Program Information Document (PID)

Concept Stage | Date Prepared/Updated: 21-Dec-2021 | Report No: PIDC255853

Public Disclosure Authorized

BASIC INFORMATION

A. Basic Program Data

Country	Project ID	Parent Project ID (if any)	Program Name
Dominican Republic	P177823		Dominican Republic Water Sector Modernization Program
Region	**Estimated Appraisal Date**	**Estimated Board Date**	**Does this operation have an IPF component?**
LATIN AMERICA AND CARIBBEAN	04-Jul-2022	31-Aug-2022	Yes
Financing Instrument	**Borrower(s)**	**Implementing Agency**	**Practice Area (Lead)**
Program-for-Results Financing	Dominican Republic	National Water and Sewerage Institute (INAPA), Ministry of Economy, Planning, and Development, CORAAVEGA, CORAASAN	Water

Proposed Program Development Objective(s)

(i) to strengthen policies, institutions, and regulations for WRM and WSS services; and (ii) to increase access to efficient, resilient, and safely managed water and sanitation services in targeted areas.

COST & FINANCING

SUMMARY (USD Millions)

Government program Cost	3,327.00
Total Operation Cost	597.55
Total Program Cost	577.00
IPF Component	20.00
Other Cost	0.55
Total Financing	597.55
Financing Gap	0.00

FINANCING (USD Millions)

Total World Bank Group Financing	220.00
World Bank Lending	220.00
Total Government Contribution	377.55

Concept Review Decision
The review did authorize the preparation to continue

B. Introduction and Context

Country Context

1. **The Dominican Republic has achieved one of the most rapid growth rates in Latin America and the Caribbean over the past 25 years, but this growth is at risk due to the global novel coronavirus (COVID-19) pandemic.** Economic growth averaged 5.3 percent from 1993 to 2019, yielding broad-based gains in employment creation and poverty reduction. The share of population under the national poverty line steadily declined from 49.7 percent in 2005 to 21.0 percent in 2019. Access to basic services such as education, water, and sanitation has consistently improved since the early 2000s, reducing deprivations.

2. **However, the COVID-19 crisis has had a major—but potentially transitory—impact on economic growth.** The pandemic was first detected in the Dominican Republic in March 2020, and as of November 2021, the country had reported 400,846 confirmed cases of COVID-19 and 4,183 deaths.[1] A National Immunization Plan has effectively been implemented, with 55.6 percent of the population fully vaccinated during the same period. Annual gross domestic product is estimated to have contracted by 6.7 percent during 2020, and the official poverty rate increased from 21.0 to 23.4 percent, the first increase in the poverty rate in decades. The economic shock and fiscal policy measures caused tax revenues to fall far short of budget projections while health and social expenditures rose rapidly, widening the fiscal deficit from 2.5 to 7.7 percent of gross domestic product from 2019 to 2020. Yet the economy has gradually recovered and economic growth is projected to exceed 9 percent in 2021.

3. **Prior to the COVID-19 pandemic, the country had progressed in reducing poverty, increasing life expectancy, and achieving relatively high levels of basic access to infrastructure such as for water supply and sanitation (WSS), and now faces the challenge of providing quality services and ensuring water security.** The basic WSS coverage statistics mask the poor quality of WSS services, which are intermittent and characterized by high rates of non-revenue water (NRW), labor and energy inefficiencies, and low collection rates. These inefficiencies result in recurrent transfers from the central government to state-owned WSS enterprises to cover operating costs, putting a strain on the central budget. Also, access to wastewater collection and treatment services is inadequate. In response to these challenges, the government launched its Water Pact (*Pacto por el Agua*) in 2021. With a 15-year vision, the pact calls for reforms and US$8.5 billion in investments for WSS, water resource management (WRM), and irrigation to ensure the country's water security and improve service delivery. The Water Pact is operationalized through the government's Multi-Annual Public Sector Plans (*Planes Nacionales Plurianuales del Sector Público, PNPSPs*), which include a chapter on the

