

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

**DOMINICAN REPUBLIC**

**UNIVERSAL SANITATION PROGRAM IN COASTAL AND TOURIST CITIES II**

**(DR-L1165)**

**LOAN PROPOSAL**

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<b>ABBREVIATIONS</b>	
COAAROM	Corporación de Acueducto y Alcantarillado de La Romana (Water and Sewer Corporation of La Romana)
CORAA	Corporación de Agua Potable y Alcantarillado (Water and Sewer Corporation)
CORAABO	Corporación de Acueducto y Alcantarillado de Boca Chica (Water and Sewer Corporation of Boca Chica)
CORASAAN	Corporación de Acueducto y Alcantarillado de Santiago (Water and Sewer Corporation of Santiago)
DBO	Design-build-operate (contracts)
EBITDA	Earnings before interest, taxes, depreciation, and amortization
ELSA	Espacios Laborales Sin Acoso (Harassment-free Work Environments)
EMBASA	Empresa Baiana de Águas e Saneamento (Bahian Water and Sanitation Company)
FIDIC	International Federation of Consulting Engineers
FONPRODE	Fondo para la Promoción del Desarrollo (Development Promotion Fund)
ICB	International competitive bidding
INAPA	Instituto Nacional de Aguas Potables y Alcantarillados (National Water and Sewer Institute)
PCR	Project completion report
SABESP	Companhia de Saneamento Básico do Estado de São Paulo (Basic Sanitation Company of the State of São Paulo)
SIUBEN	Sistema Único de Beneficiarios (Single System of Beneficiaries)
SNS	Servicio Nacional de Salud (National Health Service)

**PROJECT SUMMARY**  
**DOMINICAN REPUBLIC**  
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Financial Terms and Conditions						
<b>Borrower:</b>			<b>Flexible Financing Facility<sup>(a)</sup></b>			
Dominican Republic			<b>Amortization period:</b>	23 years		
<b>Executing agency:</b>			<b>Disbursement period:</b>	5 years		
National Water and Sewer Institute (INAPA)			<b>Grace period:</b>	6 years <sup>(b)</sup>		
<b>Source</b>	<b>Amount (US\$)</b>	<b>%</b>	<b>Interest rate:</b>	SOFR-based		
			<b>Credit fee:</b>	(c)		
<b>IDB (Ordinary Capital):</b>	380 million	100	<b>Inspection and supervision fee:</b>	(c)		
			<b>Weighted average life:</b>	15.22 years		
<b>Total:</b>	380 million	100	<b>Approval currency:</b>	U.S. dollar		
Program at a Glance						
<p><b>Program objective/description:</b> The program's general objective is to contribute to improving people's health and environmental sustainability in prioritized tourist cities by enhancing access to, and the management of, water and sanitation services that are inclusive, climate resilient, low-carbon, and foster the conservation of natural capital. Its specific objectives are to: (i) increase the coverage of safely managed sanitation in the cities targeted by the program; and (ii) improve the management efficiency of INAPA and the Water and Sewer Corporation of La Romana (COAAROM).</p>						
<p><b>Special contractual conditions precedent to the first disbursement of the loan:</b> (a) a subsidiary agreement between the borrower, represented by the Ministry of Finance, and INAPA has been signed and remains in effect, setting the terms of the transfer of resources to INAPA and the parties' other execution-related obligations; (b) the program coordination unit set up for the Universal Sanitation Program in Coastal and Tourist Cities (5637/OC-DR and 5638/KI-DR) has been strengthened for the execution of this program by hiring a contract manager and biodiversity specialist; and (c) the program Operating Regulations (<a href="#">optional link 9</a>) have been approved and remain in effect under terms previously agreed upon with the Bank, including the environmental and social management plan, the environmental and social management framework, and the environmental and social action plan (paragraph 3.3).</p>						
<p><b>Special contractual conditions for execution:</b> Prior to the disbursement of funds for the works in La Romana, an interagency agreement between INAPA and COAAROM will have been signed and remain in effect stipulating how to coordinate the works' technical designs, execution, transfer upon completion, and the operation and maintenance obligations, as well as how technical assistance will be provided to COAAROM (paragraph 3.4). See special environmental and social contractual conditions in Annex B of the program's environmental and social review summary (<a href="#">required link 3</a>).</p>						
<b>Exceptions to Bank policies:</b> None						
Strategic Alignment						
<b>Objectives:<sup>(d)</sup></b>	O1 <input checked="" type="checkbox"/>		O2 <input checked="" type="checkbox"/>		O3 <input checked="" type="checkbox"/>	
<b>Operational focus areas:<sup>(e)</sup></b>	OF1 <input checked="" type="checkbox"/>	OF2-G <input checked="" type="checkbox"/> OF2-D <input checked="" type="checkbox"/>	OF3 <input checked="" type="checkbox"/>	OF4 <input type="checkbox"/>	OF5 <input type="checkbox"/>	OF6 <input checked="" type="checkbox"/> OF7 <input type="checkbox"/>

(a) Under the terms of the Flexible Financing Facility (document FN-655-1), the borrower has the option of requesting changes to the amortization schedule, as well as currency, interest rate, commodity, and catastrophe protection conversions. The Bank will take operational and risk management considerations into account when reviewing such requests.

(b) Under the flexible repayment options of the Flexible Financing Facility, changes to the grace period are permitted provided that they do not entail any extension of the original weighted average life of the loan, or the last payment date as documented in the loan contract.

(c) The credit fee and inspection and supervision fee will be established periodically by the Board of Executive Directors during its review of the Bank's lending charges, in accordance with applicable policies.

(d) O1 (Reduce poverty and inequality); O2 (Address climate change); and O3 (Bolster sustainable regional growth).

(e) OF1 (Biodiversity, natural capital, and climate action); OF2-G (Gender equality); OF2-D (Inclusion of diverse population groups); OF3 (Institutional capacity, rule of law, and citizen security); OF4 (Social protection and human capital development); OF5 (Productive development and innovation through the private sector); OF6 (Sustainable, resilient, and inclusive infrastructure); OF7 (Regional integration).

## I. DESCRIPTION AND RESULTS MONITORING

### A. Background, problems addressed, and rationale

- 1.1 **Macroeconomic context.** In the last decade, the Dominican Republic has been one of the most dynamic economies in Latin America and the Caribbean, growing at an average annual rate of 5.3% from 2010 to 2022, or more than double the regional average (1.9%).<sup>1</sup> The country has a population of approximately 10.7 million, of which 80% live in urban areas and around 70% reside in coastal areas.<sup>2,3</sup> Tourism is one of the most important sectors driving this growth, as the Dominican Republic is one of the Latin American and Caribbean countries with the greatest inflow of foreign tourists. A total of 10,306,517 tourists visited the country in 2023, generating revenues equivalent to 15.9% of its gross domestic product (GDP).<sup>4</sup> Tourism is concentrated primarily in coastal areas with significant biodiversity and sensitive ecosystems such as coral reefs. The country is also home to rich biodiversity including approximately 6,000 vascular plant species and a diverse fauna of birds, invertebrates, amphibians, and mammals.<sup>5</sup> The Dominican Republic was ranked as the 11th most vulnerable country to climate change in 2017 and as one of the 10 nations most affected by climate events between 1997 and 2016, according to the Global Climate Index.<sup>6</sup>
- 1.2 **Diagnostic assessment of the water and sanitation sector.** Despite its notable economic growth, the Dominican Republic faces a marked disparity in basic service coverage. Around 85.1% of the urban population has access to piped water, a rate that is within the average range for Latin America and the Caribbean (between 80% and 95%). However, service continuity is deficient, as 65% of households in urban areas receive water service at least 20 hours per day.<sup>7</sup> Sewer system coverage in the country is 24%, and wastewater treatment coverage is only 11%. These rates are far below the regional average and that of countries with lower per capita incomes, which have coverage rates of 79% and 42%, respectively.<sup>8</sup>
- 1.3 **Institutional framework of the water and sanitation sector.** The National Water and Sewer Institute (INAPA) is the primary agency responsible for providing drinking water services in the Dominican Republic, pursuant to Law 5994/62. INAPA serves 41% of the country's population, 24 provinces (including San Pedro de Macoris and Higüey), and 80% of the national territory. Since the 1970s, in a

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<sup>1</sup> Central Bank of the Dominican Republic (2022). Informe Económico Anual.

<sup>2</sup> United Nations Development Programme (2021). Human Development Report on the Dominican Republic.

<sup>3</sup> World Bank (2022). Total population data.

<sup>4</sup> The Nature Conservancy, Caribbean Hotel and Tourism Association, CAST Caribbean Alliance for Sustainable Tourism, United Nations Environment Programme. "Caribbean Coral Restoration and Tourism Policy Analysis" (2024).

<sup>5</sup> Caribbean Biodiversity Fund (2024). Where We Work.

<sup>6</sup> Germanwatch (2017). Global Climate Risk Index 2017.

<sup>7</sup> ONE (2022).

<sup>8</sup> World Health Organization-United Nations Children's Fund Joint Monitoring Programme for Water Supply, Sanitation, and Hygiene. "Estimates on the Use of Water, Sanitation and Hygiene in the Dominican Republic" (2023).

process to decentralize service delivery, eight water and sewer corporations (CORAAAs) have been created by law in the country and operate in 20% of the territory (59% of the population). INAPA monitors water quality and is responsible for the planning, design, and construction of hydraulic infrastructure, in addition to managing the operation and maintenance of aqueducts. The Water and Sewer Corporation of La Romana (COAAROM) is one of the eight CORAAAs. It is an autonomous entity responsible for the administration, operation, and management of the water and sewer system in the province of La Romana.

- 1.4 **Diagnostic assessment of the lack of sanitation.** The development problem addressed by this operation concerns the poor environmental and health conditions in the Dominican Republic's main tourist cities due to the lack of access to safely and sustainably managed water and sanitation services. The cities of La Romana, San Pedro de Macorís, and Higüey are home to 90% of the population of their respective provinces, and their sewer coverage rates are 3.6%, 8.7%, and 11.1%, respectively, far below the 24% national average. La Romana does not have a wastewater treatment plant, while those in San Pedro de Macorís and Higüey are deteriorating and do not comply with discharge regulations due to their inadequate operation and maintenance. Most of the urban population use septic tanks that do not meet the relevant standards or properly treat sludge, and this compromises the safe management of sanitation.<sup>9</sup> The lack of adequate sanitation has serious impacts on public health, the environment, and the economy. In terms of health, inadequate access to water and sanitation accounts for 60% of diarrhea episodes, 13% of acute respiratory infections, and 16% of child malnutrition.<sup>10</sup> The infant mortality rate in the Dominican Republic is approximately 28 deaths per 1,000 live births, a rate that exceeds the regional average of 16.7 deaths per 1,000 live births.<sup>11,12,13</sup> Furthermore, the rate of acute diarrheal disease continues to be high, at around 19.1% in 2018.<sup>14</sup> In regard to the environment, inadequate sanitation can lead to the degradation of critical habitats such as coral reefs and marshlands, which are extremely sensitive to wastewater pollution.<sup>15</sup> Septic tanks are also a significant source of greenhouse gas emissions,<sup>16</sup> a factor that is exacerbated when they are not properly operated.<sup>17</sup>

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<sup>9</sup> Joint Monitoring Programme.

