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Report No: PAD5086

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

PROGRAM APPRAISAL DOCUMENT

ON A

PROPOSED LOAN
IN THE AMOUNT OF US\$250 MILLION

TO THE
DOMINICAN REPUBLIC

FOR A

DOMINICAN REPUBLIC WATER SECTOR MODERNIZATION PROGRAM
AS PHASE I OF THE MULTI-PHASE PROGRAMMATIC APPROACH

WITH AN OVERALL FINANCING ENVELOPE IN THE AMOUNT OF US\$500 MILLION

March 7, 2023

Water Global Practice
Latin America And Caribbean Region

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CURRENCY EQUIVALENTS

(Exchange Rate Effective February 7, 2023)

Currency Unit = Dominican Peso (RD\$)

US\$1 = RD\$ 56.4

RD\$ 1 = US\$0.0173

FISCAL YEAR

January 1–December 31

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**ABBREVIATIONS AND ACRONYMS**

AFD	French Agency for International Development (<i>Agence Française de Développement</i>)
B/C Ratio	Benefit-Cost Ratio
CAPEX	Capital Expenditure
CCAP	Climate Change Action Plan
CCRD	Government Supreme Audit Institution (<i>Cámara de Cuentas de la República Dominicana</i>)
CORAAs	Autonomous Provincial Water Supply and Sewerage Corporation (<i>corporaciones de acueducto y alcantarillado</i>)
CORAASAN	Santiago Water and Sewerage Corporation (<i>Corporación de Acueducto y Alcantarillado de Santiago</i>)
CORAAMOCA	Moca Water and Sewerage Corporation (<i>Corporación de Acueducto y Alcantarillado de Moca</i>)
CORAAVEGA	La Vega Water and Sewerage Corporation (<i>Corporación de Acueducto y Alcantarillado de La Vega</i>)
COVID-19	Coronavirus Disease 2019
CPF	Country Partnership Framework
DIGECOG	General Directorate of Accounting (<i>Dirección General de Contabilidad</i>)
DGDES	General Directorate for Economic and Social Development (<i>Dirección General de Desarrollo Económico y Social</i>)
DGIP	General Directorate of Public Investment (<i>Dirección General de Inversión Pública</i>)
DIGEPRES	General Directorate of Budget (<i>Dirección General de Presupuesto</i>)
DLI	Disbursement-Linked Indicator
DLR	Disbursement-Linked Result
EE	Energy Efficiency
EIRR	Economic Internal Rate of Return
ENPF	State-owned Non-Financial Enterprise (<i>Empresa Pública No-Financiera</i>)
ENPV	Economic Net Present Value
E&S	Environmental and Social
ESCP	Environmental and Social Commitment Plan
ESF	Environmental and Social Framework
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
ESSA	Environmental and Social Systems Assessment
FSA	Fiduciary System Assessment
GCRF	Global Crisis Response Framework
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GRID	Green, Resilient, and Inclusive Development framework
GRM	Grievance Redress Mechanism
GRS	Grievance Redress Service
IBRD	International Bank for Reconstruction and Development
IAU	Internal Audit Units
IFR	Interim Financial Report



INAPA	National Water and Sewerage Institute (<i>Instituto Nacional de Agua Potable y Alcantarillado</i>)
INDRHI	National Institute for Hydraulic Resources (<i>Instituto Nacional de Recursos Hídricos</i>)
IPF	Investment Project Financing
IVA	Independent Verification Agent
m³	Cubic Meter
MEPyD	Ministry of Economy, Planning, and Development (<i>Ministerio de Economía, Planificación y Desarrollo</i>)
MPA	Multiphase Programmatic Approach
NRW	Non-Revenue Water
O&M	Operations and Maintenance
OP	Operational Policy
OPEX	Operating Expenditure
PAP	Program Action Plan
PCMU	Program Coordination and Management Unit
PDO	Project Development Objective
PEI	Institutional Strategic Plan (<i>plan estratégico institucional</i>)
PforR	Program-for-Results
PNPSP	Multi-Annual Public Sector Plan (<i>Plan Nacional Plurianual del Sector Público</i>)
POA	Annual Operating Plan (<i>plan operativo anual</i>)
PrDO	Program Development Objective
RA	Results Area
SIGEF	Financial Management Information Systems (<i>Sistema Integrado de Gestión Financiera</i>)
SCD	Systematic Country Diagnostic
SIUBEN	Single Beneficiary System (<i>Sistema Único de Beneficiarios</i>)
SNIP	National Public Investment System (<i>Sistema Nacional de Inversión Pública</i>)
tco2eq	Tons of carbon dioxide equivalent
UEPEX	Executing Units of External Financing Projects (<i>Unidades Ejecutoras de Proyectos de Financiamiento Externo</i>)
USAID	United States Agency for International Development
WBG	World Bank Group
WRM	Water Resources Management
WSS	Water Supply and Sanitation



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DATASHEET

BASIC INFORMATION

Country(ies)	Project Name		
Dominican Republic	Dominican Republic Water Sector Modernization Program		
Project ID	Financing Instrument	Does this operation have an IPF component?	Environmental and Social Risk Classification (IPF Component)
P177823	Program-for-Results Financing	Yes	Moderate

Financing & Implementation Modalities

<input checked="" type="checkbox"/> Multiphase Programmatic Approach (MPA)	<input type="checkbox"/> Fragile State(s)	
<input type="checkbox"/> Contingent Emergency Response Component (CERC)	<input type="checkbox"/> Fragile within a non-fragile Country	
<input type="checkbox"/> Small State(s)	<input type="checkbox"/> Conflict	
<input type="checkbox"/> Alternate Procurement Arrangements (APA)	<input type="checkbox"/> Responding to Natural or Man-made Disaster	
<input type="checkbox"/> Hands-on Enhanced Implementation Support (HEIS)		
Expected Project Approval Date	Expected Closing Date	Expected MPA Program Closing Date
28-Mar-2023	31-Dec-2027	30-Jul-2032
Bank/IFC Collaboration		
No		

MPA Program Development Objective

To increase access to safely managed water and sanitation services in selected areas.

MPA Financing Data (US\$, Millions)

MPA Program Financing Envelope	1,253.60
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Proposed Program Development Objective(s)

The objectives of the Operation are to: (i) improve the planning capacity and operational and commercial efficiency of selected water supply and sanitation institutions; and (ii) increase access to safely managed water and sanitation



services in selected water stressed areas.

Organizations

Borrower :	Dominican Republic
Implementing Agency :	La Vega Water and Sewerage Corporation (CORAAVEGA)
Contact:	Julio Cesar Peña Lázala
Title:	Director General
Telephone No:	809-573-1769
Email:	liennet@hotmail.com
Implementing Agency :	Ministry of Economy, Planning, and Development (MEPyD)
Contact:	Luis Madera
Title:	Vice Minister
Telephone No:	809-555-5555
Email:	luis.madera@mepyd.gob.do
Implementing Agency :	National Institute for Hydraulic Resources (INDRHI)
Contact:	Olmedo Romano
Title:	Executive Director
Telephone No:	809-532-3271
Email:	ocava@indrhi.com
Implementing Agency :	National Water and Sewerage Institute (INAPA)
Contact:	Wascar Martinez
Title:	Sub-Director
Telephone No:	809-350-8431
Email:	wascar.martinez@inapa.gob.do
Implementing Agency :	Santiago Water and Sewerage Corporation (CORAASAN)
Contact:	Andrés Burgos López
Title:	Director General
Telephone No:	809-582-4343
Email:	direccion_gral@coraasan.gob.com.do

**MPA FINANCING DETAILS (US\$, Millions)**

Board Approved MPA Financing Envelope:	0.00
MPA Program Financing Envelope:	1,253.60
of which Bank Financing (IBRD):	500.00
of which Bank Financing (IDA):	0.00
of which other financing sources:	753.60

COST & FINANCING**SUMMARY (USD Millions)**

Government program Cost	1,130.00
Total Operation Cost	602.63
Total Program Cost	577.00
IPF Component	25.00
Other Costs	0.63
Total Financing	602.63
Financing Gap	0.00

Financing (USD Millions)

Counterpart Funding	352.63
Borrower/Recipient	352.63
International Bank for Reconstruction and Development (IBRD)	250.00

Expected Disbursements (USD Millions)

Fiscal Year	2023	2024	2025	2026	2027	2028
Absolute	0.00	57.75	13.63	43.47	61.53	73.63



Cumulative	0.00	57.75	71.38	114.85	176.37	250.00
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INSTITUTIONAL DATA

Practice Area (Lead)

Water

Contributing Practice Areas

Climate Change and Disaster Screening

This operation has been screened for short and long-term climate change and disaster risks

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

Risk Category	Rating
1. Political and Governance	Moderate
2. Macroeconomic	Moderate
3. Sector Strategies and Policies	Moderate
4. Technical Design of Project or Program	Substantial
5. Institutional Capacity for Implementation and Sustainability	Substantial
6. Fiduciary	Substantial
7. Environment and Social	Moderate
8. Stakeholders	Moderate
9. Other	
10. Overall	Substantial
Overall MPA Program Risk	Substantial

COMPLIANCE

Policy

Does the program depart from the CPF in content or in other significant respects?

☐ Yes ☒ No

Does the program require any waivers of Bank policies?

☐ Yes ☒ No



Legal Operational Policies

	Triggered
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

Environmental and Social Standards Relevance Given its Context at the Time of Appraisal

E & S Standards	Relevance
Assessment and Management of Environmental and Social Risks and Impacts	Relevant
Stakeholder Engagement and Information Disclosure	Relevant
Labor and Working Conditions	Relevant
Resource Efficiency and Pollution Prevention and Management	Relevant
Community Health and Safety	Relevant
Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Relevant
Biodiversity Conservation and Sustainable Management of Living Natural Resources	Relevant
Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	Not Currently Relevant
Cultural Heritage	Relevant
Financial Intermediaries	Not Currently Relevant

NOTE: For further information regarding the World Bank's due diligence assessment of the Project's potential environmental and social risks and impacts, please refer to the Project's Appraisal Environmental and Social Review Summary (ESRS).

Legal Covenants

Sections and Description

Section I.A.3 of Schedule 2 to the Loan Agreement. The Borrower, through MEPyD, shall no later than three (3) months after the Effective Date, hire independent auditor(s) in number and with experience and qualifications



acceptable to the Bank, for purposes of carrying out audits of the Operation in accordance with terms of reference set forth in the Operations Manual, and consistently applied auditing standards, all acceptable to the Bank.

Sections and Description

Section I.A.5 of Schedule 2 to the Loan Agreement. No later than three (3) months after the Effective Date, the Borrower, through MEPyD, shall, and shall cause INDRHI to: (a) create, and thereafter maintain throughout each calendar year of Project implementation, a specific budget line entry in the national annual budget to keep track of the corresponding expenditures incurred during Project implementation; and (b) establish, and thereafter maintain throughout the implementation of the Project, accounting, reporting, and internal control processes acceptable to the Bank, all in accordance with the criteria set forth in the Operational Manual.

Sections and Description

Section I.D of Schedule 2 to the Loan Agreement. The Borrower, through MEPyD, shall: (a) appoint (not later than the date specified in the Operational Manual), and thereafter maintain at all times during the implementation of the Program, an independent verification agent with experience and qualifications and under terms of reference acceptable to the Bank (the "Verification Agent"), to verify the data and other evidence supporting the achievement of the DLIs/DLRs, as set forth in the table in Schedule 3 to the Loan Agreement; and (b) (i) ensure that the Verification Agent carries out the DLIs/DLRs' verification process(es) in accordance with the Verification Protocol; and (ii) submit to the Bank the corresponding verification reports no later than July 31 of each Fiscal Year throughout Program execution, starting in Fiscal Year 2024 in form and substance satisfactory to the Bank. With respect to Fiscal Year 2028, the corresponding verification reports shall be submitted no later than June 1, 2028, in form and substance satisfactory to the Bank.

Conditions

Type Effectiveness	Financing source IBRD/IDA	Description Section 4.01. (a) of Article IV of the Loan Agreement. The Borrower has developed and approved the Operations Manual set forth in Section I.C.1 of the Schedule 2 to the Loan Agreement in a manner and substance satisfactory to the Bank.
Type Effectiveness	Financing source IBRD/IDA	Description Section 4.01. (b) of Article IV of the Loan Agreement. The Subsidiary Agreement for the Program between the Borrower and the WSS Service Providers has been duly signed and any conditions precedent to its effectiveness have been fulfilled.
Type Effectiveness	Financing source IBRD/IDA	Description Section 4.01. (c) of Article IV of the Loan Agreement. The Borrower, through MEPyD, has established and properly staffed the PCMU, in accordance with Section



		I.A.2 of Schedule 2 to the Loan Agreement.
Type Disbursement	Financing source IBRD/IDA	Description Section IV.B.1(b) of Schedule 2 to the Loan Agreement. No withdrawal shall be made for any DLR under Category (1) to (10) set forth in Schedule 3 to this Agreement, until and unless the Borrower has furnished evidence satisfactory to the Bank that said DLR has been achieved in form and substance acceptable to the Bank, as further detailed in Schedule 3 to this Agreement and in the Verification Protocol.
Type Disbursement	Financing source IBRD/IDA	Description Section IV.C. (a) of Schedule 2 to the Loan Agreement. No withdrawals shall be made for payments made prior to the Signature Date, except that withdrawals up to an aggregate amount not to exceed \$5,000,000 may be made for payments made prior to this date (but in no case more than one year before the Signature Date), for consulting services under Category (11);
Type Disbursement	Financing source IBRD/IDA	Description Section IV.C. (b) of Schedule 2 to the Loan Agreement. No withdrawals shall be made for eligible Expenditures under (12), unless and until the Inter-institutional - Subsidiary Agreement has been signed by the parties thereto, in terms and conditions satisfactory to the Bank.



I. STRATEGIC CONTEXT

A. Country Context

1. **The Dominican Republic's economic growth remains solid.** The coronavirus disease 2019 (COVID-19) crisis has had major economic and social impacts on the Dominican Republic, but the economy recovered strongly in 2021. Gross domestic product (GDP) rebounded 12.3 percent in 2021, supported by a solid government response to COVID-19, which included fiscal, macroprudential, and supervisory reforms, along with monetary easing. Economic performance remained solid in 2022. The monthly economic activity indicator grew 5.5 percent year on year during the period of January to August, 2022, fueled primarily by economic expansion in the service sector. The hotels, bars, and restaurants sector grew 31.2 percent during this period, bolstered by an active government vaccination campaign, resulting in 6.05 million people being fully vaccinated as of October 10, 2022, which corresponds to 56 percent of the total population. An expansionary fiscal policy also contributed to growth, while monetary tightening attenuated inflation pressures.
2. **Rising inflation is reducing household disposable incomes, primarily of the more vulnerable population.** The inflation rate of 8.6 percent year on year in September 2022 remains well outside the target range of 4 plus or minus 1 percent, driven by the impact of disruptions in international supply chains and increasing commodity prices for food and transport. The annual food inflation rate was 10.2 percent year on year in September 2022, while fuels and related items for transport services increased by 9.0 percent. The cost of the family basket increased by 22.9 percent in September 2022, compared with pre-pandemic levels in the same month, with the poorest quintiles affected the most. In the second quarter of 2022, the employment rate remained 1.1 percentage points below pre-pandemic levels, and informality remained 2.8 percent points higher. For all these reasons, poverty (defined as living with less than US\$6.85 per day) is expected to remain above pre-pandemic levels in 2022. The vulnerable population is expected to increase, while the middle-classes contract.
3. **Despite the deterioration of the current account, the Dominican Republic's external position remains solid.** The trade deficit deteriorated by US\$3.0 billion in the first half of 2022 compared with the previous year, reaching US\$8.0 billion. This was driven primarily by the imports of food and oil products, which increased by nearly 45 percent year on year in the first quarter, the largest increase in five years. However, the international reserves increased by nearly US\$876.2 million in September 2022, compared with the previous year, which is up to US\$13.8 billion or equivalent to 5.7 months of total goods imports, driven by strong remittance inflows of US\$7.3 billion accumulated between January and September, explained primarily by the economic recovery in the United States.
4. **The Dominican Republic is one of the most vulnerable countries to climate change in the world.** According to the 2017 Global Climate Risk Index, the country is in 11th place globally based on level of exposure and vulnerability to climate events.¹ In the Dominican Republic, climate change impacts the well-being of its population and economy principally through increased frequency and severity of tropical storms, hurricanes, floods and droughts as well as the more lasting effects of increasing water scarcity and sea-level rise. Hurricane Fiona is the latest example of the country's vulnerability to extreme weather-related disasters. On September 19, 2022, Hurricane Fiona hit the Dominican Republic as a category 1 hurricane with strong winds of up to 150 kilometers (km) per hour and heavy rains affecting over 1.4 million people. Geographic location is a major factor in the country's high degree of exposure to weather events and water scarcity, but its vulnerability is also due to weaknesses in infrastructure and governance (for example, inadequate management of water resources, lack of integrated basin planning and storage infrastructure, unplanned urban growth, land degradation, and weak

¹ Kreft, Sönke; Eckstein, David and Melchior, Inga. 2016. "Global Climate Risk Index 2017." German Watch, Berlin. <https://www.germanwatch.org/sites/default/files/publication/16411.pdf>



enforcement of zoning regulations and water rights regulations) and poor management of public services. From 1961–2014, the average annual damages associated with natural disasters was US\$420 million per year.² Climate change is anticipated to increase the frequency and severity of hydrometeorological hazards and overall water scarcity, reinforcing the need to actively strengthen water and disaster management policies, institutions, and investments to ensure sustainable development.

B. Sectoral and Institutional Context

5. **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 withdraws about 45 percent of its total available freshwater resources (combined surface water and groundwater), which is significantly higher than its Caribbean neighbors and the Latin America regional average of 8 percent.³ Demand already exceeds supply in the economically important Yaque del Norte basin (home to significant agricultural production and the country's second largest metropolitan area), leading to increasing conflict among water use for human consumption, agriculture, and industry. Rising temperatures caused by climate change are contributing to increasing water scarcity and more frequent droughts, especially in the arid northwest, and annual precipitation could fall by as much as 8.5 percent by 2050.⁴ Supply is also under pressure because of poor land management in the upper basins, which is increasing sedimentation and decreasing water infiltration and thus reducing the capacity of storage reservoirs and groundwater recharge. 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 public health impacts.⁵ Addressing water supply, wastewater management, and water resource management is critical to enhancing climate resilience as climate change will increase the intensity of hurricanes and storms and associated flooding, with additional impacts on water quality.⁶
6. **The legal and institutional framework for water resources management (WRM) is weak and fragmented, leaving critical basic functions unfulfilled.** The water sector lacks apex policy and planning institutions to adequately manage water resources in a context of increasing climate risks. The water sector overall is characterized by ambiguous and overlapping roles and gaps in functions among its respective actors. Water resources are publicly owned; however, integrated WRM is largely missing because of institutional fragmentation, the historically low priority of water management, and conflicting allocation of functions. WRM responsibilities are fragmented between the Ministry of Environment and Natural Resources (*Ministerio de Medio Ambiente y Recursos Naturales*, MARENA), responsible for water resources quality and groundwater, and the National Institute for Hydraulic Resources (*Instituto Nacional de Recursos Hídricos*, INDRHI), responsible for the management of surface water quantity. In addition, both institutions demonstrate gaps between existing policies and implementation for the functions allocated to them. The policies for withdrawal and discharge permits are established, but the processes and procedures are not developed or implemented, the system for water rights is antiquated and currently not implemented, and a weak and poorly maintained hydrometeorological monitoring network provides limited information on the quantity and quality of water resources reducing the resilience to climate shocks. Sector reforms have been under discussion for the last 20

² Ishizawa, Oscar A., Juan José Miranda, and Eric Stobl. 2017. "The Impact of Hurricane Strikes on Short-Term Local Economic Activity." Policy Research Working Paper 9275, World Bank, Washington, DC. <https://documents1.worldbank.org/curated/en/482101513260134821/pdf/WPS8275.pdf>.

³ Instituto Nacional de Recursos Hídricos. 2012. *Plan Hidrológico Nacional*. https://indrhi.gob.do/?page_id=41354.

⁴ United States Agency for International Development (USAID). 2017. *Dominican Republic Country Risk Profile*. Washington, DC: USAID.

⁵ Ministry of Economy, Planning, and Development of the Dominican Republic. 2013. *Plan Nacional Plurianual del Sector Público 2021–2024*. Santo Domingo: Government of the Dominican Republic, 93. <https://mepyd.gob.do/publicaciones/plan-nacional-plurianual-del-sector-publico-2021-2024>.

⁶ USAID. 2013. *Dominican Republic Climate Change Vulnerability Assessment Report*. Washington, DC: USAID.



years with little success, delaying the approval of critical legislation such as the general water law. INDRHI is preparing an update to the 2010 National Hydrological Plan, expected to be completed in 2023.

7. **Although the Dominican Republic has high levels of access to basic water and sanitation infrastructure, the quality of services is low, and unfilled demand for safely managed water supply and sanitation (WSS) services remains high.**⁷ 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 contaminating surface and groundwater sources. With rapid population growth and urbanization, sewerage coverage is expected to drop to 15 percent by 2030 without further expansion exacerbating water and vector-borne diseases particularly in times of flooding. In 2012, it was estimated that only 40 percent of drinking water systems operated by public providers were treated with chlorine.⁸ Moreover, 67 percent of households in the country report intermittent water supply making them more vulnerable during times of droughts. This forces many households to install water storage facilities and buy expensive bottled water.⁹ The poorest Dominicans spend up to almost 12 percent of their income buying bottled water.¹⁰
8. **The country's nine state-owned WSS service providers have weak management capacity and low operational and commercial efficiency**¹¹. Financial reporting is incomplete and sporadic, providers' accounting practices are not standardized, and their accounts are not audited regularly. WSS service providers do not report on performance indicators, and the scant data available show high rates of non-revenue water (NRW; 60–80 percent), high numbers of staff per 1,000 connections (7–21 staff per 1,000 connections), and low levels of metering (10 percent). This is in comparison with the Dominican Republic's neighbors in the Caribbean, which have rates of NRW that range from 25–58 percent and less than 7 staff per 1,000 connections. Energy consumption and costs vary between WSS service providers, but for some, they constitute as much as 50 percent of total operating costs. Water services are characterized by poor quality and inefficiencies because of physical leakages, unauthorized consumption through theft, and low billing (65–95 percent) and collection rates (66–82 percent), which means that WSS service providers are unable to recover their operational costs.
9. **These inefficiencies result in dependency on recurrent transfers from the central government to cover operating costs and capital expenditures, putting a strain on the central budget.** The central government finances on average 48 percent of recurrent costs, totaling US\$90 million annually, and all capital expenditures. On average, WSS service providers collect only enough own-source revenues to cover 52 percent of operational expenditures (salaries, energy, and other operational costs) and do not self-finance any of their capital expenditures. Combined, these government transfers account for 0.3–0.4 percent of GDP annually.¹² There is limited transparency or accountability on the use of government transfers, and WSS service providers lack

⁷ Safely managed drinking water is defined as the use of an improved drinking water source that is located on premises, available when needed, and free of fecal and priority chemical contamination. Safely managed sanitation is defined as the use of an improved sanitation facility that is not shared with other households and where the excreta is safely disposed in situ or transported to a treatment plant and treated to national standards. These standards follow the United Nation's Sustainable Development Goal (SDG) definitions for goals 6.1 and 6.2. The Dominican Republic has access to 97 and 95 percent, respectively basic water and sanitation infrastructure, as of 2017; however, basic access is a lower standard compared to the SDG standards of safely managed.

⁸ National Institute of Water Supply and Sewerage (NIWSS). 2016. *Proposal of a National Sanitation Strategy*.

<https://www.inapa.gob.do/index.php/proyectos/category/56-estrategia-nacional-de-saneamiento?download=81:estrategia-saneamiento-nacional>. Santo Domingo: NIWSS.

⁹ Central Bank of the Dominican Republic. 2020. *Encuesta Nacional de Gastos e Ingresos de los Hogares*. Santo Domingo: Central Bank of the Dominican Republic. https://cdn.bancentral.gov.do/documents/estadisticas/encuesta-de-gastos-e-ingresos/documents/ENGHIH_2018.pdf?v=1614762332110.

¹⁰ World Bank. 2021. *Dominican Republic Public Expenditure Review*. Washington, DC: World Bank.

<https://documents1.worldbank.org/curated/en/291631623997023891/pdf/Dominican-Republic-Public-Expenditure-Review.pdf>.

¹¹ State-owned WSS service providers are legal entities established and recognized by the central government to provide WSS services

¹² World Bank, *Dominican Republic Public Expenditure Review*.



incentives to improve their operational or commercial efficiency because transfers are unconditional.¹³ WSS service providers' own-source revenues are also limited by tariff structures that significantly undervalue the price of water and do not account for the efficient production costs of services. Weak corporate governance of the WSS service providers negatively impacts strategic planning and execution, including a lack of attention to climate resilience infrastructure development and sustainable service delivery.. Capital transfers from the central government are granted for infrastructure projects without incentives or flexibility to invest in efficiency improvements and resilience measures.

10. **The government of the Dominican Republic launched the Water Pact (*Pacto por el Agua*) 2021–2036 to address needed institutional reforms and investments in the water sector.** Presented by the president in June 2021, the Water Pact calls for reforms and US\$8.5 billion in investments for WRM, WSS, and irrigation to ensure the country's water security and improve service delivery. Specifically, the Water Pact calls for an open and collaborative public dialogue that will inform 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 service efficiency and resilience to natural disasters and climate change. The objective of the pact is to increase the production of water for human consumption and improve the efficient and sustainable use of water resources.
11. **Historical investments in the sector have focused on expanding access to infrastructure; however, this has not translated into improved quality, resilience, or efficiency of services.** Water sector reforms have been discussed for the last 20 years with no significant change in practices. The Water Pact initiative offers a unique opportunity for the government to clarify roles and responsibilities and align incentives for improved water resources management, strengthen climate-smart capital investment planning, and service delivery. This initiative follows other important social compacts in the country's energy, health, and education sectors, which implemented consultative processes that allowed for debate to arrive at a consensus among a diverse set of public, private, and civil society stakeholders on the required reforms.
12. **Given the 15-year time frame, the vision of the Water Pact will be achieved through the government's Multi-Annual Public Sector Plans (*Planes Nacionales Plurianuales del Sector Público*, PNPSPs).** These plans set the priorities for all public investments; are linked directly to the National Strategy for Development 2030; and include a chapter on water that specifies priority investments, indicators, and desired results for the sector. The current PNPSP (2021–24) identifies the water sector as its top public policy priority for investment, with 34 percent of total planned government investments (US\$418 million).¹⁴ It also identifies coverage and efficiency indicators and targets for six of the country's nine state-owned WSS enterprises. The Water Pact and the PNPSPs provide the foundation and boundaries for an ambitious and transformational government program to improve WSS services, along with direction on the types of reforms required for WRM.
13. **The Bank will support the government's transformational program through a proposed 10-year Multiphase Programmatic Approach (MPA).**¹⁵ The MPA Program will help the government address the water sector's challenges by supporting: (i) the creation of an enabling environment with institutional and legal reforms, (ii) improved quality, resiliency, and efficiency of water supply and sanitation services and water resource

¹³ As one example, the central government used to pay energy providers directly for the WSS providers' energy costs, leaving no incentive to improve energy efficiency. In 2021, the central government began to transfer the funds to the providers to pay their own energy bills, but these transfers are still unconditional, without incentives to reduce energy costs.

¹⁴ Ministry of Economy, Planning, and Development of the Dominican Republic. 2021. *Plan Nacional Plurianual del Sector Público 2021–2024*. Santo Domingo: Government of the Dominican Republic, Table 11. <https://mepyd.gob.do/publicaciones/plan-nacional-plurianual-del-sector-publico-2021-2024>.

¹⁵ The first phase of the MPA program is called the "Dominican Republic Water Sector Modernization Program". The official name of the first phase in Spanish, for purposes of the Borrower's internal budget process, is "Programa de Modernización para el Sector Agua Potable y Saneamiento". The "Dominican Republic Water Sector Modernization Program" and the "Programa de Modernización para el Sector Agua Potable y Saneamiento" refer to the same first phase of the MPA program.



management, (iii) reduction in operational subsidies from the central government thereby reducing the fiscal deficit, (iv) and the improvement of the sector's ability to adapt to climate change. The MPA Program will have two phases and will be the first of its kind in the Dominican Republic. The first phase is a US\$250 million operation with two components: a US\$225 million Program-for-Results (PforR Program) component to support a national WSS modernization program, and a US\$25 million Investment Project Financing (IPF) component (IPF Project) to address needed institutional reforms, capacity building, and minor investments in water information systems and dam safety instrumentation to adapt effectively to climate shocks.

C. Relationship to the Country Partnership Framework and Rationale for Use of Instrument

14. **The proposed MPA Program builds upon the 2018 Systematic Country Diagnostic (SCD) and is fully consistent with the objectives of the World Bank Group (WBG)'s Dominican Republic Country Partnership Framework (CPF) for FY22-26 discussed by the Board of Executive Directors on March 29, 2022¹⁶.** It is also aligned with the WBG's Green, Resilient, and Inclusive Development (GRID) framework, Global Crisis Response Framework (GCRF), Climate Change Action Plan (CCAP), and the Latin American and the Caribbean Climate Roadmap. The MPA Program responds to the SCD's priority area of "improving the management of natural resources" and will contribute to the CPF High-Level Outcome 3 "Increased resilience to climate change" and Objective 3.2 "Enhanced management of water resources." In addition, the MPA Program is aligned with the World Bank's GRID framework by considering environmental, socio-economic, and financial sustainability; building resilience to a variety of shocks (climate, financial, health); and mainstreaming gender inclusion and citizen engagement. Moreover, it also aligned with the CCAP and the region's climate roadmap by improving water resource management, reducing water-related shocks, and building the resilience of water and sanitation services. The MPA Program is also consistent with the Bank's twin goals, and GCRF's pillars of "strengthening resilience" and "strengthening policies, institutions, and investments for rebuilding better."
15. **The MPA Program is likewise aligned with the Dominican Republic's National Strategy for Development 2030, the Water Pact, the PNPSF for 2021–24, the country's Nationally Determined Contribution 2020, and the National Plan for Gender Equity and Equality.** The MPA Program is aligned with Objective 2.5.2 of the National Strategy for Development to ensure universal access to potable water and sanitation services provided with quality and efficiency, and with the Water Pact, the PNPSF (2021–24), and the Nationally Determined Contribution adaptation agenda that calls to value water, improve management of water as a resource, better manage extreme events such as flooding and droughts, and expand the treatment and reuse of water. Additionally, actions to increase women's employment in the water sector and to improve women's access to water are aligned with the Ministry of Women's National Plan for Gender Equity and Equality (2020–30).
16. **The MPA Program has benefitted from the outcomes and policy dialogue within several recently completed and ongoing World Bank Group-financed activities, positioning the Bank as a key partner of the government in the water sector.** The Bank is currently financing two complementary and not overlapping operations with this Program—the Resilient Agriculture and Integrated Water Resources Management Project (P163260) and the Wastewater Services Improvement and Water Loss Reduction Project (P171778)—and is supporting the government in its dialogue on a draft general water law. The Bank's recent Public Expenditure Review (2021) included a chapter on WSS and provided analytical underpinnings for the Water Pact and the proposed national WSS modernization program.¹⁷ In response to this analytical work, the government requested that the Bank support implementation of the Water Pact, with a focus on designing the national WSS modernization program (including harmonized indicators, institutional arrangements, and capacity building) and advancing important WRM reforms, which are required to meeting growing climate risks. Based on the government's strong political

¹⁶ Report No. 167896-DO.

¹⁷ World Bank, Dominican Republic Public Expenditure Review.



commitment to reform and modernize the water sector, the extensive dialogue to date with the Bank, the Bank's experience and its relationship with development partners in the sector, and the genuine need for a transformational program to improve WSS service delivery and WRM in the country, the Bank is uniquely positioned to support the government with specific elements of its reform and a climate-smart investment program.

17. **Rationale for using a hybrid operation with a Program-for-Results (PforR Program) and Investment Project Financing component (IPF Project).** A hybrid operation is the best instrument to support a national government program, provide incentives to improve the operational and commercial performance of the WSS service providers, and strengthen country systems, while also providing technical assistance on WSS and WRM sector reforms, climate resilience, and making modest but important investments in capacity building for water resource management.
18. **The IPF Project will provide critical technical assistance to the government to build capacity to achieve results under the PforR Program, improve resilience, WRM, and support sector reforms.** The IPF Project will support the creation of the Program Coordination and Management Unit (PCMU) at the Ministry of Planning, Economy, and Development (*Ministerio de Economía, Planificación y Desarrollo*, MEPyD) to oversee the PforR Program, provide capacity building for the PCMU and the participating WSS service providers on the implementation of the national WSS modernization program, and advance an important learning agenda on WRM linked to developing methodologies for water user registries and formalization of water use rights, which are critical climate adaptation measures. Experience from other PforRs within and outside the water sector shows that an IPF Project component can provide critical technical assistance to implementing and coordinating entities during implementation. As the first PforR in the Dominican Republic that is supporting the water sector during a period of significant institutional reform, the central government and the WSS service providers have substantial need for support to strengthen systems, capabilities, and procedures. The IPF Project will provide flexibility and predictable financing to support these needs.

II. PROGRAM DESCRIPTION

A. Government Program

19. **The government program is a 10-year subset of the Water Pact, focused on WSS and WRM across the entire geographic area of the Dominican Republic, which will be implemented by three PNPSs.** The MPA Program will support the following six elements of the government's transformational program: (i) a national WSS modernization program; (ii) rehabilitation, construction, and expansion of WSS infrastructure; (iii) strengthening resilience of water infrastructure; (iv) WRM and WSS legal, institutional, and policy framework; (v) WRM information systems; and (vi) dam safety and operation in selected geographic areas, which are critical elements to increase the country's resilience to climate shocks. These priority activities are specified in the government's PNPSs, which also include indicators and desired results to structure and monitor progress toward the Water Pact's goals. The PNPS (2021–24) sets the current targets, and the two subsequent PNPSs (2025–28 and 2029–32) will set the priorities during the latter years of the government program.
20. **The government program will be transformational by significantly strengthening the institutional and legal framework for WSS and WRM, improving resilient water service delivery, and reducing the need for central government fiscal transfers to water service providers.** The government program aims to improve commercial and operational efficiency of WSS services (including reduced water losses, improved energy and water use efficiency and increased billing and collection), rehabilitation of aging infrastructure, strengthened resilience of



WSS service provision to climatic and non-climatic hazards, and expanded access to safely managed WSS services. Strengthening the legal and institutional framework for WRM is an important step to improve the enabling environment for all water-related services, including WSS services, and strengthen their resilience to climate change. A new legal and institutional framework for WRM will not only enable better management of increasingly scarce and variable water resources but also pave the way for additional institutional and legal reforms in WSS. Strengthening both services and the legal and regulatory framework in the first phase of the MPA can help lay the groundwork to leverage the government's investments in efficient and safely management WSS services by potentially securing private sector participation in the second phase.

B. Multiphase Programmatic Approach

(i) Rationale for Using MPA

21. The MPA will facilitate the achievement of the government's ambitious goals for water sector reforms and improve access, quality, efficiency, and resilience of WSS services through a longer-term, adaptive, and continuous engagement. The MPA has several advantages over the other possible approach of a PforR combined with additional financing:

- (a) **The MPA emphasizes continuity and supporting the government with its 15-year vision of the Water Pact.** The MPA gives assurances to the client that the Bank is interested in sustaining its commitment to water sector reforms over the next decade, which cannot be achieved in one project cycle. The Bank's experience with water sector reforms in other countries demonstrates that implementing difficult reforms requires a long-term engagement. The Water Pact created the ideal technical and political environment to support the government to address the longstanding need for institutional reforms and investments in the water sector; continuity and momentum are critical to continue moving forward these reforms.
- (b) **Longer-term engagement sends a signal to other development partners, non-governmental organizations, and the private sector of the Bank's commitment to support the Dominican Republic in its water sector reforms.** This approach can help the government align development partners and other key actors around a common agenda of reforms. The long-term engagement and reforms over the life of the MPA Program may help attract private sector investment in the WSS and WRM subsectors with improved regulations and information.
- (c) **The MPA's scalable approach allows the government to expand WSS programming and WRM activities to other geographic areas and build on learning from the first phase.** Phase I will build capacity of the WSS actors and support proposed WSS and WRM reforms, then Phase II will incorporate learning from Phase I, sustain momentum and provide continuity by supporting implementation of those reforms. The MPA provides the flexibility to learn from Phase I for both WSS and WRM activities to guide the design and emphasis to be given in Phase II. For WSS, this would mean expanding the national WSS modernization program to other geographic areas or incorporating additional WSS service providers. For WRM, this would mean scaling up support to implementation of the general water law and the proposed institutional arrangements, and scaling up pilots such as on the formalization of water rights.
- (d) **The MPA makes a learning agenda over the life of the program explicit.** A central feature of the MPA is a learning agenda to apply the learning from prior phases to subsequent phases. This MPA Program has an explicit learning agenda related to improvement in WSS service delivery and reform aspects to WRM (see T



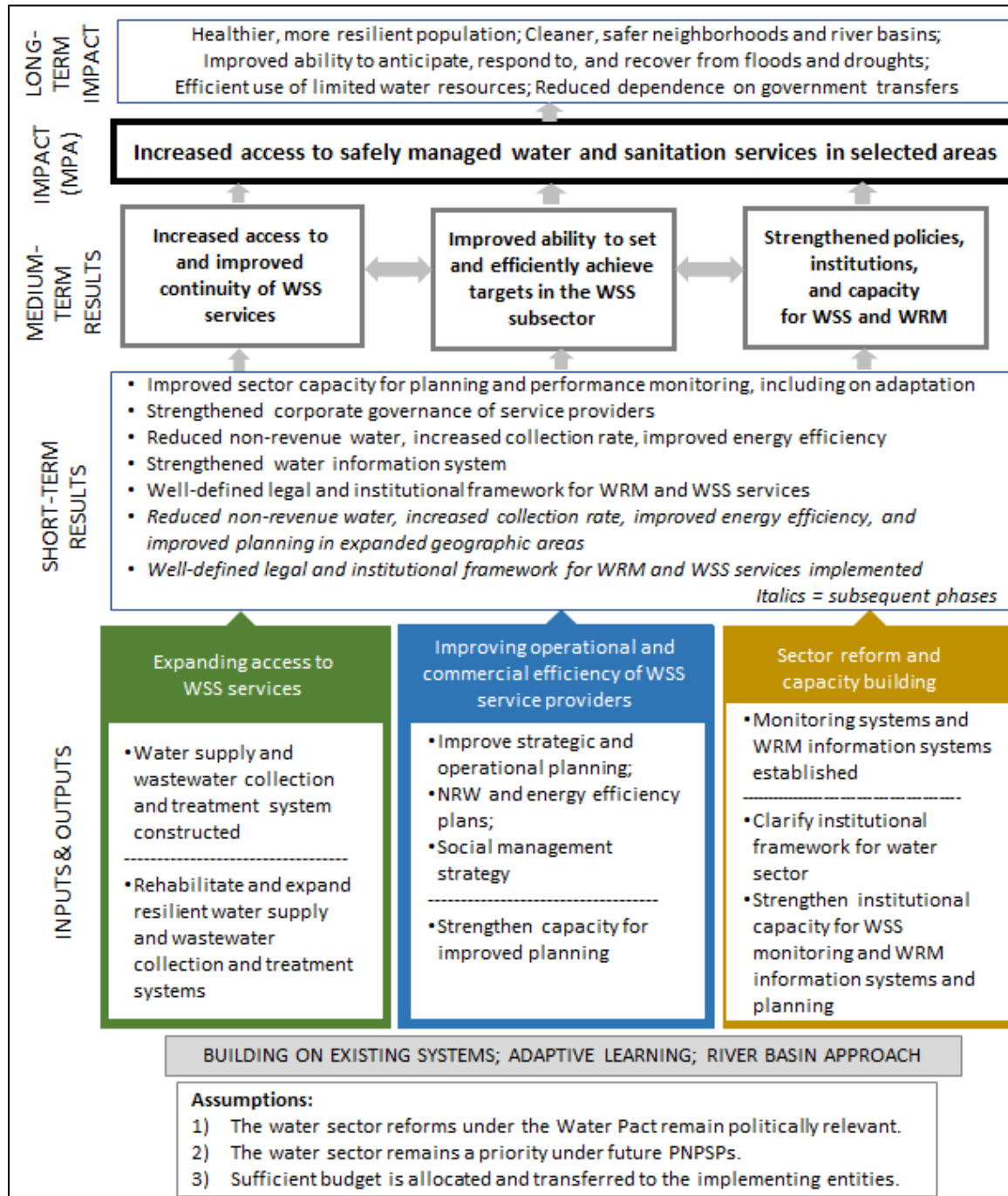
(e) Table 2).