[1] Directorate General of Epidemiology, Ministry of Public Health. *Boletín Epidemiológico Semanal*. November 19, 2021. http://digepisalud.gob.do

water sector that sets priorities for reform over the four-year electoral period. The current PNPSP (2021–24) establishes the water sector as the top priority, with the largest share of public investments.[2]

Sectoral and Institutional Context of the Program

4. **The Dominican Republic faces water quantity and quality challenges to ensure water security for human consumption and for important economic sectors such as tourism, mining, and agriculture.** The Dominican Republic extracts about 50 percent of its total available freshwater resources, which is significantly higher than its Caribbean neighbors and the Latin America regional average of 8 percent. In economically important river basins such as Yaque del Norte and Yaque del Sur, demand already exceeds supply, leading to increasing conflict between water use for human consumption and agriculture. Supply is also under pressure due to poor land management in the upper basins, which is increasing sedimentation and thus reducing the capacity of storage reservoirs. At the same time, agricultural runoff, low sewerage coverage, and limited control of industrial and municipal discharges is deteriorating the quality of surface, ground, and ocean waters. Only 10 percent of municipal wastewater is collected, and 95 percent is not treated, which poses serious environmental and health impacts.[3] Unsustainable groundwater withdrawals along coastal areas in tourist zones are also threatening the irreversible salination of aquifers.

5. **While the Dominican Republic has high levels of access to basic WSS—97 percent and 95 percent, respectively, as of 2017—the quality of services is low.** Of the 80 percent of Dominicans who live in urban centers, only 27 percent have access to centralized sewerage services, while 70 percent depend on on-site systems that do not reliably contain fecal sludge. With rapid population growth, sewerage coverage is expected to drop to 15 percent by 2030 without further expansion. Moreover, 67 percent of households in the country report intermittent water supply. This forces many households to install water storage facilities and purchase expensive bottled water.[4]

6. **Management capacity and operational and financial efficiency of WSS service providers are similarly low.** The country's nine state-owned WSS service providers do not report on performance indicators and the scant data available show high rates of NRW (60–80 percent), high numbers of staff per 1,000 connections (7–21 per 1,000 connections), and low levels of metering (10 percent). Energy costs vary between providers but for some they constitute as much as 50 percent of total operating costs. The service is characterized by poor quality and inefficiencies due to physical leakages and unauthorized consumption through theft and low billing and collection rates (39-59 percent), which contribute to providers' dependence on central government funds. Providers do not fully cover their operational costs, with the central government financing on average 48 percent of recurrent costs totaling US$80 million annually.[5] Tariff structures for the country's two largest providers, the National Institute for Water Supply and Sewerage *(Instituto Nacional de Agua Potable y Alcantarillado, INAPA*) and the WSS corporation that covers the Province of Santo Domingo and the National District (*Corporación de Acueducto y Alcantarillado de Santo Domingo, CAASD*), significantly undervalue the price of water, limiting their ability to increase own-source revenues.

7. **The challenges faced in the water sector are grounded in an inadequate legal, regulatory, and institutional framework.** The water sector lacks apex policy and planning institutions to adequately manage water resources and related water services. The water sector overall is characterized by ambiguous and overlapping roles and gaps in functions among its respective actors. WRM responsibilities are fragmented between the Ministry of Environment, responsible for water pollution and groundwater, and the National Institute for Hydraulic Resources *(Instituto*

[2] Ministry of Economy, Planning and Development of the Dominican Republic. *Plan Nacional Plurianual del Sector Público 2021–2024*. Santo Domingo: September 2021. https://mepyd.gob.do/publicaciones/plan-nacional-plurianual-del-sector-publico-2021-2024
[3] Ministry of Economy, Planning and Development of the Dominican Republic. *Plan Nacional Plurianual del Sector Público 2021–2024*, page 93. Santo Domingo: September 2021. https://mepyd.gob.do/publicaciones/plan-nacional-plurianual-del-sector-publico-2021-2024
[4] Central Bank of the Dominican Republic. *Encuesta Nacional de Gastos e Ingresos de los Hogares*. 2020. https://cdn.bancentral.gov.do/documents/estadisticas/encuesta-de-gastos-e-ingresos/documents/ENGIH_2018.pdf?v=1614762332110
[5] Ibid.

