwhelmingly, women take leadership in the home and therefore are the most severely impacted by interruption in water services. In the LAC region, women often hold dual jobs, working outside the home and inside the home, and have lifestyles with significant time constraints. Providing quality access to water services helps alleviate the burden and stress on women.
- 3.7 In addition, women in water utilities and to higher decision-making levels remains a challenge in most if not all government and private sectors. In Latin America, women represent more than 60% of the workforce in the service sector; however, only 19.7% in the water sector.² According to a recent World Bank³ study, women are underrepresented in technical and executive positions in companies that provide water

² BID (2016), <https://publications.iadb.org/es/publicacion/17521/tiene-genero-el-agua>

³ World Bank (2019), <https://openknowledge.worldbank.org/handle/10986/32319>

and sanitation services, despite of being important users and main decision makers on the use of water in the home.⁴ There are many benefits that female inclusion in institutions and companies brings (better financial performance, more innovation, better service delivery, better business management, among others).⁵ For these reasons, the AquaRating focused analysis on gender will be used to complement the application of the AquaRating innovation tools in the water and sanitation providers that will benefit from this TC. The TC will ensure women participation as part of the water utility's teams in the development and their inclusion in the outcomes of the Innovation plans. In addition, stakeholder engagement activities organized as part of the TC, such as seminars and workshops will include the engagement of as many women as possible from the water utilities.

IV. Description of activities/components and budget

- 4.1 **Component I: Design and implementation of AquaRating Innovation plans in water utilities (USD\$85,000).** This component will finance the contracting of individual consultants to apply the AquaRating focused analysis on innovation, the AquaRating tool to assess innovation culture as well as the AquaRating tool to facilitate the development of strategic innovation plans in water and sanitation utilities. In particular, the tool will be initially implemented in water utilities in Colombia, where approximately 20 utilities have already applied the AquaRating tool under the program COMPASS and, which have a specific interest in assessing the level of culture of innovation in the utility as well as developing innovation plans based on the results obtained from the application of the AquaRating focused analysis on innovation. The TC will support the implementation of innovation plans in other LAC countries if demand exists from water utilities and to the extent TC funds are available. The following steps will be followed: (i) AquaRating innovation diagnosis for water and sanitation utilities; (ii) application AquaRating tool to assess innovation culture; and (iii) development of strategic innovation plans based on the results of the diagnosis. Deliverables under this component will include: (i) AquaRating innovation culture diagnosis; and (ii) AquaRating strategic innovation plans.
- 4.2 **Component II: Feasibility study for the digitalization of the AquaRating evaluation tool (USD\$50,000).** This component will finance the feasibility study for the development and piloting of a digital AquaRating tool or "dashboard", which could allow the top management as well as technical staff of water utilities to visualize priority investments and key AquaRating indicators in real time. An individual consultant will be contracted to design and implement the AquaRating dashboard. The deliverable under this component will be a feasibility study to develop the application.
- 4.3 **Component III: Knowledge dissemination (USD\$15,000).** This component will finance the preparation, publication and dissemination of knowledge products on digitalization. The deliverables under this component will include: (i) technical notes; (ii) blogs; and (iii) webinars and workshops. The team will work with the Bank Knowledge, Innovation and Communication department to design an appropriate and impactful dissemination strategy for the activities implemented under the TC.

⁴ World Bank (2019), <https://openknowledge.worldbank.org/handle/10986/32319>

⁵ World Bank (2019), Box 1.1, <https://openknowledge.worldbank.org/handle/10986/32319>

- 4.4 The total cost of this operation is US\$150,000, which will be financed with the resources of Source Innovation Facility (RG-O1693). There will be no local counterpart financing. The distribution of resources is as follows:

Indicative Budget

Activity/Component	IDB/Source Innovation Facility	Local Counterpart	Total Funding
Component 1	85,000	0	85,000
Component 2	50,000	0	50,000
Component 3	15,000	0	15,000
TOTAL	150,000	0	150,000

- 4.5 Resources of this project to be received from the Donors of the RG-O1693 through a Project Specific Grant (PSG). A PSG is administered by the Bank according to the “Report on COFABS, Ad-Hocs and CLFGS and a proposal to unify them as Project Specific Grants (PSGs)” (Document SC-114).

V. Executing agency and execution structure

- 5.1 Since this is a Research & Dissemination (RD) TC and given that the Bank has the intellectual property for the AquaRating, and as has been the case previously, the Bank will be the executing agency for this TC to ensure the optimal execution of activities associated with the AquaRating tool in the LAC region. The TC will be executed from HQ through the Water and Sanitation Division (INE/WSA) under the supervision of the Team Leader. The monitoring of the TC will be carried out by the project team. The technical unit in INE/WSA, which has been overseeing the dissemination and technical aspects of the implementation of AquaRating, will continue performing those tasks.
- 5.2 The project team will work closely with the Bank Country offices’ water and sanitation specialists, in those countries where project activities are undertaken, which will liaise with and monitor the progress of the consultants. Non-objection letters from beneficiary countries will be requested prior to the application of AquaRating.
- 5.3 The activities to be financed with this TC operation are included in the Procurement Plan in Annex III and will be executed in accordance with Bank policies and procedures as follows: (i) policy AM-650 for individual consultants; (ii) the hiring of consulting firms of an intellectual nature will be governed by the GN 2765-4 and its Operational Guidelines (OP-1155-4); and (iii) other non-consulting services in accordance to Policy GN 2303-28.
- 5.4 TC activities will be monitored and reported annually as well as at the end of the execution period. Letters of non-objection will be obtained before any specific consultancy is carried out in a specific country.
- 5.5 The project team will be responsible for the preparation and submission to the donor of the project reporting, in compliance with the stipulations of the Administration Agreement in the RG-O1693.

VI. Major issues

- 6.1 One of the risks in achieving the objectives of this TC is the potential lack of interest or ownership from water utilities to implement innovation plans. To mitigate that risk, the team as well as in-country INE/WSA specialists will be coordinating closely the

execution of the proposed activities and will be in close contact with the respective water utilities to ensure full appropriation of the activities. Another risk is the spur of the COVID-19 pandemic, which may slow down the implementation of TC activities. To mitigate this risk, the team will plan for most activities to be carried out virtually to ensure the participation of the stakeholders involved. So far, all AquaRating applications have been implemented virtually and this has been very successful.

VII. Exceptions to Bank policy

- 7.1 This TC operation does not include any exception to Bank policies.

VIII. Environmental and Social Strategy

- 8.1 This Technical Cooperation is not intended to finance pre-feasibility or feasibility studies of specific investment projects, or environmental and social studies associated with them; therefore, this TC does not have applicable requirements of the Bank's Environmental and Social Policy Framework (MPAS).

Required Annexes:

[Results Matrix - RG-T4028](#)

[Terms of Reference - RG-T4028](#)

[Procurement Plan - RG-T4028](#)