<sup>10</sup> Annette Prüss-Ustün, et al (2019). "Burden of disease from inadequate water, sanitation and hygiene for selected adverse health outcomes."

<sup>11</sup> Directorate of Information Management of the National Health Service (SNS) (2023). Muertes Infantiles en establecimientos de la red del SNS.

<sup>12</sup> OECD (2023). Health at a Glance: Latin America and the Caribbean 2023.

<sup>13</sup> Ministry of Health of the Dominican Republic (2023). Child Health Profile 2018. Specifically in the eastern region, which includes the provinces of San Pedro de Macorís, La Romana, and Higüey, the infant mortality rate is even higher, reaching 73.87 deaths per 1,000 live births.

<sup>14</sup> Strategic National Health Plan 2030 (2022). Prevalence of acute diarrheal disease.

<sup>15</sup> Ramírez, J., P. Méndez, E.A. Hernández, and L. Cordero (2012). "El impacto de los pozos sépticos en la calidad de agua y los arrecifes de coral en la Reserva Marina de Tres Palmas (Rincón-Puerto Rico)."

<sup>16</sup> Song, X., Y. Zhang, and S. Wang (2023). "Methane emissions from municipal wastewater collection and treatment systems."

<sup>17</sup> Moonkawin, J., L.T. Huynh, M.Y. Schneider, S. Fujii, S. Echigo, L.P.H. Nguyen, T.-H.T. Hoang, H.T. Huynh, and H. Harada. "Challenges to Accurate Estimation of Methane Emission from Septic Tanks with Long Emptying Intervals (2023)."

- 1.5 **Factors linked to the lack of access to sanitation.** While low sanitation coverage is attributable to multiple and complex factors, in the specific case of the Dominican Republic the following four can be highlighted: (i) unprioritized sector: until the approval of the Water Pact,<sup>18</sup> the sanitation sector was not a priority in the Dominican Republic (6% of investments in water and sanitation),<sup>19</sup> resulting in a considerable lag in the development of adequate infrastructure. The lack of planning instruments has also contributed to the situation. This has led to inadequate financing and poor infrastructure, especially in low-income urban areas; (ii) challenges related to sanitation in informal settlements and the connections of vulnerable people to these systems: providing adequate sanitation in informal settlements is a significant challenge. The most vulnerable people, especially those in low-income urban areas, face technical, financial, and cognitive barriers to connecting to the sewer system due to poor infrastructure and the associated costs. As a solution, condominial sanitation<sup>20</sup> can be an effective alternative for improving conditions in these areas; (iii) lack of innovation and digitalization: there can be significant barriers to adopting digital technologies, such as insufficient financial resources, technological complexity, and resistance to change. The lack of innovation in the sector leads to inefficient service management and the inability to leverage the opportunities of digital technologies to strengthen planning and management. Consequently, the portfolio of designs is too limited and engineering areas are unable to adequately combine design and supervision; and (iv) inadequate operations and maintenance: inadequate operations and maintenance of sanitation facilities is a recurring problem, since more than 60% of wastewater treatment plants are out of service.<sup>21</sup>
- 1.6 **Diagnostic assessment of management efficiency in water and sanitation services.** The water and sanitation companies of San Pedro de Macorís, Higüey, and La Romana<sup>22</sup> have drinking water coverage rates that are equal to or greater than the national average of 85.5%. However, they also present significant inefficiencies in the management of their water systems. Furthermore, like the rest of the country, these three cities have low service continuity. This is the result of the systems' inadequate operation stemming from an outdated registry of networks and hydraulic model, limited training for operators, and the absence of regulation systems such as pressure reduction mechanisms. None of the country's water and sanitation systems covers its operating costs from rate revenues. Consequently, they depend on allocations from the national budget to supplement their budgets. The most significant factor in this inefficiency is the low invoicing rate, which for INAPA is 10%. In the absence of micrometering, and given the low invoicing rate, it is impossible to obtain key sector data such as nonrevenue water.<sup>23</sup> In the specific cases of the cities targeted by the program, the two served by INAPA have

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<sup>18</sup> The National Water Pact is a strategic initiative to resolve problems in this sector through a government policy, with a total investment of US\$8.565 million by 2036 to improve water and sanitation infrastructure, irrigation systems, and hydroelectric projects.

<sup>19</sup> National Infrastructure Plan.

<sup>20</sup> Condominial sanitation reduces investment costs by up to 30% compared with conventional sanitation.

<sup>21</sup> National Infrastructure Plan (2020).

<sup>22</sup> According to estimates, coverage rates in San Pedro de Macorís, Higüey, and La Romana are 90%, 85%, and 86%.

<sup>23</sup> Non-revenue water is the difference between the volume of water introduced into a water distribution system and the volume invoiced to customers.



similar values: in San Pedro de Macorís only 11.6% of users are billed, while the corresponding percentage in Higüey is 20.2%. This, combined with the high level of drinking water coverage, means that most urban dwellers are illegally connected to the system, i.e., they either do not have a contract or are not accounted for in any registry, meaning that they cannot be invoiced. This situation has operational, institutional, and cognitive causes (paragraph 1.7). The operational and management-related causes include the absence of an updated registry of all regular and irregular connections and the obsolete commercial management system. In addition, there is no single geographic information system to optimize the management and analysis of spatial data.<sup>24</sup>

**1.7 Institutional and cognitive barriers.** Institutional barriers include the complexity of signing a contract to become a water customer, while cognitive barriers include the influence of social norms, where the generalized perception is that most people do not pay for service. This reinforces the persistence of these practices ([optional link 7](#)). Moreover, the prevailing opinion is that the price of water is not high. This is consistent with the impact of INAPA and CORAASAN's<sup>25</sup> rate increases on users' perception.<sup>26</sup> The use of behavioral change sciences has considerable potential for overcoming cognitive barriers.<sup>27</sup> By applying the principles of behavioral sciences, it is possible to design interventions that modify these ingrained habits and change prevalent social norms. An example of the successful use of these tools to change behaviors related to water service is the case of Belén, Costa Rica, where social norms were used to reduce water consumption by public utilities companies.<sup>28</sup> Awareness-raising campaigns were implemented highlighting the benefits of legalization, and messages were used to showcase the desired behavior of the majority of users, which helped to change consumer perceptions and behaviors.

**1.8 Gender and diversity challenges.** A workforce with parity and diversity improves a company's likelihood of increasing productivity by 62% and its innovation by 60%.<sup>29</sup> A diagnostic assessment of gender and diversity conducted at INAPA found that women make up less than 50% of the company's workforce, a rate that decreases to 15% in managerial, supervisory, and strategic decision-making positions. INAPA implements measures to retain female employees, and, although its code of ethics mentions harassment, it does not focus on protection and support for the victim. Workplace harassment has significant negative impacts. Data from ELSA<sup>30</sup> in Peru show that harassment leads to loss of productivity: 17% of victims resort to absenteeism and 31% report impacts on their performance. Only 10% of

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<sup>24</sup> Patel, K., and S. Nihalani (2023). "A review of urban water networks management using GIS."

<sup>25</sup> Water and Sewer Corporation of Santiago.

<sup>26</sup> The rate increase did not decrease the percentage of payment by users, and satisfaction surveys did not show a negative impact.

<sup>27</sup> Cognitive barriers are obstacles related to people's mental processes and perception that affect their ability to adopt sustainable behaviors.

<sup>28</sup> Datta, S., M. Darling, K. Lorenzana, O. Calvo González, J.J. Miranda, and L. de Castro Zoratto (2015). "A Behavioral Approach to Water Conservation: Evidence from a Randomized Evaluation in Costa Rica."

<sup>29</sup> International Labour Organization (2019). *Argumentos para un cambio: las mujeres en la gestión empresarial*. Geneva, Switzerland.

<sup>30</sup> Digital tool to prevent sexual harassment in the workplace, promoting a culture of prevention and harassment-free spaces.

harassment victims report it.<sup>31</sup> Interviews with key actors at INAPA indicate that this is a critical issue, and express interest in addressing it. In the Dominican Republic, only 42.2% of men and 54.5% of women with a disability have permanent work.<sup>32</sup> In addition, INAPA and COAAROM's facilities and customer service offices are not designed based on universal accessibility standards, which limits social and workplace inclusion. According to census data of 15 Latin American and Caribbean countries, up to 30% of Afro-Caribbean people have restricted access to water.<sup>33</sup> A study of LGBTQ+ people in 12 Caribbean countries found that 25.8% of transgender people have experienced workplace discrimination or exclusion.<sup>34</sup> Qualitative studies involving INAPA and COAAROM employees and customers identified unconscious biases towards people from diverse populations (Afro-Caribbean, LGBTQ+, and persons with disabilities). Reactions based on negative stereotypes lead to a climate of fear and distrust<sup>35</sup> that affects service quality and creates barriers to unprejudiced dialogue. Promoting a culture of inclusion is essential for improving service quality and the work environment.

- 1.9 **Climate change context.** The results of the Representative Concentration Pathway (RCP) 8.5 scenario forecast an increase in the frequency, magnitude, and intensity of extreme flood events, as well as an increase of up to 27% in their impacts on infrastructure.<sup>36</sup> Likewise, climate models show a growing trend in drought events, which historically have been recurring and have affected many of the communities targeted by the program. Forecasts also indicate that the effects of tropical cyclones and hurricanes are expected to worsen. In 2017, for example, hurricanes Irma and María caused an estimated US\$182.4 million in damage, amounting to 1.6% of public spending and 0.3% of GDP in 2017.<sup>37</sup> The RCP 4.5 and 8.5 climate models also forecast an average sea level rise of +0.5 meters by 2050, as well as increasing intensity and frequency in the development of storm surges.<sup>38</sup> These processes will aggravate coastal erosion levels and affect biodiversity and strategic ecosystems, especially the most vulnerable ones such as coral reefs,<sup>39,40</sup> and they will heighten the risk of negative impacts on basic social infrastructure, coastal urban areas, and vulnerable communities.<sup>41</sup> In regard to

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<sup>31</sup> Redacción EC (2021). [Las consecuencias económicas del acoso sexual](#). *El Comercio* webpage.