(ii) MPA Program Results Chain

22. **As a contribution to the achievement of the National Strategy for Development 2030's objectives and the government's program, through the Water Pact and PNPSPs, the proposed MPA Program development objective (PrDO) is "to increase access to safely managed water and sanitation services in selected areas."** The two hybrid phases with PforR Program and IPF Project components will support six elements of the government program underpinned by the Water Pact and PNPSP (2021–24). Key outcomes of Phase I will be improved WSS services; an improved ability to set, monitor, and efficiently achieve targets in the WSS subsector; and strengthened policies, institutions, and capacity for WSS and WRM. The MPA Program Results Chain is outlined in **Error! Reference source not found.**
23. **The MPA Program also recognizes that resilient and sustainable WSS services depend on an adequate institutional and legal framework for WRM.** It is anticipated that a new general water law will be passed during Phase I, which will consolidate policy, planning, and regulatory functions in a National Water Authority to improve management of water resources (surface and groundwater quantity and quality). The National Water Authority would be allocated key functions, including: (i) maintaining a national water information system (quantity, quality, and uses); (ii) granting, registering, and enforcing water rights and discharge permits; (iii) integrated water planning at basin and national levels; (iv) protecting water resources, including by controlling water pollution and groundwater deterioration; and (v) dam safety regulation and control. The WRM 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. Final approval of any new legislation involves a parliamentary process that can introduce uncertainty regarding timelines. Nevertheless, passing the general water law is a first step to water sector reforms that will set the stage for future legislation for specific services such as WSS; hence, including WRM reforms under the MPA is strategic and logical.



Figure 1. MPA Program Results Chain





(iii) MPA Program Development Objective and PrDO Indicators

24. The PrDO is to increase access to safely managed water and sanitation services in selected areas.¹⁸

25. The PrDO will be measured by two results indicators:

- Increased access to safely managed water services
- Increased access to safely managed sanitation services

26. Over 10 years, the MPA Program can leverage not only government investments but also those of other development partners, and significantly improve the monitoring and performance of WSS service providers and improve WRM that will benefit WSS service provision and resilience. The MPA Program will aim to expand access to 300,000 people for safely managed water supply and 600,000 people for safely managed sanitation.¹⁹

(iv) MPA Program Framework

27. **The proposed MPA Program will have two overlapping hybrid phases to achieve the PrDO.** The MPA Program will support the design of new legal and institutional frameworks for WSS and WRM while advancing technically and politically feasible WSS operational reforms under the existing institutional architecture and investing in increasing access to safely managed and resilient WSS services. The nature of the development challenge calls for each phase of the MPA Program to be similar but with each phase expanding the scope toward achievement of the overall PrDO. The MPA Program's total estimated cost is approximately US\$1.253 billion, with a proposed International Bank for Reconstruction and Development (IBRD) financing envelope of US\$500 million (see Table 1).

28. **The MPA Program will support the government program through a series of PNPSs.** Overall, each PNPS governs a period of four years (aligned with the presidential election cycle) and includes a chapter outlining the strategic priorities and planned investments for the water sector that will implement the priorities under the Water Pact. Figure 2 shows how the MPA's timeline is aligned with the Water Pact, three PNPSs (2021–24, 2024–28, and 2028–32), WSS service providers' four-year institutional strategic plans (*plan estratégico institucional*, PEI), and the Bank's CPF.

Table 1. MPA Program Framework

MPA PrDO:			Increase access to safely managed water and sanitation services in selected areas.					
Phase no.	Project no.	Sequential or simultaneous	Phase's proposed PDO	IPF/ PforR	Estimated IBRD amount (US\$, millions)	Counterpart financing (US\$, millions)	Estimated approval date	Estimated E&S risk rating
I	P177823		(i) to improve the planning capacity and operational and commercial efficiency of selected water supply and sanitation institutions; and (ii) to increase access to safely managed water and sanitation services in selected water stressed	PforR IPF	225.00 25.00	352.00*	March 2023	Moderate

¹⁸ In Phase I, the target area is the provinces of Monte Cristi, Valverde, Santiago Rodriguez, Santiago, and La Vega in the Yaque del Norte basin, which is a water stressed river basin. Phase II will expand to include additional areas within Yaque del Norte and/or target additional priority water basins that the government identifies during preparation.

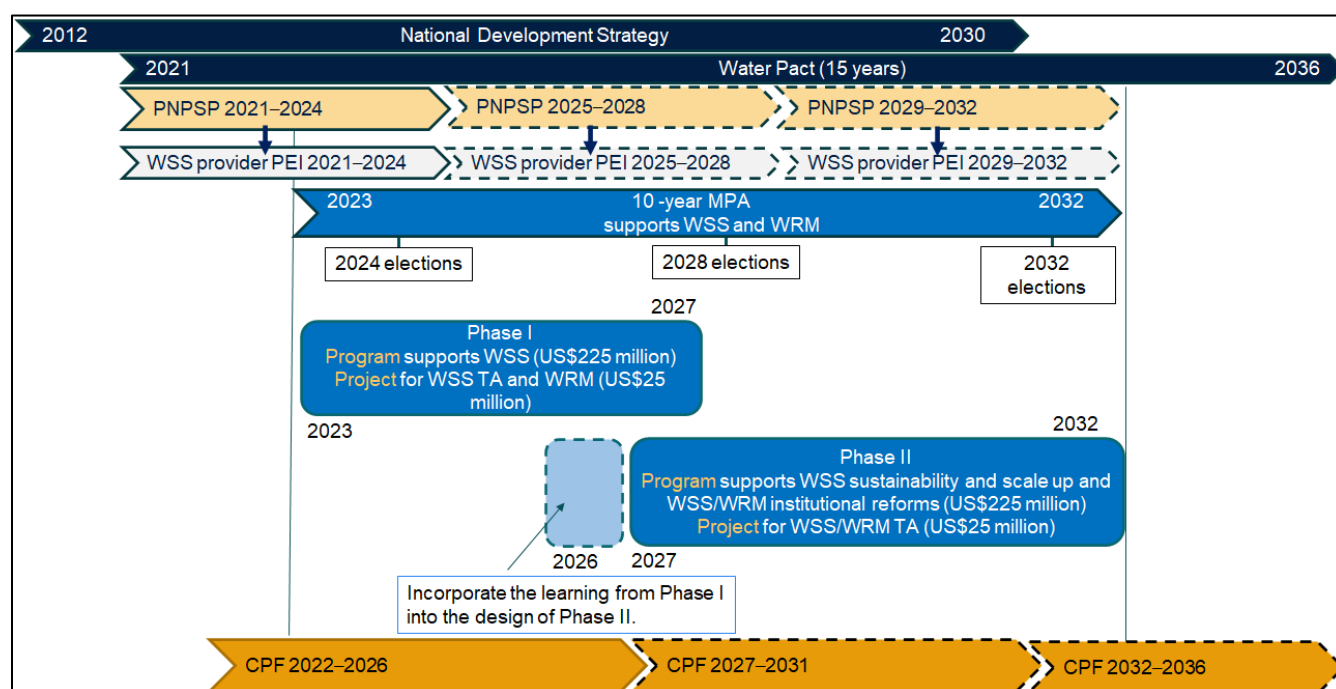
¹⁹ These estimates assume a doubling of the results of Phase I and expansion to other provinces.



MPA PrDO:			Increase access to safely managed water and sanitation services in selected areas.					
Phase no.	Project no.	Sequential or simultaneous	Phase's proposed PDO	IPF/ PforR	Estimated IBRD amount (US\$, millions)	Counterpart financing (US\$, millions)	Estimated approval date	Estimated E&S risk rating
			areas					
II		Simultaneous	TBD	PforR IPF	225.00 25.00	401.60	June 2026	Moderate
Total					500.00	753.60		
Financing envelope					\$ 1,253.60			

Note: TBD = to be determined. * Table 1 does not include the front-end fee of US\$625,000 for phase I captured in the datasheet counterpart funding.

Figure 2. MPA Alignment with Government Strategy, Water Pact, and PNPSs



29. **Phase I of the MPA Program (US\$250 million).** The first phase of the MPA Program is a US\$250 million hybrid operation with two components: a US\$225 million PforR Program and a US\$25 million IPF Project. The PforR Program will support implementation of a national WSS modernization program geographically focusing on the economically important, highly water stressed, and drought-prone Yaque del Norte river basin river basin to improve the commercial and operational efficiency of WSS service providers and expand access to resilient and safely managed WSS services. The IPF Project will support establishment and strengthening of the PCMU within MEPyD, which will use the IPF Project funds to contract technical assistance for the WSS service providers to address existing WSS capacity gaps and risks that may otherwise undermine the achievement of PforR Program results. The IPF Project will not finance any disbursement-linked results (DLRs) under the PforR Program.²⁰ With

²⁰ Furthermore, projects funded by a World Bank IPF are not eligible for program financing; duplicate financing of projects is not permitted.



regard to WRM, the IPF Project will support the legal and institutional reforms at the national-level; and support climate-smart investments to modernize the national water information system, including the creation of a digital water rights registry for WRM; and build capacity among WRM professionals, while also conducting activities in the Yaque del Norte basin to improve the understanding of available water resources, pilot a methodology to formalize water rights, improve the safety and joint operation of dams, and develop a plan for the management of water resources in the basin.²¹ Refer to Annex 8 for more information on the IPF Project for WSS- and WRM-related activities.

30. **Phase II of the MPA Program (US\$250 million).** The second phase will be a hybrid US\$250 million operation with a US\$225 million PforR Program component and a US\$25 million IPF Project component (to be confirmed during preparation of the second phase). Phase II will focus on sustaining results of the national WSS modernization program in the Yaque del Norte basin and could expand programming to other priority basins. This will include applying lessons on what it takes for WSS service providers to achieve important operational and commercial targets; expand learning on improving service delivery, efficiency, and resilience; and refine and expand WSS performance monitoring and capacity-building programs developed under Phase I. Phase II may also support the implementation of the new legal and institutional frameworks for WRM that are anticipated to be approved during the first phase. Phase II may also support the development and implementation of a new legal and institutional framework for WSS services. This will include applying lessons from pilots under the first phase to design, implement, and scale up methodologies for water user registries and formalization of water use rights in selected areas. Design of the second phase is proposed to start in 2026, in the middle of Phase I, to allow sufficient time for lessons learned during implementation of Phase I to be generated. The decision on when to begin preparation of Phase II will be informed by the level of achievement of DLRs through 2025 (which will be evaluated by the independent verification agent in 2026), the progress on the learning agenda, and the continued government commitment to sector reform.

(v) Learning Agenda

31. The phased approach using hybrid operations permits the IPF Project to fund pilots on WSS and WRM to generate lessons learned that can inform the design of Phase II and scale up impact.
32. Table 2 summarizes the hypotheses to be tested under the MPA learning agenda and the proposed method and approach for incorporating lessons learned and scaling up the impact. Throughout the 10-year MPA Program, the phases will promote knowledge exchange between WSS service providers and between the entities involved in WRM in the Dominican Republic to disseminate, replicate, and scale lessons learned, and it will also give the opportunity for cross-learning with other countries. The design of Phase II will be informed by lessons learned from Phase I from the activities in Table 2, and from complementary projects in the Dominican Republic.

²¹ The Project complements other World Bank investments that are improving irrigation, integrated WRM, and landscape management in the Yaque del Norte basin. These synergistic investments are designed to holistically address the water security challenges in the Yaque del Norte basin through infrastructure investments, capacity building, and WSS and WRM reforms, and there is ongoing close coordination between the task teams. The World Bank's Resilient Agriculture and Integrated Water Resources Management Project (P163260) is investing in rehabilitation and modernization of selected irrigation programs; rehabilitation and improved operation and maintenance of selected dams; improved soil and water conservation; and improvement of resilient, integrated water use planning at the watershed level in the Yaque del Norte basin. A Global Environment Facility grant for an Integrated Landscape Management in Dominican Republic Watershed Project (P170848) is also supporting intersectoral coordination, governance, and capacities; adoption of sustainable agricultural practices; and restoration of critical landscapes. It includes basin, sub-basin, and micro-basin land use planning in the Yaque del Norte basin and knowledge sharing with the Yaque del Norte Basin Committee.



Table 2. Learning Agenda for the MPA Program

Topic	Hypothesis	Method
WSS sector performance monitoring	A national WSS performance monitoring system can be developed and applied across all WSS service providers.	Phase I: Develop the WSS performance monitoring system and adjust indicators to align with international best practice. Phase II: Scale performance monitoring to all WSS service providers.
WSS service efficiency	Service delivery challenges consist of both technical and organizational issues. Resolving organizational issues can be done with methodologies that facilitate the emergence of leadership within an organization.	Phase I: Pilot 100-day Agile Challenge methodology to improve operational efficiencies. ^a Phase II: Scale methodology with WSS service providers participating in Phase II.
Gender inclusion	Policies and actions, including those to improve women's recruitment, retention, and career advancement, can increase female participation in the utility labor force and improve service delivery.	Phase I: Provide capacity building and knowledge sharing activities on gender and inclusion. Strengthen linkages with universities. Phase II: Incorporate lessons learned and scale up with WSS service providers participating in Phase II.
Citizen engagement	Development of social compacts builds trust between users and utilities that can increase collection rates. ^b Improved citizen engagement strategies can increase the rate of household sewerage connections.	Phase I: Pilot social compact approach and citizen engagement strategies. ^c Phase II: Incorporate lessons learned and scale up in the Phase II PforR Program.
Water use rights	Creating a formal system of water rights for water resource management informed by citizen feedback will improve water resources management.	Phase I: Pilot methodology for creating modern water user registries and formalizing water use rights in a sub-basin of Yaque del Norte. Phase II: Incorporate feedback from the pilot and scale the methodology across the country.

Note:

^a. The first phase of the 100-day Agile Challenge pilot is already under way with the Moca Water and Sewerage Corporation and the La Vega Water and Sewerage Corporation. Early feedback shows a clear culture shift that has increased collaboration, innovative problem solving, and results-based orientation that has facilitated updated network and user cadasters, improved social outreach, use of parts-on-hand to improve understanding of water balance in hydraulic sectors, increased collection rate, and reduced non-revenue water.

^b. A social compact represents the agreement that derives from a participatory process of two-way dialogue with specific communities. It articulates the terms of the agreement for joint accountability between the utility and the community and a feedback loop to improve services. The social compact approach has been used successfully in the energy sector in the Dominican Republic to increase the collection rate.

^c. Under the Wastewater Services Improvement and Water Loss Reduction Project (P171778), the Moca Water and Sewerage Corporation developed a social engagement strategy that will be used to engage communities to sign social compacts. Lessons learned will inform Phases I and II.

C. PforR Program Scope

33. The Phase I PforR Program (2023–27) will focus on implementing the national WSS modernization program in the provinces located in the Yaque del Norte basin, with a government expenditure program covering WSS investments and operational costs of US\$577 million (see



34. **Table 3).** The Water Pact and PNPSP (2021–24) call for the implementation of the national WSS modernization program that aims to: (i) provide continuous water and sanitation services, (ii) reduce NRW, (iii) guarantee the financial stability of WSS services, (iv) improve energy efficiency, (iv) reduce operational expenditures, and (v) and improve resilience of WSS services to climate and non-climate shocks. The government requested a geographic focus on the highly water stressed river basin of Yaque del Norte. Thus, the PforR Program geographic boundary spans five provinces (Monte Cristi,²² Santiago Rodríguez, Valverde, Santiago, and La Vega) whose water and sanitation services are provided by three WSS service providers (see Figure 3): the National Water and Sewerage Institute (*Instituto Nacional de Agua Potable y Alcantarillado*, INAPA), the Santiago Water and Sewerage Corporation (*Corporación del Acueducto y Alcantarillado de Santiago*, CORAASAN), and the La Vega Water and Sewerage Corporation (*Corporación de Acueducto y Alcantarillado de La Vega*, CORAAVEGA).²³ The PforR Program will primarily support WSS results in urban areas and small towns.
35. **The Yaque del Norte basin is highly water stressed, with additional pressures from drought and economic and population growth, while also at risk of riverine and urban flooding caused by heavy rainfall, tropical storms, and hurricanes.** The President of the Dominican Republic's Water Cabinet finds that demand already exceeds freshwater supply in the Yaque del Norte basin. From 2000–14, the Yaque del Norte basin experienced three dry shocks, with rainfall more than one standard deviation below average.²⁴ Climate models indicate that average annual precipitation in the country may decrease by more than 15 percent by 2050,²⁵ pointing to even more intense water stress in the future. Drought not only reduces water availability but also negatively affects the quality of surface water resources as industrial effluents, agricultural contamination, and untreated wastewater discharges become more concentrated and also reduces the quantity of available ground and surface water resources. As a result, droughts can have strong economic impacts, including through reduced agricultural production that subsequently impacts food security, agricultural exports, and farmer's incomes. To regulate limited flows, the basin relies on 15 of the country's 34 dams, which are used for water supply, irrigation, hydropower, and recreation. Floods are also a key risk. Hurricane landfall frequencies average once every two years, and in the last five years, seven periods of intense rainfall have caused fluvial and pluvial flooding in the Yaque del Norte basin, with significant economic and public health impacts. Infrastructure damage can be severe: In 2016, heavy rains from Hurricane Matthew led to fears of a dam breach, triggering an emergency discharge that caused flooding in the provinces of Santiago and Monte Cristi, including severe flooding of the headquarters of CORAASAN and the co-located Nibaje Water Treatment Plant, interrupting water services. Global climate models indicate that tropical cyclones and thus flooding and strong winds are expected to become more intense, although changes in frequency are uncertain.²⁶

²² The municipal district of Santa María in the province of Monte Cristi, which is partly in the transboundary Masacre river basin, is excluded from the Program boundary. Investments in transboundary river basins are ineligible for financing under the operation.

²³ The Provinces of Santiago y La Vega partially are within Yaque del Norte river basin and partially in the Yuna basin. While the Yaque del Norte river basin faces high water stress, the Yuna basin also faces medium to high water stress.

²⁴ World Bank CLEAR Water Dashboard, accessed July 2022.

²⁵ Government of the Dominican Republic. *Tercera Comunicación Nacional de la República Dominicana ante la Convención Marco de las Naciones Unidas sobre Cambio Climático*. 2017. [https://www4.unfccc.int/sites/SubmissionsStaging/NationalReports/Documents/29064815_Dominican%20Republic-NC3-1-Informe%20Tercera%20Comunicaci%C3%83%C2%B3n%20\(Para%20WEB\)%20\(2\).pdf](https://www4.unfccc.int/sites/SubmissionsStaging/NationalReports/Documents/29064815_Dominican%20Republic-NC3-1-Informe%20Tercera%20Comunicaci%C3%83%C2%B3n%20(Para%20WEB)%20(2).pdf)

²⁶ McSweeney, Carol, Mark New, and Gil Lizcano. 2010. "UNDP Climate Change Country Profiles: Dominican Republic." United Nations Development Programme, New York. https://www.geog.ox.ac.uk/research/climate/projects/undp-cp/UNDP_reports/Dominican_Republic/Dominican_Republic.lowres.report.pdf



Figure 3. Map of the Phase I PforR Program Boundary and the Service Areas of INAPA and the CORAAs



Note: CAASD = Corporación de Acueducto y Alcantarillado de Santo Domingo; CORAABO = Corporación de Acueducto y Alcantarillado de Boca Chica; CORAAMOCA = Corporación de Acueducto y Alcantarillado de Moca; CORAAMON = Corporación de Acueducto y Alcantarillado de Monseñor Nouel; CORAAPPLATA = Corporación de Acueducto y Alcantarillado de Puerto Plata; CORAAROM = Corporación de Acueducto y Alcantarillado de La Romana; CORAASAN = Corporación de Acueducto y Alcantarillado de Santiago; CORAAVEGA = Corporación de Acueducto y Alcantarillado de la Vega; INAPA = Instituto Nacional de Agua Potable y Alcantarillado.

Table 3. Phase I PforR Program Boundary

	Government program (priority activities in Water Pact over 10 years, through three PNPSs)	Phase I PforR Program (five years)	Reasons for nonalignment
Objective	Increase the production of water for human consumption and increase the efficiency of the use of water resources	The PDO is (i) to improve the planning capacity and operational and commercial efficiency of selected water supply and sanitation institutions; and (ii) to increase access to safely managed water and sanitation services in selected water stressed areas.	Aligned
Duration	2023–32 (10 years)	2023–27 (five years)	Aligned
Geographic coverage	The entire country	The water stressed Yaque del Norte river basin, which spans selected service areas of INAPA and the service areas of CORAAVEGA and CORAASAN;	Aligned, with focus on priority areas



	Government program (priority activities in Water Pact over 10 years, through three PNPPs)	Phase I PforR Program (five years)	Reasons for nonalignment
Results areas	Elements: (i) a national WSS modernization program; (ii) rehabilitation, construction, and expansion of WSS infrastructure; (iii) strengthening resilience of water infrastructure; (iv) WRM and WSS legal, institutional, and policy framework; (v) WRM information systems; and (vi) dam safety and operation	The PforR Program's three results areas address government program elements (i), (ii), and (iii). <i>Note: The IPF Project addresses elements (iv), (v), and (vi).</i>	Aligned
Overall financing	US\$1.379 billion (WSS capital expenditure) US\$1.209 billion (WSS operating expenditure) Total: US\$2.588 billion 5-year estimate (2023-2027) US\$586 billion (WSS capital expenditure) US\$544 billion (WSS operating expenditure) Total: US\$1,130 billion	US\$225million supported by PforR US\$352 million supported by government* Total: US\$577 million	Aligned

Note: The US\$352 million in Table 3 does not consider the US\$625,000 front-end fee for phase I captured in the datasheet counterpart funding.

36. **The PforR Program component of Phase I has a total estimated financing of US\$577 million.** The PforR Program is focused on resilient WSS service delivery and efficiency improvements, including capital and operational expenditures. Loan financing accounts for 39 percent of PforR Program costs (see

37. Table 4).

Table 4. Phase I PforR Program Financing

Instrument	Financing source	Amount (US\$, millions)	Portion of total (percent)
PforR	IBRD	225	39
	Government financing	352	61
Total PforR Program financing		577	

Note: IBRD = International Bank for Reconstruction and Development; PforR = Program-for-Results.

38. **Role of development partners.** The PforR Program provides a good platform for the coordination of partnerships with other development partners, aligned with the national program for water sector reform. Development partners that are active in the water sector include the Inter-American Development Bank, Agence Française de Développement (AFD), the Spanish Agency for International Development Cooperation, the United States Agency for International Development (USAID), the Development Bank of Latin America (CAF), the German Agency for International Cooperation, and the European Union. During preparation, development partners were consulted on the PforR Program to ensure alignment with their programming. Phase I will not include cofinancing, but this will be considered under Phase II.



D. Program Development Objectives (PDO), PDO-Level Results Indicators, Results Areas, and Summary of IPF Project

39. The PforR Program development objectives are to: (a) improve the planning capacity and operational and commercial efficiency of selected water supply and sanitation institutions; and (b) increase access to safely managed water and sanitation services in selected water stressed areas.^{27, 28}
40. The PDO indicators (which are all disbursement-linked indicators [DLIs]) are the following:
- Strengthened accountability and improved planning capacity (text, DLI 3)
 - Strengthened performance monitoring (number, DLI 10)
 - Reduced non-revenue water (NRW)²⁹ (percentage points, DLI 7)
 - Households serviced with safely managed water supply³⁰ (number, DLI 1)
 - Households serviced with safely managed sanitation.³¹ (number, DLI 2)
41. **The PforR Program seeks to increase the climate resilience of households and of the delivery of water supply and wastewater services in the selected water stressed areas to droughts and floods and to reduce carbon emissions, including through reductions in physical water losses, increased access to safely managed sanitation services, and improvements in energy efficiency (see Annex 8 and 10, respectively, for further description on climate co-benefits of the PforR Program and IPF Project).** The PforR Program is estimated to have net greenhouse gas emissions during its economic lifetime of -554,553 tons of CO₂ equivalent, which translates into annual net average emissions of -27,728 tons of CO₂ equivalent per year over its economic lifetime.³² The PforR Program will benefit 34,700 households with safely managed water supply and 76,300 households with safely managed sanitation, which is equivalent to 121,000 and 267,000 people respectively.
42. **The PforR Program will support the government's program of expenditures for the WSS sector in the provinces in the Yaque del Norte basin during 2023–27 and is structured in three results areas.** Disbursements under the PforR Program will be made based on achievement of disbursement-linked results (DLRs), which are a mix of outputs, intermediate outcomes, and outcomes. The DLI matrix is organized into 10 DLIs with 34 DLRs. Given the low capacity in the sector, detailed DLRs are needed to ensure achievement of the PforR Program objectives. See Annex 9 for details on the PforR Program theory of change and Annex 10 for its contribution to the Bank's corporate commitments.

Results area 1: Increase access to safely managed WSS services in selected water stressed areas (US\$50 million)

²⁷ Planning will be improved at two levels: operational planning at the WSS provider level, and performance monitoring to inform improved sector planning at the central government level within MEPyD. Operational and commercial efficiency includes an array improvements, but for the purposes of measuring the efficiency aspects of the PDO, the indicator of non-revenue water will be used because it succinctly captures efficiency improvements such as reducing commercial water losses through improved billing and also operational improvements such as reducing physical losses.

²⁸ Water stress, which is defined in line with Sustainable Development Goal 6.4.2 as freshwater withdrawal as a proportion of available freshwater resources, is classified at the basin level.

²⁹ The Phase I PforR will include a DLI on NRW that first incentivizes the execution of water audits and development of NRW reduction strategies in the first two years, which will allow for a more rigorous baseline. Then the Program will incentivize a modest percentage point reduction in NRW in years 3–5 before setting more ambitious NRW reduction targets in the Phase II.

³⁰ Safely managed drinking water is defined as the use of an improved drinking water source that is located on premises, available when needed, and free of fecal and priority chemical contamination.

³¹ Safely managed sanitation is defined as the use of an improved sanitation facility that is not shared with other households and where the excreta is safely disposed in situ or transported to a treatment plant where it is treated to national standards.

³² Greenhouse gas emissions reductions are achieved through a combination of planning and investments in energy efficiency for water supply and sanitation services and non-revenue water reductions, under DLIs 1, 2, 3, 6, 7, and 8, as well as expanded access to aerobic wastewater treatment under DLI 2.



43. **Results area 1 supports expenditures, activities, and results related to expanding access to safely managed water and sanitation services in selected water stressed areas.** For safely managed water services, investments include rehabilitation and extension of water supply networks, rehabilitation and construction of water treatment plants, and reduction of physical water losses. Leak reduction will help conserve limited ground and surface water resources, thus increasing resilience to more frequent droughts in the Yaque del Norte basin due to climate change. The PforR Program will also promote water conservation through development and adoption of improved demand-side management measures (including micro-metering and awareness raising). Increased access to safe and reliable water will reduce the financial burden of buying bottled water and the health burden of disease from consuming contaminated drinking water. For safely managed sanitation, activities include implementation of social engagement strategies to connect households to existing sewers, rehabilitating and expanding sewerage networks, and rehabilitating and constructing wastewater treatment plants. Thus, the beneficiary communities will be more resilient to floods by reducing the risk of disease from floodwaters contaminated with fecal coliforms from onsite sanitation. Water and sanitation investments will plan for resilience to climatic and non-climatic events, including floods, as required by the central government's public investment guidelines and be informed by the Bank's Resilient Water Infrastructure Design Brief. Providers will adopt energy efficient and low-carbon pumping and water and wastewater treatment technologies that will effectively reduce greenhouse gas emissions. Results financed by the PforR Program under this Results area will be linked to scalable disbursements under DLIs 1 and 2. DLIs 1 and 2 are tagged to the GCRF's pillar of "strengthening policies, institutions, and investments for rebuilding better."

Results area 2: Improve the planning capacity and operational and commercial efficiency of selected WSS service providers (US\$99.5 million)

44. **Results area 2 supports expenditures, activities, and results related to strengthening the planning capacity and institutional and operational performance of the WSS service providers in selected water stressed areas.** The interventions include investments in: (i) NRW reduction to reduce physical and commercial losses through, for example, annual water audits, NRW reduction strategies, improved planning for NRW, and rehabilitation of water supply systems to reduce leaks; (ii) improved energy efficiency through, for example, annual energy audits, energy efficiency strategies, electrical system rehabilitation, pump rehabilitation or replacement, improved efficiency of water and wastewater treatment plants (DLIs 1, 2 and 8), and installation of solar-powered pumping; and (iii) digitalization and update of WSS network and user cadasters. Leak reduction will help conserve ground and surface water resources and increase resilience to droughts in the already highly water stressed Yaque del Norte basin. Digitalization of network cadasters will facilitate the identification and timely repair of these leaks to improve drought resilience as well as improve response times when climate-related extremes such as hurricanes and floods cause infrastructure damage. Reduced physical losses will subsequently reduce pumping needs and thus carbon emissions, while energy efficiency investments and the use of solar energy will also reduce greenhouse gas emissions.
45. **Results area 2 will also incentivize process improvements related to strategic planning, budgeting, and procurement.** A key outcome of the Phase I PforR Program will be improved accountability and alignment between national priorities and targets and WSS service provider strategic plans, which are subsequently linked to annual operating plans, investment plans, operational and capital budgets, and procurement plans. This alignment will enable the providers to set and meet nationally relevant operational and commercial targets efficiently, including targets related to improving resilience to climate-induced floods and droughts and reducing greenhouse gas emissions. Results financed by the PforR Program under this Results area will be linked to non-scalable disbursements under DLIs 3–8. DLIs 3–8 are tagged to the GCRF's pillar of "strengthening policies, institutions, and investments for rebuilding better."



Results area 3: Strengthen policies and institutions for WSS services (US\$75.5 million)

46. **Results area 3 supports expenditures, activities, and results related to improving performance monitoring of the WSS subsector and strengthening the corporate governance of the three participating WSS Service Providers - INAPA, CORAASAN, and CORAAVEGA³³.** The interventions include investments in: (i) improving the quantity and quality of operational and commercial data generated by the WSS service providers; and (ii) promotion of process improvements to modernize billing and collection systems and improve transparency, financial management and reporting, citizen engagement, and gender equity. The PforR Program will incentivize the participating WSS service providers to report against a monitoring framework whereas the IPF Project will support MEPyD's PCMU with the development of said performance monitoring framework. Establishment of the performance monitoring framework will help the government track key performance indicators to inform their investments in climate adaption (building resilience against floods, droughts, and other climate-related shocks) and mitigation, including data on water production, water consumption, wastewater discharges, NRW, energy use, energy efficiency, and service interruptions. On corporate governance, the PforR Program will incentivize improved corporate governance of INAPA, CORAASAN, and CORAAVEGA through process improvements to modernize billing and collection systems and improve transparency, financial management and reporting, citizen engagement, and gender equity whereas the IPF Project will build capacity to track the operational, commercial, and financial performance of WSS service providers. Results financed by the PforR Program under this Results area will be linked to non-scalable disbursements under DLIs 9 and 10. DLIs 9 and 10 are tagged to the GCRF's pillar of "strengthening policies, institutions, and investments for rebuilding better."
47. **The hybrid operation will contribute to gender equity by increasing women's representation in the water sector workforce.** A human resources survey revealed that women are underrepresented in the water sector workforce of the participating WSS service providers. The operation will address this gender gap by supporting activities to improve women's attraction, selection, retention, and career advancement. The PforR Program incentivizes the WSS service providers to develop and implement Gender Action Plans [DLI 9 (iv)], while the IPF Project will finance capacity building support to the providers, such as workshops on gender and inclusion to share knowledge on good practices in the water sector.³⁴ Implementation progress will be monitored through two mechanisms: DLI 9 (iv) will track the percentage of annual actions in the Gender Action Plans implemented and an intermediate indicator in the Results Framework will track the percentage of women in engineering and technical positions. DLI 9 (iv) is described in Annex 2 and a detailed presentation of the results chain around gender equity is presented in Annex 10.

Summary of IPF Project

48. **The US\$25 million IPF Project of the hybrid operation will finance supervision, coordination, monitoring, and evaluation of the entire operation as well as capacity building related to WSS and WRM.** Implementation of the component will be managed in accordance with OP/BP 10.00 (Investment Project Financing). There is no overlap between the IPF Project and PforR Program expenditures and the IPF Project will not finance the achievement of disbursement-linked results under the PforR Program but only capacity building support to the WSS service providers. Expenditures incurred before the signing of the loan will be eligible for retroactive financing. The entire IPF financing is tagged to the GCRF's pillar of "strengthening resilience".

³³ These three WSS services providers operate in the PforR Program's geographic boundary of five provinces: Monte Cristi, Santiago Rodriguez, Valverde, Santiago, and La Vega.

³⁴ The WSS providers would then draw on the learning from the IPF-financed activities to design and implement their own inclusive actions and policies as part of their Gender Action Plan.



49. **The IPF Project will provide critical capacity building support to implementing and coordinating entities during implementation.** As the first PforR in the Dominican Republic that is supporting the water sector during a period of significant institutional reform, the central government and the WSS service providers have substantial need for support to strengthen systems, capabilities, and procedures. The IPF Project will provide flexibility and predictable financing to support these needs, and is organized under three components:

Component 1: Supervision, Coordination, Monitoring, and Evaluation (US\$9.8 million)

50. **The component will provide financial support for supervision, coordination, monitoring and evaluation of the operation, the verification of DLIs/DLRs, and the carrying out of PforR Program and IPF Project financial audits.** This entails financing a portion of the staffing costs for the Program Coordination and Management Unit (PCMU); including procurement, financial management, environmental, social, and monitoring and evaluation professionals and WSS and WRM technical specialists) and PforR Program supervision costs (including refurbishment of office space; basic office equipment, vehicles and associated costs; and communications and awareness activities, among others). It also entails funding consulting and non-consulting services of the PCMU including contracting of the independent verification agent and financing of annual external financial audit services for the PforR Program and IPF Project. The terms of reference for the independent verification agent and for the annual external financial audit will include, as applicable, a review of activities for IBRD financed projects to ensure they are not included as part of the Program expenditures and neither finance results under the Program. Finally, the component will finance the development and implementation of a WSS performance monitoring framework by the PCMU that will inform government investments and public policy on climate adaptation and mitigation in the water sector.

Component 2: Capacity building on Water Supply and Sanitation (US\$5.2 million)

51. **The component will finance consultants (individual and/or firm) to provide capacity building and just-in-time technical assistance to the central government and WSS service providers in several areas, inter alia:** (i) preparation of terms of reference for water and energy audits and energy efficiency plans that will reduce energy and water usage and thus contribute to climate mitigation; (ii) preparation of terms of reference for digitalization of user and network cadasters; (iii) reducing non-revenue water in the water-stressed and drought-prone Yaque del Norte basin; (iv) investment project planning and procurement planning; (v) planning to improve the resilience of service delivery to climate-induced floods and droughts; (vi) training on improving gender inclusion and citizen engagement (including social compact approach and methods to incentivize household sewerage connections); (vii) development and adaptation of standard financial statements that follow best practices; (viii) tariff studies; and (ix) development of a financial management module for public companies, among others.

Component 3: Water Resources Management (US\$10 million)

52. **The component will finance consulting and non-consulting services (individual and/or firm) and goods and minor works related to WRM, inter alia:** (i) improving the legal and institutional framework for WRM; (ii) capacity building and training programs for WRM professionals; (iii) developing a methodology to formalize water rights and piloting the methodology in a sub-basin of Yaque del Norte; (iv) modernizing the national information system for water resources, including the water rights registry, and improving understanding of water resources data in the Yaque del Norte basin; (v) strengthening the security and joint operation of dams in the Yaque del Norte basin; and (vi) developing a plan for the management of water resources in the Yaque del Norte Basin. The component may include financing for non-consulting services or minor works, for example the installation of hydrometric measurement stations, the rehabilitation nodes used to receive and process hydrometric data in Yaque del Norte, the improvement of dam instrumentation, and the refurbishment of INDRHI's offices.



53. **These investments in WRM will improve national- and basin-level climate resilience to increasing water scarcity, floods, and droughts by**, among other things, strengthening the institutional and regulatory framework for WRM; building the capacity of WRM professionals in key topics, including managing the impacts of climate change on water resources (such as in basin planning, administration of water rights) and dam safety during climatic extremes; installing needed dam safety instrumentation; improving the quality of timely transmitted hydromet information (including stream gauges, climate stations, and hydromet stations for flood monitoring) and ensuring that hydromet information informs forecasting and decision making processes under a changing climate; improving the capacity to use reliable, consistent information on water resources availability to inform policy and investment decisions in the context of a changing climate; and increasing water security and decreasing the risk of conflict over limited water resources by developing a plan for the management of water resources in the Yaque del Norte Basin and a methodology to formalize water use rights that consider climate uncertainty.