Nacional de Recursos Hídricos, INDRHI), responsible for the management of water quantity. There are no formal systems for withdrawal and discharge permits or for water rights. The Ministry of Health is *de jure* the ministerial entity for WSS policy making; however, *de facto* it plays a very limited role that only extends to water quality monitoring, leaving an institutional void in overall sector policy, planning, budgeting, and monitoring. There is no technical or economic regulatory function assigned to any entity for the WSS subsector, and historically tariff setting for WSS has been politicized, suppressing the value of water. The WSS subsector lacks accountability, transparency, and incentives to improve its operational and commercial performance, which is problematic given the high levels of recurrent subsidies from the central government.

8. **Recognizing the need for major reforms supported by a broad-based consensus, the government launched the Water Pact 2021–36.** Presented by the President in June 2021, the Water Pact lays out the strategic vision of the government for reform of the water sector and justifies the need for legislative changes and institutional restructuring for WRM and WSS and irrigation service delivery. Specifically, the pact calls for the development and passage of a general water law (focused on WRM) and a WSS law, and for the creation of a National WSS Modernization Program to improve services, efficiency, and resilience to climate change and natural disasters. Given the complexity of these proposed reforms, the pact envisions US$8.5 billion in sectoral investments over 15 years.

Relationship to CPS/CPF

9. **The proposed 10-year Multiphase Programmatic Approach (MPA) is fully aligned with the objectives of the World Bank Group's Dominican Republic Country Partnership Strategy (CPS) for FY15–18 (which was extended by the Board to FY19) and the proposed new Country Partnership Framework (CPF) for FY22–27, which is being finalized.** The MPA will directly support Pillar 2 of the CPS "*Improving service delivery for the poor*" by expanding access to WSS, rehabilitating WSS networks, improving wastewater collection and treatment, and improving the capacity of the WSS service providers to deliver quality, uninterrupted WSS services. The MPA will also contribute to Pillar 3 "*Building resilience*" by reducing the intermittency of water supply, incorporating resilient design criteria for new infrastructure, and improving the quality and efficient management of water resources amid increasing climatic pressures. Under the working draft of the new CPF, the MPA will be aligned with the proposed results area related to the strengthening of institutions for effective service delivery, and investment in cost-effective climate adaptation and mitigation. In addition, the MPA is aligned with the World Bank's approach to green, resilient, and inclusive development by considering environmental, socio-economic, and financial sustainability; building resilience to a variety of shocks; and considering gender and citizen engagement aspects.

Rationale for Bank Engagement and Choice of Financing Instrument

10. **The World Bank is a key partner of the government in the water sector.** The Bank is financing two operations, the Resilient Agriculture and Integrated Water Resources Management Project (P163260) and the Wastewater Services Improvement and Water Loss Reduction Project (P171778). The World Bank's recent publication of a Public Expenditure Review in January 2021 included a chapter on WSS and provided analytical underpinnings for the Water Pact and the proposed National WSS Modernization Program. In terms of analytical work, the World Bank is supporting the Government implementing various elements of the Water Pact, specifically, focused on the design of the National WSS Modernization Program, including harmonized indicators, institutional arrangements, and capacity building, along with advancing important WRM reforms. Based on the government's strong political commitment to reform and modernize the water sector, the dialogue to date with the Bank, the experience of the Bank and its relationship with development partners in the sector, and the genuine need for a transformational program to improve service delivery and WRM in the country, the Bank is uniquely positioned to support the government with specific elements of reform and investment program.

11. **Rationale for the use of an MPA Financing Modality.** The MPA Financing Modality is appropriate to support the long-term water sector reforms envisioned in the 15-year Water Pact and will provide a framework for development partners to strategically align sector financing to maximize impact. It also provides the flexibility necessary to tailor the support for sector institutional reforms to the uncertain approval timelines of the draft WRM and WSS laws. Finally, the learning agenda for WRM and WSS under Phase I will generate important lessons to be applied and scaled up in Phase II, including on establishing a regulatory function and performance monitoring system, piloting systems to develop water user cadasters and water rights systems, reducing NRW, improving consumer confidence, and improving recruitment and retention of women staff in public utilities.