<sup>32</sup> United Nations and Single System of Beneficiaries (SIUBEN) (2021). [Estudio sobre la situación de las personas con discapacidad en base a los datos del SIUBEN 2018](#). Final report. Santo Domingo: United Nations.

<sup>33</sup> Economic Commission for Latin America and the Caribbean (2020). Afro-descendants and the matrix of social inequality in Latin America: challenges for inclusion. Project documents LC/PUB.2020/14. Santiago: Author.

<sup>34</sup> Viteri, María (2024). Guía para apoyar el diseño e implementación de medidas para la prevención y atención de la discriminación por motivos de género y orientación sexual. Washington, DC: IDB.

<sup>35</sup> See some descriptions here: [Vargas, 2023](#), [Colón, 2020](#), and [Pinsof and Haselton, 2017](#).

<sup>36</sup> "[Country Climate and Development Report](#)," World Bank, 2023.

<sup>37</sup> "[Nationally Determined Contribution](#)," Dominican Republic 2020.

<sup>38</sup> Ibid.

<sup>39</sup> "[The Global Flood Protection Savings Provided by Coral Reefs](#)." The Nature Conservancy, University of California, 2018.

<sup>40</sup> Cavallo, Eduardo A., Andrew Powell, and Tomás Serebrisky (Eds.) (2020). From Structures to Services: The Path to Better Infrastructure in Latin America and the Caribbean. IDB.

<sup>41</sup> "[Estimating the Economic Damages of Climate Change in the Dominican Republic](#)," World Bank, 2023.

greenhouse gas emissions, in its updated nationally determined contribution the country commits to a 27% reduction in greenhouse gas emissions by 2030. According to the national greenhouse gas inventory presented in the Third National Communication to the United Nations, the waste sector, which encompasses solid waste and wastewater, accounts for 19.9% of the country's emissions.

- 1.10 **Program design.** In response to the diagnostic assessment and the sector's challenges, the program is designed to finance infrastructure and nonstructural measures to expand the levels of access to, and quality of, sanitation services and improve the efficiency of INAPA and COAAROM. In this regard, it is expected: (i) to narrow sanitation infrastructure gaps (including wastewater collection and treatment); and (ii) strengthen the management capacities of water and sanitation operators. The program will contribute to the expansion of sanitation service coverage in coastal areas of the Dominican Republic and limit negative environmental and social externalities by eliminating wastewater discharges in beach areas and in rivers, which will foster tourism development while reducing inequalities in the program's area of influence.
- 1.11 **Effectiveness of sanitation projects.** Sanitation projects that achieve high levels of coverage (over 75% of the community) reduce the risk of diarrheal disease by 45%.<sup>42</sup> The proper treatment and disposal of urban wastewater helps to preserve water quality in rivers, lakes, groundwater, and oceans, ensuring the sustainability of this resource and biodiversity.<sup>43</sup> The recovery of water bodies and the environment through sanitation investments also has a strong impact on economic development. Sectors such as tourism, fishing, urban development, and housing values greatly benefit from the existence of and/or access to these services. Global studies estimate that a 1% increase in the level of access to sanitation services could increase the inflow/arrival of tourists by 2.9%.<sup>44</sup>
- 1.12 **Digital transformation and innovation strategy in water and sanitation.** The Bank has provided direct support for the water and sanitation sector in key aspects of digitalization using technical cooperation funds. Moreover, it has always promoted the use of open source software ([optional link 6](#)). Open source geographic information systems such as QGIS<sup>45</sup> are essential for the digitalization of water and sanitation companies because they improve the visualization and analysis of spatial data, thereby facilitating planning, decision-making, and closer collaboration between the different operational areas. The use of open source software<sup>46</sup> also helps to prevent problems associated with commercial licenses, such as high costs and dependence on a single provider, in addition to fostering

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<sup>42</sup> Wolf, Jennyfer, Paul R. Hunter, Matthew C. Freeman, Oliver Cumming, Thomas Clasen, Jamie Bartram, Julian P.T. Higgins, Richard Johnston, Kate Medicott, Sophie Boisson, and Annette Prüss-Ustün (2018). "Impact of drinking water, sanitation and handwashing with soap on childhood diarrhoeal disease: updated meta-analysis and meta-regression."

<sup>43</sup> United Nations Environment Programme (2010).

<sup>44</sup> Elysia and Wihadanto (2020).

<sup>45</sup> QGIS is the most popular free geospatial software in the world, owned by the Open Source Geospatial Foundation (OSGeo). It is noted for its incorporation of tools through plugins and a constantly growing community of users and developers.

<sup>46</sup> Wachs, J., M. Nitecki, W. Schueller, and A. Polleres (2022). "The Geography of Open Source Software: Evidence from GitHub."

enhanced flexibility and adaptation to the sector's specific needs. This collaboration includes the following activities: (i) the use of the SaniHUB platform to design the program's sanitation projects, a measure that has reduced time and costs. This tool has been combined with workshops to train local technicians in its use; (ii) the development and application of a digital registry tool<sup>47</sup> for customers and technicians has been successfully tested in Boca Chica; and (iii) the implementation of a hydraulic modeling tool called QGISRed, which optimizes the operation of water networks. This new program proposes the development of the following digital tools, which are also open source: (i) a SaniHUB works supervision module adapted to INAPA and COAAROM's budget formats, technical specifications, and certification to facilitate real-time monitoring of works, thus enhancing transparency and accelerating response times; (ii) improvements to commercial management software, including an analysis of the state of cybersecurity and data governance; and (iii) improvements to the QGISRed software. These will all include workshops and the transfer of capacities for the new modules. The strategy also proposes the implementation of advanced metering systems, such as smart meters, especially for large consumers like hotels. The high consumption levels of these establishments warrant investing in advanced metering technology, which enables real-time monitoring of water consumption.

- 1.13 **Behavioral change and sewer system connectivity strategy.** The principles of behavioral change sciences will be implemented to develop campaigns in different media with a view to promoting the regularization of water contracts and rate payments. These campaigns will be disseminated through multiple channels, including social networks, to maximize their reach and effectiveness. In addition, a results-based contract model will be used that is adapted specifically to the Dominican context, based on the successful experience of the Basic Sanitation Company of the State of São Paulo (SABESP). This model has demonstrated its effectiveness in regularizing water contracts and sewer system connections in informal settlements. This approach implies a significant change in the social work that contractors must carry out. In addition to technical implementation, it will require close work with beneficiary communities, providing support and technical assistance to ensure they understand and comply with the terms of the contract. The condominium sanitation approach will also be used, which is inspired by the experience of the Bahian Water and Sanitation Company (EMBASA), to optimize efficiency in the construction of secondary sewer networks that include connections, maximizing the advantages of this approach to work in any urban setting.<sup>48</sup>
- 1.14 **Strategy for gender and diversity inclusion.** An action plan was designed to address the gaps and barriers highlighted in the diagnostic assessment. Activities include: (i) awareness-raising on gender equality and inclusion; (ii) managerial, technical, and operational certifications with gender and diversity considerations; (iii) rehabilitation of work spaces with a focus on gender and the inclusion of persons with disabilities; (iv) certification in addressing sexual and workplace harassment; and (v) behavioral change campaigns to regularize contracts,

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<sup>47</sup> See the digital transformation annex herein.

<sup>48</sup> To adapt these models, INAPA and COAAROM have done exchanges with SABESP and EMBASA, adapting best international practices to the local context.

payment, and connectivity, including a manual to overcome unconscious biases towards Afro-Caribbean and LGBTQ+ customers and persons with disabilities ([optional link 5](#)). Employee certification in inclusion and the prevention of harassment is a key action that has been established based on the results of diagnostic assessments, and it is supported by international evidence. It will be developed complementarily with the ELSA methodology. In addition, the implementation of a grievance unit, inclusive policies, and specific programs will enhance employee knowledge and self-efficacy to prevent harassment, as well as help to create a safer, healthier, and more inclusive work environment. Implementing inclusion policies in contracts with clients and ensuring that sewer connectivity programs are accessible to everyone, independently of their ethnic origin, gender, or socioeconomic situation, improves equity and social justice and bolsters financial and organizational performance.<sup>49,50,51</sup>

- 1.15 **Strategy for incorporating climate change considerations.** In line with the country's targets and objectives set forth in its nationally determined contribution, the national climate change adaptation plan, the national greenhouse gas inventory, and the biennial update report on climate change, the program includes actions and measures to decrease greenhouse gas emissions and improve the climate resilience of the sanitation system. It also provides for investments in wastewater treatment systems that consider the use of low energy consumption technologies and the harnessing of methane produced in anaerobic processes for plant self-consumption. In regard to adaptation, climate resilience criteria will be incorporated into the design of sewer networks and the marine outfall, and specific investments will be made to enhance the representativeness of coral reef ecosystems, contributing to improving coastal resilience to extreme events associated with climate change.<sup>52</sup>
- 1.16 **The Bank's experience in the sector and country.** The Bank has extensive experience in the water and sanitation sector. In 2019 it launched the [Optimal Sanitation Initiative](#) in which tools for designing integral, innovative, and efficient solutions were structured around four primary themes: (i) people; (ii) governmental framework; (iii) watershed; and (iv) innovation and technology. The design of this loan adopts the main concepts of this initiative, such as SaniHUB, connectivity, behavioral change, and improved governance and management. Moreover, between 2007 and 2021, the Bank approved more than 170 water and sanitation operations for more than US\$28 billion. In the Dominican Republic, a US\$25.5 million operation was approved in 2012 for the Santiago Water Supply Service Improvement Program ([2845/OC-DR](#)), which was executed by the Water and Sewer Corporation of Santiago (CORASAAN) and aimed to improve water service in the province's metropolitan area. The outcomes achieved included an increase in the number of households with an excellent level of service continuity from 11% to 52%, as well as several operational objectives such as a

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<sup>49</sup> [IDB Group Institutional Strategy 2030](#).

<sup>50</sup> Hunt, Vivian; Sundiatu Dixon-Fyle, Sara Prince, and Kevin Dolan (2020). Diversity Wins: How Inclusion Matters.

<sup>51</sup> Cronin, Melissa et al. (2024). Testing the effectiveness of interactive training on sexual harassment and assault in field science.