E. Disbursement-Linked Indicators and Verification Protocols

54. **The PforR Program will disburse upon achievement of 34 DLRs that are associated with 10 DLIs.** Disbursements will be channeled to the central government, which will use its public financial management system to budget and transfer resources to INAPA, CORAASAN, and CORAAVEGA for implementing PforR Program activities. Table 5 summarizes the DLIs and DLRs and the indicative timeline for disbursement.
55. **The central government will retain US\$50 million (22.2 percent), which is the value allocated to DLIs 1 and 2, as it is the main financier of the capital budgets for construction, extension, and rehabilitation of WSS systems.** Retention of these funds will create fiscal space for the central government while motivating close monitoring of the PforR Program; incentivizing adequate, timely capital transfers to enable the WSS service providers to increase access to safely managed water and sanitation services; and motivating the central government to support the WSS service providers to improve their planning, budgeting, and procurement processes to ensure that works are completed on budget and on schedule.
56. **DLIs 1 and 2 are global and scalable.** Global means that the targets for DLIs 1 and 2 apply to the collective performance of the participating WSS service providers, which provides flexibility for some providers to overperform to compensate for underperformance of other providers. Scalable means that disbursements will be calculated based on a unit price per additional household connection achieved. DLI 1 has a global target of 34,700 additional household connections for safely managed water supply by December 31, 2027 at a unit price per household connection of US\$721. DLI 2 has a global target of 76,300 additional household connections for safely managed sanitation by December 31, 2027 at a unit price per household connection of US\$328. The total allocated disbursement for DLI 1 is US\$25 million and for DLI 2 is US\$25 million. For both DLIs, the estimate for annual disbursements is indicative based on the best estimate of the collective performance of the three providers. By specifying additional household connections, DLIs 1 and 2 recognize the necessity for sustaining cumulative results achieved in the early years of the PforR Program. The independent verification agency will verify that the annual achievement of household connections are indeed additional, meaning that connections achieved in previous years continue to be safely managed while also achieving new safely managed connections. This will ensure sustainability of results over the life of the Program.
57. **Over the life of the PforR Program, US\$175 million (77.8 percent) will be allocated and transferred to INAPA (US\$72 million), CORAASAN (US\$75 million), and CORAAVEGA (US\$28 million) through DLIs 3–10.** As agreed with the Ministry of Finance's General Directorate of Budget (*Dirección General de Presupuesto*, DIGEPRES), the PforR Program funds are expected to be additional to current government transfers and will be programmed for efficiency improvement measures. The central government will continue to provide capital transfers to INAPA, CORAASAN, and CORAAVEGA to pay for large multiyear projects. Annex 12 summarizes the additional budget



allocations to each provider over the life of the PforR Program as determined by the value of the DLRs to be achieved in each year. The DLRs were designed to balance ambition and feasibility to encourage gradual reforms and consider the providers' low capacity. For some DLRs, results are not expected in the PforR Program's early years. For example, in 2023 and 2024, DLI 6 will incentivize water audits and preparation of a strategy and costed annual investment plan to reduce NRW, before aiming to achieve an outcome of a percentage point reduction in NRW in 2025, 2026, and 2027 under DLI 7. Results achieved by INAPA, CORAASAN, and CORAAVEGA under DLIs 3–10 will be evaluated individually; some DLIs have the same targets for all three providers, and others have targets tailored to the capacity of each utility. DLIs 3–10 are not scalable but are time bound. The DLRs are a mix of process, output, intermediate outcome, and outcome indicators that deal with safely managed water supply and sanitation services, NRW, energy efficiency, collection rates, good practice on corporate governance, planning, budgeting, and financial management, thus incentivizing a culture change. DLRs that are qualitative and more process and output oriented will be expected to be achieved in the year assigned, whereas quantitative intermediate and outcome DLRs will have some flexibility, giving providers the opportunity to overcompensate in a subsequent year if the provider underperformed in a previous year. This grace period for achievement of the quantitative DLRs will be explained in detail in the verification protocols.

58. **Verification of DLRs.** The PCMU will closely monitor the progress of achievement of all DLRs to identify implementation challenges in a timely manner and contract and oversee the independent verification agent (IVA) that will complete the annual performance assessment of DLRs. The PCMU will contract a private firm of international reputation with a strong local presence through a competitive selection process based on terms of reference acceptable to the Bank, which will include track record and prior experience in results verification in similar circumstances. The verification agent might choose to work in consortium with other firms but will ultimately be held accountable for the verification reports. The PCMU will contract the verification agency by December of 2023 to begin verification of the results achieved in 2023 between January and July of 2024. The verification process for the 2027 achievements will need to conclude by June 1, 2028 to ensure any final disbursements can be made by June 30, 2028 (the end disbursement date). The verification agent will submit the annual verification report no later than July 31 of each fiscal year, except for year 2028 (being the one related to last year of program implementation), to verify results achieved in the previous year. Annex 2 summarizes the verification protocol for each DLI. Adoption of the operations manual, including the detailed verification protocols, is an effectiveness condition. The verification agent will submit draft verification reports for review simultaneously to the PCMU, the participating WSS service providers, DIGEPRES, and the Bank, and no party shall modify such reports except to correct factual errors.³⁵ The PCMU will review the verification report and seek clearances from the Bank on the report, then submit a withdrawal application to the Bank for the net value of the results achieved. The Bank will make the final decision on whether DLIs have been achieved, in accordance with *Bank Policy: Program-for-Results Financing*. In addition to the formal verification process, the WSS service providers and PCMU will monitor indicative achievement of the DLRs throughout the year, and the Bank will also monitor implementation progress during missions.

³⁵ For which additional verification might be required, as has been the case in other PforR operations.



Table 5. The PforR Program has three results areas, 10 DLIs, and 34 DLRs.

DLI/DLR	PDO ind.	Scalable	Value (US\$, M)	Ultimate recipient	% of PforR	Baseline	Indicative timeline for DLI disbursement/ DLR target values (US\$ millions) ^a				
							2023	2024	2025	2026	2027
RA 1: Increase access to safely managed WSS services in selected water stressed areas											
DLI 1: Households serviced with safely managed water supply	Yes		25.00	National gov.	11.11		0.14	3.02	8.29	7.13	6.41
DLR 1: Number of additional Households Served with Safely Managed Water Supply (thousands) ^b		Yes				0					34.7
DLI 2: Households serviced with safely managed sanitation	Yes		25.00	National gov.	11.11		4.49	4.52	4.46	5.64	5.90
DLR 2 Number of additional Households Served with Safely Managed Sanitation (thousands)		Yes				0					76.3
RA 2: Improve the planning capacity and operational and commercial efficiency of selected WSS service providers											
DLI 3: Strengthened accountability and improved planning capacity	Yes		11.25	Providers	5.00		1.50	2.44	2.44	2.44	2.43
DLR 3: Percent of efficiency activities in the POA fully implemented as planned ^c		No				0	POA prepared and approved ^c	65 ^c	70 ^c	75 ^c	80 ^c
DLI 4: Improved capital budget planning and implementation	No		9.75	Providers	4.33		0.00	2.44	2.44	2.44	2.43
DLR 4: Costed annualized procurement plan for capital investments prepared and included in budget proposal ^c		No				Not achieved	n.a.	Achieved ^c	Achieved ^c	Achieved ^c	Achieved ^c
DLI 5: Increased collection rates	No		13.50	Providers	6.00		0.00	0.00	3.00	4.50	6.00
DLR 5: Cumulative percentage point increase in collection rate, by WSS service provider		No				78.3 79.1 66.1			1.0 1.0 11.9	3.0 3.0 16.9	5.0 5.0 18.9
DLI 6: Improved operational planning, non-revenue water	No		34.50	Providers	15.33		2.50	8.00	8.00	8.00	8.00

**performance and energy efficiency**

DLR 6: Percent of network covered by digitalization of network cadasters ^c	No			0	Provisional NRW and EE strategy ^c	Water and energy audits ^c	60 ^c	75 ^c	95 ^c
DLI 7: Reduced non-revenue water	Yes	15.25	Providers	6.78	0.00	0.00	4.00	5.15	6.10
DLR 7: Cumulative percentage point reduction in non-revenue water, by WSS service provider	No			Established by 2024 based on water audits			-2.0 -2.9 -1.3	-9.0 -11.0 -5.0	-13.0 -15.9 -9.3
DLI 8: Improved energy efficiency	No	15.25	Providers	6.78	0.00	0.00	4.00	5.15	6.10
DLR 8: Cumulative percentage point reduction in the electricity consumption (kWh) per m ³ of water dispatched to the water distribution system, by WSS service provider ^c	No			Established by 2024 based on energy audits			-5.3 -7.9 -3.8	-18.0 -16.4 -13.0	-22.6 -21.5 -22.0
RA 3: Strengthen policies and institutions for WSS services									
DLI 9: Strengthened corporate governance	No	50.50	Providers	22.44	3.00	11.60	11.80	11.97	12.13
DLR 9 (i): PEI and quarterly and cumulative quarterly budget execution reports are published on WSS service provider's website	No			Not achieved	Achieved ^c	Achieved ^c	Achieved ^c	Achieved ^c	Achieved ^c
DLR 9 (ii): Digitized billing and collection systems and innovative consumer payment mechanisms are implemented ^c	No			Not achieved	Specific-ations completed and approved ^c	Innovative consumer payment mechanisms approved ^c	Achieved	Achieved	Achieved
DLR 9 (iii): Months after the end of the fiscal year that annual financial statements are audited and published on WSS service provider's website ^c	No			n.a.	7	7 ^c	6 ^c	5 ^c	4 ^c
DLR 9 (iv): Percent of scheduled annual actions in the Gender Action Plan implemented ^c				n.a.	Plan developed and	65	70	75	80



approved^c

DLI 10: Strengthened performance monitoring	No	25.00	Providers	11.11	0.00	5.95	6.10	6.33	6.62
DLR 10: Minimum value of operational data index, by WSS service provider ^c				0.22 0.48 0.33		0.38 0.61 0.53	0.78 0.76 0.73	0.87 0.88 0.86	0.99 0.99 0.99
Total PforR financing		225.00			11.63	37.97	54.53	58.75	62.12

Note: For indicators broken down by WSS service provider, values are listed as INAPA | CORAASAN | CORAAVEGA.

^a. Values for DLIs in bold are in US\$ millions.

^b. DLIs 1 and 2 are scalable, with a global target for all participating WSS service providers that will be achieved by the end of the Program. The disbursement figures are indicative.

^c. Signifies an abbreviated description of the DLR. See Annex 2 for full description.

n.a. = not applicable



III. PROGRAM IMPLEMENTATION

A. Institutional and Implementation Arrangements

59. **The PforR Program of Phase I will be coordinated, supervised, monitored, and evaluated by the PCMU, which will be in MEPyD. MEPYD along with INDRHI will implement the IPF Project.** The PCMU will fill an institutional void at the central government level and will have five key functions: (i) provide leadership and direction for the PforR Program and coordinate with central government and WSS service providers on WSS and WRM reforms; (ii) advise and build capacity on analysis, monitoring, and evaluation of WSS sector performance; (iii) contract technical assistance to build capacity of the central government and WSS service providers; (iv) contract an independent verification agent to validate achievement of DLRs; and (v) manage the PforR Program and IPF Project components in line with Bank policy and procedures, including assuming ultimate responsibility for managing and reporting on all fiduciary, social, and environmental aspects. The PCMU will implement Components 1, 2, and part of Component 3 of the IPF Project. For Component 3, the PCMU in MEPyD will have a budget of US\$2.5 million to implement the national WRM activities related to strengthening the legal and institutional framework. INDRHI through the preexisting Project Coordination and Implementation Unit (PCIU) established for the Resilient Agriculture and Integrated Water Resources Management Project, will have a budget of US\$7.5 million to manage the remaining activities related to WRM. The detailed implementation arrangements between MEPyD and INDRHI related to the IPF Project are contained in Annex 8.
60. **The creation of the PCMU will be funded by a mix of government and IPF Project funds, demonstrating government commitment to the PforR Program and supporting sustainability beyond PforR Program closing.** The terms of reference of key PCMU staff will be detailed in the operations manual, and the appointment of key staff will be an effectiveness condition, specifically the PforR Program coordinator/director, senior financial specialist, and senior procurement specialist. To accelerate the operation's implementation readiness and support the recruitment of the professional staff, the Bank has agreed to retroactively finance up to US\$5 million from the IPF Project for expenditures from one year prior to the date of signing the loan agreement. Additional staff will comprise the unit to support the PforR Program, such as a planning specialist, environmental and social specialists, and technical specialists on NRW, infrastructure and energy efficiency, and monitoring and evaluation as well as a WRM specialist to support the IPF activities.
61. **The PCMU will coordinate with several central government actors in addition to the participating WSS service providers to ensure achievement of PforR Program results.** The PCMU will coordinate closely with the director of the President's Water Cabinet, which is a body that meets weekly to convene all water sector actors and track progress on the implementation of the Water Pact. Two directorates in MEPyD will be fully engaged during PforR Program implementation: the General Directorate for Economic and Social Development (*Dirección General de el Desarrollo Económico y Social*, DGDES) and the General Directorate for Public Investment (*Dirección General de Inversión Pública*, DGIP). DGDES coordinates development of the PNPSPs, ensures alignment with sectoral plans, and tracks development progress against PNPSP indicators. DGIP evaluates all public investment projects and grants public investment (*Sistema Nacional de Inversión Pública*, SNIP) codes. The PCMU will coordinate with the Ministry of Finance, including the General Directorates of Budget (*Dirección General de Presupuesto*, DIGEPRES) and Accounting (*Dirección General de Contabilidad Gubernamental*, DIGECOG), and Public Credit to support financial management, tracking, and reporting and to ensure that there is an adequate flow of funds to achieve results. One important function of the PCMU will be to develop a performance monitoring framework that WSS service providers will need to report against annually, and their reporting will be linked to DLI 10.



62. **INAPA, CORAASAN, and CORAAVEGA will be responsible for planning, budgeting, and implementing Program-funded activities and will be responsible for achieving PforR Program targets.** INAPA is the country's largest provider, serving about 40 percent of the population and 24 of the country's 32 provinces, which largely consist of small and medium towns and rural areas. It is a centralized entity with its headquarters in Santo Domingo and is organized into four service delivery regions. The PforR Program boundary includes three provinces served by INAPA in their Zone 1 region: Monte Cristi, Valverde, and Santiago Rodriguez. CORAASAN serves the province of Santiago, including the second largest urban population of approximately 1.17 million people in the city of Santiago. CORAAVEGA is a relatively small WSS service provider that serves approximately 450,000 people in the province of La Vega, including the 200,000 people in the urban center of the city of La Vega. The capacities of the participating WSS service providers to design and implement projects and deliver services vary, and the DLIs and DLRs have been designed accordingly. These capacities will be further enhanced by on-demand technical assistance contracted by the PCMU using IPF Project funds. Annex 3 contains additional details on the participating WSS service providers.
63. **MEPyD and DIGEPRES will sign performance agreements with INAPA, CORAASAN, and CORAAVEGA.** These performance agreements will be incentivized through DLI 3 and will articulate the annual goals and targets to be met by each provider, increasing accountability and transparency to achieve the PforR Program's objectives.
64. **The Ministry of Finance will sign a subsidiary agreement with INAPA, CORAASAN, and CORAAVEGA.** This agreement will articulate the obligations of the implementing agencies to ensure compliance with the general requirements of the Ministry of Finance and obligations of the Borrower to comply with the policies of the PforR, such as the anti-corruption guidelines. The subsidiary agreement shall also include the schedule of funds allocated to each provider over the life of the PforR Program. This schedule gives predictability to the providers on the amounts they can anticipate to budget and receive annually under the PforR Program if they achieve results. These agreements shall also specify that each provider must assign at a minimum a PforR Program coordinator to monitor and coordinate PforR Program results within their institution. This coordinator will serve as the focal point to coordinate with PCMU to provide all required evidence on achievement of results. The PCMU will subsequently consolidate all required information and act as the interface with the Bank for PforR Program supervision, monitoring, evaluation, and reporting.
65. **An operations manual is under preparation and will be a condition of PforR Program effectiveness.** The PforR Program chapter of the operations manual will, at a minimum, include: (i) the activities and timetable of actions to be carried out under the PforR Program and excluded activities³⁶; (ii) the composition and responsibilities of the PCMU; (iii) the respective roles and responsibilities of entities participating in the PforR Program; (iv) the fiduciary, technical, and operational aspects and procedures for implementation of the PforR Program, including the financial management and procurement procedures; (v) the disbursement-linked indicators for the PforR Program; (vi) the verification protocols for the DLIs and DLRs; (vii) the Anti-Corruption Guidelines; and (viii) the Program Action Plan (see Annex 6).

³⁶ Excluded activities are those considered to likely have significant adverse impacts that are sensitive, diverse, or unprecedented on the environment and/or affected people or involve the procurement of: (i) works, estimated to cost US\$75,000,000 equivalent or more per contract; (ii) goods, estimated to cost US\$50,000,000 equivalent or more per contract; (iii) non-consulting services, estimated to cost US\$50,000,000 equivalent or more per contract; or (iv) consulting services, estimated to cost US\$20,000,000 equivalent or more per contract.



B. Results Monitoring and Evaluation

66. **The PCMU will be responsible for monitoring and evaluation of the Phase I results framework using timely and reliable information provided in coordination with the implementing entities.** The PCMU will track and report progress on the results framework indicators, in collaboration with the established PforR Program coordinators at INAPA, CORAASAN, and CORAAVEGA. Reporting requirements and timeframes for DLI and non-DLI indicators will be detailed in the operations manual. As part of the PforR Program, the PCMU will develop an operational and commercial performance monitoring framework with the participating WSS service providers that will be incentivized through DLI 10.
67. **The PCMU will also coordinate closely with the Water Cabinet and DGDES to ensure alignment with the Water Pact and PNPSs.** DGDES in MEPyD oversees monitoring and evaluation of the PNPS indicators (including water sector indicators) through its National Monitoring and Evaluation System. The development of a comprehensive WSS performance monitoring framework will strengthen and complement the national system. The IPF Project will finance training and capacity building on monitoring and evaluation for the PCMU, WSS service providers, and for DGDES.

C. Disbursement Arrangements

68. **Disbursements of Bank loan proceeds will be made at the request of the Borrower upon achievement of DLRs.** The total amount of the PforR Program (US\$225 million) will be distributed across the DLRs. The DLRs related to DLIs 1 and 2 are scalable and global; therefore, partial achievement of the global household connection targets at the closure of the PforR Program, for only DLIs 1 and 2, will disburse at the defined unit prices. The DLRs for DLIs 3 to 10 are not scalable and are timebound. For the DLRs related to DLIs 5, 7, 8, and 10, the Bank will allow carrying over the value allocated to such DLRs to the subsequent year as per clear conditions defined in the verification protocols. The DLRs related to DLIs 3, 4, 6, and 9 must be fully achieved in their respective assigned years. For example, an individual WSS service provider needs to achieve DLRs 9 (i) through 9 (iv) for the value of DLI 9 for that provider to be disbursed. Carry over of the values allocated to these DLRs is not permitted and failure to fully achieve the result in the assigned year will lead to loss of disbursement. Notwithstanding, if any of the DLRs set forth in Schedule 3 to the loan agreement have not been achieved according to these provisions and as further specified in the Verification Protocol, the Bank may, by notice to the Borrower: (i) reallocate all or a portion of the proceeds of the loan then allocated to that DLR to any other DLR; and/or (ii) cancel all or a portion of the proceeds of the loan then allocated to that DLR.
69. **The PforR Program will be eligible for an advance of 25 percent of the PforR loan portion upon effectiveness to support an incremental budget allocation to WSS service providers and faster implementation.** The PforR Program is anticipated to become effective in late calendar year 2023 after legislative approval of the loan agreement by the National Congress and compliance with the effectiveness conditions. However, the government is fully committed to the PforR Program and decided to launch the PforR Program on January 1, 2023 (corresponding with the start of its fiscal year) using government financing. Upon effectiveness of the loan in 2023, the PCMU may submit a withdrawal application to the Bank to disburse up to 25 percent of the PforR Program portion of the loan (US\$56.25 million) as an advance to a designated Modernization Program subaccount in the treasury single account (Cuenta Única de Tesorería) held with the central bank.
70. **The PforR Program will follow the government's fiscal year from January 1 to December 31, and results from the prior year will be verified by an independent verification agent through an annual performance assessment in the subsequent year between January 1 and July 31.** Starting in 2024, when DLRs are achieved in the previous year by the participating WSS service providers and verified, the value allocated to said DLRs will be recovered



from the amount due to be disbursed, and then the amount recovered will become available for additional advances. In summary, annual withdrawal applications and their corresponding disbursements will replenish the Advance during the life of the PforR Program and, in year 2028, the Bank will fully recover the original Advance of US\$56.25 million. The DLI reimbursements method will also be made available to reimburse any DLRs achieved in 2027.

Transfers to Participating WSS service providers under the PforR Program

71. **The PforR Program fiscal transfers to the participating WSS service providers will operate on an advance basis.** At each annual budget preparation cycle, DIGEPRES will adjust the budget ceiling for INAPA, CORAASAN, and CORAAVEGA to include the value of the DLRs anticipated to be achieved in the following fiscal year, according to Annex 12. The allocations to the providers will follow the government's normal budget cycle, with budget requests submitted by the providers in August or September and finalized by December. The predetermined values of the DLRs by provider and year gives the providers predictability of the funds they can expect to receive under the PforR Program if they achieve all the results.
72. **Fiscal transfers under the PforR Program will be classified as external financing and will be made quarterly.** The Borrower has the obligation to program and transfer incremental financial resources to each WSS service provider consistent with the respective Allocated Amounts per DLRs achieved by each provider specified in Annex 12 and under Schedule 3 of loan agreement for the achievement of any attributable DLI 3 through 10. As agreed with DIGEPRES and reflected in the loan agreement, the fiscal transfers accruing from external financing under the PforR Program in respect of the incremental annual budgets and transfers to the respective providers shall be protected as the Borrower has the obligation to transfer loan proceeds to the WSS service providers for the achievement of any attributable DLI 3 through 10. The first year of the PforR Program (2023) will be launched partly using government funds, pending the effectiveness of the loan, and the participating WSS service providers' budget ceilings were already raised accordingly for 2023.
73. **The values of DLIs 1 and 2 are ascribed to the Ministry of Finance when achieved by the WSS service providers, whereas the values of DLIs 3–10 are ascribed to the three providers and should be reflected directly in their annual budgets as incremental funds to be received through the PforR Program.** PforR Program fiscal transfers from DIGEPRES to the three providers for DLIs 3–10 will be calculated on a net basis starting in calendar year 2024. If the verification process, starting in calendar year 2024, confirms that a provider did not achieve part or all the expected results in 2023, then DIGEPRES will reduce the amount of the transfers being made in 2024 by the value of the DLRs not achieved in 2023. This reduction, if any, will happen in the second half of the fiscal year 2024 once the verification process has concluded. This process will repeat each year for all future years of the PforR Program. If the providers achieve all results in the previous year, then they should expect to not have any deductions in transfers for the subsequent year. If providers underperform on DLIs 5, 7, 9, and 10, they can overachieve only in one subsequent year to recuperate the values of the underachieved DLRs. These recuperated values will need to be considered when providers develop the budgets for future years.

D. Capacity Building

74. **The IPF Project will be the main mechanism to strengthen capacity at the central government and WSS service provider level. In addition, INAPA will leverage technical assistance from AFD to achieve the PforR Program's objectives and support the sustainability of results.** Components 1 and 2 of the IPF Project will build the capacity of the PCMU, the WSS service providers, and the central government to achieve the DLIs and DLRs. The IPF Project financing will not be used to directly finance DLRs but rather strengthen the capacity of providers to achieve them. The PCMU will contract technical assistance for the participating WSS service providers to build capacity



on a range of issues that include, among others, NRW, energy efficiency, digitalization, innovative technologies, and the development of training programs to improve the professionalization of WSS service providers (including on performance monitoring, strategic planning, procurement, commercial and financial management, 100-day Agile challenge³⁷, citizen engagement strategies to incentivize household sewerage connections, and use of social compacts to increase collection rates, gender inclusion in the utility workforce,³⁸ and environmental and social management). The technical assistance will draw upon the Bank's Utility of the Future Program and explore partnerships with international organizations such as the International Water Association, American Water Works Association, Association of WSS Regulators of the Americas, USAID's Engendering Utilities Program, and local universities to establish capacity building and continuing education and certification programs.

75. **AFD is providing a US\$10 million technical assistance grant to INAPA via the European Union to support INAPA Zone 1 from 2022–25.** Zone 1 serves the provinces managed by INAPA in the PforR Program boundary. The technical assistance, which is complementary to and not overlapping with the PforR Program, aims to strengthen INAPA's operational and commercial performance and recommend improvements to its organizational structure for INAPA Zone 1. This technical assistance is directly aligned with the PforR Program's goals and objectives and will help strengthen INAPA's capacity to achieve the results under the PforR Program.

IV. ASSESSMENT SUMMARY

76. **During preparation, the Bank assessed the country's fiduciary, environmental, and social systems related to WSS services, and the institutions involved in coordinating, monitoring, and supervising the PforR Program and the WSS service providers that will implement the PforR Program to assess their capacity to achieve the PforR Program development objectives.** The following sections provide a brief summary of the technical, fiduciary, and environmental and social assessments. More detailed summaries are included in Annexes 3 to 5, all of which propose actions to be taken by different entities to mitigate risks to achieving the PforR Program development objectives. These actions are summarized in the Program Action Plan (PAP) in Annex 6.

A. Technical

(i) Strategic Relevance and Technical Soundness

77. **The PforR Program has clear alignment with government priorities and public policy.** The PforR Program is directly aligned with the Water Pact and the PNPSP (2021–24), which demonstrates that the water sector is a key strategic issue and a priority area of investment for the government. Improving water sector governance and increasing access to efficient and safely managed WSS services is fundamental to the country's economy and development and to improved living standards for its population.
78. **The technical assessment finds that the PforR Program is technically sound because it addresses the weaknesses in the government's program, and there is strong support from central government and participating WSS service providers.** The technical soundness of the PforR Program was assessed based on the level of ownership and the government authorities' commitment to the PforR Program, the strengths and

³⁷ 100-day Agile challenge is an approach utilized to organize and motivate teams within organizations to identify challenges and find local solutions to achieve specific results to overcome those challenges within 100 days.

³⁸ This training will support ongoing and new gender initiatives. The World Bank has collaborated with USAID on Engendering Utilities to include staff from INAPA in this program that trains gender equity advocates and supports them in implementing inclusive policies that facilitate achievement of utility business objectives. This operation will explore opportunities to provide similar training for CORAASAN and CORAAVEGA (such as through the program on Gender Equality in the Workforce offered at the University of Los Andes) and apply the World Bank Water Global Practice's Equal Aqua framework to promote women's inclusion and professional advancement in water utilities.



weaknesses in the government program design and implementation arrangements, the extent to which the PforR Program and the IPF Project can address the gaps and challenges highlighted, and the readiness of Providers to achieve the PforR Program's results. The heterogeneity in implementation capacity of WSS service providers to manage services and implement projects informed the design of the DLIs and DLRs by having specific targets for each provider tailored to their respective capacity. The level of readiness to achieve results was informed by a review of the providers' institutional strategic plans and annual operational plans along with their ongoing and planned investment projects. Moreover, the IPF Project was designed to specifically address the capacity weaknesses of each provider and of the PCMU in MEPyD. Finally, the PAP actions were designed specifically to mitigate risks of achieving the PforR Program's objectives. See annex 3 for further details.

(ii) Expenditure Framework for the Phase I and Phase II PforR Programs

79. **It is estimated that US\$5.781 billion (US\$2.759 billion in capital expenditures [CAPEX] and US\$3.022 billion in operating expenditure [OPEX]) is needed to achieve the vision of the Water Pact (2021–36) for WSS.** The Phase I and Phase II PforR Programs responds to the need for supporting a government overarching program of investments in WSS that covers 10 years of the Water Pact (2023–32), with an estimated cost of US\$2.588 billion (US\$1.379 billion in CAPEX and US\$1.209 billion in OPEX) for the entire country. The estimated cost of the Water Pact for the first five years is US\$1.130 billion (US\$586 million in CAPEX and US\$544 million in OPEX) for the entire country. The Phase I and Phase II PforR Programs will specifically support the government program only in selected geographic areas over a 10-year period with an estimated total cost of approximately US\$1.254 billion (see Table 6).
80. **The Phase I PforR Program has an estimated expenditure framework of US\$577 million from 2023–27 for WSS CAPEX and OPEX** in the three provinces covered by INAPA (Monte Cristi, Santiago Rodriguez, and Valverde), the province of Santiago, and the province of La Vega. The expenditure framework for Phase I and Phase II in Table 6 shows the estimated WSS CAPEX and OPEX costs in the PforR Program boundary, and the technical assessment confirms it is adequate to achieve the desired results identified in the Program.
81. **The government's contribution of approximately US\$754 million (60 percent) of total OPEX during Phases I and II of the MPA Program demonstrates the government's commitment to its development agenda.** The government will finance 61 percent (US\$352 million) of the Phase I PforR Program costs and 64 percent (US\$401.6 million) of the Phase II PforR Program costs. The Bank will provide US\$225 million of PforR loan financing in each phase of the MPA Program.

(iii) Monitoring and Evaluation Capacity

82. **The detailed DLI matrix, verification protocols, results chain, and results framework for the PforR Program will significantly strengthen the monitoring and evaluation of the national WSS modernization program.** In addition, as part of the IPF Project, the PCMU in MEPyD (as the responsible entity for the PforR Program monitoring and evaluation) will work closely with DGDES (which tracks progress on indicators for the PNPSP) to ensure close alignment with the PNPSP. The PforR Program should improve the quality and quantity of information provided by WSS service providers. The PforR Program's detailed results framework and theory of change will also provide a learning and capacity-building opportunity for DIGEPRES to improve the implementation of the government's budget for results approach, which also requires a results framework and theory of change to establish a new program in the government's budget classification.
83. **The strengthened monitoring and evaluation will facilitate demand-side engagement, peer learning, and healthy peer competition among WSS service providers.** The PCMU will publish data on individual WSS service provider's performance against the DLRs verified by the IVA during the annual performance assessment. Putting



credible and timely information on the individual WSS service providers' performance in the public domain will help bring in demand-side actors who can hold the providers accountable and be another source of pressure for reforms. It will also facilitate peer learning and healthy peer competition between WSS service providers that will help drive better results.

(iv) Economic and Financial Evaluation

84. **The present value of the PforR Program's economic cost is estimated at US\$292 million.** The PforR Program's incremental economic costs include the investment cost in water supply interventions (US\$233.3 million) and sewerage/wastewater treatment (US\$107.5 million) financed by both the government and the Bank. In addition, incremental operating costs of US\$6.23 million (that is, the difference between the with-Program [WP] and without-Program [WOP] scenarios) contribute to the incremental economic cost.
85. **The results for the cost-benefit analysis indicate that the PforR Program will yield significant net benefits and is economically viable.** Counting all benefits and costs, in present value terms, total incremental benefits are higher than total incremental costs making the Program economically viable, i.e., using a six percent rate of discount the present value of total incremental benefits (US\$375.32 million) largely exceeds the present value of incremental costs (US\$292.78 million) which is reflected in the 1.28 benefit cost (B/C) ratio of the Program. All interventions have B/C ratios greater than one, with interventions in CORAASAN reaching a 1.57 B/C ratio, INAPA 1.43 and CORAAVEGA 1.01. Furthermore, economic analysis indicators show that funding for sector modernization reforms under the PforR Program will deliver a 10.05 percent economic internal rate of return (EIRR), which is four percentage points above the rate of discount. CORAASAN interventions are expected to attain a 19.16 percent EIRR, INAPA 10.63 percent, and CORAAVEGA 6.14 percent. Note that even CORAAVEGA that is expected to achieve 6.14 percent EIRR is regarded as economically viable as other alternative projects assumed to attain a 6 percent EIRR.
86. **The sector modernization reforms under the Program will attain an Economic Net Present Value (ENPV), estimated at US\$82.54 million.** The present value of the Program incremental benefits is estimated to be US\$82.54 million higher than the present value of the Program incremental costs. The US\$82.54 million ENPV can also be explained being the excess generated by the Program implementation taking into account that other alternative projects could generate US\$292.78 million. Moreover, each of the Program's participating utilities will contribute to attaining the total ENPV; i.e., US\$38.21 million by INAPA, US\$43 million by CORAASAN, and US\$1.25 million by CORAAVEGA.
87. **When shadow price of carbon³⁹ (SPC) is used to incorporate the emission mitigation impacts of the Program, it is found that the EIRR goes up from 10.05 percent to a range between 10.46 and 10.87 percent.** Likewise, when the Program mitigation impacts are taken into account the ENPV goes up from US\$82.4 million to the range between US\$91.4 million and US\$100 million. These results indicate that the Program is not only economically viable for the Dominican Society but it also contributes to the global public good through its emission mitigation impacts. The full economic and financial evaluation is included in the Technical Assessment Summary in Annex 3.

³⁹ Shadow price of carbon (SPC) has been estimated a range with a lower and upper limit for each year, with base at 2020 when the lower limit was set at US\$40 per tCO₂eq and upper limit at US\$80 per tCO₂eq. Such SPCs lower and upper limit were set to grow at a 2.26 percent per year.



Table 6. Expenditure Framework for the Phase I and Phase II PforR Programs, 2023–32

Region/WSS Service Provider	Economic Classification	Expenditure Function	MPA Phase 1					MPA Phase 2	Total MPA
			2023	2024	2025	2026	2027	Total	
			US\$ million	US\$ million	US\$ million	US\$ million	US\$ million	US\$ million	US\$ million
INAPA (Province of Dajabon, Valverde, Santiago Rodriguez, and Monte Cristi)	2.2.1.1	Water Investment (CAPEX)	26.90	26.90	26.90	26.90	26.80	134.40	134.40
	2.2.1.1	Sanitation Investment (CAPEX)	0.96	0.96	0.96	0.96	0.96	4.80	57.30
	2.1.1.1	Recurrent (Compensation of employees)	2.60	2.70	2.80	3.00	3.00	14.10	32.00
	2.1.1.2	Recurrent (Energy & other operational costs)	2.80	2.90	3.00	3.20	3.30	15.20	34.30
		Total	33.26	33.46	33.66	34.06	34.06	168.50	258.00
CORAASAN (Province of Sanitago)	2.2.1.1	Water Investment (CAPEX)	3.48	3.48	3.48	3.48	3.48	17.40	17.40
	2.2.1.1	Sanitation Investment (CAPEX)	5.56	5.56	5.56	5.56	5.56	27.80	282.80
	2.1.1.1	Recurrent (Compensation of employees)	20.80	21.80	22.80	23.80	25.10	114.30	259.30
	2.1.1.2	Recurrent (Energy & other operational costs)	14.75	15.46	16.20	16.98	17.80	81.20	183.90
		Total	44.59	46.30	48.04	49.82	51.94	240.70	743.40
CORAAVEGA (Province of La Vega)	2.2.1.1	Water Investment (CAPEX)	16.30	16.30	16.30	16.30	16.30	81.50	81.50
	2.2.1.1	Sanitation Investment (CAPEX)	14.98	14.98	14.98	14.98	14.98	74.90	94.90
	2.1.1.1	Recurrent (Compensation of employees)	1.40	1.40	1.50	1.60	1.70	7.60	17.20
	2.1.1.2	Recurrent (Energy & other operational costs)	0.70	0.70	0.80	0.80	0.80	3.80	8.60
		Total	33.38	33.38	33.58	33.68	33.78	167.80	202.20
Overall Total (Program Component)			111.23	113.14	115.28	117.56	119.78	577.00	1,203.60
Government Financing			97.23	71.84	65.58	60.76	56.58	352.00	753.60
Bank Financing (P4R)			14.00	41.30	49.70	56.80	63.20	225.00	450.00
Bank Financing (IPF)								25.00	50.00
Total Program and Project Component								602.00	1,253.60

Notes: OPEX, derived from the costs of the Water Pact over 10 years as per the government program, is estimated based on historical figures for the participating WSS service providers. INAPA's OPEX was discounted to 10 percent, based on the population served in the three out of the 24 provinces covered by INAPA in the Phase I PforR Program boundary. OPEX for all participating WSS service providers was also discounted to 60 percent of the total OPEX to account for expenditures directly related to the PforR Program. OPEX is financed by a mix of own-source revenues and fiscal transfers from central government. 72 percent of INAPA's, 17 percent of CORAASAN's, and 21 percent of CORAAVEGA's income is from central government fiscal transfers. Almost all the participating WSS service provider's CAPEX is traditionally financed from fiscal transfers; Phase II does not include CAPEX for water investments because the Water Pact does not include water supply investments from 2028–32. The detailed design of Phase II will include a reassessment of the CAPEX requirements for water, if any, that should be included in a revised expenditure program. Phase II may include other CORAAs and/or other provinces covered by INAPA outside of the Yaque del Norte Basin. Table 6 does not include the front-end fee of the loan for US\$625,000.



B. Fiduciary

88. **The conclusion of the Fiduciary System Assessment (FSA) is that the PforR Program systems (financial management, procurement, and governance) after the implementation of the PAP are adequate to support the achievement of the PforR Program objectives.** The systems are assessed to have the capabilities to provide reasonable assurance that the financing proceeds will be used with the objective of supporting the achievement of the PforR Program objectives, with due attention to the principles of economy, efficiency, effectiveness, transparency, and accountability.
89. **The assessment identified some areas for improvement and risks,** including the following: (i) unfamiliarity of the Borrower (MEPyD, DIGEPRES, DIGECOG, Government Supreme Audit Institution, and water services providers) with the PforR instrument; (ii) lack of Program Consolidated Annual Financial Statements implying that specific arrangements need to be put in place to enable the production of those consolidated annual financial statements; (iii) deficiencies in the contract management process because there is no robust mechanism to verify if the contract was handled in a timely manner and within the conditions established in the procurement documents and the contract; (iv) procurement planning process does not require a mandatory market evaluation to elaborate the annual procurement plan, which might affect the process because of lack of participation and a potential risk that goods, services, and works are not procured in a timely and effective manner; (v) the potential inability of the government, in times of fiscal constraints, to provide adequate fiscal transfers to the providers in support of their quest to achieve the DLIs; and (vi) the recurring gap between the established laws and regulations (de jure) and the actual implementation of those laws and regulations (de facto).
90. **Mitigating actions to address system weaknesses.** These actions include close implementation support to be provided by the Bank's fiduciary teams, including support to set up the arrangements to produce the Program Consolidated Financial Statements as well as the preparation of an operations manual; the PCMU providing capacity and technical support to WSS service providers to improve and reduce the gap between policy and implementation with respect to procurement planning, bidding documents, and contracting procedures. In addition, DLI 9 incentivizes WSS service providers to produce audited annual financial statements which the PCMU will use as the basis for the Program consolidated annual financial statements and improve financial transparency of providers. This risk is also mitigated by including the schedule of Program incremental funds that shall be allocated annually in subsidiary agreements between the Ministry of Finance and WSS service providers.
91. **These weaknesses, including any potential fraud and corruption occurrences, will be mitigated progressively through the implementation of the PAP, and under the IPF Project.** The PCMU will be responsible for promptly informing the Bank of any credible and material allegations of fraud and/or corruption regarding the PforR Program. In addition, fraud and anti-corruption language will also be included in the subsidiary agreements between the Ministry of Finance and the WSS service providers.
92. **Moreover, there is a strong and adequate legal and institutional framework and capacity to monitor and address governance and corruption issues.** The providers (INAPA, CORAASAN, and CORAAVEGA) are subject to the rules on transparency and free access to information that govern public entities (Law 200-04) as well as the rules on ethics and integrity in the public service, including the duty to declare assets and income (Law 448-06) and the provisions of the Procurement Law No. 340-06 and its amendments, imposing sanctions for non-compliance to government officials and suppliers, without prejudice to the detailed responsibilities established in the regulations and the civil or criminal responsibilities provided for in the corresponding laws. A summary of the FSA is included in Annex 4 and the fiduciary aspects of the IPF Project are included in Annex 8.
93. **Considering these mitigation measures, but also that the PforR instrument is new to the key stakeholders related to the PforR Program, the overall PforR Program integrated fiduciary risk is assessed as Substantial.**



C. Environmental and Social

94. **The Environmental and Social Systems Assessment (ESSA) found that overall, the national regulatory framework and technical capacity for environmental and social management are adequate, and that the PforR Program's overall environmental and social risk is Moderate.** The ESSA was developed iteratively and in a consultative manner, incorporating feedback from relevant stakeholders. The draft ESSA was consulted with MEPyD, INAPA, CORAASAN, CORAAVEGA, and INDRHI on September 28, 2022, and with civil society, NGOs, and local representatives on November 29 and 30, 2022, and feedback was incorporated into the updated draft of the ESSA that was disclosed on December 5, 2022. The final version of the ESSA was disclosed by MEPyD on February 3, 2023 and will be disclosed on the Bank's website on or about March 3, 2023.^{40, 41}
95. **The PforR Program will not finance activities that would have significant adverse impacts that are sensitive, diverse, or unprecedented on the environment and/or affected people.** The ESSA identified five important risks and associated mitigation measures, summarized in Table 7. The environmental and social management systems in the Dominican Republic have adequate capacity to manage the identified risks.