12. **The PforR is the optimal instrument to support a national program**. The government has an ambitious investment and reform program for the water sector and they are seeking the World Bank's support to refine and implement it. The PforR is the most suitable instrument to support the implementation of a national program, which will allow the government to focus on results and strengthen country systems. The flexibility of the instrument will allow the government to address performance issues in WSS as well as support implementation of national level reforms.

C. Program Development Objective(s) (PDO) and PDO Level Results Indicators

MPA Program Development Objective(s) (PrDO)

To increase access to efficient, resilient, and safely managed water and sanitation services in target areas.

Program Development Objective(s)

(i) to strengthen policies, institutions, and regulations for WRM and WSS services; and (ii) to increase access to efficient, resilient, and safely managed water and sanitation services in targeted areas.

PDO Level Results Indicators

13. A preliminary list of PDO-level results indicators have been identified to measure the achievement of the PDO:
    (i) Number of households with access to safely managed drinking water (percent),
    (ii) Number of households with access to safely managed sanitation (percent),
    (iii) National WSS Modernization Program Secretariat operational with resources and requisite capacity to monitor, manage, and coordinate the program and deliver services,
    (iv) Reduction in NRW (percent),
    (v) Portion of new infrastructure investments informed by resilience evaluations (percent), and
    (vi) WRM law and WSS law drafted and submitted to Congress.

D. Program Description

PforR Program Boundary

14. **The proposed 10-year two-phase MPA (2022-2032) is intended to support a portion of the activities proposed under the Water Pact 2021-2036, to be implemented throughout three PNPSPs (2021-2024, 2024-2028, and 2028-2032).** The thematic boundaries of the government program include: (i) a National WSS Modernization Program; (ii) WSS rehabilitation and expansion; (iii) strengthening resilience of water infrastructure; (iv) WRM and WSS legislation and regulation; (v) WRM information systems; and (vi) feasibility studies of hydraulic infrastructure. The National WSS Modernization Program has five priority areas: provide continuous WSS services, reduce losses in the transmission

and distribution networks, guarantee the financial stability of WSS services, improve energy efficiency, and reduce operational expenditures. Existing draft legislation on WRM currently envisions the establishment of a National Water Authority that would be allocated the functions of: (i) keeping an inventory of water resources, in terms of quantity, quality, and uses; (ii) granting and recording water rights; and (iii) protecting water resources, including controlling basin deforestation and erosion, water pollution, and groundwater deterioration. The legislation would separate and clarify functions between policy making, regulation, and the creation and operation of water resource infrastructure. Draft legislation for the WSS sector is at an initial phase of development, and would likewise aim to clarify and separate policy, regulation, and service delivery functions.

15. **Phase I of the MPA (US$220 million).** The first phase (2022-2027) is a US$200 million hybrid PforR with a US$20 million IPF component. It will support a government expenditure program covering WSS investments and operational costs of US$597 million in WSS in the Yaque del Norte river basin and national-level WRM and WSS reforms and capacity building. The Program will primarily support WSS results in urban areas, however during preparation the inclusion of rural areas will also be considered.

16. **Phase I Results Areas.** Phase I will be structured around four results areas: (i) WSS access and quality; (ii) WSS operational and commerical efficiency; (iii) WSS resilience; and (iv) strengthening national policies, institutions, and regulations for WRM and WSS services.

17. **Phase I IPF Component for technical assitance (TA).** The IPF component of the PforR will provide critical TA to support the government with national-level WRM and WSS reforms, a learning agenda, and capacity building for WRM, utility management, and the National WSS Modernization Program Secretariat.