<sup>52</sup> Coral reefs improve coastal climate resilience due to their capacity to mitigate the impact of floods by breaking and attenuating wave energy, decreasing the risk of negative impacts on exposed infrastructure.

reduction in the percentage of electricity costs in relation to total operating costs from 29% to 23.7% ([PCR, 2022](#)). In addition, the Water and Sanitation Investment Program ([2430/OC-DR](#)) has closed, which was executed by INAPA and implemented US\$70 million in water and sanitation works. The program benefited more than 40,000 households by improving their access to water service in urban areas. This program, cofinanced by the Spanish Agency for International Development Cooperation, has yielded important lessons learned that are being applied in operations DR-L1158 and DR-L1165. These include: concentrating works in fewer locations to improve efficiency; reducing the number of bidding processes to speed up execution, moving forward with the preparation of designs and bidding processes prior to loan approval, and working at the commercial management level throughout INAPA and not only in one or several provinces, as well as making productive interaction between the execution unit and the rest of INAPA's technical units feasible.<sup>53</sup> Sector projects such as 2845/OC-DR and 2430/OC-DR are quite representative of the overall historical context in the Dominican Republic. The country has faced significant challenges in water and sanitation due to inadequate planning and insufficient financing. Lessons learned include the importance of accelerating investments in the sector based on quality projects and bidding documents, the political commitment of institutions, a willingness to transform, as well as concentrating efforts in specific areas to maximize impact and improving coordination between technical and administrative units. These lessons have guided the improvement in the execution of current projects.

- 1.17 **Lessons learned from operation DR-L1158.** Operation 5637/OC-DR, 5638/KI-DR was approved in November 2022 for US\$190 million, including US\$80 million from the Bank's Ordinary Capital, US\$60 million from Korea, and a local counterpart contribution<sup>54</sup> of US\$50 million. This operation centers on sanitation in the coastal tourist city of Boca Chica. Its execution is progressing rapidly, with 50% of the amount already tendered<sup>55</sup> and an additional 29% on track to be tendered in the second half of 2024.<sup>56</sup> The main lessons learned and systematized for the design and execution of both operations are: (i) the strategy for the sanitation projects consists of using SaniHUB for the designs, including the recently developed module for condominiumal branches,<sup>57</sup> dividing the project into a macrostructure using International Federation of Consulting Engineers (FIDIC) contract tenders and a secondary network that includes connections and uses results-based contract tenders. This strategy makes it possible to concentrate 90% of the amount tendered in one city for these two processes, ensuring sustainability through efficient operation of the systems as well as effectiveness by including connections for vulnerable households; (ii) training for water and sanitation companies on the use of FIDIC contracts<sup>58</sup> and results-based contracts, together

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<sup>53</sup> The work of INAPA as a whole at the commercial level is considered essential, although there may be specific actions to carry out in certain provinces, such as micrometering.

<sup>54</sup> Could include Development Promotion Fund (FONPRODE) financing for the Dominican Republic.

<sup>55</sup> Corresponds to FIDIC DBO contract bidding for the macrostructure.

<sup>56</sup> Corresponds to results-based contract bidding for sewer network construction.

<sup>57</sup> The design of condominiumal branches requires surveying the sanitation facilities of the households to be connected.

<sup>58</sup> Includes specific training for the Office of the Comptroller.

with the development of standard specifications (that includes operation), adapted to sanitation projects in the Dominican Republic; and (iii) INAPA's current application of ISO-37001 certification, which prevents, detects, and addresses bribery through anticorruption policies, financial controls, and audits.<sup>59</sup>

1.18 **The Bank's value-added.** In 2022, the Bank developed the National Infrastructure Plan, identifying urban sanitation<sup>60</sup> as a priority and identifying its main challenges and lines of action.<sup>61</sup> The Bank has also transformed the way sanitation projects are designed in the Dominican Republic. Bank support has been key to this process. Technical cooperation operations ATN/JF-19618-DR and ATN/OC-20285-DR provide financing to hire experts and to hold exchanges and workshops, which have bolstered the adoption of digital technologies and the implementation of innovative contracts such as FIDIC operating and results-based contracts. The Bank has played a fundamental role in South-South exchanges, facilitating the implementation of other countries' successful experiences. A notable example is Brazil's experience with condominium sanitation, the implementation of which was made possible by these exchanges. IDB Lab's support (GRT/CF-20064-DR) has also been key to developing a strategy focused on improving the connectivity of the most vulnerable people through results-based contracts that include tools such as microloans or grants to modify and improve sanitation facilities. All this support has allowed the Dominican Republic to systematically address the sanitation gap, ensuring sustainability and accelerating execution to cover existing needs. Furthermore, it has supported increased participation of the private sector in areas that are not traditionally addressed by construction companies in the country, such as the operation of sanitation systems and social work to achieve sewer system connectivity. Moreover, it is planned to improve the calculation of GHG emissions from individual solutions based on the evaluation of their physical and environmental characteristics.

## **B. Objectives, components, and cost**

1.19 **General and specific objectives.** The program's general objective is to contribute to improving people's health and environmental sustainability in prioritized tourist cities by enhancing access to, and the management of, water and sanitation services that are inclusive, climate resilient, and low-carbon, and that foster the conservation of natural capital. Its specific objectives are to: (i) increase the coverage of safely managed sanitation in the cities targeted by the program; and (ii) improve the management efficiency of INAPA and COAAROM.

1.20 **Component 1: Expansion and optimization of resilient and inclusive sanitation infrastructure (US\$350 million).** This component contributes to the

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<sup>59</sup> In general, each 10% of investments in the sector lost due to corruption account for more than \$75 billion in annual losses. The implementation of ISO 37001 throughout the entire sector will decrease losses due to corruption, improve service quality, and enhance public trust in institutions ([IDB, 2020](#)).

<sup>60</sup> In addition to sanitation efforts, others targeting solid waste management are integrated with the government's commitment to improving the environment and public health through the Solid Waste Law 225-20, approved in 2020, and the Bank's support for its implementation through technical cooperation operation ATN/JF-19618-DR.

<sup>61</sup> Within this National Infrastructure Plan, cities in coastal tourist areas were prioritized due to their low level of sewer system coverage, the significant negative impact on health and the environment, and the high concentration of tourist activities in these areas.

program's first specific objective of increasing the coverage of safely managed sanitation in the cities of La Romana, San Pedro de Macorís, and Higüey. It will finance the construction of sewer networks including household connections,<sup>62</sup> interceptor sewers, and collectors, as well as the expansion, rehabilitation, and optimization of wastewater treatment plants and marine outfalls. The designs of these works will include climate change resilience criteria and will prioritize technologies that implement low CO<sub>2</sub> equivalent<sup>63</sup> emissions, as well as solutions that are less costly and operationally complex. Included will be 18 months of initial operations under the design-build-operate (DBO) contract to ensure the appropriate transfer of capacities to operators. This initial operation phase will enable operators to become familiar with the system, optimize resources, and ensure proper maintenance, thereby promoting long-term efficiency and sustainability. Condominial technology will be used for the sewer networks, adaptable to irregular urban areas, through results-based contracts to improve connectivity. This component will also finance the upgrading of sanitary facilities for the most vulnerable households to enable them to be connected to the sewer system.<sup>64</sup>

- 1.21 **Component 2: Institution-strengthening and efficiency improvements in the sector (US\$25 million).** This component seeks to improve the efficiency of INAPA and COAAROM through rapid-impact interventions, technical and operational certification programs, gender equality, inclusion and diversity, and the prevention of corruption. To improve commercial management, open source digital tools will be developed, the registry and number of customers invoiced will be updated, technical assistance will be provided, and smart meters will be installed for large consumers. Furthermore, behavioral change campaigns will be conducted with a gender and diversity approach (paragraph 1.14) targeting clients and focusing on regularization, rate payments, and sewer system connectivity. The component will finance sectorization and the installation of pressure regulators and micrometers. The program aims to expand the ISO-37001 certification initiated by INAPA to the national level, as it prevents, detects, and addresses bribery through anticorruption policies, financial controls, and audits. Expanding this certification to COAAROM and contractors will strengthen the integrity of water management, ensuring the efficient use of resources and improving transparency. In addition, the offices of INAPA and COAAROM will be renovated following a gender and diversity approach, as outlined in paragraph 1.14. The component will also finance an environmental and biodiversity monitoring program, as well as a coral reef recovery program<sup>65</sup> that will include an analysis of financial mechanisms to coordinate the public and private sector to ensure its sustainability.

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<sup>62</sup> Household connections located in a public space.

<sup>63</sup> In all, 71% of CO<sub>2</sub> emissions eliminated is attributable to the elimination of individual solutions.

<sup>64</sup> Developed in the 1980s in Brazil, condominial sanitation represents a savings of 30% compared with conventional sanitation, and it can be adapted to any urban configuration.

<sup>65</sup> Provisions for coral protection, such as cruise ship and garbage dumping regulations, and ballast water management are included in the "Southeast Reefs Marine Sanctuary Guideline Management Plan" and will be supported by the program in aspects such as monitoring.



- 1.22 **Administration and evaluation (US\$5 million).** This component will finance program administration, monitoring, evaluation, and other operating costs.<sup>66</sup>

### C. Key results indicators

- 1.23 **Beneficiaries.** The program's direct beneficiaries will be 191,000 households with new access to safely managed sanitation<sup>67</sup> in three cities of the Dominican Republic (San Pedro de Macorís, La Romana, and Higüey).<sup>68</sup> The program will also improve management at INAPA and COAAROM, increasing revenues and enhancing process efficiency and inclusiveness. Lastly, increasing access to sanitation positively impacts tourism and the natural capital of the targeted areas.
- 1.24 **Key results indicators.** The program aims to increase the coverage of safely managed sanitation in the targeted cities, reaching 191,000 households, and improve management efficiency at INAPA and COAAROM, increasing the number of invoiced residential customers to 540,000 and that of invoiced large consumers to 1,200, and increasing the micrometering rate to 20%.
- 1.25 **National impact on sanitation.** The combined results of operations DR-L1158 and DR-L1165 will provide safely managed sanitation to more than 800,000 people in the coastal area between Boca Chica and La Romana (this represents a 9% increase in coverage at the national level), a region encompassing 120 kilometers of coastline. Not only does this area have a large population, but also significant tourist hubs, and one of the most important coral reefs in the region, the Southeast Reef.