Table 7. Risks and Mitigation Measures Identified in the Environmental and Social Systems Assessment

No.	Identified risks	Mitigation measures
1	Adverse environmental, social, health, or security impacts on communities: generation of debris and other solid waste, emission of gas from use of heavy machinery, leaks from fuels or lubricants, and negative impacts on receiving water bodies from inability of wastewater treatment plants to absorb increased wastewater inflows.	Strengthen the application of the health and safety code. Apply national laws for effluent discharge. Include the monitoring and management of environmental and social risks and impacts in the contracting for works supervision.
2	Resistance to the PforR Program activities by the users, small and medium enterprises, institutions, and groups that use potable water for non-domestic purposes.	Identification of the interested parties; a solid communication strategy and periodic consultations; and mechanisms for dealing with complaints, claims, and suggestions of the PforR Program.
3	Temporary effects on formal and informal economic activities, temporary restriction of access to business entrances during construction, and temporary interruption of pedestrian traffic routes.	Consideration of the impacts of trenches on businesses; communicate, signal, and guide on alternative routes, and restore traffic as soon as possible; application of national laws and measures used by the WSS service providers on business impacts and formalize them as standard practices.
4	Possible exclusion of vulnerable groups without ability to pay for services and fees.	Social rate or subsidy for WSS services; low-cost connections for vulnerable groups; regulation that allows to include the debts and the costs for unique and standard connections, within the benefits of the PforR Program.
5	Community risks associated with labor influx and COVID-19 for works under the PforR Program.	Application of national labor laws; avoiding child labor; prevention of sexual abuse and harassment, including mechanisms for complaints and referral to sanctioning bodies; implementation of COVID-19 protocols.

Note: WSS = water supply and sanitation.

96. **During implementation, the Bank will provide capacity-building support on environmental and social**

⁴⁰ The ESSA disclosed by MEPyD can be found at <https://mepyd.gob.do/transparencia/proyectos-y-programas/>

⁴¹ The ESSA disclosed by the Bank can be found at <https://documents.worldbank.org/en/publication/documents-reports/documentlist?qterm=P177823>



management to the PCMU and the participating WSS service providers. This will include promotion of mechanisms to share good environmental and social practices among participating institutions and executors of PforR Program activities, supporting INAPA to modernize its environmental and social management units and create regional offices in Zone 1 for environmental and social management, supporting CORAASAN to modernize its Environmental and Social Management Units and its Gender Equality Unit, and supporting CORAAVEGA in the creation of its Environmental and Social Management Department and the strengthening of its capacity on gender equity. The participating WSS service providers will take measures to design and implement good international practices to comply with the proper environmental and social management of projects and implement strategies that promote effective citizen participation and improvement of feedback channels, particularly its grievance mechanism, and prioritize the participation of vulnerable groups.

97. **Summary of assessment of environmental and social (E&S) risks and impacts of the IPF Project.** The activities to be financed under the IPF Project are expected to result in indirect E&S benefits related to the integrated and sustainable management of water resources which is key to ensure water quality and availability for different E&S needs. The overall risk rating for the IPF Project is **Moderate**.
98. **The environmental risk rating is considered Moderate.** From an environmental perspective, indirect benefits include conservation of biodiversity and ecosystems, improvement of water resource management and services for water users and water-dependent sectors, reduction of water contamination due to the coverage expansion of WSS services, contribution to climate change adaptation, and resilience towards natural disaster risks, and improvement of safety of nearby communities due to the increasing capacity to manage watersheds/dams. The IPF Project will finance non-consulting services for the installation of hydromet stations and dam safety instrumentation. These activities are expected to result in minor, site-specific, short-term, and reversible environmental risks and impacts which will be managed through the site-specific Environmental and Social Management Plans to be prepared during implementation, before launching the bidding process.
99. **The social risk rating is considered Moderate.** From a social perspective, the IPF Project is expected to have positive impacts, aiming to develop a comprehensive and inclusive institutional framework, strengthening institutional capacities, and developing a broad WSS learning agenda, while leveraging the capacity of the government to develop sustainable institutional and organizational platforms. The activities supported by this technical assistance will need substantive citizen engagement, a robust communication strategy, and periodic consultations. To avoid the risk of exclusion of vulnerable groups, MEPyD, and all relevant government institutions will ensure that a broad spectrum of stakeholders is included in the preparation and implementation phases, emphasizing engagement with vulnerable groups.
100. **The Terms of Reference for each study to be carried out under the IPF Project will be reviewed by the Bank to ensure that all studies are prepared consistent with ESF requirements.** In accordance with Bank's Environmental and Social Framework, the terms of reference, work plans or other documents defining the scope and outputs of technical assistance activities will be drafted so that the advice and other support provided is consistent with Environmental and Social Standards 1-10 as well as the Bank's Environmental Health and Safety General Guidelines related to water and sanitation sectors. The IPF Project has also prepared a Stakeholder Engagement Plan, which includes a Grievance Redress Mechanism; and Labor Management Procedures that were disclosed on November 29, 2022 by the Bank and on December 5th by MEPyD; and an Environmental and Social Commitment Plan that was consulted and disclosed by MEPyD and the Bank on February 15, 2023.^{42,43}

⁴² The E&S instruments disclosed by the Bank can be found at <https://documents.worldbank.org/en/publication/documents-reports/documentlist?qterm=P177823>

⁴³ The E&S instruments disclosed by MEPyD can be found at <https://mepyd.gob.do/transparencia/proyectos-y-programas/>



101. **Grievance Redress Mechanisms.** Communities and individuals who believe that they are adversely affected as a result of a Bank supported PforR operation, as defined by the applicable policy and procedures, may submit complaints to the existing program grievance redress mechanism or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address pertinent concerns. Affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit <http://www.worldbank.org/GRS>. For information on how to submit complaints to the World Bank Inspection Panel, please visit <http://www.inspectionpanel.org>.

V. RISK

102. **The overall residual risk to achieving the PDO is rated Substantial due to:** (i) the innovative technical design of the PforR Program, with the PforR used for the first time in the Dominican Republic; (ii) institutional capacity for implementation and sustainability, and (iii) fiduciary risk. Other risks are considered Moderate or Low.
103. **Technical design of the Program.** As the first PforR in the Dominican Republic, there will be a learning curve for the government to manage the verification of results and disbursement process and ensure adequate flow of funds under the PforR Program. Mitigating factors include the following: (i) the Bank has engaged extensively with DIGEPRES to agree on detailed procedures and schedule for the flow of funds under the PforR Program using the government's own budget procedures and systems, and the schedule for additional budget transfers under the PforR Program will be included in the subsidiary agreement with INAPA, CORAASAN, and CORAAVEGA; (ii) the PCMU will use the IPF Project to contract in technical assistance to strengthen the PCMU, the central government entities, and the participating WSS service providers. The PCMU will also closely monitor results throughout the year that will be established through performance agreements (DLI 3). The performance agreement will articulate the annual goals and targets to be met by each provider, increasing accountability and transparency to achieve the PforR Program's objectives. Moreover, WSS service providers will appoint Program coordinators to ensure internal coordination and liaise with the PCMU to communicate progress. The Bank will provide close supervision support to help the government to address implementation challenges and technical assistance to augment the PCMU. Nevertheless, the instrument is new to all stakeholders, and until implementation experience with the instrument is gained the residual risk is considered **Substantial**.
104. **Institutional capacity for implementation and sustainability.** Risks are related to the weak capacity of the WSS service providers and the ability to deliver results for the Program. WSS service providers do not have a track record of providing high-quality WSS services; moreover, they have varying experience in areas such as NRW and energy efficiency. Historically, soft budget constraints, along with the practice of deferring maintenance, has not instilled financial discipline among providers, knowing that the central government will step in to cover budget deficits. Nevertheless, the providers demonstrate that they can execute capital budgets, and INAPA and CORAASAN have practical experience in dealing with NRW through other projects financed by multi- and bilateral development partners. CORAAVEGA has the least experience in working on NRW and energy efficiency but recognizes that these aspects are important to improve service delivery and improved efficiency. The IPF Project will mitigate the risks of weak capacity by providing resources to the PCMU to contract in support to the providers as needed to help them build capacity on an array of issues from NRW, energy efficiency, planning and budgeting, procurement, and environmental and social elements. The Bank team will also provide support and technical assistance to the PCMU as needed. Moreover, the PforR Program and its DLIs and DLRs that are related to



processes and outputs are designed to specifically strengthen the providers' capacity and instill operational behaviors to close existing gaps between policy and implementation to ensure sustainability of the PforR Program's results. Nevertheless, until the PforR Program can demonstrate effective use of the IPF Project, the residual risk among WSS service providers is **Substantial**.

105. **Additionally, MEPyD will be taking on a new role of PforR Program coordination, supervision, and monitoring.** Their role will be critical to the success of the PforR Program, which will be supported by the establishment of the PCMU. The IPF Project of the operation and its retroactive financing will allow MEPyD access to resources to adequately staff and complement existing staff in MEPyD who will play a role in monitoring the PforR Program. Until the PforR Program gets under way, and MEPyD can demonstrate that they can execute this role, the risks are substantial. Likewise, while the providers will benefit from using government systems to implement the PforR Program, working with results-based financing will differ from their normal operations and soft budget constraints that they are accustomed to, which will require an organizational culture shift. Therefore, the overall residual risk for institutional capacity for implementation and sustainability is considered **Substantial**.
106. **Fiduciary.** The fiduciary systems assessment summary highlighted the main risks associated with the PforR Program. The lack of familiarity with the instrument can be addressed only with implementation experience. The lack of Program Consolidated Annual Financial statements will be mitigated through DLR 9 (iii) that will incentivize annual financial audits, which will be consolidated by the PCMU. Procurement and planning deficiencies at the provider level will be mitigated by the IPF Project and capacity-building measures on procurement and planning. The budgeting and transfer of program funds to providers in accordance with Annex 12 and the assurances in subsidiary agreements that these budgets and transfers will be protected. To this end, and as part of the subsidiary agreement to be entered into between Ministry of Finance and the providers, DIGEPRES shall create a new program in the budget structure that will allow them and the providers to isolate transfers and expenditures against the PforR Program funds. The gap between policy and implementation for financial reporting, budgeting, and procurement is mitigated through a series of DLIs and DLRs such as DLR 9 (iii) on annual financial audits, DLR 9 (i) on reporting cumulative budget execution reports, and DLI 4 that incentivizes costed procurement plans to directly inform annual budget to reduce variances between budget and execution. Until the PforR Program and implementing entities can demonstrate results and progress on strengthening capacity, the residual risk is rated **Substantial**.



ANNEX 1. RESULTS FRAMEWORK MATRIX

Results Framework

COUNTRY: Dominican Republic

Dominican Republic Water Sector Modernization Program

Program Development Objective(s)

The objectives of the Operation are to: (i) improve the planning capacity and operational and commercial efficiency of selected water supply and sanitation institutions; and (ii) increase access to safely managed water and sanitation services in selected water stressed areas.

Program Development Objective Indicators by Objectives/Outcomes

Indicator Name	DLI	Baseline	Intermediate Targets				End Target
			1	2	3	4	
To improve the planning capacity of selected water supply and sanitation (WSS) institutions							
Strengthened WSS performance monitoring (Text)	DLI 10	0.22 0.48 0.33	n.a.	0.38 0.61 0.53	0.78 0.76 0.73	0.87 0.88 0.86	0.99 0.99 0.99
Strengthened accountability and improved operational planning capacity (Text)	DLI 3	Not Achieved.	3a. (i) Performance Agreement signed; AND (ii) Four-year PEI including the POA and the related budget prepared and approved by the respective WSS provider's board of directors or Executive Director according to the requirements of the respective provider..	3 b. (i) Achievements against Performance Agreement evaluated by PCMU and annual goals updated by WSS Service Provider and published in the respective WSS Service provider's website; AND (ii) Annual operating and capital investment budget prepared and	3 c. (i) Achievements against Performance Agreement evaluated by PCMU and annual goals updated by WSS Service provider and published in the respective WSS Service provider's website; AND (ii) Annual operating and capital investment budget prepared and	3 d. (i) Achievements against Performance Agreement evaluated by PCMU and annual goals updated by WSS Service provider and published in the respective WSS Service provider's website; AND (ii) Annual operating and capital investment budget prepared and	3 e. (i) Achievements against Performance Agreement evaluated by PCMU and annual goals updated by WSS Service provider and published in the respective WSS Service provider's website; AND (ii) Annual operating and capital investment budget prepared and



Indicator Name	DLI	Baseline	Intermediate Targets				End Target
			1	2	3	4	
				approved by the respective WSS Service provider's board of directors according to the dates established in DIGEPRES' guidelines for budget formulation; AND (iii) At least 65% of activities related to efficiency improvement included in the POA for the year implemented and completed by the respective WSS Service provider as planned.	approved by the respective WSS Service provider's board of directors according to the dates established in DIGEPRES' guidelines for budget formulation; AND (iii) At least 70% of activities related to efficiency improvement included in the POA for the year implemented and completed by the respective WSS Service provider as planned.	approved by the respective WSS Service provider's board of directors according to the dates established in DIGEPRES' guidelines for budget formulation; AND (iii) At least 75% of activities related to efficiency improvement included in the POA for the year implemented and completed by the respective WSS Service provider as planned.	approved by the respective WSS Service provider's board of directors according to the dates established in DIGEPRES' guidelines for budget formulation; AND (iii) At least 80% of activities related to efficiency improvement included in the POA for the year implemented and completed by the respective WSS Service provider as planned.
To improve the operational and commercial efficiency of selected WSS institutions							
Reduced non-revenue water (Text)		0 0 0	n.a.	n.a.	-2.0 -2.9 -1.3	-9.0 -11.0 -5.0	-13.0 -15.9 -9.3
To increase access to safely managed water and sanitation services in selected water stressed areas							
Households serviced with safely managed water supply (Number (Thousand))	DLI 1	0.00					34.70
Households serviced with safely managed sanitation (Number (Thousand))	DLI 2	0.00					76.30



Intermediate Results Indicator by Results Areas

Indicator Name	DLI	Baseline	Intermediate Targets	End Target
			1	
Strengthen policies and institutions for WSS services				
Percentage of women in engineering and technical positions (Text)		5.5 15.5 31.0		6.5 16.5 39.0
Percentage point improvement in customer satisfaction (Text)		Baselines established in Year 1	7.5 7.5 7.5	15 15 15
Number of learning pilots implemented (Number)		0.00		3.00
Improve policies and institutions for WRM				
National water information system strengthened and used for decision-making (Text)		Not Achieved		Achieved
Methodology for water rights formalization developed and approved (Text)		Not Achieved		Achieved
Proposal for restructuring of the WRM institutional framework completed (Text)		Not Achieved		Achieved

**Monitoring & Evaluation Plan: PDO Indicators**

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Strengthened WSS performance monitoring	See DLI 10.	See DLI 10.	See DLI 10.	See DLI 10.	See DLI 10.
Strengthened accountability and improved operational planning capacity	See DLI 3.	See DLI 3.	See DLI 3.	See DLI 3.	See DLI 3.
Reduced non-revenue water	See DLI 7	See DLI 7	See DLI 7	See DLI 7	See DLI 7
Households serviced with safely managed water supply	See DLI 1.	See DLI 1.	See DLI 1.	See DLI 1.	See DLI 1.
Households serviced with safely managed sanitation	See DLI 2.	See DLI 2.	See DLI 2.	See DLI 2.	See DLI 2.



Monitoring & Evaluation Plan: Intermediate Results Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Percentage of women in engineering and technical positions	Calculated as [Number of women in engineering or technical positions] divided by [Total number of staff in engineering or technical positions]. For complete details, see the Operations Manual.	Annual	Human resource systems of WSS providers.	WSS providers' internal reports from the human resources department submitted to the Bank.	WSS providers
Percentage point improvement in customer satisfaction	The customer satisfaction survey is a citizen engagement mechanism that will allow customers to provide feedback on the quality of water supply service provision, including satisfaction with handling of complaints. The results will be monitored and will inform the WSS providers' management decisions.	Annual	Customer satisfaction survey.	WSS providers will administer and report results of a customer satisfaction survey.	WSS providers, which by law are responsible for using survey methodologies defined by the Public Administration Monitoring System (Sistema de Monitoreo de la Administración Pública; SISMAP) and publishing their survey results with SISMAP each year.
Number of learning pilots implemented	This includes pilots in: - WSS sector performance monitoring - WSS service efficiency - Gender Inclusion - Citizen Engagement - Water use rights	Annual	Report on lessons learned from the pilot.	Implementing entities will prepare reports on lessons learned from the pilot activities.	WSS providers, MEPyD, and INDRHI



National water information system strengthened and used for decision-making	A national water information system is a system that draws upon at a minimum collects hydro meteorological data from stations placed in the rivers basins to inform decision making such as on reservoir operation.	By end of project	INDRHI	INDRHI will verify that the national water information system is informing hydromet institutions' decision making processes.	INDRHI
Methodology for water rights formalization developed and approved	The methodology will include inter alia processes and procedures to develop water user cadasters and systems to document water allocations rights.	End of Project, but will be monitored annually	INDRHI	INDRHI will verify that the methodology for water rights formalization has been approved.	INDRHI
Proposal for restructuring of the WRM institutional framework completed	Upon passage of the WRM law a proposal will be developed on how to restructure existing institutions to fulfill the obligations and functions under a new legal and institutional framework.	Annual	PCMU	The PCMU will verify that the proposal for restructuring the WRM institutional framework has been completed.	PCMU/MEPyD



ANNEX 2. DISBURSEMENT LINKED INDICATORS, DISBURSEMENT ARRANGEMENTS AND VERIFICATION PROTOCOLS

Disbursement Linked Indicators Matrix				
DLI 1	Households serviced with safely managed water supply			
Type of DLI	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount
Outcome	Yes	Number (Thousand)	25,000,000.00	4.15
Period	Value		Allocated Amount (USD)	Formula
Baseline	0.00			
2023	0.00		0.00	Disbursement = Additional safely managed water connections * A where: A: \$721/ connection
2024	0.00		0.00	Disbursement = Additional safely managed water connections * A where: A: \$721/ connection
2025	0.00		0.00	Disbursement = Additional safely managed water connections * A where: A: \$721/ connection
2026	0.00		0.00	Disbursement = Additional safely managed water connections * A where: A: \$721/ connection
2027	34.70		25,000,000.00	Disbursement = Additional safely managed water connections * A



				where: A: \$721/ connection
DLI 2	Households serviced with safely managed sanitation			
Type of DLI	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount
Outcome	Yes	Number (Thousand)	25,000,000.00	4.15
Period	Value		Allocated Amount (USD)	Formula
Baseline	0.00			
2023	0.00		0.00	Disbursement = Additional safely managed sanitation connections * A where: A: \$328 / connection
2024	0.00		0.00	Disbursement = Additional safely managed sanitation connections * A where: A: \$328 / connection
2025	0.00		0.00	Disbursement = Additional safely managed sanitation connections * A where: A: \$328 / connection
2026	0.00		0.00	Disbursement = Additional safely managed sanitation connections * A where: A: \$328 / connection
2027	76.30		25,000,000.00	Disbursement = Additional safely managed sanitation connections * A where: A: \$328 / connection



DLI 3	Strengthened accountability and improved planning capacity			
Type of DLI	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount
Output	No	Text	11,250,000.00	0.65
Period	Value		Allocated Amount (USD)	Formula
Baseline	Despite dependence on central government transfers, WSS providers do not agree on the results (value for money) to be achieved in a given year in line with strategic priorities. Lack of correlation between institutional strategic plans (PEI), annual operating plans (POA), and annual budget.			
2023	3a. (i) Performance Agreement signed; AND (ii) Four-year PEI including the POA and the related budget prepared and approved by the respective WSS Service provider's board of directors or Executive Director according to the requirements of the respective provider.		1,500,000.00	Achieved/Not Achieved
2024	3 b. (i) Achievements against Performance Agreement evaluated by PCMU and annual goals updated by WSS Service Provider and published in the respective WSS Service provider's website; AND (ii) Annual operating and capital investment budget prepared and approved by the respective WSS Service provider's board of directors according to the dates established in DIGEPRES' guidelines for budget formulation; AND (iii) At least 65% of activities related to efficiency improvement included in the POA for the year		2,440,000.00	Achieved/Not Achieved



	implemented and completed by the respective WSS Service provider as planned.		
2025	3 c. (i) Achievements against Performance Agreement evaluated by PCMU and annual goals updated by WSS Service provider and published in the respective WSS Service provider's website; AND (ii) Annual operating and capital investment budget prepared and approved by the respective WSS Service provider's board of directors according to the dates established in DIGEPRES' guidelines for budget formulation; AND (iii) At least 70% of activities related to efficiency improvement included in the POA for the year implemented and completed by the respective WSS Service provider as planned.	2,440,000.00	Achieved/Not Achieved
2026	3 d. (i) Achievements against Performance Agreement evaluated by PCMU and annual goals updated by WSS Service provider and published in the respective WSS Service provider's website; AND (ii) Annual operating and capital investment budget prepared and approved by the respective WSS Service provider's board of directors according to the dates established in DIGEPRES' guidelines for budget formulation; AND (iii) At least 75% of activities related to efficiency improvement included in the POA for the year implemented and completed by the respective WSS Service provider as planned.	2,440,000.00	Achieved/Not Achieved
2027	3 e. (i) Achievements against Performance Agreement evaluated by PCMU and annual goals	2,430,000.00	Achieved/Not Achieved



	updated by WSS Service provider and published in the respective WSS Service provider's website; AND (ii) Annual operating and capital investment budget prepared and approved by the respective WSS Service provider's board of directors according to the dates established in DIGEPRES' guidelines for budget formulation; AND (iii) At least 80% of activities related to efficiency improvement included in the POA for the year implemented and completed by the respective WSS Service provider as planned.			
DLI 4	Improved capital budget planning and implementation			
Type of DLI	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount
Intermediate Outcome	No	Text	9,750,000.00	0.40
Period	Value		Allocated Amount (USD)	Formula
Baseline	Significant deviation between budget and executed budget.			
2023	0.00		0.00	n.a.
2024	In Year 2, each WSS Service provider has prepared a costed annualized procurement plan for capital investments, with an associated cash plan, and included it as part of their respective annual budget proposal to the Borrower for FY25.		2,440,000.00	Achieved/Not Achieved
2025	In Year 3, each WSS Service provider has prepared a costed annualized procurement plan for capital investments, with an associated cash		2,440,000.00	Achieved/Not Achieved



	plan, and included it as part of their respective annual budget proposal to the Borrower for FY26.			
2026	In Year 4, each WSS Service provider has prepared a costed annualized procurement plan for capital investments, with an associated cash plan, and included it as part of their respective annual budget proposal to the Borrower for FY27.	2,440,000.00	Achieved/Not Achieved	
2027	In Year 5, each WSS Service provider has prepared a costed annualized procurement plan for capital investments, with an associated cash plan, and included it as part of their respective annual budget proposal to the Borrower for FY28.	2,430,000.00	Achieved/Not Achieved	
DLI 5	Increased collection rates			
Type of DLI	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount
Intermediate Outcome	No	Text	13,500,000.00	0.00
Period	Value		Allocated Amount (USD)	Formula
Baseline	78.3 79.1 66.1			
2023	0.00		0.00	n.a.
2024	0.00		0.00	n.a.
2025	1.0 1.0 11.9		3,000,000.00	Achieved/Not Achieved



2026	3.0 3.0 16.9		4,500,000.00	Achieved/Not Achieved
2027	5.0 5.0 18.9		6,000,000.00	Achieved/Not Achieved
DLI 6	Improved operational planning, NRW performance, and energy efficiency			
Type of DLI	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount
Output	No	Text	34,500,000.00	1.74
Period	Value		Allocated Amount (USD)	Formula
Baseline	Lack of robust analysis to break down the problems of NRW and energy inefficiency and lack of strategic planning and prioritization of NRW and EE in POAs and budgets. Network and user registries are not up to date and negatively impact utility efficiency.			
2023	6 a. (i) Provisional NRW reduction and energy efficiency strategies developed and adopted by the respective WSS Service provider and approved by its management; AND (ii) Annual investment plan for the reduction of NRW and improved energy efficiency developed by the respective WSS Service provider and approved by its management; and ; AND (iii) Inclusion of the costs identified in the corresponding annual investment plan in the annual budget of the respective WSS Service provider.		2,500,000.00	Achieved/Not Achieved
2024	6 b. (i) Annual water audits in Priority Hydraulic Systems and Sectors as identified in provisional NRW strategy and energy audits in priority		8,000,000.00	Achieved/Not Achieved



	facilities as identified in the energy efficiency provisional strategy completed, and monitoring measures implemented by the respective WSS Service provider; AND (ii) Development and adoption by the respective WSS Service provider of an NRW and energy strategy based on water and energy audits; AND (iii) NRW and energy efficiency activities (as set forth in the Verification Protocol for each WSS Service Provider) included by the respective WSS Service provider in the POA and in its budget, and are being implemented, and the annual results are monitored, reported and published in the WSS Service providers' website; AND (iv) Strategy to digitize Users Cadaster and Network Cadaster developed and approved by the respective WSS Service provider management.		
2025	6 c. (i) Annual water audit in Priority Hydraulic Systems and Sectors as identified in NRW strategy and energy audit in Selected Facilities and monitoring measures implemented by the respective WSS Service provider; AND (ii) Respective WSS Service provider NRW and energy strategies are updated based on annual water and energy audits; AND (iii) NRW and energy efficiency activities included (as set forth in the Verification Protocol for each WSS Service Provider) by the respective WSS provider in the POA and in its budget, and are being implemented, and the annual results are monitored, reported and, published in the WSS Service providers' website; AND (iv) Digitalization	8,000,000.00	Achieved/Not Achieved



	of Water Network Cadaster and Users Cadaster plan is implemented by the respective WSS Service provider, covering at least 60% of the water network and 80% of the users in priority hydraulic sectors.		
2026	6 d. (i) Annual water audit in priority Hydraulic Systems and Sectors as identified in NRW strategy and energy audit in Selected Facilities and monitoring measures implemented by the respective WSS Service provider; AND (ii) Respective WSS provider NRW and energy strategies are updated based on annual water and energy audits; AND (iii) NRW and energy efficiency activities (as set forth in the Verification Protocol for each WSS Service Provider) included by the respective WSS provider in the POA and in its budget, and are being implemented, and the annual results are monitored, reported and, published in the WSS Service providers' website; AND (iv) Digitalization of Water Network Cadaster and Users Cadaster plan is implemented by the respective WSS Service provider, covering at least 75% of the water network and 80% of the users in priority hydraulic sectors.	8,000,000.00	Achieved/Not Achieved
2027	6 e. (i) Annual water audit in priority hydraulic systems and sectors as identified in NRW strategy and energy audit in selected facilities and monitoring measures implemented by the respective WSS Service provider; AND (ii) Respective WSS provider NRW and energy	8,000,000.00	Achieved/Not Achieved



	strategies are updated based on annual water and energy audits; AND (iii) NRW and energy efficiency activities (as set forth in the Verification Protocol for each WSS Service Provider) included by the respective WSS provider in the POA and in its budget, and are being implemented, and the annual results are monitored, reported and, published in the WSS Service providers' website; AND (iv) Digitalization of Water Network Cadaster and Users Cadaster plan is implemented by the respective WSS Service provider, covering at least 95% of the water network and 100% of the users in priority hydraulic sectors.			
DLI 7	Reduced non-revenue water (NRW)			
Type of DLI	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount
Outcome	No	Text	15,250,000.00	0.00
Period	Value		Allocated Amount (USD)	Formula
Baseline	Will be established in year 2024 or earlier based on water audits.			
2023	0.00		0.00	n.a.
2024	0.00		0.00	n.a.
2025	-2.0 -2.9 -1.3		4,000,000.00	Achieved/Not Achieved
2026	-9.0 -11.0 -5.0		5,150,000.00	Achieved/Not Achieved



2027	-13.0 -15.9 -9.3		6,100,000.00	Achieved/Not Achieved
DLI 8	Improved energy efficiency			
Type of DLI	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount
Intermediate Outcome	No	Text	15,250,000.00	0.00
Period	Value		Allocated Amount (USD)	Formula
Baseline	Will be established in year 2024 or earlier based on energy audits.			
2023	0.00		0.00	n.a.
2024	0.00		0.00	n.a.
2025	-5.3 -7.9 -3.8		4,000,000.00	Achieved/Not Achieved
2026	-18.0 -16.4 -13.0		5,150,000.00	Achieved/Not Achieved
2027	-22.6 -21.5 -22.0		6,100,000.00	Achieved/Not Achieved
DLI 9	Strengthened corporate governance			
Type of DLI	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount
Output	No	Text	50,500,000.00	2.42
Period	Value		Allocated Amount (USD)	Formula
Baseline	(i) Lack of transparency in planning and execution; AND (ii) Lack of modern and efficient methods for billing, collection, and payment; AND (iii) Financial statements are not standardized among the WSS providers and do			



	not comply with the good practices; AND (iv) There is a gender gap between male and female employees of the WSS providers.		
2023	9 a. (i) PEI and quarterly and cumulative quarterly Budget Execution Reports (i.e. 4 in total) for the corresponding fiscal year published in the WSS Service providers' website after the end of each quarter; AND (ii) Specifications for system requirements and business processes for digitizing billing and collection systems completed and approved by the respective WSS Service provider's management, and innovative consumer payment mechanisms identified and approved by said WSS Service provider's management; AND (iii) The FY22 annual financial statements of the respective WSS Service provider are audited and published in the WSS Service provider's website within 7 months after the end of the fiscal year, based on the financial reporting guidance standards approved by the DIGECOG; AND (iv) A Gender Action Plan is developed by the WSS providers and approved by the respective WSS Service provider's management.	3,000,000.00	Achieved/Not Achieved
2024	9 b. (i) PEI and quarterly and cumulative quarterly Budget Execution Reports (i.e. 4 in total) for the corresponding fiscal year published on the WSS Service providers' website after the end of each quarter; AND (ii) Billing and collection systems are digitized, and innovative consumer payment mechanisms are tried, tested	11,600,000.00	Achieved/Not Achieved



	and approved by the respective WSS Service provider's management; AND (iii) The FY23 annual financial statements of the respective WSS Service provider are audited and published in the WSS Service provider's website within 7 months after the end of the fiscal year, based on the financial reporting guidance standards approved by the DIGECOG; AND (iv) 65% of the actions scheduled in the Gender Action Plan for the year are implemented by the respective WSS Service provider.		
2025	9 c. (i) PEI and quarterly and cumulative quarterly Budget Execution Reports (i.e. 4 in total) for the corresponding fiscal year published on the WSS Service providers' website after the end of each quarter; AND (ii) Digitized billing and collection systems and innovative consumer payment mechanisms are implemented by the respective WSS Service provider; AND (iii) The FY24 annual financial statements of the respective WSS Service provider are audited and published in the WSS Service provider's website within 6 months after the end of the fiscal year, based on the financial reporting guidance standards approved by the DIGECOG; AND (iv) 70% of the actions scheduled in the Gender Action Plan for the year are implemented by the respective WSS Service provider.	11,800,000.00	chieved/Not Achieved
2026	9 d. (i) PEI and quarterly and cumulative quarterly Budget Execution Reports (i.e. 4 in total) for the corresponding fiscal year published	11,970,000.00	chieved/Not Achieved



	on the WSS Service providers' website after the end of each quarter; AND (iii) Digitized billing and collection systems and innovative consumer payment mechanisms are implemented and maintained by the respective WSS Service provider; AND (iii) The FY25 annual financial statements of the respective WSS Service provider are audited and published in the WSS Service provider's website within 5 months after the end of the fiscal year, based on the financial reporting guidance standards approved by DIGECOG; AND (iv) 75% of the actions scheduled in the Gender Action Plan for the year are implemented by the respective WSS Service provider.		
2027	9 e. (i) PEI and quarterly and cumulative quarterly Budget Execution Reports (i.e. 4 in total) for the corresponding fiscal year published on the WSS Service providers' website after the end of each quarter; AND (ii) Digitized billing and collection systems and innovative consumer payment mechanisms are implemented and maintained by the respective WSS Service provider; AND (iii) The FY26 annual financial statements of the respective WSS Service provider are audited and published in the WSS Service provider's website within 4 months after the end of the fiscal year, based on the financial reporting guidance standards approved by DIGECOG; AND (iv) 80% of the actions scheduled in the Gender Action Plan for the year are implemented by the respective WSS Service provider.	12,130,000.00	chieved/Not Achieved



DLI 10	Strengthened performance monitoring			
Type of DLI	Scalability	Unit of Measure	Total Allocated Amount (USD)	As % of Total Financing Amount
Output	No	Text	25,000,000.00	0.99
Period	Value	Allocated Amount (USD)		Formula
Baseline	0.22 0.48 0.33			
2023	0.00	0.00		n.a.
2024	0.38 0.61 0.53	5,950,000.00		Achieved/Not Achieved
2025	0.78 0.76 0.73	6,100,000.00		Achieved/Not Achieved
2026	0.87 0.88 0.86	6,330,000.00		Achieved/Not Achieved
2027	0.99 0.99 0.99	6,620,000.00		Achieved/Not Achieved



Verification Protocol Table: Disbursement Linked Indicators

DLI 1	Households serviced with safely managed water supply
Description	Measures the cumulative number of additional households with access to safely managed drinking water. Safely managed water supply is defined as the use of an improved drinking water source that is located on premises, available when needed, and free of fecal and priority chemical contamination. Full details will be in the verification protocol.
Data source/ Agency	WSS Service providers
Verification Entity	IVA
Procedure	Determine the number of additional households receiving safely managed water supply using data from data loggers and the WSS Service providers' operational and commercial databases. Full details will be in the verification protocol.
DLI 2	Households serviced with safely managed sanitation
Description	Measures the cumulative additional number of households with access to safely managed sanitation. Safely managed sanitation is the use of an improved sanitation facility that is not shared with other households and where the excreta is safely disposed in situ or transported to a treatment plant where it is treated to national standards. Full details will be in the verification protocol.
Data source/ Agency	WSS Service providers
Verification Entity	IVA
Procedure	Determine the number of additional households receiving safely managed sanitation services using data from the WSS Service providers' operational and commercial databases. Full details will be in the verification protocol.
DLI 3	Strengthened accountability and improved planning capacity
Description	Full details will be in the verification protocol.
Data source/ Agency	WSS Service providers
Verification Entity	IVA
Procedure	Full details will be in the verification protocol.



DLI 4	Improved capital budget planning and implementation
Description	Full details will be in the verification protocol.
Data source/ Agency	WSS Service providers
Verification Entity	IVA
Procedure	Full details will be in the verification protocol.
DLI 5	Increased collection rates
Description	Measures cumulative percentage point increase in the collection rate for each WSS Service provider, with collection rate defined as [Total amount collected in a calendar year] divided by [Total amount billed in the calendar year]. Full details will be in the verification protocol.
Data source/ Agency	WSS Service providers
Verification Entity	IVA
Procedure	Full details will be in the verification protocol.
DLI 6	Improved operational planning, NRW performance, and energy efficiency
Description	Full details will be in the verification protocol.
Data source/ Agency	WSS Service providers
Verification Entity	IVA
Procedure	Full details will be in the verification protocol.
DLI 7	Reduced non-revenue water (NRW)
Description	Measures cumulative reduction in percentage points in the rate of NRW. The rate of NRW is the volume of NRW divided by the volume of water dispatched to the network. The volume of NRW is calculated as [Volume of water dispatched to the network] - [Volume of water billed]. Leak reduction will help conserve limited ground and surface water resources, thus increasing resilience to more frequent droughts due to climate change. Full details will be in the verification protocol.



Data source/ Agency	WSS Service providers
Verification Entity	IVA
Procedure	Annual water audits will compile information needed to establish the baseline and report against this indicator. Full details will be in the verification protocol.
DLI 8	Improved energy efficiency
Description	Measures cumulative reduction of percentage points in the electricity (kWh) per m3 of water dispatched to the system. Full details will be in the verification protocol.
Data source/ Agency	WSS Service providers
Verification Entity	IVA
Procedure	Annual energy audits will compile information needed to establish the baseline and report against this indicator. Full details will be in the verification protocol.
DLI 9	Strengthened corporate governance
Description	(i) Full details will be in the verification protocol. (ii) Full details will be in the verification protocol. (iii) Full details will be in the verification protocol. (iv) The Gender Action Plan (GAP) is a planning document that includes a diagnostic on the WSS provider's strengths and weaknesses on gender equity, the legal and institutional context for gender inclusion, the WSS provider's strategic objectives to improve gender equity, and an annualized action plan with costed actions to improve gender equity, including internal and external actions. At a minimum, the GAP will include a proposal for human resources development indicating specific measures to improve women's attraction, selection, retention, and professional development across all job roles. The GAP will be approved by the Management of each participating WSS provider. Full details will be in the verification protocol.
Data source/ Agency	WSS Service providers
Verification Entity	IVA
Procedure	Full details will be in the verification protocol.



DLI 10	Strengthened performance monitoring
Description	Minimum value of a dimensionless index that measures the progression in the quantity and quality of operational, commercial, and financial information using international good practices. Full details will be in the verification protocol.
Data source/ Agency	WSS Service providers
Verification Entity	IVA
Procedure	Full details will be in the verification protocol.