18. **Phase II of the MPA (US$280 million)**. The second phase (2026-2032) will be a US$250 million hybrid PforR with an estimated US$30 million IPF component, to be confirmed during preparation. Design of the second phase is planned to begin in 2025 before Phase I ends and will consider the lessons learned during implementation. The second phase of the MPA will support implementation of the new legal, institutional, and regulatory frameworks for WRM and WSS that are anticipated to be approved during the first phase.

E. Initial Environmental and Social Screening

19. The proposed Program is likely to have positive environmental and social impacts, mainly due to the increased of access to and improvement of the quality and efficiency of water and sanitation services.

20. **The environmental risk rating for the Program is considered moderate.** Key environmental risks and impacts are related to infrastructure activities for the improvement of water and sanitation services, and are expected to be site-specific, short-term, and reversible. These include (i) nuisance related to dust generation, vibration, noise, and odors; (ii) generation, management, and disposal of non-hazardous and hazardous solid waste; (iii) generation and discharge of wastewater from civil works; (v) sludge generation and disposal from potential water and sanitation works; (iv) temporary disruptions to local traffic during the construction phase; (v) health and safety risks to the project workforce and local communities, including from exposure to hazardous materials/wastes and COVID-19; (vi) direct and indirect impacts from other natural hazards (floods, landslides, cyclones, earthquakes, tsunamis, extreme heat, and water scarcity) that may occur in the affected areas.

21. **The social risk rating for the Program is considered moderate.** From an initial screening, potential social risks include: (i) the incorporation of new low-income users who would not be able to afford some of the new services or tariffs; (ii) the potential temporary displacement of formal and informal economic activities; (iii) the possible temporary restriction of access to entry to commercial business during construction (already covered by the Contractors' obligations included in the bidding documents); (iv) the short-term interruption of pedestrian transit routes; (v) the

potential impact on the provision of community services and/or infrastructure; and (vi) community risks associated with labor influx, including sexual exploitation, abuse, and harassment (SEA/SH), and the transmission of COVID-19. The Program's interventions are not expected to generate any negative impacts on local communities, nor will they involve any exploitation of critical natural resources or knowledge.

22. For the Phase I PforR, an Environmental and Social System Assessment (ESSA) will be prepared. The ESSA will examine the scope, context, and potential impacts (including direct, indirect, induced and cumulative effects as relevant) of the Program from an environmental and social perspective. The ESSA will describe the extent to which the Government has the capacity (legal framework, regulatory authority, organizational capacity, and performance) to manage those effects, with an emphasis in the environmental and social policies, legislations, program procedures and an institutional system review to assess its consistency with the core principles of the PforR policy OP/BP 9.00. The content of the ESSA will include, but not be limited to: (i) a brief description of the Program, including the objectives, relationships between government's Program and the PforR; (ii) potential environmental and social risks, impacts and benefits, including any potential issues related to land acquisition; (iii) institutional arrangements and mechanisms in place to deal with the potential environmental and social risks; (iv) identification of areas in which the implementing entities should improve procedures and performance (which may be expressed through the Program Action Plan (PAP) and the DLIs as necessary); and (v) inputs to the integrated risk assessment. The ESSA will provide specific recommendations to enhance social inclusion and environmental and social management capacity and performance, which will be discussed and agreed with the Borrower. Additionally, the ESSA will determine specific barriers to access related to each project activity for women, persons with disabilities, migrants and LGBTI[6] people, among other vulnerable groups. If required, based on the ESSA's recommendations, an action plan to ensure appropriate Borrower systems on environmental and social management will be developed and included within the Program. The actions outlined in the ESSA may also be included in the PAP. Finally, the ESSA will outline means to leverage citizen participation through virtual channels, focusing on improving transparency and access. The Program is also expected to have positive impacts on gender including job creation and leadership opportunities for women in grassroot cooperatives and by possibly promoting female participation in utilities. During preparation, more information will be gathered to identify gaps that can be addressed through the Program.

Legal Operational Policies	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

Summary of Screening of Environmental and Social Risks and Impacts of the IPF Component

[6] An acronym for 'lesbian, gay, bisexual, transgender and intersex' persons that is also used as shorthand for 'persons of diverse sexual orientation, gender identity, gender expressions or sex characteristic.