### D. Program viability

- 1.26 **Technical viability.** The evaluation of the technical files during the pre-program stage ([optional link 2](#)) concluded that they adequately respond to the needs identified and objectives established for the program. The designs are based on a medium- and long-term vision, following widely accepted engineering principles. The prioritized solutions drew on an analysis of appropriate alternatives, with advanced studies and designs for potential bidding. FIDIC<sup>69</sup> DBO contracts will be used, as they have been effective, ensuring that the designs are efficient and that the builders will also be responsible for operations. Furthermore, specific training will be included for operators, as this is key for the proper maintenance of the facilities.<sup>70</sup>
- 1.27 **Socioeconomic viability.** A socioeconomic analysis of the sanitation works was conducted as part of the program's viability analysis. To determine the return, a cost-benefit analysis was conducted for each of the sanitation works. The benefits were quantified in terms of the population's willingness to pay for sewer and

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<sup>66</sup> Minor operating costs that will be defined more precisely in the Operating Regulations.

<sup>67</sup> Safely managed sanitation includes sewer and wastewater treatment.

<sup>68</sup> Includes 58,000, 66,000, and 67,000 households in San Pedro de Macorís, Higüey, and La Romana, respectively.

<sup>69</sup> FIDIC contracts are a set of standard contracts commonly used in the construction industry at the international level. FIDIC stands for International Federation of Consulting Engineers.

<sup>70</sup> Global Report on Sanitation and Wastewater Management in Cities and Human Settlements, UN-Habitat, 2023.

wastewater treatment services, as well as greenhouse gas emissions avoided by the program. The costs used were investment costs and incremental operating and maintenance costs. Using a discount rate of 12%, the Higüey project is viable with an economic internal rate of return (EIRR) of 27% and a net present value (NPV) of US\$108.3 million; the La Romana project is viable with an EIRR of 20% and an NPV of US\$68.4 million, and the San Pedro de Macorís project is viable with an EIRR of 20% and an NPV of US\$47.3 million, as presented in the program socioeconomic annex. A sensitivity analysis was performed to take stock of any changes to program returns in response to changes in the main assumptions of the economic evaluation ([optional link 1](#)).

- 1.28 **Institutional viability.** The Institutional Capacity Assessment Platform (ICAP) developed two years ago in the framework of the DR-L1158 program was updated. The findings of the institutional capacity assessment, using the ICAP methodology, confirm that INAPA's execution capacity is satisfactory, based on its experience executing projects with financing from the Spanish Cooperation Fund for Water and Sanitation in Latin America and the Caribbean (FECASALC), the European Union, and country resources, having satisfactorily closed a FECASALC project. INAPA is currently executing operation DR-L1158, which has a coordination unit, as well as projects with World Bank financing. INAPA also has procurement experience, including the preparation of FIDIC contracts and staff training, and has adopted appropriate procedures from the financing agencies. In the last three years, INAPA has strengthened its team, making it possible to execute more of its own and international resources (four times more funds than in the past). It has also achieved greater efficiency in decision-making and has developed more institutional and policy capacity.
- 1.29 The institutional strengthening plan for INAPA and COAAROM includes: (i) a review and adjustment of organizational structure; (ii) programs to improve area manuals, positions, and functions, with their respective staff training; (iii) a plan to support the development/updating of commercial software; (iv) the design and implementation of a capacity-building plan; (v) a plan to improve accounting practices and their alignment with international accounting standards, including staff training; (vi) a survey of customers, properties, and connections; (vii) a technical survey of nonlinear works and networks; (viii) a plan to incorporate users into the company's invoicing system; and (ix) an active portfolio management plan. Importantly, the World Bank, through a results-based loan, and the French Development Agency also have management improvement projects for INAPA. To this end, quarterly coordination meetings have been scheduled.
- 1.30 **Financial viability.** The circumstances of INAPA and COAAROM are such that central government transfers are necessary to sustain their services because revenues are insufficient to cover operating costs. Revenues cover only 22% of INAPA's operating and maintenance costs, and only 55% in the case of COAAROM. Financial projections for the next 15 years point to positive financial performance (EBITDA) in 2029. Targets for INAPA are to increase the percentage of invoiced residential customers from 10% to 37% of customers served by 2030 and increase residential client collection rates from 64% to 72% and nonresidential collection rates to 88% by 2030. Targets for COAAROM are to increase the percentage of invoiced clients from 50% to 85% of customers served and increase residential customer collection rates from 56% to 74%. Financial projections do not

include rate increases for water. These targets are based on the implementation of the institutional strengthening actions described in Component 2 with the additional use of techniques based on behavioral change sciences and digital transformation tools, in addition to a 20% increase in micrometering in the three cities.

- 1.31 **Progress made toward preparing the operation.**<sup>71</sup> For FIDIC DBO contracts for sanitation macrostructure, the designs are available, and the allocated amounts are: La Romana, US\$66 million; San Pedro de Macorís, US\$37 million; and Higüey, US\$43 million. The anticipated dates for bidding documents are November 2024, December 2024, and January 2025, respectively. In regard to the results-based contracts for the construction of secondary sewer networks, the installation of connections, and the installation of pressure-control devices in the drinking water network, the amounts are: La Romana, US\$65 million; San Pedro de Macorís, US\$57 million; and Higüey, US\$66 million. The designs will be available for La Romana, while they will be available in August for San Pedro de Macorís and in June for Higüey. The anticipated bidding dates are December 2024, March 2025, and February 2025, respectively.<sup>72</sup>

## **E. Program alignment**

- 1.32 **National government’s strategy for the sector.** The program is aligned with the National Commitment for the Water Pact (2021-2036), considering sanitation management as one of the key areas for ensuring 100% coverage by 2036. It envisages an investment plan for new infrastructure and the replacement of obsolete networks, an institutional restructuring process with service providers, and additional measures to improve service quality. The National Infrastructure Plan also prioritizes sanitation for the three proposed cities.
- 1.33 **Alignment with the IDB Group country strategy with the Dominican Republic.** The program is framed within the IDB Group Country Strategy with the Dominican Republic 2021-2024 (GN-3084-1) through the priority area “strengthening of human capital” and the strategic objective “boost access to improved water and sewer services.” Specifically, it will contribute to the indicator on the percentage of the population using improved sanitation facilities.
- 1.34 **Alignment with the IDB Group Institutional Strategy.** The operation is aligned with the new IDB Group Institutional Strategy: Transforming for Scale and Impact (CA-631) through its critical objectives of: (i) reduc[ing] poverty and inequality, by increasing access to sanitation services, especially for vulnerable people; (ii) address[ing] climate change, as the financed investments will contribute to reducing CO<sub>2</sub> emissions; and (iii) bolster[ing] sustainable regional growth, through investments in infrastructure. Likewise, it is aligned with the following operational focus areas: (i) biodiversity, natural capital, and climate action; (ii) gender equality

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<sup>71</sup> Technical cooperation funds (ATN/OC-20685-DR) are available to prepare designs, workshops, and bidding documents.

<sup>72</sup> The executing unit and institutions linked to contract execution, such as the Office of the Comptroller, have received extensive training in the innovative contract models to be implemented. In addition, prequalification of the main works is planned once the program has been approved as well as bidding after the term of the loan agreement has entered into effect.

and the inclusion of diverse population groups; (iii) institutional capacity, rule of law, and citizen security; and (iv) sustainable, resilient, and inclusive infrastructure.

- 1.35 **Alignment with strategies and sector frameworks.** The program is aligned with the document “Sustainable Infrastructure for Competitiveness and Inclusive Growth” ([GN-2710-5](#)), especially its priority area “support the construction and maintenance of socially and environmentally sustainable infrastructure,” by promoting access to basic infrastructure services. The program is consistent with: (i) the Water and Sanitation Sector Framework Document (GN-2781-13), by promoting universal access to quality, equitable, and inclusive water and sanitation services with program designs that incorporate climate change considerations and promote water security; (ii) the Climate Change Sector Framework Document (GN-2835-8), with the premise relating to the fourth dimension of success that “countries make progress on mainstreaming climate change considerations across sectors”; and (iii) the Gender and Diversity Sector Framework Document (GN-2800-8) related to the provision of quality public services that promote gender equality or women’s empowerment, as well as projects that support the social inclusion of persons with disabilities.
- 1.36 **Paris alignment.** The program has been analyzed using the [Joint MDB Assessment Framework](#) for Paris alignment and the [IDB Group Paris Alignment Implementation Approach](#) (document [GN-3142-1](#)) and is deemed to be aligned with the adaptation objective of the Paris Agreement and universally aligned with the mitigation objective of the Paris Agreement.
- 1.37 **Green and climate finance.** An estimated 95.8% of the operation’s resources are considered climate finance, as they are invested in adaptation and mitigation activities, according to the [joint methodology of the multilateral development banks for tracking climate adaptation finance](#). Lastly, 99.63% of the operation’s resources are invested in green finance, based on the IDB Group’s green finance tracking methodology (document GN-3025-5) ([optional link 4](#)).
- 1.38 **Alignment with the Public Utilities Policy (GN-2716-6).** The proposed program and country sector objectives are consistent with the principles of the Public Utilities Policy (GN-2716-6) and meet conditions of financial sustainability and economic evaluation. The financial evaluation conducted showed that COAAROM and INAPA have the financial capacity to meet the commitments arising from the investments proposed in this program, based on the implementation of the management improvement actions identified ([optional link 8](#)).

## II. FINANCING STRUCTURE AND MAIN RISKS

### A. Financing instruments

- 2.1 **Modality and financing structure.** The program is structured as an investment loan under the loans for specific projects modality. The interventions have concrete, interdependent objectives and components. The preliminary drafts for all the works have been defined, and their technical, financial, economic, and environmental feasibility has been established.

- 2.2 **Cost and financing.** The total cost of the program is US\$380 million, to be financed from the Bank’s Ordinary Capital. The program does not envisage cofinancing or local contributions. The preliminary budget is outlined in Table 1.

**Table 1. Estimated program cost (US\$ millions)**

Components	IDB	Total	%
Component I. Expansion and optimization of resilient and inclusive infrastructure	350	350	92.10
Component II. Institution-strengthening and efficiency improvements in the sector	25	25	6.58
Administration and contingencies	5	5	1.32
<b>Total</b>	<b>380</b>	<b>380</b>	<b>100</b>

- 2.3 **Disbursement schedule.** The loan disbursement period will be five years from the date that the loan contract enters into effect. The planned annual disbursements are presented in Table 2.