ANNEX 3. SUMMARY TECHNICAL ASSESSMENT

A. Program Strategic Relevance and Technical Soundness

A.1. PforR Program Description

1. The annex provides a summary of the full Technical Assessment, which is published separately.
2. **The Program development objectives** are to: (i) improve planning capacity and efficiency of selected WSS water supply and sanitation institutions, and (ii) increase access to safely managed water and sanitation services in selected water-stressed areas.^{44, 45}
3. **The PforR Program will have a geographic boundary that is defined by the five provinces in the highly water-stressed and economically important Yaque del Norte basin: Monte Cristi,⁴⁶ Santiago Rodríguez, Valverde, Santiago, and La Vega.** The 7,784 square kilometer basin is home to significant agricultural and industrial production and the country's second largest metropolitan area, the city of Santiago. Demand already exceeds supply in the basin, affecting economic output and leading to increasing conflict between water use for agriculture and human consumption, which account for 88 percent and 8 percent of water use, respectively, in the basin. Rising temperatures are contributing to more frequent drought, and water supply in the basin could fall by 22 percent by 2025.⁴⁷ High rates of unregulated and informal water use in the basin lead to huge inefficiencies, with farmers siphoning potable water to use for irrigation and households (and even whole villages), installing clandestine water connections that contribute to the significant rates of non-revenue water (at least 70 percent) in the provinces of Yaque del Norte. The WSS service providers that cover these provinces are National Water and Sewerage Institute (*Instituto Nacional de Agua Potable y Alcantarillado*, INAPA), Santiago Water and Sewerage Corporation (*Corporación de Acueducto y Alcantarillado de Santiago*, CORAASAN), and La Vega Water and Sewerage Corporation (*Corporación de Acueducto y Alcantarillado de La Vega*, CORAAVEGA).
4. **The PforR Program will have three results areas that are aligned with the government's strategic priorities in the Water Pact and the Multi-Annual Public Sector Plan (*Plan Nacional Plurianual del Sector Público*, PNPSP) 2021–24 and address the identified sector challenges.** The PforR Program's three results areas align with the PNPSP's three objectives: (i) sustainable management and improved institutional framework for the water sector; (ii) efficient, equitable supply with high quality standards of drinking water and sanitation services; and (iii) prioritization and strategic use of the resource as appropriate. A summary description and assessment of the PNPSP's actions for the water sector under each of these objectives are detailed in Section A3: Technical Soundness.
5. **Results area 1: Increase access to safely managed WSS services in selected water stressed areas (US\$50 million).** Results area 1 supports expenditures, activities, and results related to expanding access to safely managed water and sanitation services in selected water stressed areas. For safely managed water services, investments include rehabilitation and extension of water supply networks, rehabilitation and construction of water treatment plants, and reduction of physical water losses. Leak reduction will help conserve limited ground and surface water resources, thus increasing resilience to more frequent droughts in the Yaque del Norte basin

⁴⁴ Planning will be improved at two levels: operational planning at the WSS provider level, and performance monitoring to inform improved sector planning at the central government level.

⁴⁵ Water stress, which is defined in line with Sustainable Development Goal 6.4.2 as freshwater withdrawal as a proportion of available freshwater resources, is classified at the basin level.

⁴⁶ The municipal district of Santa María in the province of Monte Cristi, which is partly in the transboundary Masacre River basin, is excluded from the Program boundary. Investments in transboundary river basins are ineligible for financing under the operation.

⁴⁷ USAID. *Dominican Republic Country Risk Profile 2017*. Percent decrease is from a baseline of 2005.



due to climate change. The PforR Program will also promote water conservation through development and adoption of improved demand-side management measures (including micro-metering and awareness raising). Increased access to safe and reliable water will reduce the financial burden of buying bottled water and the health burden of disease from consuming contaminated drinking water. For safely managed sanitation, activities include social engagement strategies to connect households to existing sewers, rehabilitating and expanding sewerage networks, and rehabilitating and constructing wastewater treatment plants. Thus, the beneficiary communities will be more resilient to floods by reducing the risk of disease from floodwaters contaminated with fecal coliforms from onsite sanitation. Water and sanitation investments will plan for resilience to climatic and non-climatic events, including floods, as required by the central government's public investment guidelines and be informed by the Bank's Resilient Water Infrastructure Design Brief. Providers will adopt energy efficient and low-carbon pumping and water and wastewater treatment technologies that will effectively reduce greenhouse gas emissions. Results financed by the PforR Program under this Results area will be linked to scalable disbursements under DLIs 1 and 2. (see Annex 1).

6. **Results area 2: Improve the planning capacity and operational and commercial efficiency of selected WSS service providers (US\$99.5 million).** Results area 2 supports expenditures, activities, and results related to strengthening the planning capacity and institutional and operational performance of the WSS service providers in selected water stressed areas. The interventions include investments in (i) NRW reduction to reduce physical and commercial losses through, for example, annual water audits, NRW reduction strategies, improved planning for NRW, and rehabilitation of water supply systems to reduce leaks; (ii) improved energy efficiency through, for example, annual energy audits, energy efficiency strategies, electrical system rehabilitation, pump rehabilitation or replacement, improved efficiency of water and wastewater treatment plants (DLIs 1,2 and 8), and installation of solar-powered pumping; and (iii) digitalization and updating of WSS network and user cadasters. Leak reduction will help conserve ground and surface water resources and increase resilience to droughts in the already highly water stressed Yaque del Norte basin. Digitalization of network cadasters will facilitate the identification and timely repair of these leaks to improve drought resilience as well as improve response times when climate-related extremes such as hurricanes and floods cause infrastructure damage. Reduced physical losses will subsequently reduce pumping needs and thus carbon emissions, while energy efficiency investments and the use of solar energy will also reduce greenhouse gas emissions.
7. **Results area 2 will also incentivize process improvements related to strategic planning, budgeting, and procurement.** A key outcome of the Phase I PforR Program will be improved accountability and alignment between national priorities and targets and WSS service provider strategic plans, which are subsequently linked to annual operating plans, investment plans, operational and capital budgets, and procurement plans. This alignment will enable the providers to set and meet nationally relevant operational and commercial targets efficiently, including targets related to improving resilience to climate-induced floods and droughts and reducing greenhouse gas emissions. Results financed by the PforR Program under this Results area will be linked to non-scalable disbursements under DLIs 3–8.
8. **Results area 3: Strengthen policies and institutions for WSS services (US\$75.5 million).** Results area 3 supports expenditures, activities, and results related to improving performance monitoring of the WSS subsector and strengthening the corporate governance of INAPA, CORAASAN, and CORAAVEGA. The interventions include investments in: (i) improving the quantity and quality of operational and commercial data generated by the WSS service providers; and (ii) process improvements to modernize billing and collection systems and improve transparency, financial management and reporting, citizen engagement, and gender equity. The PforR Program will incentivize the participating WSS service providers to report against a monitoring framework whereas the IPF Project will support MEPyD's PCMU with the development of said performance monitoring framework.



Establishment of the performance monitoring framework will help the government track key performance indicators to inform their investments in climate adaption (building resilience against floods, droughts, and other climate-related shocks) and mitigation, including data on water production, water consumption, wastewater discharges, NRW, energy use, energy efficiency, and service interruptions. On corporate governance, the PforR Program will incentivize improved corporate governance of INAPA, CORAASAN, and CORAAVEGA through process improvements to modernize billing and collection systems and improve transparency, financial management and reporting, citizen engagement, and gender equity whereas the IPF Project will build capacity to track the operational, commercial, and financial performance of WSS service providers. Results financed by the PforR Program under this Results area will be linked to non-scalable disbursements under DLIs 9 and 10.

9. **Investment Project Financing Component (US\$25 million).** The IPF Project will finance three components: (i) supervision, coordination, monitoring, and evaluation of the operation (program and project components; US\$9.8 million); (ii) technical assistance to the WSS service providers (US\$5.2 million); and (iii) improved water resources management at the national and basin levels (US\$10 million). IPF Project Components 1 and 2 will support the PforR Program. Component 1 will support the creation of a Program Coordination and Management Unit (PCMU) in the Ministry of Economy Planning, and Development (*Ministerio de Economía, Planificación y Desarrollo*, MEPyD) and contracting a verification agent for the life of program, and financial audits for the PforR Program and IPF project. Through Component 2, the PCMU will contract technical support to address existing WSS capacity gaps and risks related to, for example, performance monitoring, strategic planning, procurement, financial management, and technical capacity on reducing non-revenue water and improving energy efficiency that may otherwise undermine the achievement of program results.
10. The PforR Program will exclude any activities which: (i) in the opinion of the Bank, are likely to have significant adverse impacts that are sensitive, diverse, or unprecedented on the environment and/or affected people; or (ii) involve the procurement of: (1) works, estimated to cost US\$75,000,000 equivalent or more per contract; (2) goods, estimated to cost US\$50,000,000 equivalent or more per contract; (3) non-consulting services, estimated to cost US\$50,000,000 equivalent or more per contract; or (4) consulting services, estimated to cost US\$20,000,000 equivalent or more per contract.

A.2. Strategic Relevance

11. **The PforR Program has clear alignment with government priorities and public policy.** As described in paragraph 4 above, the PforR Program is directly aligned with the Water Pact and the PNPS (2021–24), which demonstrates that the water sector is a strategic issue and a priority area of investment for the government of the Dominican Republic.
12. **The proposed MPA program is fully aligned with the objectives of the World Bank Group’s Dominican Republic Country Partnership Framework for fiscal years 2022–26 and the Green, Resilient, and Inclusive Development Framework.** The MPA Program will contribute to the Country Partnership Framework High-Level Outcome 3, “Increased resilience to climate change” and is directly aligned with Objective 3.2, “Enhanced management of water resources.” In addition, the MPA Program is aligned with the Bank’s approach to green, resilient, and inclusive development by considering environmental, socioeconomic, and financial sustainability; building resilience to a variety of shocks (financial, climate, health); and mainstreaming gender inclusion and citizen engagement.
13. **The PforR Program is fully aligned with the central government’s public policy and methodology on budgeting for results.** The Ministry of Finance has developed a methodology on budgeting for results, which shares similarities with the Bank’s PforR instrument. A key difference between the two approaches is that the government’s methodology relies on implementing entities to self-report results annually, whereas the PforR



requires third-party verification. The PforR also gives the central government additional leverage to condition incremental transfers provided by the loan, which can be difficult to do with existing transfers. The central government has not applied the budgeting for results methodology in the water sector, and the operation will allow them to leverage the PforR to strengthen their own systems and with a results-based approach.

A.3. Technical Soundness of the PforR Program

14. **The technical soundness of the PforR Program has been assessed looking at the level of ownership and commitment to the government program (Water Pact and PNPS 2021–24), the strengths and weaknesses in the Water Pact and PNPS's design and implementation arrangements, and the extent to which the program and the project components can address the gaps and challenges highlighted.** The assessment was informed by a large body of analytical work that includes a recent Public Expenditure Review for WSS by the Bank, the 2016 Public Expenditure and Financial Accountability,⁴⁸ and the government's comprehensive vision for sector reform and investments as outlined in the Water Pact and the PNPSs. The PforR Program's theory of change details the relationship between activities, outputs, intermediate outcomes, and outcomes, which is a benefit to the government's program (see annex 9 for the PforR Program's detailed theory of change). The assessment was also informed by other development partner evaluations, such as Agence Française de Développement (AFD), and thorough consultations with central government directorates in MEPyD and the Ministry of Finance.
15. **These central government stakeholders included:** the General Director of Public Investment (*Dirección General de Inversión Pública*, DGIP) and the General Directorate of Economic and Social Development (*Dirección General de Desarrollo Económico y Social*, DGDES), both ascribed to MEPyD; and the General Directorate of Budget (*Dirección General de Presupuesto*, DIGEPRES), the General Directorate of Accounting (*Dirección General de Contabilidad Gubernamental*, DIGECOG), and Public Credit, all ascribed to the Ministry of Finance. The consultations with central government actors identified and dissected the challenges they face with the WSS service providers in terms of service quality, inefficiencies, planning, budgeting, financial accounting, project preparation, the high level of subsidies provided to providers, and lack of accountability of the WSS service providers to central government.
16. **On average, the central government transfers US\$90 million per year for recurrent costs and US\$165 million per year for capital costs, totaling US\$255 million per year in total transfers to the WSS service providers.**⁴⁹ Of these annual transfers, an average of 51 percent of total recurrent and 62 percent of total capital transfers are provided to INAPA, CORAASAN, and CORAAVEGA. Without performance information for each provider on an array of operational and commercial indicators, it is difficult for the central government to assess the value for money they are getting for these annual transfers. Consultations with the central government stakeholders highlighted the challenges such as linking WSS service provider financial systems with the government's integrated financial management information system (*Sistema Integrado de Gestión Financiera*, SIGEF), inconsistencies in financial statements presented by providers, lack of audited financial statements, weaknesses in public investment planning, lack of operational and commercial performance information, and lack of mechanisms to increase accountability to link WSS service provider strategic plans with their annual operating plans and budgets, which can undermine the ability to achieve the objectives of the PNPS.
17. **In addition, several rounds of consultations were held with the three participating providers (INAPA, CORAASAN, and CORAAVEGA) to identify reasons for the challenges in service delivery and planning.** These consultations also focused on actions to be taken and the development of reasonable targets to be achieved under the program (see Annex 1: Results Framework). These consultations highlighted that WSS service providers

⁴⁸ 2016 Public Expenditure and Financial Accountability Report Dominican Republic.

⁴⁹ Transfers to all nine providers between 2014–20, per DIGEPRES.



do not have updated users and network cadasters, lack macro-metering and have limited micro-metering, have low billing and collection rates, and have challenges with clandestine connections. The participating WSS service providers lack strategies and investment plans to reduce non-revenue water (NRW) and do not conduct water audits. In addition, the providers have no incentives to improve energy efficiency, which makes up a significant portion of recurrent transfers to the providers, and they do not have strategies or energy audits to inform what they can do to improve energy efficiency. Extensive consultations with each participating WSS service provider informed the development of the disbursement-linked results (DLRs) to support the achievement of the program's development objective. These results are also aligned with the participating WSS service provider's institutional strategic plans that are linked to the PNPS 2021-24 and goals of the Water Pact.

PforR Program Ownership and Commitment

18. **The Bank's consultations with central government entities and the participating WSS service providers demonstrate strong buy-in and support of the proposed PforR Program because it is directly aligned with the PNPS and Water Pact, and WSS service provider's four-year institutional strategic plans.** The PforR Program will give the participating WSS service providers the additional resources they need to improve their operational and commercial efficiency. A challenge faced by the WSS service providers is that the central government has historically financed capital investment projects, and not efficiency improvements which are required to extract themselves from the vicious circle of poor quality of services contributing to low billing and collection rates, which subsequently leads to underinvestment in operation and maintenance to ensure quality services. The proposed PforR Program, expected results, and the incremental funds that the PforR Program can offer providers are well aligned with the needs of the providers and their existing four-year institutional strategic plans. The PforR Program has high relevance, commitment, and buy-in among the providers and central government.
19. **Commitment and accountability.** Although the implementation of the PNPS and the ability to achieve the objectives and desired results have shortcomings, it marks a significant step forward in strengthening the WSS service providers' accountability to the central government for the resources they receive through recurrent and capital transfers. Throughout the year, DGDES convenes WSS service providers quarterly to review advancements toward the agreed upon indicators for the sector, and track PNPS progress. A strong signal of the government's commitment to the proposed PforR Program to support the Water Pact and PNPS (2021-24) is the allocation of US\$7 million in incremental funds for 2023 to the three providers (US\$3 million for INAPA, US\$2 million for CORAASAN, and US\$1 million for CORAAVEGA) that are linked to the (DLIs and the disbursement linked results (DLRs) for 2023. See Annex 12 for PforR Program funds ascribed to each of the providers over the life of the PforR Program.

Design of the Government program

20. **The PNPS and the Water Pact exhibit the following strengths in their design:** (i) appropriate and relevant overarching objectives; (ii) many actions that address key weaknesses in WSS service management, planning, inefficiencies in public spending, and transparency; (iii) actions that build on specific problems faced in the sector that have been identified through various diagnostics; and (iv) national-level objectives mirrored in the WSS service providers four-year strategic plans to ensure alignment between provider and national government priorities.
21. **However, the PNPS 2021-24 also has a number of shortcomings.**
 - a. **The 19 priority actions in the PNPS 2021-24 related to WSS service improvements are a mixture of activities, outputs, intermediate outcomes, and outcomes with varying impact potential and are presented**



without any prioritization.⁵⁰ All actions may have some level of impact, but the PNPSPP does not prioritize the actions that will be most impactful to achieve the objectives. For example, improving the quality of water supply services in an efficient and sustainable manner cannot be done without addressing NRW. While NRW is an action in the PNPSPP, providers may opt to focus on increasing production of water rather than focusing on minimizing losses to improve services.

- b. **There are gaps in the set of measures needed to fully achieve the three overarching objectives.** Energy efficiency is one of the 19 actions in the PNPSPP, but there is currently no indicator to track, monitor, or incentivize improvements. Another example is the action on promoting financial transparency. The Ministry of Finance's Director General of Accounting (*Dirección General de Contabilidad*, DIGECOG) gives providers guidelines for developing financial statements to be reported to central government, these guidelines are not adhered to and maybe inadequate for state-owned enterprises, and there is no consistency between providers on how they apply the guidelines thus making it impossible to compare performance of providers.
- c. **Lack of a capacity building program to support WSS service providers to achieve objectives.** The monitoring tools of the PNPSPP do allow for each provider to establish their own baselines and targets for indicators, but each provider has vastly different capacities to set and achieve targets. A mix of experience and support from bi-lateral and multi-lateral agencies to these three providers means that some such as CORAASAN have deeper understanding of technical issues such as NRW reduction, whereas CORAAVEGA has limited experience and know-how. Energy efficiency is an area in which all three providers lack experience and know-how to make improvements. There is currently no centralized support mechanism to provide capacity building to WSS service providers on an array of issues such as NRW, energy efficiency, but also planning, and procurement to reduce deviations between budget and execution.
- d. **There is no clear link between activities in WSS service providers' four-year strategic plans, annual operating plans (plan operativo anual; POA), and annual budgets to finance high impact activities.** Implementing the PNPSPP in the water sector risks being a bureaucratic exercise with limited impact if resources are not assigned to execute actions. Guidance on developing institutional four-year strategic plans is clear, but guidelines to translate these strategic plans into operational plans and budgets is less clear. Most important, priority for financing capital investments is given to new construction and rehabilitation, and not efficiency improvements.
- e. **The PNPSPP monitoring framework may be sufficient to capture general trends in the sector, but inadequate to assess operational and commercial performance of providers.** MEPyD's DGDES in collaboration with WSS service providers and the National Bureau of Statistics (Oficina Nacional de Estadísticas) produced a set of indicators to track progress of the PNPSPP, which is based on self-reported data and national surveys with no verification of self-reported data. The range of indicators may be useful to track general trends but are insufficient to evaluate the value for money the government is getting for the level of subsidies transferred to providers. The quality of the data used to produce the indicators is not clear, and the level of detail that is provided is insufficient to adequately assess the true quality of the data.

Design of the PforR Program

22. **The PforR Program was designed to address the shortcomings in the priority actions for water in the PNPSPP and their implementation.**
 - **Capacity-building support will be made available to the WSS service providers** through the IPF Project technical assistance component to support their achievement of DLIs. MEPyD will manage this IPF Project

⁵⁰ See the separately disclosed full Technical Assessment for a review of all 19 actions related to the water sector in the PNPSPP 2021-24.



and will contract in technical assistance and develop capacity-building activities to support providers. AFD is also providing INAPA with technical assistance in the three provinces included in the PforR Program boundaries. This technical assistance will support INAPA in areas of NRW, and strengthening their operational and commercial performance, which is complementary to the desired results under the PforR Program. The technical assistance is for US\$10 million and is planned for 2022-25.

- **The PforR Program will improve coordination at central level and with WSS service providers.** The IPF Project will support MEPyD with a PCMU that will have specific functions to improve coordination among MEPyD, Ministry of Finance, and WSS service providers. This unit will also strengthen the capacity of central government to supervise and monitor the PforR Program.
- **Disbursements are linked to a specific and clear matrix of DLIs and DLRs, DLI verification protocols, and results framework** to eliminate ambiguity on what the three WSS service providers need to do to achieve results under the PforR Program. This will help the central government and providers strengthen the link between activities, outputs, intermediate outcomes, and outcomes by linking them to funding and incentives, which is missing in the implementation of water actions in the PNPSP.
- **DLIs and DLRs are designed to account for the heterogeneity of the three WSS service providers**, offering incentives for stronger providers to improve their performance further while rewarding smaller and weaker providers for strong commitment and effort through a series of stretch and basic results.
- **The multi-year PforR Program measures results across five fiscal years**, giving time for implementing complex operational reforms at the WSS service provider level and incentivizing sustained performance. The results during the PforR Program are pragmatic in the first year and gradually stretch providers to do more in subsequent years.
- **Extra care will be given to the disbursement arrangements for the performance-based financing component**, so that disbursements are made only on achievement of clearly defined DLIs and DLRs against detailed verification protocols, verified by an independent verification agent. Any changes to the DLIs and DLRs will undergo a formal process of review and approval and will be applied across the board for all WSS service providers. This will strengthen the incentives for the WSS service providers, knowing that the PforR Program disbursements are strictly conditional on achieving results. This is an important value addition of the PforR Program to the central government because their budget for results methodology leaves verification of the results to the implementing entities.
- **The PforR Program will create an environment for healthy peer competition and peer learning among WSS service providers** by publishing individual provider performance against the DLI matrix for each result year so that lagging providers will want to improve. They can also learn from providers that are performing better.

23. **The PforR Program is technically sound because it addresses the weaknesses in the government's program, and there is strong support from central government and participating WSS service providers.** The PforR Program's technical soundness has been assessed based on the Dominican Republic authorities' level of ownership and commitment to the WSS reforms, the strengths and weaknesses in the government program design and implementation arrangements, and the extent to which the PforR Program and the IPF Project can address the binding constraints.

A.4. Lessons from Other Programs and Global Knowledge

24. **The PforR Program design was informed by best global knowledge**, with support from the Water Global Practice's Water Supply and Sanitation Global Solutions Group; the Energy Global Practice; the Governance Global Practice; and the Urban, Disaster Risk Management, Resilience, and Land Global Practice. The Water



Global Practice has shared its extensive experience in utility turnaround, non-revenue water reduction, climate change mitigation and adaptation in the water sector, gender inclusion and citizen engagement, and supporting policy, institutional and regulatory reform. The Energy Global Practice provided guidance on designing indicators and activities for improved energy efficiency and shared experiences from supporting the Energy Pact in the Dominican Republic; using the social compact approach to build provider-client trust, improve service delivery, and increase collections; creating a business case to motivate provider-level policy reforms to improve gender equity; and digitizing user cadasters to reduce commercial losses. The PforR Program also drew on lessons learned from the Governance Global Practice and the Urban, Disaster Risk Management, Resilience, and Land Global Practice on implementing urban performance grant programs, including a recently published synthesis report.⁵¹ As the Bank's first MPA Program using two PforR phases, support from Operations Policy and Country Services has also been critical.

25. **The PforR Program design draws on lessons from past and current operations funded by development partners in the water sector.**⁵²

- **Align operational design to the realistic capacity of counterparts.** This is the first PforR in the Dominican Republic, and the PforR Program is inherently complex, building capacity at the level of both the central government and the providers and supporting activities related to WSS. The design of each DLI establishes a realistic target for the first year based on existing capacity, then takes a progressive approach over the five-year implementation period that gradually increases the level of effort necessary to achieve results. Institutional bandwidth was also considered when revising the scope of all DLRs in a given year to ensure that utility departments and staff will not be overburdened.
- **Address capacity constraints at the early stages of implementation to avoid critical impact on development outcomes.** MEpyD will establish a PCMU and activities will be made eligible for retroactive financing to ensure that the PCMU is fully operational in first year of the PforR Program before loan effectiveness. The IPF Project will provide technical assistance to the PCMU, the central government, and the WSS service providers to address capacity constraints.
- **A review of WSS service provider infrastructure investments suggests adequate readiness of providers to achieve targets.** A detailed review was undertaken of existing investment projects for each participating provider that have an assigned public investment code in the national public investment system (Sistema Nacional de Inversión Pública; SNIP) and financing, along with pipeline projects that are in feasibility stage for both water and sanitation investments. The status of the investment projects (pre-feasibility, feasibility, design, procurement, implementation) were evaluated and used to inform the targets for DLIs 1 and 2 by year, which are deemed conservative throughout the life of the PforR Program. Evaluation of the projects indicates that the targets are realistic.

⁵¹ World Bank. 2022. *Incentivizing Service Delivery Through Fiscal Transfers Lessons from World Bank's Performance-Based Financing for Local Governments*. Washington, DC: World Bank

⁵² The World Bank supported a similar set of development objectives to strengthen the policy framework and improve operational and commercial efficiency of CORAAPLATA through the *Water and Sanitation in Tourist Areas Project* (US\$27.5 million, P054221), which closed in 2018. Two other water projects recently became effective, with a component of the *Resilient Agriculture and Integrated Water Resources Management Project* (US\$80 million, P163260) supporting INAPA with investments in WSS infrastructure, and the *Water Supply and Wastewater Services Improvement Project* (US\$43.5 million, P171778) implemented by INAPA supporting investments and capacity building for CORAAMOCA. Inter-American Development Bank and the Spanish Agency for International Development Cooperation have also jointly financed the *INAPA Water and Sanitation Investment Program* (US\$70 million, DR-L1041 and DR-X1005) which was approved in 2010 and closed in 2021. Led by AfD, the European Union's Caribbean Investment Facility has also been supporting investments and technical assistance to INAPA and CORAASAN through the *Increasing Efficiency in Water and Sanitation Management in the Dominican Republic Project* (€10.35 million grant and €110 million loan, expected to close in 2023).



A.5. Institutional and Implementation Arrangements

26. **INAPA, CORAASAN, and CORAAVEGA will be implement the PforR Program, and the PCMU in MEPyD will coordinate and monitor it.** The three participating WSS service providers will follow the government's budgeting and procurement procedures to execute the PforR Program and will program activities in their annual operating plans to ensure that they can achieve the results defined for each year. These activities will be budgeted and financed according to the allocations prescribed to each participating WSS service provider annually basis. Budgets will be reviewed and approved by DIGEPRES and the Ministry of Public Health. The PCMU in MEPyD will also play a quality control role since they are coordinating the PforR Program.
27. **INAPA is the country's national WSS service provider covering 24 of 32 provinces.** INAPA has the largest service area of all providers, covering 75 percent of the country's provinces and 50 percent of the population, both urban and rural. INAPA also provides support to some municipalities and rural areas outside of their 24 provinces. INAPA's service areas that fall within the PforR Program boundaries consist of three provinces in Zone 1 (Monti Cristi, Valverde, and Santiago Rodriguez) that covers about 10 percent of the population they serve (see Table 8 for further details on operational indicators). INAPA is the WSS service provider with the largest operating and capital budget in the country, with an operational budget of US\$68 million and a capital budget of US\$114 million in 2022.
28. **As described in the Fiduciary Systems Assessment, INAPA improved its budget outturn for capital investments to 80 percent in 2020, up from 54 and 44 percent in 2018 and 2019, respectively, highlighting their capacity to execute capital projects.** In 2021, the budget outturn for capital investments dropped to 56 percent, which equates to the execution of US\$48 million for that year (see section B, Expenditure Program for more details). INAPA's centralized planning poses challenges to improving its operational and commercial efficiency in their service deliver areas because investment and operational decisions are made at the central level. Nevertheless, INAPA has experience with multi-lateral and bi-lateral financing of projects that have substantially improved the operational and commercial indicators at a provincial level. INAPA closed a project in 2021 with financing from the Inter-American Development Bank that demonstrated significant improvements in operational and commercial efficiency in the province of San Cristobal, such as improving network and user cadasters, improving billing and collection rates, and reduction of NRW. INAPA has a similar experience in the province of San Pedro de Macoris, with bi-lateral support from the French government to improve commercial and operational efficiency.
29. **The experiences in San Cristobal and San Pedro de Macoris demonstrate that quality of service and efficiency improvements are possible in INAPA's centralized planning structure.** During the PforR Program implementation of the, INAPA will leverage the technical assistance from AfD to replicate elements of the San Cristobal experience, which is aligned with the PforR Program's objectives. INAPA's tariff structure is set at a national level and approved by the president of the republic. Tariff levels are set below cost recovery and do not vary by geographic region limiting their ability to improve cost recovery. Even without a change in tariff structure there is significant room for improvement to invest in efficiency and modernization improvements such as digitalizing and updating user and network cadasters and billing collection systems; and improved metering to help control both physical and commercial losses, improve revenues, and the quality of services.
30. **CORAASAN has strong capacity for planning and service delivery.** CORAASAN serves the province of Santiago, which accounts for about 10 percent of the country's population and is home to the second-largest urban population of almost 1.2 million people in the city of Santiago. CORAASAN showed a strong commitment to achieve PforR Program results during preparation. The provider's annual operating budget is US\$67 million, and US\$18 million for its capital budget in 2022. CORAASAN's budget outturn for 2021 was 83 percent for capital investments, representing US\$17 million in expenditures, demonstrating good planning and execution. (see



section B Expenditure Program for more details). CORAASAN has benefited from bi-lateral (AfD) and multilateral (Inter-American Development Bank) support over the years and has a strategic investment plan for water and sanitation investments that includes reductions in NRW. CORAASAN has a department focused on water loss reduction and has developed a water audit for their 32 macro sectors in the city of Santiago, which follows international best practice (International Water Association). CORAASAN has also digitized their user and network cadasters, which are constantly updated.

31. **Nevertheless, CORAASAN continues to have NRW rates of 70 percent because it has not implemented actions to reduce NRW, despite having a strategy in place.** As mentioned previously, consultations with CORAASAN suggested that capital improvement projects that are financed by the central government do not prioritize investments in efficiency improvements such as NRW. Therefore, they see the PforR Program as a way to finance the investments needed to improve efficiencies. CORAASAN is able to set its own tariff structure, which is the highest in the country. This reflects their ability to have the highest operational cost coverage ratio in the country at 0.75 (see Table 8).⁵³ This ratio reflects the fact that they do not cover their energy costs through their own source revenues, which is the de facto public policy for all WSS service providers. The central government is beginning to reduce the level of support for energy costs, and the WSS service providers are looking for ways to improve energy efficiency as a result.
32. **CORAAVEGA has moderate capacity for planning and service delivery.** CORAAVEGA is a relatively small WSS service provider that serves approximately 450,000 people in the Province of La Vega (about 4 percent of the country's population), including 200,000 people in the city of La Vega. CORAAVEGA showed a strong commitment to achieve PforR Program results during preparation and is well organized. The provider's annual operating budget for 2022 is US\$4.1 million, and US\$4.5 million for its capital budget. CORAAVEGA's budget outturn for 2021 was 163 percent for capital investments, representing US\$3.6 million in expenditures. The over expenditure suggests that improved planning and budget execution is needed within CORAAVEGA because funds for the capital budget outturn in 2020 was 34 percent. Capital funds transferred and accumulated from 2020 were executed in 2021 (see section B Expenditure Program for more details). On its operational and commercial performance, CORAAVEGA's NRW rate is estimated at 67 percent for key hydraulic sectors. Their operating cost coverage ratio of 65 percent reflects their dependence on central government subsidies for both energy costs and staff salaries. CORAAVEGA, through its board of directors, is able to adjust its tariff structure but faces challenges in raising tariffs because the quality of services is poor with no hydraulic sector delivering continuous services. A review of CORAAVEGA's annual operating plan shows that they have planned activities to improve efficiencies, but also lack the resources to make the necessary investments. During consultations, CORAAVEGA was clear about the opportunity that the PforR Program offers with the incremental funds to focus on efficiency improvements.

Table 8. Descriptive Statistics on the Implementing Entities, INAPA Zone 1, CORAASAN, and CORAAVEGA

Indicators	INAPA Zone 1 (2022)	CORAASAN (2022)	CORAAVEGA (2022)
Population served (Census 2010)	450,000	1,200,000	450,000
Water connections to network (percent)	56.0	64.1	28.8
Volume of water produced (m ³ /sec)	2.00	4.75	0.95
Number of sewerage connections	3,257	47,928	23,862
Volume of wastewater collected (Mm ³ /year)	0.95	76.00	15.20

⁵³ These figures are based on own-sources revenues collected (not amount billed amounts) divided by operating costs.



Indicators	INAPA Zone 1 (2022)	CORAASAN (2022)	CORAAVEGA (2022)
Non-revenue water (percent) ^{a*}	80.9	70.3	69.3
Energy Consumption (kWh/m ³ of water produced)	0.093	0.40	0.11
OPEX coverage ratio (own-source revenues collected)/recurrent costs) ^{b**}	18	75	65
Billing efficiency (percent)	62.4	95.0	84.6
Collection efficiency (percent)	77.5	79.0	66.0

Note: kWh = kilowatt-hour; m³ = cubic meters; Mm³ = millions of cubic meters.

*a. Estimates for NRW are based on best available information provided by WSS service providers.

**b. Figures are based on 2020 budget execution. INAPA's OPEX coverage ratio is for all 24 provinces.

33. MEPyD will establish a PCMU to provide overall PforR Program coordination, supervision, and monitoring.

Although the Ministry of Public Health has the WSS service providers ascribed to them for budgetary purposes, the Ministry plays no role in monitoring or coordinating WSS service providers except for the public health aspect of drinking water quality. The institutional void at the central of government for policy formulation, overall planning, and regulation of WSS service providers is widely acknowledged and documented.⁵⁴ MEPyD's functions by law of planning, coordination, data collection, and analysis to inform and make public policy are a good fit for a unit that can coordinate, monitor, and supervise the PforR Program. The staff that are ascribed to the president's Water Cabinet are located in MEPyD, and the PCMU can help strengthen the Water Cabinet, which has the function of coordinating all water sector actors. MEPyD's General Directorate for Economic and Social Development (*Dirección General de el Desarrollo Económico y Social*, DGDES) is responsible for development of the government's PNPS for all sectors. DGDES leads that process and coordinates across all sector entities and ensures that public sector entities' four-year strategic plans are aligned with the National Strategy for Development 2030 and the four-year consolidated PNPS. DGDES also has a monitoring unit to develop and track indicators of the PNPS, which include the water sector. The PCMU will work closely with DGDES on data collection and to improve the quality of indicators that are being collected. The PCMU will also play a critical role to coordinate with DIGEPRES on WSS budget review and monitoring and with DIGECOG on financial reporting and analysis of the participating WSS service providers. The PCMU will be responsible for the overall annual Program Financial Audit that be submitted nine months after the close of the fiscal year. The PCMU will consolidate the annual audited financial statements provided by three WSS service providers as incentivized by DLR 9 (iii) and have them reviewed by an audit firm contracted by PCMU.

34. The PCMU will be composed of key staff to execute its functions. The PCMU will include a mix of MEPyD staff and contracted staff where capacity does not exist. The PCMU will have a director or coordinator to oversee the unit and overall implementation. To manage the fiduciary aspects of the IPF Project MEPyD will need to have a senior procurement specialist familiar with Bank policies, and a senior financial specialist familiar with managing external resources through the government's Executing Units of External Financing Projects (Unidades Ejecutoras de Proyectos de Financiamiento Externo; UEPEX) system. These senior specialists may be accompanied by one specialist for each function. The PCMU will also have a senior planning specialist who can support the WSS service providers with reviewing and diagnosing challenges in budget execution. These staff will coordinate with central government entities such as DIGEPRES and DIGECOG and WSS service providers to strengthen coordination and build WSS service provider capacity in planning, financial management, and procurement. The PCMU will need

⁵⁴ World Bank. 2021. "Water and Sanitation Public Expenditure Review." World Bank, Washington, DC; Water Pact 2021-36; Pluriannual Public Sector Plan 2021-24.



to have senior specialists who can manage the environmental and social aspects and requirements of the IPF Project, but who can also work with WSS service provider to strengthen the capacity to manage environmental and social issues in provision of services and implementation of WSS activities. To support the WSS service providers with technical assistance in areas such as NRW and energy efficiency among others, the PCMU will contract a senior infrastructure specialist and senior operations specialist on a full-time or part-time basis. The operations specialist will have experience in issues such as NRW and commercial aspects of WSS provision. Both can support the Directorate General of Public Investment with the review of projects submitted by the participating WSS service providers and also provide support on technical issues. The PCMU will also have a monitoring and evaluation specialist to track regular progress on the DLIs and the results framework. Finally, the PCMU should have a water resource management specialist who will coordinate all activities related to the WRM subcomponent of the Project that includes institutional and regulatory reforms and will work closely with the National Institute for Hydraulic Resources (Instituto Nacional de Recursos Hídricos) on the activities that they will implement and coordinate with the director of the Water Cabinet and the Environmental Ministry (Ministerio de Medio Ambiente y Recursos Naturales).

B. PforR Program Expenditure Framework

35. **The PforR Program is a geographically, thematically, and temporally defined portion of the government program, which includes investments in WSS in the provinces of the Yaque del Norte basin over the five-year period from 2023-27, with approximately US\$577 million in total expenditures (see Table 9).** The government will contribute US\$352 million (61 percent), and the Bank will finance US\$225 million (39 percent) through a loan from the International Bank for Reconstruction and Development using the Program for Results financing instrument. CAPEX for sanitation totals US\$108 million (19 percent) and for water supply totals US\$233 million (40 percent), while recurrent expenditures for salaries, energy costs, and other operational costs total US\$236 million (41 percent).

Table 9. PforR Program Expenditure Framework

Region/WSS Service Provider	Economic Classification	Expenditure Function	MPA Phase 1					
			2023	2024	2025	2026	2027	Total
			US\$ million	US\$ million	US\$ million	US\$ million	US\$ million	US\$ million
INAPA (Province of Dajabon, Valverde, Santiago Rodriguez, and Monte Cristi)	2.2.1.1	Water Investment (CAPEX)	26.90	26.90	26.90	26.90	26.80	134.40
	2.2.1.1	Sanitation Investment (CAPEX)	0.96	0.96	0.96	0.96	0.96	4.80
	2.1.1.1	Recurrent (Compensation of employees)	2.60	2.70	2.80	3.00	3.00	14.10
	2.1.1.2	Recurrent (Energy & other operational costs)	2.80	2.90	3.00	3.20	3.30	15.20
		Total	33.26	33.46	33.66	34.06	34.06	168.50
CORAASAN (Province of Santiago)	2.2.1.1	Water Investment (CAPEX)	3.48	3.48	3.48	3.48	3.48	17.40
	2.2.1.1	Sanitation Investment (CAPEX)	5.56	5.56	5.56	5.56	5.56	27.80
	2.1.1.1	Recurrent (Compensation of employees)	20.80	21.80	22.80	23.80	25.10	114.30
	2.1.1.2	Recurrent (Energy & other operational costs)	14.75	15.46	16.20	16.98	17.80	81.20
		Total	44.59	46.30	48.04	49.82	51.94	240.70
CORAAVEGA (Province of La Vega)	2.2.1.1	Water Investment (CAPEX)	16.30	16.30	16.30	16.30	16.30	81.50
	2.2.1.1	Sanitation Investment (CAPEX)	14.98	14.98	14.98	14.98	14.98	74.90
	2.1.1.1	Recurrent (Compensation of employees)	1.40	1.40	1.50	1.60	1.70	7.60
	2.1.1.2	Recurrent (Energy & other operational costs)	0.70	0.70	0.80	0.80	0.80	3.80
		Total	33.38	33.38	33.58	33.68	33.78	167.80
Overall Total (Program Component)			111.23	113.14	115.28	117.56	119.78	577.00
Government Financing			97.23	71.84	65.58	60.76	56.58	352.00
Bank Financing (P4R)			14.00	41.30	49.70	56.80	63.20	225.00

Note: OPEX is estimated based on historical figures from 2014-18. INAPA's OPEX was discounted to 10 percent, based on the population served in the provinces covered by INAPA in the PforR Program boundary. OPEX for all providers was also discounted to 60 percent for expenditures directly related to the PforR Program. OPEX is financed by a mix of tariffs and transfers from central government. Seventy-two percent of INAPA's, 17 percent of CORAASAN's, and 21 percent of CORAAVEGA's income is from central government transfers.

CAPEX = capital expenditure; CORRA = Autonomous Provincial Water Supply and Sewerage Corporation; CORAASAN = Santiago Water and Sewerage



Corporation; CORAAVEGA = La Vega Water and Sewerage Corporation; INAPA = National Water and Sewerage Institute; MPA = Multiphase Programmatic Approach; OPEX = operating expenditure; PforR = program-for-Results; WSS = water supply and sanitation.

B.1. Budget Allocation/Classifications

36. **The budget management process leading to approval and execution of the WSS service providers' budgets is complex.** Though categorized as state-owned enterprises, the participating WSS service providers (INAPA, CORAASAN, and CORAAVEGA) essentially operate as government departments with a hybrid commercial arm. The WSS service providers' state budgets (capital and recurrent transfers) are allocated to their parent ministry, the Ministry of Public Health (Ministerio de Salud Pública), which approves the releases of the state budget allocated funds to the providers so they can receive the funds into their respective accounts and begin the process of budget execution.
37. **The providers' budget management arrangements for fiscal transfers from the government state budget follow the same process as for other government departments.** Law 423-06 establishes the budget cycle for the providers (categorized as Non-Financial Public Enterprises (*entidades públicas no-financieras*, EPNF). The budgeted amounts of the EPNFs for fiscal transfers (capital and recurrent grants) are contained in the state budget and are approved by the legislature. Historically, the overall budgets of the EPNF were approved by the executive branch through the Minister of Finance, but in 2019, Decree 207-19 delegated approval of EPNF's budget to the Ministry of Finance.
38. **At a minimum, in accordance with the decree for executive approval of EPNF budgets, the following documents shall accompany the draft budget to the Minister of Finance:**
- Institutional strategic plan in force in the year that is budgeted.
 - Multiannual investment plan in force for the year that is budgeted.
 - Draft of the annual operating plan for the year to be budgeted.
 - Draft annual purchasing plan for the year to be budgeted.
 - Annual cash budget for the year to be budgeted.
39. **Although this set of documents is indicative of adequate planning at provider level, the link among strategic plans, annual plans, and budgets remains weak.** In addition, the procurement and cash plans do not generally correlate and have been a cause of under-implementation, especially where multiyear capital projects are concerned. These are some of the key weaknesses that the operation seeks to address, among others.
40. **When the legislature approves the final state budget, DIGEPRES then loads it into the budget execution platform of the SIGEF.** Then the recurrent transfers to the providers are released monthly through the Ministry of Public Health, while the capital transfers are released quarterly or according to the progress of the projects in execution. The Comptroller General of the Republic reviews the releases by the Ministry of Health before the transfer of funds by the National Treasury (Hacienda). Recurrent transfers are generally predictable and reasonably timely, while capital transfers depend on obligations from implementation progress of projects at the provider level. They also are subject to the central government's fiscal stance at a particular time that can result in delays in effecting timely transfers.

B.2. Capacity to Execute the Budget

41. **A review of providers' budget execution outturn for 2019–20 and their budgets for 2021 and 2022 highlights an uneven trajectory of income and expenditure outturns.** Capital transfers are based on the providers' submissions that are approved by MEPyD and assigned capital project identifier (SNIP codes) and can vary dramatically from year to year because of varying investment plans, but recurrent transfers follow a more predictable pattern. It appears that recurrent transfers were generally higher than budgeted except for



CORAASAN and CORAAVEGA in 2019. The higher transfers and associated spending could ostensibly be because of the need for windfall transfers arising from coronavirus disease 2019 (COVID-19)-related activities at the provider level. Internally generated revenues were overbudgeted for the providers in 2019 and 2020, except for CORAAVEGA in 2020. This could be because of COVID-19's impact on collection efficiency. Realism in the budgeting of providers' internally generated revenues (own-source revenues) is one key area to be managed better because the impact on implementation of providers' approved investment plans seems to be impaired because of cross-subsidization of recurrent expenditures from capital transfers on a year-to-year basis. This scenario seems most acute with INAPA and CORAAVEGA that consistently had, over the two years, significant recurrent revenue deficits supposedly financed from capital transfers.

42. **This operation, through implementation support and the Program Action Plan, will support the government to counter these weaknesses at the provider level.** The weaknesses are most pronounced during the capital budgeting process and at the level of execution. Thus, the outcome of countering this salient weakness will accrue in the mirroring of fiscal transfers more closely with the providers' implementation capacity during any fiscal year, and allowing the annual plans to include capacity enhancement strategies to deliver on the goals of improved service delivery through capital formations. In essence, the providers will also be provided with capacity development programs in the development and timely implementation of budgets, leading to increased efficiency and effectiveness in service delivery and ensuring accountability and transparency in the management of public resources.

B.3. Financial Sustainability and Funding Predictability and Adherence to Government Priorities

43. **Providing and sustaining delivery of quality WSS services requires substantial infrastructure investments and continuing asset maintenance.** The three participating WSS service providers rely heavily on fiscal transfers from the government state budget to finance their operations—both capital and recurrent expenditures. Because the WSS service providers are currently structured as a form of government department with little or no autonomy and no focus on results, the incentive to improve performance seems to be lacking. The participating WSS service providers' own-source revenues barely cover a fraction of their recurrent costs. In 2019 and 2020, INAPA own-generated revenues from collections in relation to its overall income was in the range of 9–14 percent; CORAASAN performed the best of the three with a range of 44–56 percent, although it has the lowest implementation capacity factor largely because of its size in absorbing recurrent or capital spending; and CORAAVEGA performed in the range of 17–34 percent.
44. **Although predictability of budgetary allocations is more or less assured, the delays in execution of the budgets impairs the allocation efficiency of the budget itself.** As highlighted, the introduction of SIGEF as the budget execution system in government in 2021 has in some cases led to delays in the providers' ability to spend their capital transfers timely because of delays in uploading the approved capital budgets onto the budget execution platform. Equally, the lack of interface between the government SIGEF and the WSS service providers' own financial management systems creates wasteful duplication in the work of the participating WSS service providers' finance departments. The Program will seek to find a solution to this through the IPF Project technical assistance through supporting the interfacing of government and provider systems.
45. **Transfers from the central government are a significant source of funds for the WSS service providers, but they represent only a small share of the government's total recurrent expenditures.** Total transfers (that is, recurrent and capital transfers) to the WSS service providers represented an average of 1.9 percent of total government expenditure during 2014–18.⁵⁵

⁵⁵ World Bank. 2021. *Dominican Republic Public Expenditure Review*. Washington, DC: World Bank.



B.4. Efficiency of PforR Program Expenditures

46. **The PforR financing from the International Bank for Reconstruction and Development will leverage government financing to achieve the DLRs.** On the basis of the implementation capacity factor of 52:46:03 for INAPA, CORAAVEGA, and CORAASAN, respectively, Table 10 shows how each participating WSS service provider will be financed incrementally from the Program funds to achieve the DLRs.⁵⁶

Table 10. Summary Incremental Budget Scenario Per Provider

Provider	Program Year	2023	2024	2025	2026	2027	Total (DOP)	Total (USD)
INAPA	Total Budget Without Program	4,331,000,000	4,677,000,000	5,051,000,000	5,455,000,000	5,891,000,000	25,405,000,000	474,000,000
	Program Incremental Funds	161,000,000	682,000,000	917,000,000	1,015,000,000	1,086,000,000	3,861,000,000	72,000,000
	Total Budget WITH Program	4,492,000,000	5,359,000,000	5,968,000,000	6,470,000,000	6,977,000,000	29,266,000,000	546,000,000
	% increase in annual budget	4%	15%	18%	19%	18%	15%	15%
CORAASAN	Total Budget Without Program	4,077,000,000	4,403,000,000	4,755,000,000	5,135,000,000	5,546,000,000	23,916,000,000	446,000,000
	Program Incremental Funds	161,000,000	682,000,000	969,000,000	1,058,000,000	1,152,000,000	4,022,000,000	75,000,000
	Total Budget WITH Program	4,238,000,000	5,085,000,000	5,724,000,000	6,193,000,000	6,698,000,000	27,938,000,000	521,000,000
	% increase in annual budget	4%	15%	20%	21%	21%	17%	17%
CORAAVEGA	Total Budget Without Program	253,000,000	273,000,000	295,000,000	319,000,000	345,000,000	1,485,000,000	28,000,000
	Program Incremental Funds	54,000,000	267,000,000	355,000,000	392,000,000	434,000,000	1,502,000,000	28,000,000
	Total Budget WITH Program	307,000,000	540,000,000	650,000,000	711,000,000	779,000,000	2,987,000,000	56,000,000
	% increase in annual budget	21%	98%	120%	123%	126%	101%	100%
Overall Program Incremental allocation to Providers							Total (USD)	175,000,000

Note: "Total budget without Program" is based on estimated recurrent budgets. CORAASAN = Santiago Water and Sewerage Corporation; CORAAVEGA = La Vega Water and Sewerage Corporation; INAPA = National Water and Sewerage Institute.

47. **The Expenditure Program was calculated taking into account the Program's expected results in each of the three results areas.** The cost effectiveness of spending is well articulated in the economic analysis and highlights that overall financing of the Program will be recovered through the benefits that would accrue to the nation as a whole. The budgets (which mirror the expenditure program) will, as required by Article 62 Law 423-06, contain the estimates of income, expenses, and financing; the cash requirements; and the human resources to be deployed, establishing the operational, economic, and financial results foreseen for the management of the next budget period. Efficiency of spending is monitored during the budget process and at the time of execution, and reporting as expenditures are linked to economic and financial performance indicators. The indicators the government traditionally considers fall well beyond what this operation seeks to monitor, and the fact that the budgets are linked to strategies, priorities, and annual plans signifies the productivity of spending at the WSS service provider level.
48. **Executed budgets show accountability and transparency, although they need improvements in timing and standardization of reports.** The participating WSS service providers comply with proper accounting, reporting, and publication of executed budget statements. Private auditors conduct the annual audits, and the audit reports are submitted to the legislature. However, only CORAAVEGA completes an annual external audit.

C. Results Framework and Monitoring and Evaluation

49. **The detailed DLI matrix, verification protocols, results chain, and results framework for the PforR Program will significantly strengthen the monitoring and evaluation of the national WSS modernization program.** In addition, as part of the IPF Project, the PCMU in MEPyD, which is responsible for monitoring and evaluation of the program, will work closely with DGDES (which tracks progress on indicators for the PNPSP) to ensure close

⁵⁶ Allocations across the three providers were based on population served and an implementation capacity factor which considered the annual recurrent budgets of the three participating WSS providers as a proxy for implementation capacity. The implementation capacity factor was calculated based on the proportion of the annual recurrent budget for each provider divided by the sum of the recurrent budgets for all three providers in a given year. These percentages were averaged over 4 years and applied to 50 percent of value each DLI. CORAAVEGA being the smallest provider received less allocations and their annual targets account for the smaller allocation.



alignment with the PNPSP. The PforR Program should improve the quality and quantity of information provided by WSS service providers. The PforR Program's detailed results framework and theory of change will also provide a learning and capacity building opportunity for DIGEPRES, to improve the implementation of the budget for results approach which also requires a results framework and theory of change to establish a new program in the government's budget classification.

D. PforR Program Economic Rationale⁵⁷

50. **Rationale for public provision and financing.** Currently, WSS service providers in the Dominican Republic receive significant financial support from the central government for both capital and operational expenditures. The need for such financial support is rooted in the utilities' weak management capacity, low operational and commercial efficiency, and constrained revenues because of tariff structures that significantly undervalue the price of water and do not account for the efficient production costs of services. As such, the WSS utilities are not commercially viable and cannot attract commercial financing to undertake the proposed sector modernization reforms. Thus, public sector financing for investments aiming at the improvement of management capacity and increased operational and commercial efficiency of the WSS utilities is justified, given the high regulatory risks and demands of high cost-recovery tariffs by the private sector that will render the private sector noncompetitive, compared with public provision.

D.1 PforR Program Economic Evaluation

Methodology

51. **An incremental cost-benefit analysis methodology is used, based on the with-program and without-program scenarios.** The period of analysis uses a 20-year time horizon, which includes a five-year implementation period of Phase I during which all measurable results are to be achieved. Valuation of costs and benefits is done using constant prices of 2022 and using a rate of exchange of RD\$56.60 per US dollar; a 6 percent rate of discount is used to estimate the net present values of benefits and costs. Economic analysis seeks to assess the proposed Program's net economic benefits to the Dominican Republic's society; the financial analysis assesses the Program's impact on the participating WSS service providers' financial viability. The with-program scenario is defined based on the preliminary assessment of results to be achieved by the Program, which were determined in close consultation with the participating WSS service providers. The without-program scenario was defined based on a similar technical assessment. The cost-benefit analysis methodology is used because benefits and cost of water and sewerage services can be monetized and quantified.
52. **Impacts of Program activities on global climate change (i.e., assessment of greenhouse gas emissions) are estimated using the World Bank Guidelines for Carbon Accounting and Social Value of Carbon and defined technical features of the activities financed under the Program.** The results of this assessment are integrated into this economic analysis.

Assessment of Benefits

53. **Benefits accruing to populations are grouped in benefits from increased access to WSS services, reduced NRW, and reduced energy usage.** See the full Technical Assessment for details on the economic and financial analysis.

⁵⁷ This section discusses the rationale for public financing of the Program and the valued added from the Bank support, and presents the analysis of the Program's potential fiscal impact. This analysis is consistent with the Bank guidelines, Operational Policy, and Bank Procedure, Program-for-Results.



Program impact on greenhouse gas emissions

54. Based on an assessment of impacts of Program activities on greenhouse gas emissions, it is estimated that the Program's net annual average emissions will be -27,728 tons of CO₂ equivalent per year over its economic lifetime, which constitute significant mitigation impacts. It is estimated that the Program's gross emissions will be 3,910,396 tons of CO₂ equivalent over its economic lifetime and net emissions will be -314,625 tons of CO₂ equivalent over its economic lifetime, when compared to a without Program scenario.

Conclusions of Cost Benefit Analysis

55. Counting all benefits and costs, in present value terms (Table 11), total incremental benefits are higher than total incremental costs making the Program economically viable, i.e., using a six percent rate of discount the present value of total incremental benefits (US\$401.83 million) significantly exceeds the present value of incremental costs (US\$292.78 million) which is reflected in the 1.37 benefit to cost ratio of the Program. All interventions have benefit to cost ratios greater than one, with interventions in CORAASAN reaching a 1.57, INAPA 1.43, and CORAAVEGA 1.22.

Table 11. Summary results of economic assessment

	INAPA	CORAASAN	CORAAVEGA	ALL
Present value of incremental benefits (@ 6 % discount rate), US\$ m	128.01	118.82	154.99	401.83
Present value of incremental costs (@ 6 % discount rate), US\$ m	89.80	75.75	127.23	292.78
Economic Internal Rate of Return	10.63%	19.16%	9.08%	11.29%
Economic Net Present Value (@ 6 % discount rate), US\$m	38.21	43.08	27.75	109.05
Benefit/Cost (B/C) Ratio	1.43	1.57	1.22	1.37

56. The investments financed by the Program (to improve WSS services, quality of their services, and the operational and commercial efficiency in the participating WSS provider's service areas and their associated operational costs for expanding their WSS services) will deliver a 11.29 percent Economic Internal Rate of Return (EIRR), which is more than five percentage points above the rate of discount, where the rate of discount represents a rate of return had the financing been allocated to other projects in the Dominican Republic. CORAASAN's interventions are expected to attain a 19.16 percent EIRR, INAPA's 10.63 percent, and CORAAVEGA's 9.08 percent.
57. The sector modernization reforms under the Program will attain an Economic Net Present Value (ENPV), estimated at US\$109.05 million; i.e., the present value of the Program incremental benefits is estimated to be US\$109.05 million higher than the present value of the Program incremental costs. The US\$109.05 million ENPV can also be explained being the excess generated by the Program implementation taking into account that other alternative projects could generate US\$292.78 million. Moreover, each of the Program's participating WSS service providers will contribute to attaining the total ENPV; i.e., US\$38.21 million by INAPA, US\$43.08 million by CORAASAN, and US\$27.75 by CORAAVEGA.
58. When the shadow price of carbon⁵⁸ (SPC) is used to incorporate the greenhouse gas emissions mitigation impacts of the Program, it is found that the EIRR goes up from 11.29 percent to a range between 12.00 and 12.69 percent (Error! Reference source not found.). Likewise, when the Program mitigation impacts are taken i

⁵⁸ Shadow price of carbon (SPC) has been estimated a range with a lower and upper limit for each year, with base at 2020 when the lower limit was set at US\$40 per tCO₂eq and upper limit at US\$80 per tCO₂eq. Such SPCs lower and upper limit were set to grow at a 2.26 percent per year.



nto the ENPV goes up from US\$109.05 million to the range between US\$124.67 million and US\$140.30 million. These results indicate that the Program is not only economically viable for the Dominican Republic's society but it also contributes to the global public good through its emission mitigation impacts.

Table 12. Economic Internal Rate of Return and Net Present Value

	Not including GHG emissions mitigation	Including SPC	
		Lower limit	Upper limit
Economic Internal Rate of Return	11.29%	12.00%	12.69%
Economic Net Present Value (@ 6 % discount rate), US\$M	109.05	124.67	140.30
Benefit/Cost (B/C) Ratio	1.37	1.43	1.48

Financial Analysis

59. **None of the participating WSS service providers is at present financially viable; i.e., their revenues do not cover their operations and maintenance costs and each has been receiving operational transfers from the central government to cover their operations and maintenance costs, including salaries of personnel and energy bills.** Furthermore, during Program implementation, the central government has budgeted to continue making transfers to all participating WSS service providers at an average US\$47 million per year, US\$39 million/year for INAPA's participating utilities, US\$5.86 million/year for CORAASAN, and US\$2.28 million/year for CORAAVEGA. However, it is expected that the Program activities, especially during the first two years, will serve to introduce reforms that make WSS services more financially sustainable, e.g., it is expected that by the end of year two of Program implementation, baselines for the NRW, collection efficiency improvements, and energy use improvements will be established, and based on those, monitored. Execution of such programs are expected to contribute to improvements on the financial sustainability of the participating WSS service providers.

E. Risks and Mitigation Measures

60. **The overall residual risk to the achievement of PforR Program objectives from a technical perspective is considered "Substantial."** Table 13 presents the main risks and the proposed mitigation measures, to be addressed through actions under the PforR Program, technical assistance, or binding actions in the Program Action Plan.

Table 13. Technical Risks to Achievement of PforR Program Objectives and Proposed Mitigation Activities

RA	Risk/assumption	Mitigation measures	Risk level
All	DIGEPRES may fail to allocate and transfer budgetary funds from program resources to providers and impair the predictability of resource flows and implementation of program activities.	Subsidiary agreements will be signed between DIGEPRES and participating WSS service providers that include the schedule of funds to be allocated annually to providers.	Substantial
	The providers may have difficulty meeting the standard of safely managed water supply, both in water quality and continuity of service.	The standard for safely managed water has been clearly communicated to the participating WSS service providers, and the most feasible systems and sectors have been pre-identified to progressively achieve results of increasing difficulty. The verification protocols will include detailed definitions on safely managed water supply. The IPF Project will provide additional technical assistance as needed.	Moderate



RA	Risk/assumption	Mitigation measures	Risk level
1	Some households may not connect to the sewerage network, limiting the number of safely managed sewerage connections.	The standard for safely managed sanitation has been clearly communicated to the participating WSS service providers, and the most feasible systems and sectors have been pre-identified to progressively achieve results of increasing difficulty. The IPF Project will provide technical assistance to the providers, which can include training on social engagement approaches and draw on the Bank's experience with the City-Wide Inclusive Sanitation initiative and the report <i>Connecting the Unconnected: Approaches for Getting Households to Connect to Sewerage Networks</i> . Where appropriate, condominium sewerage systems will also be used, along with experience on the application of the social compact approach being developed in the Water and Wastewater Services Improvement Project (P171778).	Moderate
2	Providers lack capacity to achieve DLRs related to the NRW and energy efficiency.	The IPF Project was included in the operation to give MEPyD the resources to provide technical assistance support to the participating WSS service providers in areas in which they have low institutional capacity. This technical assistance will be contracted in from the local market for energy efficiency and/or the international market for NRW. In addition, the Bank will support MEPyD with the development of terms of reference for the technical assistance and provide just-in-time support through trust fund resources to MEPyD and the providers to fill gaps.	Moderate
3	MEPyD is delayed in developing an operational and commercial performance monitoring framework.	The IPF Project gives MEPyD the resources to contract in specialists to support them to develop a performance monitoring framework. In addition, DLI 10 is based on variables that follow international best practice and are drawn from the Bank's IBNET website. IBNET is a free open-source software that MEPyD can use to begin analyzing data collection through DLI 10. Future efforts by MEPyD could develop an application that is specific to the Dominican Republic, but IBNET will allow the government to begin data collection and analysis.	Moderate

F. Program Action Plan

61. The Technical Assessment evaluated the government program's strengths and weaknesses and made recommendations on how to mitigate risks to the achievement of results. Two recommendations considered to be most critical will be included in the Program Action Plan, as summarized in Table 14.

Table 14. Inputs from the Technical Assessment to the Program Action Plan (at the Time of Program Appraisal)

No.	Action description	DLI	Responsibility	Timing	Completion measurement
Technical Assessment					
1	PCMU establishes a performance monitoring		PCMU/MEPyD	2023, first year of	Performance monitoring framework established with



No.	Action description	DLI	Responsibility	Timing	Completion measurement
	framework for WSS service providers.			implementation	protocols for reporting included in the operations manual
2	MEPyD (DGIP) enters the budget for investment projects with approved SNIP codes into SIGEF in a timely manner to ensure WSS service providers can spend the funds.		DGIP/ MEPyD	Recurrent, quarterly	Verification that budgets for all projects with SNIP codes are entered into SIGEF



ANNEX 4. SUMMARY FIDUCIARY SYSTEMS ASSESSMENT

This annex is a summary of the full Fiduciary Systems Assessment which has been produced as a separate document and will be disclosed separately.

Conclusions of the Fiduciary Systems Assessment⁵⁹

Reasonable Assurance

1. **The conclusion of the Fiduciary Systems Assessment (FSA) is that subject to the implementation of the proposed mitigation measures and agreed actions.** These are reflected in the Program Action Plan (PAP), the procurement and financial management systems that are to be used for the PforR Program, including governance arrangements, are adequate to provide reasonable assurance that the PforR Program funds will be used for the intended purposes, with due attention to the principles of economy, efficiency, effectiveness, transparency, and accountability.

Risk Assessment

2. **The overall integrated fiduciary systems risk rating is assessed as Substantial.** The key fiduciary risks resulting in the Substantial risk rating to the Program development outcomes are as follows: (i) unfamiliarity of the Borrower, the Ministry of Economy Planning, and Development (Ministerio de Economía, Planificación y Desarrollo; MEPyD), General Directorate of Budget (Dirección General de Presupuesto; DIGEPRES), the General Directorate of Accounting (Dirección General de Contabilidad Gubernamental; DIGECOG), Government Supreme Audit Institution (Cámara de Cuentas de la República Dominicana; CCRD), and the participating water supply and sanitation (WSS) providers with the Program-for-Results (PforR) instrument; (ii) lack of Program Annual Financial Statements; (iii) lack of an effective contract management system; (iv) challenges during implementation of new systems related to financial and contract registration, which will operate together with the e-procurement system; (v) lack of market research during the elaboration of the procurement plan; (vi) the potential inability of the government, in times of fiscal crunch, to provide adequate fiscal transfers to the providers in support of their quest to achieve the disbursement-linked indicators (DLIs); and (vii) the recurring gap between the established laws and regulations (de jure) and the actual implementation of those laws and regulations (de facto).
3. **The proposed systems- and capacity-strengthening and/or mitigation measures to address these risks include the following:** (i) close implementation support to be provided by the Bank's fiduciary teams, including support to set up the arrangements to produce the Program Consolidated Financial Statements and for the preparation of the operations manual; (ii) verification of eligibility to ensure that any person or entity debarred or suspended by the Bank or by another multilateral institution with which the Bank has signed a cross-debarment agreement is not awarded a contract under or otherwise allowed to participate in the PforR Program during the period of such debarment or suspension; (iii) inclusion of a contract management section in the operations manual to ensure an effective and timely delivery of goods, services, and works; (iv) design of a mechanism to promote bidders' participation in the procurement process; (v) provision of technical assistance to ensure compliance with procurement processes; (vi) support of the Program Coordination and Management Unit (PCMU) to closely

⁵⁹ The FSA was conducted through a methodical review of systems and practices in the government of the Dominican Republic and the three WSS providers: National Water and Sewerage Institute (Instituto Nacional de Agua Potable y Alcantarillado; INAPA), Santiago Water and Sewerage Corporation (Corporación de Acueductos y Alcantarillados de Santiago; CORAASAN), and La Vega Water and Sewerage Corporation (Corporación de Acueductos y Alcantarillados de La Vega; CORAAVEGA), the implementing agencies under the Program. The FSA was underpinned by analytical work undertaken earlier, Public Expenditure and Financial Accountability 2016 (European Union). It also benefited from a systematic review of the chapter on WSS included in the Dominican Republic Public Expenditure Review that provided additional analytical underpinnings for the Water Pact and the proposed national WSS modernization program.



monitor progress in the execution of PforR Program expenditures to ensure that they remain on track and are aligned with the achievement of the expected results; (vii) the declared commitment of the government to prioritize fiscal transfers to the providers under the PforR Program to enable them to achieve the agreed DLIs; and (viii) close monitoring and coordination by the PCMU to ensure that the budgetary resources necessary to achieve the agreed DLIs are transferred to the participating WSS service providers on a timely basis and that all providers comply with the binding laws, regulations, and policies.

Review of the Public Financial Management Cycle

Planning and Budgeting

Adequacy of Budgets

4. **There is a transparent process for the selection of public investment projects. MEPyD is responsible for public investment planning and prioritizes all major investment projects on the basis of uniform selection criteria that are publicly available and includes economic analysis of all major investment projects.**
5. **The WSS service providers are responsible for the PforR Program investment planning, including preparing a four-year institutional strategic plan 2021–24 and formulating annual budgets for operational and capital expenditures consistent with the National Development Strategy 2030 and the Multi-Annual Public Sector Plan.** The Ministry of Finance (MoF) reviews and approves all investment projects that are submitted by WSS service providers to the MEPyD. According to the Budget Organic Law, the Presidency of the Republic approves annual budgets of non-financial public corporations.⁶⁰
6. **PforR Program budget estimates are included in the government’s annual budget and there is due process between the implementing agencies and DIGEPRES for negotiating their annual budgets, and there has been full compliance with this process over recent years.** In essence, the adequacy of the budget allocations is contingent on the fiscal envelope, based on macroeconomic forecasts on a year-to-year basis. In general, however, the priorities of government spending are tailored to available budgetary financing, with such financing including targeted annual fiscal deficits. There is, therefore, a reasonable expectation that PforR Program’s resources will be allocated in annual budgets as required.
7. **The PforR Program expenditures budgeting is realistic and will be aligned with the government’s policy and budget cycle (from January 1 to December 31) and processes.** At the formulation stage, the annual budgets for 2021 and 2022 were prepared in an orderly and comprehensive manner, with efforts successfully made to link to policy priorities. The processes outlined in the annual budget preparation calendar were adhered to, though with some delay. All government agencies participated in the budget formulation process, though there was limited time for formal participation from the line ministries.
8. **During the implementation stage, DIGEPRES makes the expenditure allocations to central government agencies in accordance with the budget authorizations.** The budget departments (Departamentos de Presupuesto) of the WSS service providers monitor budget execution and prepare monthly budget reports by economic classification of expenditures. These reports provide accurate, comprehensive, information in an easily accessible format. Monthly execution reports for 2021 and from January–July 2022 were issued within two weeks from the end of each month and are made publicly available on the WSS service provider’s respective websites. The participating WSS service providers also issue quarterly and semi-annual physical and financial reports. Consequently, PforR Program’s actual expenditures are compared with the budget with reasonable frequency, and explanations are provided for significant variations from the budget. DIGEPRES consolidates all public corporations’ annual budget

⁶⁰ Since 2019, Presidential Decree 207-19 delegated the approval of nonfinancial public corporations’ annual budgets to the Ministry of Finance.



reports in the Budget Execution Report for Non-financial and Financial Public Enterprises (Libro de Ejecución de Presupuesto de Empresas Públicas No Financieras y Financieras), which is published on the DIGEPRES website, though with some delay. The 2020 report is the latest report made public on DIGEPRES website.

9. **The WSS service providers will record the PforR Program budget execution in their own internal budgeting tools and in SIGEF.** Since SIGEF began operations in 2004, it has been improved in phases and now provides capabilities for modern treasury management, including features to record and control commitments, process payments, account for cash and accrual transactions, and prepare financial statements. All central government budget entities use SIGEF and it is reliable for recording and reporting PforR Program budget transactions.
10. **Finally, during the evaluation and control stage, the Constitution of the Dominican Republic mandates the National Congress (through the CCRD) to perform ex post controls on budget implementation and to evaluate and approve the annual budget execution report (Estado de Recaudación e Inversión de las Rentas; ERIR) produced by the executive branch.**⁶¹ The CCRD renders an audit opinion on the ERIR and government debt. However, despite recent efforts, effective audit coverage remains relatively low thereby increasing the risk of leakage of public funds.

Budget Classifications

11. **The government budgeting system's classifications include the following: (i) administrative, (ii) economic, (iii) functional (disaggregated at the sub-functional level), and (iv) geographic.** The classification system is compatible with international standards as defined by the Government Finance Statistics of the International Monetary Fund and the United Nations Classification of Functions of Government, respectively. The classifiers are applied consistently during the budget formulation, execution, monitoring, and evaluation stages and are correctly consistent with the accounting chart of classification. The WSS service providers must comply with the annual budgetary policy and regulations. The annual budget for 2022 was presented in a format that reflects the classifications. The classification system is adequate for supporting economic and fiscal policy management.
12. **Transfers to the WSS service providers are appropriated and allocated to the Ministry of Health, based on the following:** (i) an organizational unit classification of Ministry of Health and Social Care (Code 207); (ii) an economic classification of Recurrent Expenditure Transfers (2.4) and Capital Expenditure Transfers (2.5); (iii) a source of financing code; and (iv) a functional classification of Social Services (Code 4.2).
13. **The PforR Program's fiscal transfers from the Ministry of Health to the WSS service providers will be processed through SIGEF under a specific budget line that was created for the PforR Program and using the above-mentioned budget classifications.** After the WSS service providers receive fiscal transfers, they are processed through their own budgeting and accounting information systems. However, this has been a binding constraint because these systems are not interlinked or interfaced with the central government's SIGEF, and all transactions are entered twice—once in the providers' primary budget execution system and again in SIGEF, increasing the risk of errors caused by recording duplicate transactions and increasing the need for reconciliations between the two systems for consistency of financial information. Mitigation measures include the establishment of specific arrangements and controls to produce the Program's Annual Financial Statements and the provision of close support by the Bank throughout project implementation.

⁶¹ CCRD audit reports for 2020 and 2021 were submitted to the National Congress within three months of the receipt of the financial statement by the Supreme Audit Institution. The audit report for 2019 was submitted to the National Congress within four months of CCRD receiving the financial statements.



Financial Sustainability and Funding Predictability

14. **The PforR Program's expenditure framework is adequate to achieve the results. The total estimated cost of the PforR Program is approximately US\$577 million, with a proposed International Bank for Reconstruction and Development financing envelope of US\$225 million.** The total PforR Program expenditure comprises 41 percent recurrent expenditures and 59 percent capital expenditures, with the Bank financing approximately 39 percent of the total.
15. **The central government finances the investments of the WSS service providers and part of their recurrent costs primarily through fiscal transfers from the central government.** Per the Budget Formulation Book for the year 2020, DIGEPRES allocated transfers to the National Water and Sewerage Institute (Instituto Nacional de Aguas Potables y Alcantarillados; INAPA) for works (costs of acquisition or construction of assets used to provide water and sanitation services) of RD\$4,101,386,473 (including loans from multilateral financial institutions belonging to Source 60 and external donations belonging to Source 70) and transfers for operation costs amounting to RD\$2,124,201,103, for an overall total of RD\$6,225,587,576.

PforR Program Budget versus Actual Expenditures, 2018–21 in RD\$

National Water and Sewerage Institute (Instituto Nacional de Aguas Potables y Alcantarillados; INAPA)

Year	Initial budget		Actual expenditure		Budget outturn (percentage)	
	Operating costs	Investments	Operating costs	Investments	Operating costs	Investments
2018	2,461,140,481	4,280,562,628	2,989,923,578	2,295,886,738	121.49	53.64
2019	3,288,552,348	4,431,219,385	3,679,354,798	1,963,222,861	111.88	44.30
2020	3,588,360,709	4,163,863,909	3,768,796,670	3,334,381,902	105.03	80.08
2021	3,304,139,182	4,750,968,681	5,252,086,131	2,689,139,975	158.95	56.60

Santiago Water and Sewerage Corporation (Corporación del Acueducto y Alcantarillado de Santiago; CORAASAN)

Year	Initial budget		Actual expenditure		Budget outturn (percentage)	
	Operating costs	Investments	Operating costs	Investments	Operating costs	Investments
2018	2,983,601,286	951,500,577	2,135,903,755	879,899,702	71.59	92.47
2019	2,806,557,187	2,118,508,224	2,549,399,009	1,029,078,437	90.84	48.58
2020	2,927,222,230	1,158,695,904	2,705,109,819	1,336,373,535	92.41	112.33
2021	2,917,878,515	1,170,253,565	2,914,921,809	970,993,806	99.90	82.97

La Vega Water and Sewerage Corporation (Corporación del Acueducto y Alcantarillado de La Vega; CORAAVEGA)

Year	Initial budget		Actual expenditure		Budget outturn (percentage)	
	Operating costs	Investments	Operating costs	Investments	Operating costs	Investments
2018	121,767,858	51,948,900	142,030,647	76,683,383	116.64	147.61
2019	126,804,937	124,519,060	154,026,710	81,083,583	121.47	65.12
2020	176,040,127	365,367,000	153,001,365	127,307,835	86.91	34.84
2021	154,728,142	125,841,981	241,773,083	204,733,530	156.26	162.69



16. The WSS service providers have a high degree of autonomy in budget execution, within the parameters of their approved annual operating plans, and have the necessary institutional capacity for budget preparation and execution.
17. **The general conclusion on the adequacy of budgets is that the government has well-developed though relatively complex budget processes that are adequate to support this PforR operation.** The PforR Program's budget is realistic, prepared with adherence to government policy, and is expected to be implemented in an orderly and predictable manner. There is a reasonable expectation that the required resources will be appropriated in the financial years when required and released accordingly. Nevertheless, this is an issue that requires close monitoring during supervision to ensure that the necessary resources are made available to WSS service providers and that the PforR Program is a high enough priority that it survives any discretionary budget cuts. A subsidiary agreement to which the government and the providers will subscribe will further consolidate the government's determination to make incremental fiscal transfers to the participating WSS service providers so that they are able to achieve the agreed results under the PforR Program.

Procurement Planning

18. **Public entities that acquire goods, services, and works with public funds shall prepare an Annual Procurement and Contracting Plan (Plan Annual de Compras y Contrataciones; PACC) annually, as required by Article No. 2 and No. 36 of Law No. 340-06 on Procurement and Contracting with amendments contained in Law No. 449-06 and in accordance with the methodology developed by the Public Procurement Office (Dirección General de Contrataciones Públicas) using the Standard Form No. SNCC.F.053.** The PACC contains the results of the formulation process in the planning, not exceeding 12 months, resulting in a detailed program of everything that is required to be acquired by the entity during a budgetary year to be included in the preliminary draft budget. This PACC is carried out after the institution defines its institutional strategic plan and annual operating plan. INAPA, the Santiago Water and Sewerage Corporation (Corporación del Acueducto y Alcantarillado de Santiago; CORAASAN), and La Vega Water and Sewerage Corporation (Corporación del Acueducto y Alcantarillado de La Vega; CORAAVEGA) carry out the PACC each year through their respective planning and development units, in collaboration with their procurement units and the requesting units to define the activities to be procured during the fiscal year.
19. **Procurement planning in the local system defines the organization needs and how much and by when it is needed, within a given period.** However, such planning does not require market research to obtain better results at the time of carrying out its processes; it performs only a price verification. Similarly, there are no risk assessment and mitigation measures at the time of planning. These shortcomings affect the costing of the procurement items and hence the inordinate delay in completing the procurement processes. The implementation and capacity building support will help enhance the capacity of the providers and their associated counterparts to improve on their procurement planning processes for timely and cost-effective delivery of procurement items.

Procurement Profile of the PforR Program

20. **The Program objectives from a procurement perspective will be achieved through the implementation of key activities that will support the achievement of the DLIs.** These key activities are focused on works, goods, and consulting and non-consulting services.
 - **DLI 1: Households serviced with safely managed water supply:** works, goods, and consulting and non-consulting services to improve water supply systems, among others
 - **DLI 2: Households serviced with safely managed sanitation:** works, goods, and consulting and non-



consulting services to improve sanitary sewerage systems, among others

- **DLI 6: Improving operational planning and non-revenue water performance and energy efficiency:** consulting services to develop a non-revenue water and energy efficiency strategy for specific water sectors and an associated annual investment plan, among others
- **DLI 7: Reduction in non-revenue water:** goods and consulting and non-consulting services to develop user and network cadasters, network sectorization, and acquire and install macro and micrometers, among others
- **DLI 8: Improved energy efficiency:** goods and consulting and non-consulting services to complete an energy audit and implement energy efficiency measures, among others
- **DLI 9: Strengthened corporate governance:** goods and consulting and non-consulting services to digitalize billing and collection systems and implement innovative customer payment mechanisms, among others

Procurement Performance

21. **The WSS service providers rely on skilled procurement staff with knowledge of local procurement rules and procedures.** However, CORAASAN and CORAAVEGA have no prior experience implementing Bank-financed projects or programs under the Procurement Regulations. INAPA has had some experience in implementing Bank-financed IPF Projects but not PforR Programs.
22. **The use of systems such as SIGEF (financial management) and the Regular Structured Process System “TRE system”(Sistema Trámite Regular Estructurado; contract certification) have been recently incorporated into the CORAAS, and their link in the e-procurement system is ongoing.** As a result, some key stages in the life cycle of the required procedures and processes linking procurement planning and management with the financial management system are not being carried out with the use of the necessary control and monitoring systems or mechanisms. As for INAPA, the incorporation of SIGEF is recent, but they already had the TRE system in place. Therefore, their control and monitoring systems and processes are much more developed.

Budget Execution

Treasury Management and Flow of Funds

23. **The central government procedures will be used for treasury management of PforR Program funds, including the treasury single account held at the central bank to manage all government financial resources.** The government cash management procedures are well-developed, including clear and well-understood procedures. Treasury balances are calculated and consolidated daily. The operation of the treasury single account is tracked through SIGEF, because it is the main instrument used for recording, monitoring, and controlling the budget and tracking the financial execution of government expenditures and revenues. To execute payments and collect revenues, the government uses the Banco de Reserva as its financial agent (or any other bank, as authorized by the National Treasury).
24. **The existing arrangements for transferring budgeted funds from the Ministry of Finance to INAPA and the CORAAs are deemed adequate to ensure that funds are made available in line with implementation plans and that funds are made available in an orderly and predictable manner, as further described below.**
25. **Transfers to WSS service providers are made in line with approved budget authorizations and limits.** Transfers are requested by the executive director of each provider and executed following the processes established in SIGEF, which include the issuance of a request for payment by the Ministry of Health, ex ante review by delegates of the Comptroller General of the Republic (Controlaria General de la República; CGR), and payment by the



National Treasury. The allocated budget for recurrent expenditure is divided equally by 12 and transfers in these amounts are made every month into the WSS service providers' general bank accounts. Similarly, such capital transfers are made into the WSS service providers' bank accounts held under the treasury single account concept in commercial banks from which payments are made to suppliers, vendors, and contractors.