**Table 2. Disbursement schedule (US\$ thousands)**

Component	Year 1	Year 2	Year 3	Year 4	Year 5	Total
<b>IDB</b>	75.020	101.006	125.469	49.051	29.454	380.000
<b>Total</b>	75.020	101.006	125.469	49.051	29.454	380.000
<b>%</b>	19.7	26.5	33	12.9	7.7	100

**B. Environmental and social risks**

- 2.4 The program is classified as a Category “A” operation under the Bank’s Environmental and Social Policy Framework, based on existing information, because moderate impacts are anticipated within an area of the seabed measuring 20 meters in diameter in the Southeast Reef Marines Sanctuary. During the construction phase, potential impacts include intensified erosion processes in areas subject to earth moving works; impacts on vegetation; alteration of aquatic fauna habitats during the works; temporary disturbance of natural habitats and terrestrial fauna; inconvenience caused by construction activities such as demolitions and flows of vehicle traffic, equipment, material, and workers to worksites; earth moving works; microtunneling; and the operation of construction campsites. During the operating phase, potential impacts include altered seawater quality due to the discharge of effluents, alteration of aquatic fauna habitats, increased diversity of aquatic organisms, and unpleasant odors and noise. Social impacts include workplace health and safety incidents and/or accidents, impacts on road safety, inconveniences to residents during the works, risks and negative impacts based on gender violence, exclusion and/or discrimination, and temporary impacts from the loss of economic income owing to road or access closures. Since threat levels for flooding, earthquakes, and heatwaves are moderate, and the criticality and vulnerability of infrastructure interventions are moderate, a disaster risk classification of “moderate” is appropriate. The environmental and social risk rating is “substantial” because there may be

moderate direct impacts associated with the typology of the works, potential complaints and grievances due to increased unpleasant odors, or disease vectors. Likewise, the area of indirect influence also includes legally protected areas and category IV and VI Key Biodiversity Areas. A social liability has also been identified due to a family resettlement process, and, lastly, INAPA is still in the process of creating institutional capacity to implement the Bank's Environmental and Social Policy Framework. As this is a specific works operation, an environmental and social impact assessment was drawn up for the La Romana project, as well as an environmental and social evaluation for each project in Higüey and San Pedro de Macorís. There are no Indigenous peoples in the Dominican Republic or in the area of influence, according to the criteria of Environmental and Social Performance Standard 7. This information was confirmed through the environmental and social studies conducted. No environmental liabilities were identified. The environmental and social management plan includes specific risk-management measures for gender-based violence. The environmental and social impact assessments, environmental and social evaluations, and environmental and social management policy have been integrated into INAPA's environmental and social management system, and an environmental and social action plan has been agreed on, in accordance with the Bank's Environmental and Social Policy Framework and Environmental and Social Performance Standards.

- 2.5 In accordance with the stakeholder participation program, four public consultations were held using a hybrid format on 26 April and 1 and 2 May. The stakeholder groups participating in these consultations supported the project. Participants expressed concerns about technical matters related to the benefits of installing sewer systems, participation and decision-making processes, and the location of pumping and wastewater treatment stations. Questions were addressed orally by the INAPA team. In addition, two presentations were given for the Ministry of Environment and other institutions responsible for managing protected areas. On 28 June 2024, the versions of the post-consultation documents and the public consultation report were published on the [Bank's website](#).
- 2.6 The program's social and environmental management plan includes a biodiversity action plan with a US\$1.5 million budget. This plan includes a biota monitoring program and a coral reef restoration program. It will also include an analysis of the collaboration between the public sector (mainly water companies) and the private sector (hotels, construction companies) to make coral restoration financially sustainable. Local experience<sup>73</sup> through the Dominican Foundation for Marine Studies (FUNDEMAR),<sup>74</sup> which has implemented advanced assisted reproduction and environmental monitoring techniques, has been successful and provides a solid foundation for designing, scaling up, and systematizing the restoration activities. The direct contracting of FUNDEMAR is being considered to implement the coral restoration actions, based on its unique experience in coral restoration,

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<sup>73</sup> Dominican Foundation of Marine Studies, The Nature Conservancy, Dominican Reef Network, Ministry of Environment and Natural Resources. "Manual de Reproducción Asistida de Corales: Experiencia en República Dominicana."

for an amount of approximately US\$700,000 ([optional link 10](#)) (see Annex III for more information).

### **C. Fiduciary risks**

- 2.7 Since the executing agency has extensive knowledge and experience in the implementation of Bank-financed projects, no major fiduciary risks are anticipated (see paragraph 1.27). In regard to financial management, the executing agency has experience and knowledge that support the program's financial execution. Only one medium-high risk has been identified, which is that insufficient bids for the more complex processes may lead to unsuccessful results. The limited number of interested firms that are able to meet the technical and financial requirements, coupled with the participation of municipal entities, increases the integrity risk. To mitigate this risk, technical support will be available to prepare quality bidding documents and conduct workshops and advertising. In terms of integrity, compliance with Standard 37001 adopted by INAPA and the institutional strengthening measures planned in Component II of the program mitigate risk and any potential negative impacts on the achievement of the development objectives and on the reputation of INAPA and the Bank.

### **D. Other key risks and issues**

- 2.8 **Sustainability.** Several tools have been identified to guarantee the sustainability of the works financed by the program: (i) INAPA and COAAROM will sign an agreement in which they commit to provide technical support for the works, as well as support for their operation and maintenance (paragraph 3.4); (ii) rapid-impact interventions to improve the drinking water service, increase the companies' revenues, and make operating costs more efficient (paragraph 1.21); and (iii) the use of the Bank's nonreimbursable instruments to provide support through technological, operational, and social innovation that help to increase the community's involvement in the sustainability of services (paragraph 1.12 and 1.13).
- 2.9 The required rights-of-way and legal ownership of land or plots will be in place where works will be contracted before giving the order to begin construction activities in the corresponding tranche.

## **III. IMPLEMENTATION AND MANAGEMENT PLAN**

### **A. Summary of implementation arrangements**

- 3.1 **Execution arrangements.** The borrower will be the Dominican Republic, and the executing agency will be INAPA, which will be responsible for the administration of the loan proceeds and the fulfillment of the operation's objectives. INAPA will be responsible for coordinating all the program's technical and operational activities, including accounting records and compliance with the program Operating Regulations. COAAROM will participate in the technical execution of the program in the area for which it provides service. INAPA will act through the coordinating unit established for program DR-L1158, which will be comprised, at all times, of a coordinator, a procurement specialist, a financial specialist, a social specialist, and

an environmental specialist who will be responsible for this program's execution. The unit will be strengthened by hiring a contract manager and biodiversity specialist. Support will also be provided to the executing agency to strengthen interagency coordination, especially with the Ministry of the Environment and the municipal governments of the program's cities, communication, and implementation capacity through training and the designation of focal points in these institutions.

- 3.2 **Program Operating Regulations.** The program will be governed by the program Operating Regulations ([optional link 9](#)), the terms of which will include the project cycle, institutional coordination mechanisms and instruments, and environmental and social considerations.
- 3.3 **Special contractual conditions precedent to the first disbursement of the loan:** (a) a subsidiary agreement between the borrower, represented by the Ministry of Finance, and INAPA has been signed and remains in effect, setting the terms of the transfer of resources to INAPA and the parties' other execution-related obligations; (b) the program coordination unit set up for the Universal Sanitation Program in Coastal and Tourist Cities (5637/OC-DR and 5638/KI-DR) has been strengthened for the execution of this program by hiring a contract manager and biodiversity specialist; and (c) the program Operating Regulations have been approved and remain in effect under terms previously agreed upon with the Bank, including the environmental and social management plan, the environmental and social management framework, and the environmental and social action plan. Ensuring cross-sector and institutional coordination, these conditions will also ensure that INAPA has allocated the minimum personnel required for proper program execution.
- 3.4 **Special contractual conditions for execution.** Prior to the disbursement of funds for the works in La Romana, an interagency agreement between INAPA and COAAROM will have been signed and remain in effect stipulating how to coordinate the works' technical designs, execution, transfer upon completion, and the operation and maintenance obligations, as well as how technical assistance will be provided to COAAROM ([required link 3](#)).
- 3.5 **Procurement and audits.** Procurement financed in whole or in part with loan proceeds will be undertaken in accordance with the Policies for the Procurement of Goods and Works Financed by the IDB (GN-2349-15) and the Policies for the Selection and Contracting of Consultants Financed by the IDB (GN-2350-15). Any advanced country system (including the subsystems for national competitive bidding, price comparison, framework agreement, reverse auction, and individual consultants) that has been approved by the Bank's Board of Executive Directors (GN-2538-22 of 2017) will be used in accordance with the scope provided for in the respective approval and as set forth in Annex III hereof.
- B. Design activities subsequent to approval**
- 3.6 **Monitoring.** The executing agency will prepare reports on the progress and achievement of outcomes relating to the activities for which it is responsible. The monitoring structure will include the procurement plan, program execution



plan, annual work plan, results matrix, progress monitoring report, and the risk management plan. The executing agency will submit semiannual reports to the Bank on the progress made and outcomes achieved, as well as an action plan for the following six-month period within 60 days of the end of each six-month period ([required link 2](#)).

- 3.7 **Evaluation.** The executing agency will contract for: (i) a midterm evaluation, in the form of a project completion report, which will be submitted 90 days after the date on which 50% of the program resources have been disbursed and (ii) a final evaluation, which will be submitted 90 days after the date of the final disbursement of program resources. The proposed evaluation methodology will use a before-and-after comparison, which will consist of measuring the outcome indicators after the interventions have been implemented and comparing the measurements to verify achievement of the targets.<sup>75</sup> As part of the final evaluation, an ex post economic evaluation will be conducted, the methodology of which is detailed in the monitoring and evaluation plan ([required link 2](#)). Additionally, there will be a 24-month extension of the deadline to submit the project completion report after the project's execution is complete because the expected impacts do not occur immediately after the works are completed.
- 3.8 **Operation and maintenance.** The borrower, through the executing agency and COAAROM, will agree to take the necessary measures to ensure that the program's works and assets are properly maintained in accordance with generally accepted technical standards. COAAROM will maintain the works in La Romana (paragraph 3.4). During the disbursement period and as part of the semiannual progress reports, the borrower will submit a report on the status of such works and goods through the executing agency. If Bank inspections or reports received by the Bank determine that maintenance is being performed below the levels agreed on in the program Operating Regulations, the borrower, through the executing agency, will adopt the necessary measures to fully remedy the deficiencies. attribution

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<sup>75</sup> In order to evaluate the innovative instruments to be implemented with the loan, nonreimbursable resources will finance evaluations of behavioral campaigns to be designed and implemented to increase rate payments, connectivity, and lower household water consumption.