26. **Disbursement of Bank loan proceeds will be made at the government's request through the PCMU at MEPyD.** The loan proceeds will be disbursed upon the achievement of verified DLIs and are not dependent on or attributable to individual transactions or expenditures of the PforR Program. Loan proceeds will be disbursed against the achievement of 13 results that are associated with 10 DLIs. The financing amount allocated per DLI has been determined based on the relative importance of the indicator, to provide the incentive necessary to achieve the overall PforR Program goals and outcomes.
27. **MEPyD, through the PCMU, will contract a consulting firm (to be paid from the IPF Project) to provide independent and credible verification of the achievement of the DLIs.** The Bank will need to clear the terms of reference of the independent verification agent. The selected independent verification agent shall have the necessary independence and capacity for ensuring credible verification.
28. **The PforR Program will use the functionality of PforR advances. The Bank may make an advance payment of up to 25 percent of the PforR Program funds (US\$56.25 million, maximum) for one or more DLIs that have not yet been achieved.** To request an advance, the PCMU at MEPyD will attach a request for advance letter to the withdrawal application, per the sample included in the Disbursement and Financial Information Letter.
29. **With the advance provided by the Bank, DIGEPRES will enable the WSS service providers to include the value of the DLRs attributed to them in their annual budget under a newly created Budget Program 14, registered against external financing.** The first year of the Program will launch using government funds, pending the effectiveness of the loan, and the WSS service provider's budget ceilings have already been raised accordingly. The amount to be budgeted will be the value of potential DLRs that the participating WSS service providers shall meet for that year. Budget allocations to providers will follow the government's normal budget cycle. WSS service providers submit their budget requests for the following year to the Ministry of Finance in August or September, with final approval of budgets by December.
30. **Proceeds of the Bank loan will be disbursed to a segregated WSS Modernization Program subaccount in the treasury single account held with the central bank and denominated in US dollars.** Funds are then transferred from this treasury single account subaccount into the Dominican peso-denominated WSS service providers' bank accounts (held at commercial and/or state-owned banks) from which payments will be made, consistent with the approved budgeted expenditures of the WSS service providers. If after the PforR Program's closing date the Borrower fails to provide the Bank with evidence satisfactory to the Bank that the withdrawn loan balance does not exceed the total amount of PforR Program expenditures (payments made on or after the signing date but before the closing date), the General Conditions require that the Borrower shall, upon notice from the Bank, promptly refund to the Bank such excess amount of withdrawn balances.

Accounting and Financial Reporting

31. **The PforR Program's transactions will be recorded primarily in the budget and accounting information systems maintained by the WSS service providers in Oracle and other information technology platforms.** The participating WSS service providers' accounting systems permit the tracking of expenditures following cost center and functional and geographical classifications and they have detailed charts of accounts. The financial information systems of each WSS service provider are deemed adequate for recording PforR Program financial transactions and timely preparation of monthly financial reports.



32. **WSS service providers' own accounting systems, supplemented by SIGEF, will be used to generate the respective provider's and the PforR Program Annual Financial Statements using the accrual basis of financial reporting in Dominican pesos.** At the end of each fiscal year, the PCMU will prepare the Program Consolidated Annual Financial Statements that will be audited. The Program Annual Financial Statement will be a consolidation of the annual financial statements of the providers. The PCMU will be responsible for coordinating with the external auditors for the audit of the PforR Program Consolidated Annual Financial Statements.

Procurement Processes and Procedures

33. **INAPA, CORAASAN, and CORAAVEGA are subject to the application of Law No. 340-06 (dated August 18, 2006), as amended by Law No. 449-06 (dated December 6, 2006), on Public Contracting of Goods, Works, Services, and Concessions.** The selection procedures established in the cited regulations are as follows: National Public Bidding (Licitación Pública Nacional); International Public Bidding (Licitación Pública Internacional); Restricted Bidding (Licitación Restringida); Price Comparison (Comparación de Precios); Small Purchases (Compras Menores), Works Drawing (Sorteo de Obras), and Reverse Auction (Subasta Inversa). To determine the selection modality to be applied in a procurement or contracting, the threshold ceilings shall be used to determine the selection modality to be applied in a purchase or contracting process, the Public Procurement Office (Dirección General de Contrataciones Públicas; DGCP) updates this threshold every year. However, there are exceptional procedures stipulated in the law and its regulations with limited or without competition that do not depend on the threshold ceilings but on the nature of the requirement and the market approach itself.
34. **The threshold used for 2022 by the institutions under Law 340-06 and its modifications are shown in TTable 15.**

Table 15. Procurement Thresholds 2022

Thresholds 2022			
Procedure	Works	Goods	Services
National Public Bidding	From RD\$404,657,142.99 and up	From RD\$5,312,505.99 up	From RD\$5,312,505.99 And up
Restricted Bidding	From RD\$206,227,320 to RD\$404,657,142.99	From RD\$5,258,566.00 to RD\$5,312,505.99	From RD\$5,258,566.00 to RD\$5,312,505.99
Drawing of Works	From RD\$123,736,392.99 to RD\$206,227,320.99	n.a.	n.a.
Price Comparison	From RD\$32,996,371.00 to RD\$123,736,392.99	From RD\$1,237,364.00 to RD\$5,258,565.99	From RD\$1,237,364.00 to RD\$5,258,565.99
Small Purchases	n.a. All the works from RD\$1 to RD\$123,736,392.99 are conducted through the price comparison method.	From RD\$164,982.00 to RD\$1,237,363.99	From RD\$164,982.00 to RD\$1,237,363.99

35. **Publication.** As indicated in Table 15, some of the procurement methods require an invitation to bidders, and for the National Public Bidding, the announcement must be placed in two local newspapers during two consecutive days. In the event of non-compliance, the process could be invalid. However, for the purchase of goods and contracting of services and works, the advertisement shall be published for all the selected procurement methods on both the procuring agency's website and DGCP's website.
36. **Decree 350-17 establishes the mandatory, official, and permanent use of the Transactional Portal (*Portal Transaccional*) for the management of procurement and contracting for those entities and agencies subject to**



the application of Law No. 340-06 and its amendments. This platform is a technological tool for the management of public procurement of goods, works, and services and should contain all the documentation issued in a process.

37. **e-Procurement System.** The Transactional Portal is an electronic public procurement web platform that allows public institutions to conduct the entire procurement process online, from planning to reception of goods, services, and works. Through this system, all suppliers have access to the procurement processes in a virtual office and can participate online in all processes, including posting of bidding documents, submission of comments, bids and invoices, and receipt of automatic notifications about purchases related to their business activity. In general, anyone can access the procurement process and download the documents of the digital file in any phase of the process except for documents considered confidential.
38. **Public Procurement and Contracting Committee.** As indicated in the Law No. 340-06, a committee will be composed of five public servants, and this is mandatory for all the institutions under the scope of application of this law. The committee is responsible for the organization, application, and execution of the procedures carried out under the selection method indicated above, and the exceptional procedures, except for security situations and national emergencies.
39. **Bid envelopes.** The bids submitted shall be in two separate envelopes. One envelope (the Technical Envelope) will contain the elements of solvency, suitability, capacity, and technical offer of the bidder. The other envelope (Economic Envelope) will be considered when the bidder has reached the qualification required in the Procurement Bidding Document after the evaluation of the technical bids. The economic proposal and the bid guarantee shall be included in this envelope.
40. **Bidding Process.** This may be carried out in one or two stages. In a two-stage public bidding, the opening of the technical bids and the financial (economic) bids shall be carried out separately; in a one-stage public bidding, the opening of the technical bids and the financial bids shall be carried out together.
41. **Bidding documents.** The Public Procurement Office is responsible for the preparation of the standard documents, such as bidding documents for goods, services, consulting services, and works, and the standard and complementary forms that support the National Procurement and Contracting System, which are mandatory for government offices under the implementation of this framework. At the moment, there are standard bidding documents only for national public bidding procedures for goods and related services, consulting services, non-consulting services and works, and model bidding documents for reverse auctions. However, other standard documents (format to be used during specific stages in the process) shall be used for most of the procurement processes.

Contract Administration

42. **Contract management.** Contract administration is one of the mandatory stages in the procurement process. The award generates rights to the bidder, so the government offices must formalize the contract or purchase orders where applicable either in writing or in digital format, and these shall be published through their official websites and the Transactional Portal. After the contract or purchase order is signed, suppliers are required to deliver the goods, services, or works awarded.
43. **The process of reception and contract management is carried out by the person in charge of the warehouse and supply of the contracting agency or office, who shall receive the goods provisionally until verification of their compliance on the technical side.** In the case of works or services, the corresponding technical department must verify that the executed works or services comply with the requirements and terms established in the Specific Conditions, Technical Specifications and/or terms of reference.



44. **Once the works, goods, or services have been received in accordance with the bidding documents, the final acceptance of the works, goods, or services is carried out before proceeding with the entry into the warehouse for inventory purposes in the case of goods.** However, there is no mechanism to verify that the contract is being handled within the time and conditions established in the procurement documents.

Procurement Risks and Mitigation Measures

45. **Control audits ex-ante and ex-post in the procurement processes.** The use of the electronic public contracting system (Portal Transaccional) and the link to control systems during the execution phase of a public contracting process will allow better control and accountability on the processes carried out by INAPA, CORAASAN, and CORAAVEGA. However, because these public agencies did not have them in place, the information related to procurement performance is not complete or accurate. The new authorities only recently assumed these actions and commitments. Therefore, there is no historical information available to verify compliance within the contracting process, contract registration, and expenditure execution processes through reports that by legal mandate must be made by the CGR and the Chamber of Accounts (Camara de Cuentas). There are currently no prior audits or reports on these agencies to verify their performance, although they are in the process of including them in the audits that are underway and as part of the reporting requirements. Nevertheless, recent statistics show that these agencies comply with transparent procurement procedures and ensure that the registration of the information related to the process is now being uploaded in Portal Transaccional system for auditing purposes.
46. **Accountability.** INAPA, CORAASAN, and CORAAVEGA have a team of qualified and experienced procurement professionals in place with well-defined responsibilities. The Procurement Committees (*Comité de Compras y Contrataciones*) are established by law and well in place and accountable for the integrity of the competitive process and other exceptional procurement activities.
47. **Competitive process versus registered bidders.** DGCP, through the Bidder National Register (*Registro de Proveedor del Estado*), enables and legitimizes bidders to participate in the procurement process according to their commercial registered items or profession. According to statistics issued by DGCP, these three non-financial entities have a critical number of processes that have been cancelled or declared deserted (which means without bidders or without a technical or financial offer, according to the bidding document). The nature of these entities requires acquisition of goods, services, and works with a certain level of complexity, specialization, and technical specifications or that present difficulties to find in the market. Also, the participation in a procurement process could be affected for several reasons: (i) bidders are not clearly identified; (ii) bidders are not registered in the Bidder National Register despite their registration in the Chamber of Commerce; (iii) lack of process integrity; (iv) payment delays; (v) wide or extended publicity; and (vi) restricted access to the market in that region. These challenges could lead to delays in achieving institutional results and might affect the delivery of the services they provide to the community or region.

Internal Control Framework

Internal Controls

48. **The internal control environment to be used for the PforR Program is anchored in the country's legal and institutional framework.** In addition, the internal approval processes and systems of the WSS service providers allow for a reasonable segregation of duties between the various stages of the expenditure cycle, including purchase orders, receipt and verification of services rendered, requests for payment and the custody of purchased goods. The process-flows appear to be well understood, with adequate control over and stewardship of PforR Program activities and funds.



49. **All accounting and support documents are retained on a permanent basis using a system that allows for easy retrieval by the authorized user.** The Bank's General Conditions require each Borrower to retain all records (contracts, orders, invoices, bills, receipts, and other documents) evidencing eligible expenditures and to enable the Bank's team to examine such records. They also require such records to be retained for at least one year after receipt by the Bank of the final audited financial statement required in accordance with the legal agreement or two years after the closing date, whichever is later. The government will be responsible for ensuring that document retention beyond the period required by the legal agreement complies with their government regulations.
50. **The PforR Program's internal control system will be supported by the operations manual. The operations manual will comprise descriptions, flow charts, policies, templates and forms, user-friendly tools, instructions, and techniques to ensure that approval and authorization controls continue to be adequate and are properly documented, and that they facilitate the adequate safeguarding of the PforR Program's assets.** The operations manual should be prepared by the PCMU and approved by the Bank before effectiveness and be maintained and updated throughout the PforR Program's life.
51. **The Open Access to Public Information Law 200-04 regulates the right of access to public information.** The National Congress approved the law, which is mandatory for the entire public sector including the WSS service providers, in April 2004 and it entered into force in February 2005.
52. **For this purpose, the Ministry of Finance developed and made the Transparency Portal (the use of which is mandatory) available to all government agencies, including WSS service providers. INAPA, CORAASAN, and CORAAVEGA publish a wide range of financial information on their websites using the Transparency Portal tool, including annual budget proposals, annual budget allocations approved, and in-year and cumulative annual budget execution reports.** However, only partial financial information, for example, on annual unaudited statements of financial position, is made available to the public on the WSS service providers' websites.
53. **In addition, relevant procurement information (bidding documents, clarifications and amendments, bid opening records, and award recommendation) is made publicly available on the WSS service providers' websites and on the Transactional Portal.** WSS service providers maintain detailed fixed asset registers, and there are specific units and departments within each of these agencies responsible for the asset monitoring, with counts taking place at least once a year (as part of the preparation of the Annual Financial Statements) and then reconciled with the accounting records following standards approved by DIGECOG. The sale or disposal of fixed assets is done throughout the year, following norms and procedures established by DIGECOG as well. There are also detailed depreciation schedules used to reflect a more true and fair picture of the value of these assets (regardless of the cash basis of financial reporting used) and to prepare the agency to be ready to purchase new assets once an asset's condition deteriorates.
54. **Reconciliations of government bank accounts are prepared by someone other than those personnel who process or approve payments, and the accounting manager then reviews and approves them and submits them to the treasury manager for final approval.** Depending on the procurement method, the responsible authorities are established in Law 340-06 (see Table 16). There is also clear definition and segregation of functions in procurement processes, in which staff and committees participating in the processes work independently and are accountable for their individual contribution.
- **Expenditure authorization:** Finance directors are responsible for authorizing expenditures and perform this function at the request of the procurement unit or the authorized unit. All procurement methods must have a Certificate of Funds before undertaking the procurement process, except emergency and national security processes.



- **Contract award:** Procurement decisions are made by competent authorities based on established processes included in the legal framework.

Table 16. Procurement Methods Using Country Systems

Procurement method	Responsible authority for expenditure authorization	Legal documents issued
National Public Bidding Restricted Bidding Price Comparison Works Drawing	Procurement committee	Contract
Minor purchases	Financial unit or equivalent	Purchase order
Direct contracting	Procurement unit	Purchase order
Exceptional processes	Procurement committee	Contract

55. **Code of Ethics.** The WSS service providers' employees are considered public servants, as per provisions of Law 120-01 Code of Ethics for Public Servants (Código de Ética del Servidor Público). Law 120-01 provides for rules of conduct with which all public servants must comply, along with sanctions that are applicable in case of staff misconduct. In addition, the General Directorate of Ethics and Integrity (Dirección General de Ética e Integridad Gubernamental), reporting to the presidency, was established in 2012 as the government department responsible for promoting the development and strengthening of an ethical culture of transparency and integrity through the promotion of ethical and moral values in public administration. The General Directorate of Ethics and Integrity also supported INAPA and CORAAVEGA in the preparation of their codes of ethics. CORAASAN has a code of ethics from 2016 and will start updating the code shortly.

Internal Audit

56. **CGR is the governing body of the country's Internal Control System. It is mandated by the Constitution to conduct ex ante control and ex post audits across central government, decentralized agencies, and public corporations (including INAPA and the CORAAs).** No payment for goods or services is made in the public sector without ex ante approval of the internal audit units (IAUs). The CGR defines the internal audit framework, assesses government internal controls, carries out its audits, and reports directly to the president (executive).
57. **The IAU is part and parcel of the institutional control arrangements under each of the WSS service provider's control frameworks, and the PforR Program expenditures will be under the scope of the IAUs reporting to the CGR.** However, CGR's internal audit process is focused largely on ex ante reviews of payment orders by IAUs, and it does not effectively conduct oversight as a support function to internal management. This and the employment of an audit approach that is not adequately risk based and does not allow sufficient focus on systemic issues leaves a risk of leakage of public funds. A key challenge will be how to limit internal audit function's involvement in the PforR Program's expenditure processing cycle and how to ensure enhanced independence for internal auditors. To the extent that internal (or external) audit reports become available in the future relating to the PforR Program specifically, the status of the auditors' findings and recommendations will be followed up during supervision missions by the Bank team.

PforR Program Governance and Anticorruption Arrangements

58. **In 1999, the Dominican Republic ratified the Inter-American Convention against Corruption. A legal and regulatory framework on fraud and anti-corruption was thus put in place, and Law 41-08 was enacted that**



established the Ministry of Public Administration (Ministerio de Administración Pública) as the governing body on public employment. Article 80 of the law prohibits public officials from “requesting, accepting or receiving, directly or through an intermediary, gratuities, gifts, commissions or rewards, as payment for acts germane to their positions” and “requesting, accepting or receiving advantages or benefits, in money or in kind, to facilitate the acquisition of goods and services of the State by third parties, or facilitate the sale of the same to third parties.” Finally, among the serious offenses provided for in Article 84 of the law, there are those provisions that specifically identified repercussions for engaging in any of the prohibited actions mentioned in this paragraph, including “fraudulent handling of State funds or assets for personal benefit or that of other people.”

59. **In accordance with the provisions of Law No. 340-06 and its amendments, sanctions for noncompliance by official of the executive branch, with the provisions of this law, shall be applied in accordance with the regime provided for in the Law of the Civil Service and Administrative Career.** In all other cases, the application of sanctions shall be governed by the provisions of the respective disciplinary statutes. Any government officials who participate in the procurement or contracting process shall be liable for any damages caused by negligence or malice caused to the public patrimony and shall be liable for the sanctions contemplated in the referred law and its regulations.
60. **WSS service providers employees are considered public servants and are subject to administrative sanctions, without prejudice to the detailed responsibilities established in the regulations and the civil or criminal responsibilities provided for in the corresponding laws, depending on the seriousness of the offense.** The provisions of the law also establish that corrupt or fraudulent practices included in the Criminal Code or within the Inter-American Convention against Corruption, or any agreement between bidders or with third parties, that restrict free competition practices shall be grounds for rejection of the proposal at any stage of the procurement process or the rescission of the contract if it has already been executed.
61. **The Attorney General's Office (Procuraduría General de la República), is the office responsible for formulating and implementing the state's policy against crime, directing criminal investigations, and exercising public criminal action on behalf of society.** The Attorney General's Office houses the Specialized Prosecution Office for Administrative Corruption (Procuraduría Especializada de Persecución de la Corrupción Administrativa) to prosecute allegations of corruption in relation to the management of public resources. Per the provisions of Article 88 of Law 76-02 (Criminal Procedure Code), the Specialized Prosecution Office for Administrative Corruption carries out all the necessary procedures to investigate the illicit acts typified in the Dominican Penal Code, gathers evidence, and prosecutes offenders in court. Once the investigation is completed, the trial is conducted until its completion. Thus, there is adequate legal and institutional framework and capacity to monitor and address governance, fraud, and corruption issues.
62. **The Bank's Institutional Integrity Vice-Presidency (INT) may also, jointly with the Borrower and/or the participating WSS service providers or on its own initiative, investigate any allegations or other indications of fraud and corruption (as defined in the anti-corruption guidelines) in connection with the PforR Program or any part of the PforR Program.** In all such cases, the Borrower and the participating WSS service providers will collaborate with INT to acquire all records and documentation that INT may reasonably request from the operation regarding the use of the PforR Program financing. If the Borrower or the Bank determines that any person or entity has engaged in fraud and/or corruption (as defined in the anticorruption guidelines) in connection with the PforR Program, the Borrower will take timely and appropriate action, satisfactory to the Bank, to remedy or otherwise address the situation and prevent its recurrence.
63. **To implement the Bank's anticorruption guidelines for PforR operations, it has been agreed that any expenditures arising out of contracts given to individuals or firms debarred by the Bank or under suspension**



by the Bank are not eligible for Bank financing under the PforR Program. The external auditors' terms of reference will include a requirement to review PforR Program expenditures to confirm that contracts are not awarded to debarred or suspended firms.

64. **The PCMU, INAPA, CORAASAN, and CORAAVEGA will immediately inform the Bank (through e-mail and official letter) of any complaint, claim, or allegation related to fraud and corruption that they either have received or of which they become aware;** in addition, every semester (together with the Program Monitoring Reports), a report will be prepared containing all alleged cases, with an updated status of the respective actions taken as pertaining to the PforR Program resources. The PCMU, INAPA, CORAASAN, and CORAAVEGA will immediately provide the Bank with all the records, documentation, and other information that the Bank may request with respect to such issues. In the event that the Bank decides to conduct its own investigation, the Bank may request the government and/or the participating WSS service providers to exercise its/their legal rights and remedies (under the relevant contract or contracts) to obtain all information, records and documentation that the Bank may request and provide these to the Bank. This process does not limit the rights of the Bank to also make direct requests for information from individuals or contractors who are recipients of PforR Program financing. In line with the obligations arising under the anticorruption guidelines, the government and participating WSS service providers should ensure that individuals or contractors who are recipients of PforR Program financing are aware that the Bank may decide to exercise this option. If the Bank determines that it has not been able to receive the documentation, records, or information it requested directly and/or through the participating WSS service providers, the Bank may declare the relevant expenditure ineligible for Bank financing under the PforR Program. Furthermore, if the Bank concludes that a sanctionable offense has occurred, it may decide to pursue sanctions against the individual or company, in line with the Bank procedures.
65. **Debarments.** Without prejudice to the corresponding criminal or civil actions, suppliers may be subject to the following sanctions: written warning; execution of the guarantees; penalties established in the bidding documents or in the contract; unilateral termination without liability for the contracting entity, or temporary or definitive disqualification. For disqualification purposes, only DGCP could debar a firm or an individual bidder. Disqualification shall depend on the degree of the offense and may be for a period of one to five years or permanently, without prejudice to the civil liabilities stipulated by the pertinent law, including, but not limited to: bribery, non-compliance with contract obligations, collusion, complicity with civil servants to be awarded or to obtain privileged information.

Auditing

PforR Program Audit

66. **A local firm (Reyes, Galvez y Asociados) has audited CORAAVEGA's own Annual Financial Statements for 2021 and 2020.** The auditors expressed a modified audit opinion on CORAAVEGA's 2021 Annual Financial Statements because CORAAVEGA has not made any evaluation of the fair value of the subsidies received and maintained as property, plant, and equipment and advances for works. CORAASAN's financial statements for the years 2018–20 were audited by a local firm within the Panel Kerr Forster Global Network, but these audited financial statements are not publicly available. Neither a private audit firm nor CCRD have audited CORAASAN's or INAPA's annual financial statements for 2018–21. A recommendation to undertake annual independent external audit of the participating WSS service providers is included in the PAP.
67. **The PforR Program, through DLI 9, will support the preparation of WSS service providers annual financial statements following government accounting standards issued by DIGECOG, and for these financial statements to be audited in accordance with internationally recognized auditing practices by an auditor acceptable to the**



Bank, and published on each WSS website in a timely fashion. For purposes of the PforR Program, and in line with its constitutional mandate, the CCRD will conduct the external audit of the Program's Consolidated Annual Financial Statements. If the CCRD is not able to conduct the audit, a private auditor acceptable to the Bank will be hired to conduct the audit, to be paid for under the IPF Project. As earlier mentioned, the financial statements of the PforR Program shall be the consolidated audited financial statements of the three providers.

68. **CCRD is functionally independent from the executive branch and has unrestricted and timely access to records, documents, and information required for the development of external audits.** CCRD usually renders an opinion on the government annual budget and financial execution statements within two months after they are received. The external auditor will follow agreed terms of reference acceptable to the Bank and will conduct the audit in accordance with either the International Standards for Supreme Audit Institutions, or the International Standards on Auditing.
69. **The audited Program Consolidated Annual Financial Statements will also be prepared in accordance with accounting standards acceptable to the Bank (that is, the International Public Sector Accounting Standards), or national accounting standards where, as determined by the Bank, they do not significantly depart from international standards or in accordance with acceptable standards that are consistent with "special-purpose" financial statements.** The auditors will be required to issue an opinion on the Program's Consolidated Annual Financial Statements. The auditor's report will be submitted to the Bank no later than nine months after the end of the fiscal year. The Bank will review the audit report and will periodically determine whether the audit recommendations are being implemented satisfactorily.

Procurement and Financial Management Capacity

Adequacy of Staffing in Both Numbers and Experience

70. **INAPA, CORAASAN, and CORAAVEGA have teams of fiduciary staff (financial management and procurement) and are responsible for monitoring the implementation of the PforR Program's integrated fiduciary aspects. Staff are professional, experienced, and knowledgeable on governmental policies and procedures.** The procurement unit is responsible for undertaking the procurement processes within INAPA, CORAASAN, and CORAAVEGA. However, during the process cycle, other units are also involved from the preparation of the procurement plan and budgeting processes until the reception of the goods, and delivery of services and works.
- **Planning and Development Unit (Departamento de Planificacion y Desarrollo):** Develops the institutional strategic plan and the annual operating plan, which include the expected outcomes and the strategic projects and, based on which the budget is prepared
 - **Legal Department:** Reviews the legality of procurement documents and compliance with the legal framework and manages the contract processes that include draft contracts and amendments, requests contract certification through TRE system, approves bidding documents, solves disputes, and provides legal advice to the Procurement Committee on specific issues regarding the bidding process, on modifications of specifications and contracting procedures, and on the formalities required to support documentary evidence and substantiate modifications and terminations
 - **Administrative and Financial Management Department:** Responsible for ensuring that funds are available before initiating the procurement process and certifying funds before signing contracts, and also for scheduling payments within the budget and requesting DIGEPRES changes in budget lines (virements) as necessary
 - **Requesting areas:** Specific units within the office responsible for elaborating the terms of reference and the request for the goods, services, and works they will need during the fiscal year in a timely manner. These items should be included in the annual procurement plan



- **Warehouse:** Maintain the inventory of goods and receive goods in accordance with the technical specification, and the planning and distribution of materials based on the planning of the needs of the different user areas
- **Access to Public Information Unit.** Manage the institutional website and respond to any citizens' requests for public information in accordance with the established procedures. All procurement activities should be published and procurement documents disclosed on the website, with the exceptions indicated in Law 200-04.

Financial Management

71. **The PCMU in MPEyD will be in charge of all aspects of PforR Program monitoring and reporting.** The PCMU will be staffed with technical staff, including the fiduciary and administrative functions, and will serve as a coordination unit with all other government departments and the participating WSS service providers. The PCMU will be staffed with a senior procurement specialist and a procurement analyst in coordination with the units in charge of the technical aspects.

Implementation Support

72. **The fiduciary implementation support will include the following:**
- Reviewing the implementation progress, focusing on the achievement of the PforR Program results and implementation of the PAP and related legal covenants
 - Monitoring the performance of fiduciary systems and associated risks and the implementation of the Bank's anticorruption guidelines
 - Monitoring the PforR Program's reporting process for financial statements (which will be outlined in the operations manual) and assisting the client as necessary
 - Reviewing the PforR Program implementation with the sector team to assess the timeliness and adequacy of the appropriated PforR Program funds.

Key Fiduciary System Risks and Mitigation Measures

73. Based on the Fiduciary Systems Assessment, key fiduciary system risks and mitigation measures are described in [Table 17](#).

Table 17. Key Fiduciary System Risks and Mitigation Measures

Risk	Mitigation action	Timing	Responsible
Unfamiliarity with the Program for-Results instrument	Prepare operations manual	By effectiveness	PCMU
Risk that contracts will be awarded to firms and/or individuals debarred or suspended by the Bank	Eligibility verification to ensure that any person or entity debarred or suspended by the Bank or by another multilateral institution with which the Bank has signed a cross-debarment agreement is not awarded a contract under the PforR Program during the period of such debarment or suspension	During implementation	PCMU/providers



Risk that the PforR Program financial statements are not prepared timely or subject to external audit	Close technical support for the preparation of the participating WSS service providers' respective annual financial statements and terms of reference for their financial statements' annual audits.	During implementation	PCMU/PAP
Lack of an effective procurement-related complaints procedure in the bidding documents	Preparation and implementation of a clause in the bidding documents on the handling of complaints, which includes a detailed description of the procedure through which a timely and fair revision of the complaint is ensured.	During the first 12 months of implementation	PCMU/PAP
Amount of PforR Program expenditures may be insufficient to cover the withdrawn loan balance; INAPA, CORAASAN, and CORAAVEGA dependence on transfers from the central government for the execution of their budgets reflected in the Program Annual Financial Statements	Close implementation support to be provided by the Bank to (i) ensure that the government allocates adequate resources to the WSS service providers; and (ii) help establish the arrangements to produce the Program Annual Financial Statements	During implementation	Bank supervision
Fraud and corruption	Promptly inform the Bank of any credible and material allegations of fraud and/or corruption regarding the PforR Program as part of the overall PforR Program reporting requirements.	During implementation	PMU/providers

Note: INAPA = National Water and Sewerage Institute; CORAASAN = Santiago Water and Sewerage Corporation; CORAAVEGA = La Vega Water and Sewerage Corporation; PAP = Program Action Plan; PCMU = Program Coordination and Management Unit.



ANNEX 5. SUMMARY ENVIRONMENTAL AND SOCIAL SYSTEMS ASSESSMENT

This annex is a summary of the full Environmental and Social Systems Assessment which has been produced as a separate document and will be disclosed separately.

1. **This annex summarizes the key aspects of the Environmental and Social Systems Assessment (ESSA), which was prepared to meet the requirements of Program for Results Financing Policy and Directive, following the Bank guidance document for the preparation of ESSAs (OPS5.04-GUID.118).** The ESSA was prepared based on the overall principles of avoiding, minimizing, and/or mitigating against potential adverse impacts and risks on people and the environment; promoting environmental and social (E&S) sustainability in the design of the Program-for Results (PforR) Program, and the inclusion of vulnerable segments of the population, informed by stakeholder engagement activities; and also promoting informed decision-making relating to the PforR Program's E&S aspects. Neither OP 7.50 International Waterways nor OP 7.60 Disputed Areas are applicable to this PforR Program.
2. **The specific goals the ESSA prioritized were to identify the main E&S risks and impacts associated with the PforR operation, assess the capacity of the Borrower's systems to assess and manage those risks, and identify measures to strengthen those systems, as informed by the assessment.** This was carried out through the analysis of government policies, laws, regulations, institutional procedures, and relevant documents, particularly as they refer to the identification and management of the E&S risks of the activities covered by the PforR; analysis of the institutional capacity of the entities involved in the implementation of the PforR activities, particularly the regional service providers of water and sanitation services; consultation activities, meetings, and interviews with key stakeholders related to the PforR operation; and the identification of recommendations to strengthen the management of E&S risks.
3. **The PforR Program activities are expected to bring a number of E&S benefits,** including direct positive impacts on the health of the population in the Program's area; increased productivity and improved quality of life for populations; improved security and privacy of women and children; greater economic, environmental, and social sustainability of the water and sanitation service; increased resilience of populations, especially populations vulnerable to crisis events of various kinds; positive impact on governance by strengthening of transparency and active citizen participation.
4. **The PforR Program also involves potential adverse impacts and risks.** The main ones are:
 - Adverse impacts with respect to the environment, social, health and safety of the communities, including: (i) generation and handling of rubble and other solid waste; (ii) gas emission caused by the use of heavy machinery; (iii) possible fuel or lubricant leaks; and (iv) increase in the volume of effluents to be treated in the existing wastewater treatment plants, affecting the receiving body and generating hydrological changes with possible modifications of environmental parameters.
 - Resistance to PforR Program activities by users, small and medium enterprises, institutions, and/or groups that use drinking water for non-domestic purposes.
 - Temporary effects on formal and informal economic activities, temporary restriction of access to business entrances during construction, and temporary interruption of pedestrian traffic routes.
 - Possible exclusion of vulnerable groups without ability to pay for services and fees.
 - Community risks associated with labor influx.
5. **The nature and significance of the E&S risks related to the PforR activities are expected to be of low to moderate intensity, which is consistent with the core principles and expectations for the level of E&S risk set out in the**



PforR Policy. The recommended E&S risk management measures for the E&S risks and impacts identified are:

- Ensuring the consistent application of the health, safety, and hygiene code at work; application of national laws on effluents in receiving bodies; include in the contracting of works the supervision, monitoring, and management of environmental and social risks and impacts.
 - Identifying the interested parties likely to oppose the PforR Program measures, and carry out a solid communication strategy and periodic consultations and other stakeholder engagement activities, and disseminating the mechanisms for dealing with complaints and suggestions.
 - Considering the adverse impacts on businesses when doing excavations; communicating, signaling, and guiding users on alternative routes and restoring traffic as soon as possible; and applying national laws and practices used by WSS service providers on business impacts as standard practices.
 - Implementing social rates and/or service subsidies, particularly regarding low-cost connections for vulnerable groups; making use of regulation provisions that allows to include the debts and the costs for unique and standard connections, as part of the benefits of the program.
 - Applying labor laws, avoiding child labor, preventing sexual abuse and harassment, setting up mechanisms for worker complaints and referrals to sanctioning bodies, and coronavirus disease 2019 protocols.
6. **Regarding the adequacy of the legal and regulatory framework applicable to the PforR Program activities, and considering that the E&S risks associated to the activities covered by the PforR Program are not expected to be particularly significant, the assessment indicated that the E&S risks and impacts can be managed with the existing regulatory framework in place.** In that regard, the ESSA's recommendations focus on ensuring that there are proper monitoring arrangements in place to ensure that the applicable provisions of the E&S regulatory framework are implemented.
7. **In terms of the institutional structure of the participating entities in the implementation of the PforR activities, the National Water and Sewerage Institute (Instituto Nacional de Agua Potable y Alcantarillado; INAPA), the Santiago Water and Sewerage Corporation (Corporación de Acueductos y Alcantarillados de Santiago; CORAASAN), and the La Vega Water and Sewerage Corporation (Corporación de Acueductos y Alcantarillados de La Vega; CORAAVEGA) will be in charge of implementing the PforR Program activities in the provinces of Monte Cristi, Valverde, Santiago Rodríguez, Santiago, and La Vega and will be responsible for managing their corresponding E&S risks.** The Ministry of Economy Planning, and Development (Ministerio de Economía, Planificación y Desarrollo) will support the monitoring and follow-up of the E&S aspects recommended by the ESSA, particularly in institutional strengthening for E&S management and the provision of technical assistance. The assessment carried out as part of the ESSA, which also included the analysis of their track record, indicates that the implementing entities' capacity for implementing the relevant laws and regulations for the management of E&S risks of the PforR Program activities is adequate, provided that the ESSA recommendations are followed.
8. **The stakeholder engagement process followed in the formulation of the ESSA included an active consultation process with the key stakeholders at national and regional levels,** including (i) numerous dialogues, presentations, and meetings with representatives of the different participating entities involved in the implementation of the PforR Program activities, particularly the regional service providers, covering the PforR Program and its E&S aspects, including standalone meetings held on a regular basis and sessions during Bank missions; (ii) a group consultation event at which the key E&S risks and impacts of the PforR Program were explained, along with the proposed recommendations to strengthen the management of E&S risks among the entities involved in PforR Program implementation; and (iii) targeted interviews with representatives of key stakeholders, including rural water user associations, multilateral donors, and potential beneficiaries, including municipalities. The participants expressed support for the PforR Program and highlighted its benefits for the population, and they were supportive of the



recommendations to adopt international good practices in the management of E&S risks and to strengthen the PforR Program's grievance redress systems and gender aspects. The draft ESSA was consulted with MEPyD, INAPA, CORAASAN, CORAAVEGA, and INDRHI on September 28, 2022, and with civil society, NGOs, and local representatives on November 29 and 30, 2022, and feedback was incorporated into the updated draft of the ESSA. The final version of the ESSA was disclosed by MEPyD on February 3, 2023 and will be disclosed on the Bank's website on or about March 3, 2023.⁶²

9. **Several key measures are proposed to address the E&S risks identified as part of the ESSA, many of which are already being implemented by the water supply and sanitation (WSS) providers:**
 - Design and implement international good practices to comply with the proper E&S management of projects, including those related to the E&S impacts of civil works.
 - Ensure that the E&S staffing arrangements are sufficient, based on the needs of the participating entities, according to their role in the implementation of the E&S risk management measures.
 - Promote mechanisms to share good E&S practices among participating institutions and executors of PforR Program activities, particularly at the regional level.
 - Implement strategies to promote effective citizen participation and improved feedback channels, particularly grievance mechanisms, and prioritize the participation of vulnerable groups.
 - Implement technical assistance activities to support CORAAVEGA in the creation of its Environmental and Social Management Department and strengthen capacity on gender equity.
 - Implement technical assistance activities to support CORAASAN to modernize its E&S management units and its Gender Equality Unit.
 - Support INAPA to modernize its E&S management units and create a regional office for E&S management in INAPA Zone 1.
10. **Based on the analysis of strengths and weaknesses of the country's and the participating WSS service providers' E&S policies in the ESSA, four actions are included in the Program Action Plan:**
 - Promote the adoption of good international practices on the management of E&S impacts in the design, implementation, and monitoring of projects, per ESSA recommendations, including the sharing of good practices among participating institutions and executors of PforR Program activities.
 - Implement strategies that promote the effective participation of citizens and beneficiaries on an ongoing basis, particularly in terms of grievance mechanisms, prioritizing vulnerable groups. Establish an environmental and social unit for CORAAVEGA. Strengthen existing environmental and social units at CORAASAN and INAPA Central, including support to INAPA Zone 1 service delivery unit.
 - Ensure that the E&S staffing arrangements are sufficient, hiring qualified E&S specialists based on the needs of the participating entities, according to their role in the PforR Program.
11. **Additional information about the assessment and its findings can be found in the complete ESSA document.**

⁶² The final ESSA disclosed by MEPyD can be found at <https://mepyd.gob.do/transparencia/proyectos-y-programas/> and



ANNEX 6. PROGRAM ACTION PLAN

Action Description	Source	DLI#	Responsibility	Timing		Completion Measurement
PCMU establishes performance monitoring framework for WSS providers.	Technical		PCMU/MEPyD	Due Date	31-Dec-2023	WSS performance monitoring framework established with protocols for reporting included in the OM.
MEPyD (DGIP) enters the budget for investment projects with approved SNIP codes into SIGEF in a timely manner to ensure WSS providers can spend the funds.	Technical		DGIP/MEPyD	Recurrent	Quarterly	Verification that budgets for all projects with SNIP codes are entered into SIGEF.
The Program financial statements are prepared following approved guidelines by DIGECOG, subject to external audit, and are publicly available.	Fiduciary Systems	DLI 9	PCMU/MEPyD, DIGECOG, WSS providers	Recurrent	Yearly	Annual verifications by an independent verification agent will confirm if providers are complying with DLI 9.
Consolidation of information on all credible and material complaints on fraud and corruption under the Program and actions taken or being taken, with report promptly shared with World Bank.	Fiduciary Systems		PCMU/MEPyD	Recurrent	Yearly	Report on fraud and corruption cases and how they have been resolved submitted to the Bank.
Preparation and implementation of a clause in the bidding documents on the handling of complaints, which	Fiduciary Systems		PCMU/MEPyD	Other	Language for bidding documents to be agreed within 12	Bidding documents include clause on complaints handling.



includes a detailed description of the procedure through which a timely and fair revision of the complaint is ensured.					months of implementation, then included in all procurement processes.	
Promote the adoption of good international practices on the management of E&S impacts in the design, implementation, and monitoring of projects, per ESSA recommendations, including the sharing of good practices among participating institutions.	Environmental and Social Systems		MEPyD	Recurrent	Continuous	Report of international good practices adopted.
Capacity building support to the providers to implement strategies that promote the effective participation of citizens and beneficiaries on an ongoing basis, particularly in terms of grievance mechanisms, prioritizing vulnerable groups.	Environmental and Social Systems		PCMU/MEPyD	Recurrent	Continuous	Report on capacity building activities to WSS providers and actions taken by providers.
Establish an environmental and social unit for CORAAVEGA. Strengthen existing environmental and social units at CORAASAN and INAPA Central, including support to INAPA Zone 1 service delivery unit.	Environmental and Social Systems		WSS providers, support from PCMU/MEPyD	Other	Within 12 months after effectiveness.	Report on the establishment of the unit in CORAAVEGA and activities to strengthen E&S management for CORAASAN and INAPA.