Development Effectiveness Matrix		
Summary		DR-L1165
<i>I. Corporate and Country Priorities</i>		
Section 1. IDB Group Institutional Strategy Alignment		
Operational Focus Areas	-Biodiversity, natural capital, and climate action -Gender equality and inclusion of diverse population groups -Institutional capacity, rule of law, citizen security -Sustainable, resilient, and inclusive infrastructure	
[Space-Holder: Impact framework indicators]		
2. Country Development Objectives		
Country Strategy Results Matrix	GN 3084-1	Increase access to improved AP and sewage sources
Country Program Results Matrix	GN-3207	The intervention is included in the 2024 Operational Program.
Relevance of this project to country development challenges (If not aligned to country strategy or country program)		
<i>II. Development Outcomes - Evaluability</i>		Evaluable
<b>3. Evidence-based Assessment &amp; Solution</b>		<b>10.0</b>
3.1 Program Diagnosis		2.5
3.2 Proposed Interventions or Solutions		3.5
3.3 Results Matrix Quality		4.0
<b>4. Ex ante Economic Analysis</b>		<b>10.0</b>
4.1 Program has an ERR/NPV, or key outcomes identified for CEA		1.5
4.2 Identified and Quantified Benefits and Costs		3.0
4.3 Reasonable Assumptions		2.5
4.4 Sensitivity Analysis		2.0
4.5 Consistency with results matrix		1.0
<b>5. Monitoring and Evaluation</b>		<b>9.5</b>
5.1 Monitoring Mechanisms		4.0
5.2 Evaluation Plan		5.5
<i>III. Risks &amp; Mitigation Monitoring Matrix</i>		
Overall risks rate = magnitude of risks*likelihood		Medium Low
Environmental & social risk classification		A
<i>IV. IDB's Role - Additionality</i>		
The project relies on the use of country systems		
Fiduciary (VPC/FMP Criteria)	Yes	Budget, Treasury, Accounting and Reporting, Internal Audit. Procurement: Information System, Price Comparison.
Non-Fiduciary		
The IDB's involvement promotes additional improvements of the intended beneficiaries and/or public sector entity in the following dimensions:		
Additional (to project preparation) technical assistance was provided to the public sector entity prior to approval to increase the likelihood of success of the project		

*Evaluability Assessment Note: The general objective of the project is to contribute to bettering the health of the population and environmental sustainability in prioritized tourist cities by improving access to and management of inclusive, climate-resilient, low-carbon water and sanitation services that promote natural capital conservation. The specific objectives are: (i) increasing safely managed sanitation coverage in the cities where the program will intervene; and (ii) enhancing efficiency in managing INAPA and COAAROM. The three cities where the program will intervene are Higüey, La Romana and San Pedro de Macorís, in the Dominican Republic.*

*The project has a complete diagnosis for the two specific objectives. The indicators associated with the general objective and the specific objectives included in the results matrix have means of verification, established baseline and target values, and are SMART.*

*The economic analysis of the operation was carried out through a cost-benefit analysis of each of the sanitation works, and an aggregate analysis. Benefits were quantified through households' willingness to pay (WTP) for having sewerage and wastewater treatment services, as well as greenhouse gas emissions avoided by the program. Costs used were investment costs and incremental operation and maintenance costs. Using a 12% discount rate, the net present value (NPV) of the aggregate analysis is US\$224,052,276, and the internal rate of return (IRR) is 22%. The sensitivity analysis shows that if the WTP of households benefiting from sewage and wastewater treatment decreases by 60%, or if investment costs increase by 90%, the program will no longer be economically viable.*

*The project includes a monitoring and evaluation plan in accordance with the Bank's standards. The effectiveness of the proposed intervention will be measured through a before-after evaluation (without attribution). Additionally, the ex-post efficiency of the operation will be evaluated with an updated cost benefit analysis using the same methodology used for the ex-ante analysis for each project.*

## RESULTS MATRIX

<b>PROGRAM OBJECTIVE</b>	The program's general objective is to contribute to improving people's health and environmental sustainability in prioritized tourist cities by enhancing access to, and the management of, water and sanitation services that are inclusive, climate resilient, low-carbon, and foster the conservation of natural capital. Its specific objectives are to: (i) increase the coverage of safely managed sanitation in the cities targeted by the program; and (ii) improve the management efficiency of the National Water and Sewer Institute (INAPA) and the Water and Sewer Corporation of La Romana (COAAROM).
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### GENERAL DEVELOPMENT OBJECTIVE

Indicator	Unit of measure	Baseline value	Baseline year	Target year	Target	Means of verification	Comments
<b>General development objective:</b> Contribute to improving people's health and environmental sustainability in prioritized tourist cities by enhancing access to, and the management of, water and sanitation services that are inclusive, climate resilient, and low-carbon, and that foster the conservation of natural capital							
Annual CO <sub>2</sub> equivalent (CO <sub>2</sub> and CH <sub>4</sub> ) emissions avoided by the project	Tons of CO <sub>2</sub> equivalent	0	2023	2031	187,730.64	Annual operating reports on tons of CO <sub>2</sub> equivalent emissions	Application of the Energy Performance and Carbon Emissions Assessment and Monitoring Tool (ECAM)
Rate of acute diarrheal infections in children under 5 in targeted project locations	Percentage	19.1 <sup>1</sup>	2018	2034	9.4	The rate is measured on the basis of childcare providers' responses to the National Demographic and Health Survey (ENDESA)	The target was set based on evidence of the expected impact on reducing diarrhea in similar interventions, and the coverage of beneficiary households.

<sup>1</sup> The baseline and target will be updated in the initial plan when information is available on all the program's projects. The preliminary baseline corresponds to the national rate.

**SPECIFIC DEVELOPMENT OBJECTIVES**

Indicator	Unit of measure	Baseline value	Baseline year	Year 1	Year 2	Year 3	Year 4	Year 5	End of program	Means of verification	Comments
<b>Specific development objective 1: Increase the coverage of safely managed sanitation in the cities targeted by the program</b>											
Households with access to safely managed sanitation in targeted program locations	Households	0 <sup>2</sup>	2023					191,000	191,000	Updated user registry	Safe sanitation includes the collection and treatment of wastewater, according to target 6.2 of the Sustainable Development Goals
<b>Specific development objective 2: Improve the management efficiency of INAPA and COAROM</b>											
2.1 INAPA and COAROM residential clients invoiced	Number	158,000	2024			280,000		540,000	540,000	Updated user registry	
2.2 INAPA and COAROM large consumers invoiced	Number	0	2024	0		300	1,200		1,200	Updated user registry	Commercial clients with monthly consumption of more than 500 cubic meters per month
2.3 Micrometering rate in the targeted program locations	Percentage	3.6	2024					20	20	Updated user registry	Micrometered clients/total clients
2.4 INAPA and COAROM staff certified in the prevention of workplace sexual harassment	Percentage	0	2023			60		90	90	Certification records	INAPA and COAROM have an estimated 7,320 permanent staff members.
2.5 Companies in the water and sanitation sector certified in ISO 37001	Number	1	2023			4	4	4	13	Certification records	Companies in the water and sanitation sector considered are: CORAAS, INAPA, and construction companies that work with INAPA. <sup>3</sup>
2.6 Validation time for work certifications	Index	100	2023					70	70	Records of formal communication with the executing unit	The index is regularized on the basis of 2023 = 100.

<sup>2</sup> No household in the prioritized locations currently has properly treated wastewater.

<sup>3</sup> The total universe is estimated to include 23 companies.

OUTPUTS

Indicator	Unit of measure	Baseline value	Baseline year	Year 1	Year 2	Year 3	Year 4	Year 5	End of program	Means of verification	Comments
<b>Component 1: Expansion and optimization of resilient and inclusive sanitation infrastructure</b>											
1.1 Sanitation system in La Romana built	System	0	2023					1	1	Works acceptance certificate	Work contracts will include 18 months of operation and training for staff responsible for operation.
1.2 Sanitation system in Higüey built	System	0	2023					1	1		
1.3 Sanitation system in San Pedro de Macorís built	System	0	2023					1	1		
<b>Component 2: Institution-strengthening and efficiency improvements in the sector</b>											
2.1 Program of online technical and operational certifications and incentives implemented with gender and diversity considerations <sup>4</sup>	Program	0	2023			1			1	Execution unit report	
2.2 Digital tools designed and implemented to improve technical and commercial management	Digital tool	0	2023		1	2			3	Execution unit progress report	These are open source registry and commercial management tools and the SaniHUB works supervision module.
2.3 Behavioral change and communication campaigns implemented to regularize contracts, payment, and connectivity with an approach based on gender and diversity considerations (persons with disabilities, Afro-descendants, and LGBTQ+ people)	Campaign	0	2023			2	0	1	3	Execution unit progress report	
2.4 Contract executed to improve the commercial management of residential and nonresidential clients, including updating of the registry	Contract	0	2023					1	1	Progress report and updated registry	

<sup>4</sup> As defined in paragraph 1.14 of this loan proposal.

Indicator	Unit of measure	Baseline value	Baseline year	Year 1	Year 2	Year 3	Year 4	Year 5	End of program	Means of verification	Comments
2.5 Contracts for the installation of micrometers in the targeted locations and for large consumers executed, including the installation of pressure-regulating devices	Contract	0	2023			1		3	4	Works acceptance certificate	
2.6 Certification program in gender equality, diversity, and inclusion <sup>5</sup> implemented	Program	0	2023						1	Execution unit progress report	
2.7 Renovation of INAPA and COAAROM's offices following a gender equality and inclusion approach <sup>6</sup>	Rehabilitated office	0	2023				2	2	4	Works acceptance certificate	Includes INAPA's central office and two provincial offices, as well as COAAROM's office
2.8 Certification program in the prevention of corruption in public and private companies in the water and sanitation sector implemented	Program	0	2023					1	0	Execution unit progress report	
2.9 Environmental and biodiversity monitoring program implemented		0	2023					1	1	Execution unit progress report	This is annual monitoring.
2.10 Coral reef recovery program designed with financial, monitoring, and evaluation mechanisms, as well as mechanisms to coordinate with the private sector, and including a pilot restoration project	Program	0	2023					1	1	Execution unit progress report	

<sup>5</sup> In accordance with paragraph 1.14 of this loan proposal.

<sup>6</sup> Idem.

**Country:** Dominican Republic **Division:** WSA **Operation:** DR-L1165 **Year:** 2024

## FIDUCIARY AGREEMENTS AND REQUIREMENTS

**Executing agency:** National Water and Sewer Institute (INAPA)

**Operation name:** Universal Sanitation Program in Coastal and Tourist Cities II

### I. Fiduciary Context of the Executing Agency

#### 1. Use of country systems in the operation<sup>1</sup>

<input checked="" type="checkbox"/> Budget	<input checked="" type="checkbox"/> Reporting	<input checked="" type="checkbox"/> Information system	<input type="checkbox"/> National competitive bidding (NCB)
<input checked="" type="checkbox"/> Treasury	<input checked="" type="checkbox"/> Internal audit	<input checked="" type="checkbox"/> Shopping	<input type="checkbox"/> Other
<input checked="" type="checkbox"/> Accounting	<input type="checkbox"/> External control	<input type="checkbox"/> Individual consultants	<input type="checkbox"/> Other

2. Fiduciary execution mechanisms: INAPA, as the executing agency, will be responsible for the execution of processes and resources, in technical coordination with the water and sewer corporation of the cities targeted by the program.

#### 3. Fiduciary capacity

Fiduciary capacity of the executing agency	<p>The executive agency's institutional capacity was assessed in 2021 by applying the Institutional Capacity Assessment Platform (ICAP) methodology, and the assessment was updated recently (2024). The assessment concludes that the executing agency's fiduciary capacity is satisfactory for program execution.</p> <p>Since the executing agency has extensive knowledge and experience in implementing Bank-financed projects, no major fiduciary risks are anticipated. However, the need has been identified to strengthen the program coordination unit with additional staff, including professionals in different areas such as procurement and financial management.</p>
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#### 4. Fiduciary risks and risk response

Risk taxonomy	Risk	Risk level	Risk response
Governance systems	Financial management	Medium-Low	1. Actions relating to the ongoing strengthening of the executing agency

<sup>1</sup> Any system or subsystem approved subsequently may be used for the operation, pursuant to the terms of the Bank's approval.

Risk taxonomy	Risk	Risk level	Risk response
	and procurement		<p>through training, assistance, and supervision in fiduciary matters by the Bank's fiduciary team.</p> <p>2. Maintain the key executing agency staff from the Universal Sanitation Program in the first Coastal and Tourist Cities operation and strengthen it with a contract manager. Also, progressively strengthen the project team with support consultants so the team's workload can be properly distributed, thereby completing financial formalities on time, and with the design and management of bidding processes.</p>
Internal processes	Procurement	Medium-Low	<p>1. Detailed planning of bidding and setting up a system for monitoring the achievement of the milestones planned for each process.</p> <p>2. Technical assistance from the IDB to prepare the bidding documents and provide advisory support throughout the bidding process.</p>

5. Policies and guidelines applicable to the operation: GN-2349-15 and GN-2350-15
6. Exceptions to policies and guides: Not applicable

## II. Considerations for the Special Provisions of the Loan Contract

Special conditions precedent to the first disbursement:
<p>Exchange rate: For the purposes of Article 4.10 of the General Conditions, the parties agree that the applicable exchange rate will be the rate indicated in section (b)(ii) of that article. For these purposes, the exchange rate used will be that prevailing on the effective date on which the borrower, executing agency, or any other individual or entity to which the authority to incur expenses has been delegated, makes the respective payments or transfers to the contractor, provider, or beneficiary.</p>
<p>Type of audit: The program's audited financial statements will be prepared annually, within 120 days after the close of each fiscal year. At program closing, the program's audited final financial statements will be submitted within 120 days after the date of the final disbursement.</p>



### III. Agreements and Requirements for Procurement Execution

☒	Bidding documents	For procurement of works, goods, and nonconsulting services conducted in accordance with the procurement policies (document GN-2349-15) and subject to international competitive bidding (ICB), the IDB's standard bidding documents will be used or those agreed on by the executing agency and the Bank for a particular procurement process. The selection and contracting of consulting services will be conducted in accordance with the policies for the selection of consultants (document GN-2350-15) and will use the standard request for proposals issued by the Bank or that agreed on by the executing agency and the Bank for a particular procurement process. For design-build-operate (DBO) bidding, the relevant International Federation of Consulting Engineers (FIDIC) contract will be used. The program's sector specialist is responsible for reviewing the technical specifications and terms of reference for procurement during preparation of the selection processes. This technical review may be ex ante and is independent of the procurement review method.
☒	Use of country systems	Price comparison (shopping) and small value subsystems will be used for the procurement of standardized and readily available goods and services, pursuant to the approval of the Bank's Board of Executive Directors. The procurement plan for the operation will list the procurements to be conducted using the country system within the approved scope. If the scope of Board approval for use of the country system is expanded, it will be applicable to the operation.
☒	Direct contracting and single-source selection	The program envisages the direct contracting of the Dominican Foundation for Marine Studies (FUNDEMAR) for restoration works of a public coral area, for an estimated US\$700,000 (see <a href="#">optional link 10</a> ).
☒	Recurring expenses	Any recurring financed expenses required to implement the program that are approved by the Project Team Leader will be incurred following the executing agency's administrative procedures. Such procedures will be reviewed and accepted by the Bank, provided they do not violate the principles of economy, efficiency, and competition.
☒	Advance procurement / Retroactive financing	Advance procurement is possible for the following procurement processes: (1) FIDIC design-build-operate (DBO) contract for the macrostructure in the La Romana location, and (2) FIDIC DBO contract and results-based consulting contract for improving drinking water, secondary sewer networks, and critical points of the storm drain in the La Romana location. The processes will be carried out in advance until contracts are signed, and no payments will be made before the loan eligibility date (see GN-2349-15, GN-2350-15, and the Bank's policy on recognition of expenditures, retroactive financing, and advance procurement (GN-2259-1)).

☒	Procurement supervision	The supervision method will be ex post, except where ex ante supervision is warranted. Where procurement is executed through the country system, supervision will be conducted through the country supervision system. The monitoring method—(i) ex ante, (ii) ex post, or (iii) country system—will be determined for each selection process and identified in the procurement plan based on the level of complexity of the process. Ex post reviews will be conducted every six months in accordance with the project supervision plan, subject to change during execution. Ex post review reports will include at least one physical inspection visit selected from the procurement processes subject to ex post review.
☒	Records and files	The executing agency will be responsible for maintaining the files and supporting documentation for procurement processes and all documents related to the execution of contracts and receipts for payments made with program resources, as well as conducting these processes in accordance with established procedures.

Main procurement items

Description of the procurement	Selection method	New procedures/ tools	Estimated date	Estimated amount (US\$)
FIDIC DBO contract for the macrostructure in the Higüey location	ICB			26 million
Results-based contract to improve secondary sewer networks in the Higüey location	ICB			25 million
FIDIC DBO contract for the macrostructure in the San Pedro de Macorís location	ICB			28 million
Results-based contract to improve secondary sewer networks in the San Pedro de Macorís location	ICB			26 million
FIDIC DBO contract for the macrostructure in the La Romana location	ICB		02/25	66 million
Results-based contract to improve secondary sewer networks in the La Romana location	ICB		04/25	65 million

Click [required link 4](#) to access the 18-month procurement plan.

#### IV. Financial Management Agreements and Requirements

☒	Programming and budget	<p>The annual budget is prepared by the Ministry of Finance, through the General Budget Office, in coordination with the Ministry of Economy, Planning, and Development, as well as with the other government entities involved in the process. The executing agency will be responsible to the Ministry of Finance for managing the program's planning, budget, and planning tools, including the Bank's own tools (i.e., project execution plan, annual work plan, procurement plan, and financial plan).</p>
☒	Treasury and disbursement management	<p>The program will use a special bank account opened in the name of the program in U.S. dollars, through the National Treasury Single Account.</p> <p>The exchange rate to be used in the operation will be the exchange rate effective on the date of payment of the expenditure in the local currency—option (b)(ii) of Article 4.10 of the General Conditions of the loan contract.</p> <p>Advances and reimbursement of funds will be used as the modes of disbursement recommended to manage this operation. Payments to third parties are discouraged due to the risk of asset laundering. As regards the advance of funds, the financial plan will be considered for a period of six months, and up to 12 months may be considered if the program so requires. The operation is expected to justify 80% of the funds to be used in accounting for the cumulative balances pending justification, before requesting a new advance.</p>
☒	Accounting, information systems and report generation	<p>The specific accounting standards to be followed are the International Public Sector Accounting Standards. For the operation's accounting records, the module for project execution units of externally funded projects (UEPEX) in the country's Integrated Financial Management System (SIGEF) will be used as the technology platform, and cash-based accounting will be used. All of the program's main financial reports, including disbursement requests, will be generated directly by UEPEX.</p> <p>In addition, the program Operating Regulations will be used with the documented definition of workflows, internal controls, and eligible expenditures.</p>
☒	Internal control and internal auditing	<p>The Office of the Comptroller General of the Dominican Republic performs the government's internal audit function. To perform this function, the Office of the Comptroller General is assisted by internal audit units in each unit of the Dominican Republic's public administration apparatus.</p>

<input checked="" type="checkbox"/>	External control and financial reporting	<p>The borrower and/or executing agency will select and procure the external audit services in accordance with the terms of reference previously agreed upon by the executing agency and the Bank, which will set out the type, timing, and scope of the review. The external auditor selected and the audit standards to be applied will be acceptable to the Bank. The program's required annual financial statements will be audited by a Bank-eligible firm. The type of audit and level of eligibility required for auditors may be adjusted over the program's lifetime depending on the findings of the Bank's supervision.</p> <p>The program's required audited financial statements are:</p> <p>Annually: Audited financial statements to be submitted to the Bank no later than 120 days after the end of each fiscal year.</p> <p>At project closing: Audited financial statements to be submitted to the Bank no later than 120 days after the date of the last disbursement.</p>
<input checked="" type="checkbox"/>	Financial supervision of the operation	<p>Supervision will be conducted through the annual financial audits. On-site and desk reviews and support will also be performed at intervals that will be determined as program execution progresses.</p>

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-\_\_\_/24

Dominican Republic. Loan \_\_\_\_/OC-DR to the Dominican Republic.  
Dominican Republic Universal Sanitation Program in  
Coastal and Tourist Cities II

The Board of Executive Directors

RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such contract or contracts as may be necessary with the Dominican Republic, as borrower, for the purpose of granting it a financing aimed at cooperating in the execution of Dominican Republic Universal Sanitation Program in Coastal and Tourist Cities II. Such financing will be for the amount of up to US\$380.000.000, from the resources of the Bank's Ordinary Capital, and will be subject to the Financial Terms and Conditions and the Special Contractual Conditions of the Project Summary of the Loan Proposal.

(Adopted on \_\_\_\_\_ 2024)