ANNEX 7. IMPLEMENTATION SUPPORT PLAN

1. **The Bank will provide considerable focused support during PforR Program implementation.** As the first Program-for-Results (PforR Program) in the Dominican Republic, there will be a significant learning curve for the central government, the PCMU, and the implementing entities. The ambitious PforR Program will incentivize progressive improvements in service delivery to expand access to safely managed water and sanitation service delivery, while also improving the operational and commercial efficiency of three of the country's nine water supply and sanitation (WSS) providers and supporting national and sub-national institutional reforms through the IPF Project. To succeed, the PforR Program will require more than just financial incentives (disbursement-linked indicators); the Bank will need to deploy significant resources and a multidisciplinary team with the right skills and behaviors to facilitate institutional collaboration and capacity building, encourage knowledge generation and dissemination through the learning agenda, and inspire change.
2. **Bank implementation support will be focused on implementation quality and on making the results-based incentive system work to its full potential.** This will include: (i) reviewing implementation progress (including that of the Program Action Plan) and achievement of PforR Program results and disbursement-linked indicators; (ii) providing support on resolving emerging PforR Program implementation issues and on building institutional capacity; (iii) monitoring the adequacy of system performance, and monitoring compliance with legal agreements; (iv) supporting the government in monitoring changes in risks; and (v) providing ongoing technical support through the IPF Project, various trust funded activities, support from the Water Global Practice, and exploring all avenues to enhance capacity building for the participating WSS service providers.
3. **Coordinating implementation support during the first year of the PforR Program will be key, both to comply with the Program Action Plan and achieve effectiveness of the loan in a timely manner and to achieve results quickly and efficiently.** Disbursement-linked results in the first year incentivize the development of operational, commercial, procurement, financial management, and inclusion plans and strategies that will guide the achievement of results in the later years. The Bank will work closely with the implementing entities to ensure that they have the technical assistance necessary to prepare these key documents, while also moving forward with implementation of priority efficiency investments and works to expand access to safely managed WSS services. The Bank will also ensure that all implementing entities understand the verification protocol, so that they are strategically focused on achieving verifiable results that can lead to disbursements. The first implementation support mission will take place as soon as possible after approval by the Board to support the implementing agencies in the preparation of key activities. This close support will continue during the remaining years of the PforR Program. Detailed financial management and environmental and social implementation support activities can be found in annexes 4 and 5.

Main Focus of Implementation Support

Time	Focus	Skills needed	Resource estimate	Partner role
First 12 months	Compliance with PAP actions. Capacity building for the PCMU, including on strengthening understanding of the PforR process. Establish arrangements for independent verification and ensure common understanding of verification protocol among	Financial; legal; procurement and financial management; E&S; WSS; WRM; monitoring and evaluation	Three implementation support missions, three technical missions 6 missions x 8 people x 1 week = 48 person weeks over the first 12 months	Joint missions



all implementing entities.
Strengthen monitoring and
evaluation system.
Development of terms of
reference for IPF activities.

12–48 months	Review implementation progress. Technical assistance on WSS and WRM. Monitor performance of financial management and E&S systems.	Financial; legal; procurement and financial management; E&S; WSS; WRM; monitoring and evaluation	Two implementation support missions per year, two technical missions per year, Mid-Term Review 2 x 4 years x 8 people x 1 week = 128 weeks 2 x 12 people x 1 week = 48 weeks 5 people x 2 weeks = 10 weeks Total 186 weeks over 48 months	Joint missions
Other	Independent audit/ assessment of verification of results Local technical and institutional consultants	Independent technical expertise In-the-field supervision	3 people x 6 weeks = 18 weeks	

Skills needed	Number of staff weeks	Number of trips
Legal	10	n/a
Financial management	30	13
Procurement	30	13
Social	30	13
Environment	30	13
Monitoring and evaluation	30	10
Technical - WSS	90	15
Technical - WRM	45	10
Economics	10	2
Total	309	189

**Role of partners in Program implementation**

Name	Institution/country	Role
European Union via AFD	France	Through a US\$10 million technical assistance grant, provide capacity building support to INAPA at the national level and in Zone 1.
Global Water Security and Sanitation Partnership (GWSP)	Multi-donor (Bank-managed programmatic trust fund)	GWSP will provide technical assistance to support PforR Program activities, including on resilience of WSS infrastructure, dam safety, gender inclusion, and citizen engagement.
Quality Infrastructure Investment Partnerships (QII)	Japan (Bank-managed programmatic trust fund)	QII is supporting WSS service providers on the 100-Day Agile Challenge methodology and the social compact approach, and financing capacity-building activities for the WSS service providers on non-revenue water reduction.
Global Facility for Disaster Risk Reduction (GFDRR)	Multi-donor (Bank-managed programmatic trust fund)	GFDRR is supporting complementary capacity building activities for the National Institute for Hydraulic Resources (Instituto Nacional de Recursos Hídricos) on dam operations and safety and for INAPA on improving the resilience of WSS infrastructure.



ANNEX 8. INVESTMENT PROJECT FINANCING COMPONENT

1. **The US\$25 million investment project financing component (IPF Project) of the hybrid operation will finance supervision, coordination, monitoring, and evaluation of the entire operation as well as technical assistance related to water supply and sanitation (WSS) and the water resources management (WRM) investments.** Implementation of the component will be managed in accordance with OP/BP 10.00 (Investment Project Financing). There is no overlap between the IPF Project and PforR Program expenditures and the IPF Project will not finance the achievement of disbursement-linked results under the PforR Program. Expenditures incurred before signing of the loan will be eligible for retroactive financing.
2. **The IPF Project will provide critical technical assistance to implementing and coordinating entities during implementation.** As the first Program-for-Results in the Dominican Republic that is supporting the water sector during a period of significant institutional reform, the central government and the WSS service providers have substantial need for support to strengthen systems, capabilities, and procedures. The IPF Project will provide flexibility and predictable financing to support these needs. Accordingly, the IPF Project is organized for implementation under three separate components:

Component 1: Supervision, Coordination, Monitoring, and Evaluation (US\$9.8 million)

3. The component will provide financial support for supervision, coordination, monitoring and evaluation of the operation, the verification of DLIs/DLRs, and the carrying out of Program and Project financial audits. This entails financing a portion of the staffing costs for the Program Coordination and Management Unit (PCMU; including procurement, financial management, environmental, social, and monitoring and evaluation professionals and WSS and WRM technical specialists) and PforR Program supervision costs (including refurbishment of office space; basic office equipment, vehicles and associated costs, and communications and awareness activities, among others). It also entails funding consulting and non-consulting services of the PCMU including contracting of the independent verification agent and financing of annual external audit services for the PforR Program and IPF Project. The terms of reference for the independent verification agent and for the annual external financial audit will include, as applicable, a review of activities for IBRD financed projects to ensure they are not included as part of the Program expenditures and neither finance results under the Program. The PCMU will develop and implement a WSS performance monitoring framework that will inform government investments and public policy on climate adaption and mitigation in the water sector.

Component 2: Technical Assistance on Water Supply and Sanitation (US\$5.2 million)

4. The component will finance consultants (individual and/or firm) to provide capacity building and just-in-time technical assistance to the central government and providers in several areas: (i) preparation of terms of reference for water and energy audits and energy efficiency plans that will reduce energy and water usage and thus contribute to climate mitigation; (ii) preparation of terms of reference for digitalization of user and network cadasters; (iii) reducing non-revenue water in the water-stressed and drought-prone Yaque del Norte basin; (iv) investment project planning and procurement planning; (v) planning to improve resilience of service delivery to climate-induced floods and droughts; (vi) training on improving gender inclusion and citizen engagement (including social compact approach and methods to incentivize household sewerage connections); (vii) development and adaptation of standard financial statements that follow best practices; (viii) tariff studies; and (ix) development of a financial management module for public companies, among others.



Component 3: Water Resources Management (US\$10 million)

5. **The component will finance consulting and non-consulting services (individual and/or firm) and goods related to:** (i) improving the legal and institutional framework for WRM; (ii) capacity building and training programs for WRM professionals; (iii) developing a methodology to formalize water rights and piloting the methodology in a sub-basin of Yaque del Norte; (iv) modernizing the national information system for water resources, including the water rights registry, and improving understanding of water resources data in the Yaque del Norte basin; (v) strengthening the security and joint operation of dams in the Yaque del Norte basin; (vi) and developing a plan for the management of water resources in the Yaque del Norte basin. The component may include financing for non-consulting services, for example the installation of hydrometric measurement stations, the rehabilitation of a node used to receive and process hydrometric data in Yaque del Norte, the improvement of dam instrumentation, and the refurbishment of INDRHI's offices.
6. **These investments in WRM will improve national- and basin-level climate resilience to increasing water scarcity, floods, and droughts by, among other things, strengthening the institutional and regulatory framework for WRM.** The component will also build the capacity of WRM professionals in key topics, including managing the impacts of climate change on water resources (such as in basin planning, administration of water rights) and dam safety during climatic extremes. In addition, the component will investment in installing needed dam safety instrumentation; improving the quality of timely transmitted hydromet information (including stream gauges, climate stations, and hydromet stations for flood monitoring) and ensuring that hydromet information informs forecasting and decision-making processes under a changing climate. The component will improve the capacity to use reliable, consistent information on water resources availability to inform policy and investment decisions in the context of a changing climate; and increasing water security and decreasing the risk of conflict over limited water resources by developing a plan for the management of water resources in the Yaque del Norte Basin and a methodology to formalize water use rights that consider climate uncertainty.

Institutional Arrangements

7. **The PCMU in the Ministry of Economy Planning, and Development (*Ministerio de Economía, Planificación y Desarrollo, MEPyD*) will implement Components 1, 2, and part of Component 3 of the IPF Project.** For Component 3, the PCMU in MEPyD will have a budget of US\$2.5 million to implement the national WRM activities related to strengthening the legal and institutional framework. The PCMU will be fortified with key staff including: (i) a WSS specialist who will coordinate the technical assistance to the WSS service providers; (ii) a WRM specialist who will coordinate all activities related to the WRM subcomponent of the IPF Project that includes institutional and regulatory reforms and will work closely with the National Institute for Hydraulic Resources (*Instituto Nacional de Recursos Hídricos, INDRHI*) on the activities that it will implement; and (iii) a senior environmental specialist; and (iv) a senior social specialist to coordinate with the Director of the Water Cabinet and the Environmental Ministry (*Ministerio de Medio Ambiente y Recursos Naturales*) to manage the environmental and social (E&S) aspects and requirements of the IPF Project;⁶³ and (v) a senior procurement specialist familiar with Bank's Procurement Regulations; (vi) a procurement analyst; (vii) a senior financial specialist familiar with managing external resources through the government's Executing Units of External Financing Projects (*Unidades Ejecutoras de Proyectos de Financiamiento Externo, UEPEX*) system; and (viii) an accountant to manage the fiduciary aspects of the IPF Project.
8. **INDRHI through the preexisting Project Coordination and Implementation Unit (PCIU) established for the**

⁶³ These E&S specialists will also work with WSS providers to strengthen the capacity to manage E&S issues in the provision of services and implementation of WSS activities.



Resilient Agriculture and Integrated Water Resources Management Project, will have a budget of US\$7.5 million to manage the remaining activities related to WRM. There is strong complementarity⁶⁴ between the activities financed under the Resilient Agriculture Project and those under the Water Sector Modernization Program, and the PCIU in INDRHI will be strengthened with staff and consultants to ensure they have adequate capacity, including: (i) a specialist who can support capacity-building activities on WRM, (ii) a specialist who can support the strengthening of the national water information system, (iii) a dam safety specialist, (iv) an accountant; and (v) a procurement specialist. The operations manual will clearly designate the respective roles and responsibilities of MEPyD and INDRHI. Further, Hacienda, MEPyD and INDRHI will sign a subsidiary agreement which will include the obligation to adhere to the terms of the loan agreement, the operations manual, and the Environmental and Social Commitment Plan.

Financial Management and Disbursement Arrangements

9. **Organization and staffing.** The financial management staff in the PCMU at MEPyD and the PCIU at INDRHI will be trained on financial management procedures at project inception and the Task Team will provide hands-on financial management support as needed. For the execution of activities under component 3, the PCIU at INDRHI needs to be reinforced by hiring an accountant with relevant accounting and financial experience with externally financed operations. These staff will work full time on the IPF Project to be able to adequately manage the financial management transactions.
10. **Budgeting arrangements.** MEPyD and INDRHI will be responsible for the annual budget programming of the IPF Project, executing and evaluating their respective activities. The IPF Project's annual budget will be structured according to the government's classification and the IPF Project's components, subcomponents, and activities classification and monitored through the financial management information system (*sistema integrado de gestión financiera*; SIGEF)/UEPEX. MEPyD and INDRHI will also manage disbursement planning, control of fund transfers, and budgetary modifications according to the annual operating plan and procurement plan during the year.
11. **Accounting system.** The government's SIGEF is an automated modular tool that serves as the instrument to facilitate compliance with the purposes of the State Financial Administration System (Sistema de Administración Financiera del Estado, SIAFE). SIGEF has a module to execute projects with external financing called SIGEF/UEPEX, which has embedded controls providing for the efficiency and transparency in the management of external financing funds.
12. **National Accounting Standards will be used for maintaining the IPF Project accounting records.** IPF Project transactions will be booked through entries made in the government system SIGEF/UEPEX, using a tailored chart of accounts to allow recording and reporting within SIGEF/UEPEX according to project needs and documented in the operations manual. Government accounting is on accrual basis, thus and if possible, UEPEX reports will follow this policy; otherwise, cash-basis reporting is acceptable to the Bank.
13. **The Dominican Republic's assets, property, plant and equipment, are registered in the System of Administration of Goods (*Sistema de Administración de Bienes*), designed to maintain a follow-up and control of the assets, property, plant, and equipment of all government agencies.** Each item has an individual record in the system with the required data for its control and monitoring, from the recording of its physical entry until it is written off the inventory.

⁶⁴ The Resilient Agriculture and Integrated Water Resources Management Project is financing the development of irrigation water user registries and complementary dam safety activities in the Yaque del Norte Basin. There is close coordination between the task teams.



14. **Financial reporting.** The IPF Project proposed arrangements will use cash basis accounting for the preparation of semiannual interim financial reports (IFR) and annual financial statements. IFRs should specify sources and uses of funds, reconciling items (as needed) and initial and year-end cash balances, with expenditures classified by component and by disbursement category; and a statement of investments reporting the current semester and the accumulated operations against ongoing plans and footnotes explaining the important variances.
15. **The IPF Project financial information will comprise the use of funds on all the activities executed by the PCMU and the PCIU.** INDRHI will submit progress and financial reports to MEPyD, and this information will be consolidated by MEPyD, including its own execution, and presented in project IFRs and audited financial statements. The IPF Project IFRs will be prepared on a fiscal semester basis and will be submitted to the Bank no later than 45 days after the end of each calendar semester. The reports would be prepared in US dollars.
16. **Internal control.** As part of the overall implementation arrangements, an operations manual will be developed by the PCMU at MEPyD and PCIU at INDRHI describing, among other things, specific financial management arrangements and internal control procedures for the IPF Project.
17. **The Comptroller General of the Republic (*Contraloría General de la República*) is the governing body of the National Internal Control System and has Internal Audit Units (IAUs) distributed throughout the central government, including MEPyD and INDRHI.** These units are responsible for verifying the control, compliance with standards, procedures, and applicable laws of the institution's financial processes and fund management. IAUs perform ex ante control of payments, and no payment for goods or services is made in the public sector without ex ante approval of these units. Activities implemented under the IAUs could be considered part of the scope of the annual operating plan for fiscal year 2023.
18. **External audit.** Annual audits on the activities carried out under the IPF Project will be performed in accordance with Bank policy, under terms of reference and by an independent auditor acceptable to the Bank. Annual audit reports will be submitted to the Bank up to six months after the audited period, and reports will be tagged as publicly disclosable in Bank records and posted at its institutional portals to comply with Bank policy and Dominican Republic Law 200-04 on free access to public information. The auditing terms of reference will include a requirement for the auditors to check that any contracts that are being financed by another IBRD Project are excluded from the PforR Program Expenditures.
19. **Disbursement and flow of funds.** The advance method is the main disbursement method to be used for the IPF Project. IPF Project funds will be advanced to two designated dedicated accounts to be managed by each the PCMU at MEPyD and the PCIU at INDRHI. In addition, two accounts will be established under the treasury single account (Cuenta Única de Tesorería) in local currency for managing funds and making payments for eligible expenditures to be financed under the IPF Project activities. Advanced funds will be documented by the PCMU and the PCIU to account for grant proceeds and replenish the designated account using Statement of Expenditures agreed with the Bank. The frequency for the presentation of eligible expenditures paid from the DA is at least once every quarter. The fixed ceiling for the DAs will be US\$1.5 million for MEPyD and US\$0.5 million for INDRHI.
20. **The PCMU and PCIU will independently submit withdrawal applications in Client Connection.** The PCMU and the PCIU will each be responsible for the appropriate accounting of the funds deposited into the designated accounts and to document expenses to the Bank on the uses of these funds. The reimbursement, direct payment and special commitment methods will also be available for the IPF Project and included in the Disbursement and Financial Information Letter (DFIL). The minimum application size for direct payment and reimbursement withdrawal applications will be US\$200,000 for each entity. The IPF Project will follow the Bank's disbursement policies and procedures as described in the DFIL.



21. **Disbursement categories.** Table 18 sets out the amount allocated to a single disbursement category for financing out of the proceeds of the loan regarding the IPF Project:

Table 18. Disbursement Categories under the IPF Project

Categories	Loan amount allocated (in Special Drawing Rights)	Percentage of expenditures to be financed (inclusive of taxes)
1. Goods, consulting and non-consulting services, training, incremental operating costs (MEPyD)	17,500,000	100
2. Goods, minor works, consulting and non-consulting services, training, incremental operating costs (INDRHI)	7,500,000	100
Total amount	25,000,000	

22. **Disbursement Plan.** The IPF Project plans to disburse over five years, as reflected in Table 19.

Table 19. Disbursement Plan for the IPF Project (US\$, millions)

World Bank Fiscal Year	2024	2025	2026	2027	2028
Projected disbursement	1.5	2	5.5	7	9

23. **Financial Management Action Plan.** To manage the fiduciary risk, key measures to address financial management weaknesses were defined in the following time-bound action plan (see Table 20): (i) appoint qualified and experienced financial management staff to the PCMU and PCIU with relevant accounting and financial experience and agreed with the Bank (assigning a financial management specialist and an accountant under MEPyD and an accountant under INDRHI); (ii) prepare the operational manual, including the financial management section and reflecting the coordination and financial information submission between the PCMU and PCIU; (iii) carry out the actions necessary for planning and recording the budget in the annual budget law, and iv) design and develop a tailored chart of accounts and financial reports, including IFRs and annual statements, in accordance with project needs, generated by SIGEF/UEPEX and agreed and approved by the Bank and incorporated in the operations manual.

Table 20. Time Bound Financial Management Action Plan

Action	Deadline	Responsible
1. MEPyD appoints qualified and experienced financial management staff to the PCMU as agreed, assigning at least 2 professionals: one (1) Financial Management Specialist and one (1) Procurement Specialist.	Effectiveness	MEPyD
2. INDRHI appoints qualified and experienced financial management staff to the PCIU's structure as agreed: assigning at least one (1)	Within three months of effectiveness	INDRHI



Accountant.		
3. MEPyD and INDRHI will prepare their respective portions of the operations manual, including the financial management and flow of funds and management of funds.	Effectiveness	MEPyD and INDRHI
4. MEPyD and INDRHI prepare and record the budget in the annual budget law.	Within three months of effectiveness	MEPyD and INDRHI
5. MEPyD and INDRHI prepare chart of accounts and contents and format of IFRs, generated from SIGEF/UEPEX.	Within three months of effectiveness	MEPyD and INDRHI
6. External auditors are contracted by MEPyD.	Within three months of effectiveness	PCMU (MEPyD)

Note: IFR = interim financial report; INDRHI = National Institute for Hydraulic Resources; MEPyD = Ministry of Economy, Planning, and Development; PCIU = Project Coordination and Implementation Unit; PCMU = Program Coordination and Management Unit; SIGEF = financial management information system; UPEX = Executing Units of External Financing Projects.

24. **Financial management supervision.** The Bank will conduct at least two financial management supervisions per year. Financial management performance and compliance will also be monitored through the review of bi-annual IFR and yearly audit reports.

Procurement Arrangements

25. **The PCMU at MEPyD and the PCIU at INDRHI will be responsible for implementing the procurement arrangements for the IPF Project, under the scope of their respective components.** Although MEPyD has had prior experience managing Bank projects, the fact that a new unit will be established (PCMU) to take responsibility for the implementation of the component warrants a substantial procurement risk. However, although INDRHI has experience in implementing investment programs and projects financed by the government and multilateral financial institutions, including Bank-financed projects, INDRHI has not managed large, complex multisectoral projects, and the current staff needs to become fully familiarized with the Bank's procedures and regulations, dated November 2020. The PCMU and the PCIU will each be supported by a qualified senior procurement specialist who will be assigned as part of the team, and MEPyD will also appoint a procurement analyst as part of the PCMU. The procurement performance of the PCMU and PCIU shall be monitored closely to ensure that any associated risks are timely identified and mitigated. The responsibilities of the senior procurement specialists will be, among other things, supporting the procurement process, establishing a procurement filing and data management system and a contract administration system through STEP, and the required coordination between units and parties to ensure the compliance with timelines and deliverables related to the procurement process. Also, the operations manual will include a contract management section to ensure an effective and timely delivery of goods, services, and works.
26. **Applicable procurement regulations.** MEPyD and INDRHI will conduct procurement using the Bank's *Procurement Regulations for IPF Borrowers* (dated July 1, 2016, revised November 2017, August 2018, and November 2020) and the provisions stipulated in the legal agreement for the supply of goods and consulting and non-consulting services.
27. **Project Procurement Strategy for Development and Procurement Plan.** The Project Procurement Strategy for Development was prepared and will inform the Procurement Risk and Mitigation Action Plan. It will also inform the prior review thresholds and the first 18-month procurement plan. The Bank will carry out post-procurement reviews annually with an initial sampling rate commensurate with the IPF Project's risk rating. This rating will be



reviewed and adjusted periodically during implementation based on the agencies' performance. MPEyD and INDRHI will upload all procurement and contract information in the Systematic Tracking of Exchanges in Procurement (STEP) system, which will be used to provide the Bank with a consolidated list of all contracts for goods and consulting and non-consulting services awarded under the IPF Project.

28. **The Bank's standard procurement documents shall be used for all contracts that are subject to international competitive procurement.** When approaching the national market, the Borrower may use procurement documents acceptable to the Bank. The procurement plan in STEP will determine which contracts are subject to national and international market approach and the type of review (Prior or Post). The IPF Project is not expected to finance any contract at or above prevailing Operations Procurement Review Committee thresholds considering the estimated activity costs under Substantial risk.
29. **Retroactive financing.** The Recipient may advance with the procurement under the above procurement arrangements and may seek the Bank's approval of advance contracting and the recognition of retroactive financing within the parameters set forth in the Loan Agreement. The Bank has agreed to retroactively finance up to US\$5 million from the IPF Project for eligible expenditures from one year prior to the date of signing of the loan agreement. In such cases, if the eventual contracts are to be eligible for retroactive financing, the procurement procedures, including advertising, shall be consistent with Sections I, II and III of the Bank's Procurement Regulations. The Borrower undertakes such advance procurement at its own risk, and any concurrence by the Bank on the procedures, documentation, or proposal for award of contract, does not commit the Bank to finance the project in question.

Environmental and Social Issues and Management

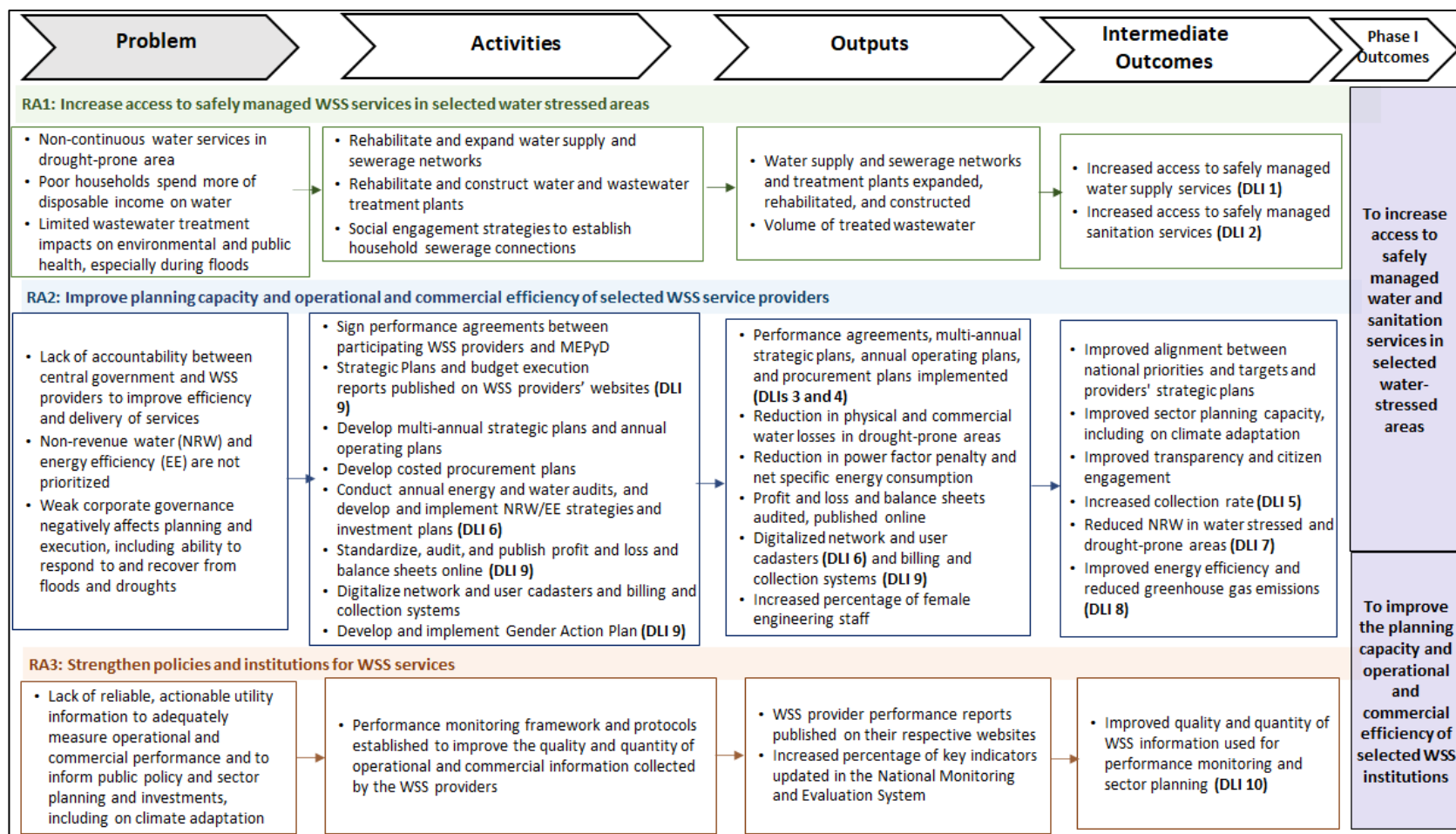
30. **E&S risk classification.** The E&S risk classification for the IPF Project is considered **Moderate**. Activities from the IPF Project will have an overall positive E&S impact and aim to strengthen institutional WSS and WRM strategies and water legislation, and support the development of a broad learning agenda with multiple stakeholders. The technical assistance activities will be centered on institutional capacity building. The sexual exploitation and abuse/sexual harassment risk rating is considered low, and there are existing codes of conduct in the relevant institutions, as well as in the Labor Management Procedures of the IPF Project.
31. **E&S instruments.** For the IPF Project, MPEyD has developed, consulted, disclosed, and adopted the following E&S instruments in line with the provisions of the Bank's Environmental and Social Standards: (i) an Environmental and Social Commitment Plan, (ii) a Labor Management Plan with a Grievance Mechanism for Workers, and (iii) a Stakeholder Engagement Plan with a grievance redress mechanism. These instruments were disclosed on the MPEyD website on December 5, 2022. MPEyD will also prepare, consult, adopt, disclose and implement site-specific Environmental and Social Management plans for refurbishment of MPEyD's offices.
32. **In addition, INDRHI will prepare, consult, adopt, disclose and implement site-specific Environmental and Social Management Plans for hydrometric measurement stations, improvement of dam safety instrumentation, and the refurbishment of INDRHI's offices.** The Environmental and Social Management Plans shall include site-specific Environmental and Social Assessments and generic E&S procedures applicable for such type of civil works. Given that the overall E&S IPF Project risks are moderate, and the risks associated with the hydrometric stations are low, the E&S assessment and management plans for these stations will be deferred to the implementation stage with the understanding that the areas to be used for the installation of the hydrometric stations may not be occupied or displace people or businesses, even if the land is owned by INDRHI.
33. **E&S management.** MPEyD is responsible for the overall implementation of the IPF Project and its E&S aspects. INDRHI will manage the E&S issues related to the aspects of Component 3 that it will implement, and will report



on these activities to MEPyD. The PCMU at MEPyD will include an E&S management team that consists of a hired or assigned full-time environmental specialist and a hired or assigned full time social specialist, with the profile and capacity to adequately manage the E&S risks and/or impacts generated by the IPF Project in the area of influence of the PforR Program and implement, monitor, and report on the E&S instruments of the IPF Project (Environmental and Social Management Plans, Stakeholder Engagement Plan, Labor Management Plan, and Environmental and Social Commitment Plan). The PCIU at INDRHI will maintain qualified staff and resources to support management of E&S risks and impacts, including one dedicated environmental and one dedicated social specialist, with qualifications and experience acceptable to the Bank. The Bank will provide guidance and support to the E&S staff of the PCMU and PCIU to ensure compliance with the Environmental and Social Framework, as well as during the development of the E&S instruments required by the Environmental and Social Framework.



ANNEX 9. PforR Program Theory of Change



Note: The PforR Program theory of change is specifically for the Program-for-Results component. The IPF Project activities related to WRM are detailed in annex 8 and associated indicators can be found in the results framework in annex 2.



ANNEX 10. Corporate Commitments

Climate Change

1. **The operation (PforR Program and IPF Project components) will contribute to institutional strengthening that will improve national-, basin-, and WSS service provider-level capacity for climate adaptation and mitigation,** including through improving: i) the ability of the Dominican Republic to set and achieve national and basin-level targets on climate adaptation and mitigation in the water sector (**PforR Program; IPF Project**); ii) to incorporate climate risks and uncertainty into strategic planning for water resources management (**IPF Project Component 3**) and water supply and sanitation (WSS) service delivery (**disbursement-linked indicators [DLIs] 3 and 10; IPF Project Components 1 and 2**); iii) to build capacity and develop a methodology at the Ministry of Economy, Planning and Development to proactively collect and analyze reliable, actionable climate data on water resources and water supply and sanitation services to inform public policy and sector planning and investments (**DLI 10; IPF Project Component 1**); iv) to improve the coordination between the many national-level entities involved in improving climate adaptation and mitigation in the water sector (**PforR Program; IPF Project Components 1 and 2**); and v) to improve the efficiency, professionalism, responsiveness, citizen engagement, and inclusion of WSS service providers to improve the operation and maintenance of the water supply and sanitation networks and the WSS service providers' ability to quickly respond to and recover from climate-related disasters such as floods and droughts (**DLIs 1–10; IPF Project Components 1 and 2**).
2. **The PforR Program will contribute significantly to increasing adaptation climate co-benefits** by increasing the resilience of households and water service provision to water stress, droughts, hurricanes and floods that are expected to be exacerbated by climate change.
3. **Resilience of water supply and sanitation service provision.** Droughts impact water quantity and quality. The PforR Program will build the resilience of WSS service providers to droughts by (i) promoting rational water use and installing metered connections to reduce unrestricted water use (**DLIs 1 and 7**), and (ii) reducing physical losses through rehabilitation of pipes, rehabilitation or replacement of aging sand filters, and regularization of leaky and unmetered informal water connections (**DLIs 1 and 7**), among others. Drought also reduces the quality of surface waters by reducing surface water flows, thus reducing the dilution of contamination from agricultural runoff, industrial effluents, and untreated sewage. This increases the water treatment requirements for water service providers. The PforR Program will invest in rehabilitation and upgrade of water treatment plants to improve WSS service provider's ability to treat water to potable standards, thus increasing the resilience of water service provision to drought (**DLI 1**). The same interventions will ensure appropriate treatment of higher turbidity surface waters during and after flood events. Floods and drought can also harm the structural integrity of WSS infrastructure, causing service disruptions. Infrastructure design, rehabilitation, and construction under the PforR Program will consider resilience to climatic and non-climatic events, including hurricanes, floods and droughts, as required by the central government's public investment guidelines and be informed by the Bank's Resilient Water Infrastructure Design Brief (**DLIs 1, 2, 7, and 8**).⁶⁵ For climate-related risks, all investment projects must analyze frequency and severity of current and future climate-related hazards (including from hurricanes, floods, and

⁶⁵ Dirección General de Inversión Pública, Ministerio de Economía, Planificación y Desarrollo. 2017. *Normas Técnicas del Sistema Nacional de Inversión Pública*. Santo Domingo. <https://mepyd.gob.do/publicaciones/normas-tecnica-del-sistema-nacional-de-inversion-publica>



droughts) and vulnerabilities to determine risks and inform siting and design of the project to reduce climate-related risks at the proposal, pre-feasibility and feasibility stages.

4. **Resilience of households.** These measures to improve the resilience and quality of WSS services will increase the resilience of households to climate change by ensuring an uninterrupted supply of potable water for handwashing, hygiene, drinking, and food preparation, even during floods and droughts. At the same time, expansion of sewerage networks and rehabilitation and construction of wastewater treatment plants will increase the resilience of selected households to floods by reducing the public health risk of disease from floodwaters contaminated with fecal coliforms.
5. **Women—both individually and as caretakers—are affected more adversely by climate change, natural disasters, and deficiencies of WSS services.** Women have less access to emergency shelters than men, have less mobility when disasters hit because of their caretaking role for children and the elderly, and are more vulnerable to gender-based violence, which often increases in disaster situations. Moreover, as Dominican women dedicate on average 16.7 percent of their time to unpaid domestic and care work (compared with 3.8 percent of men's time),⁶⁶ the poor quality of basic services such as drinking water supply and sanitation are particularly burdensome for women.
6. **The PforR Program will also provide significant mitigation climate co-benefits by reducing the emission of greenhouse gases associated with the extraction, treatment, and distribution of potable water and the collection and treatment of wastewater.** Renewables account for 24 percent of the installed electrical generation capacity, but only 12 percent of electrical generation in 2019.⁶⁷ Under DLI 8, the PforR Program will disburse upon achievement of electricity savings of 22.6, 21.5, and 22.0 percentage points, respectively, for the National Water and Sewerage Institute (Instituto Nacional de Agua Potable y Alcantarillado; INAPA), the Santiago Water and Sewerage Corporation (Corporación de Acueductos y Alcantarillados de Santiago; CORAASAN), and the La Vega Water and Sewerage Corporation (Corporación de Acueductos y Alcantarillados de La Vega; CORAAVEGA). It is estimated that the Program will have average net emissions of -27,728 tCO₂e/year, which will be achieved primarily through a combination of planning and investments in energy efficiency for water supply and sanitation services and non-revenue water reductions under DLIs 1, 2, 3, 6, 7, and 8, as well as expanded access to aerobic wastewater treatment under DLI 2. Annual net GHG emissions at the end of Program implementation are estimated at -30,923 tCO₂e in 2027, which are expected to continue throughout the rest of the economic life of the Program.
 - **Reduce energy demand for pumping, including from high water losses (DLIs 1, 2, 3, 6, 7, and 8).** The PforR Program will conduct water audits and implement a comprehensive approach to leak identification and reduction (including formalizing water connections and reducing unregulated water use for irrigation), thus reducing pumping needs. Results under DLI 1 will be achieved in large part by investing to reduce water losses, thereby enabling the provision of continuous water services. Wastewater systems will rely on gravity-based transmission wherever feasible.

⁶⁶ Comisión Económica para América Latina y el Caribe, Encuesta Nacional de Hogares de Propósitos Múltiples 2016.

⁶⁷ International Renewable Energy Agency (IRENA). 2021. *Dominican Republic Energy Profile*. Abu Dhabi, UAE: IRENA.

https://www.irena.org/IRENADocuments/Statistical_Profiles/Central%20America%20and%20the%20Caribbean/Dominican%20Republic_Central%20America%20and%20the%20Caribbean_RE_SP.pdf



- **Improve energy efficiency of pumping and wastewater and water treatment processes (DLIs 1, 2, 3, and 8).** Energy audits will identify opportunities to increase the energy efficiency of pumping and treatment of water supply and wastewater. This will include investments in variable speed pumps, improved pump maintenance, and replacing aging sand filters in water treatment plants to reduce frequency of pumping to backwash filters, among others. Importantly, this includes energy efficient investments in wastewater pumping stations, aeration, and wastewater treatment pumping, as well as the use of climate-smart low carbon technologies for wastewater treatment to reduce GHG emissions.
- **Reduce methane and nitrous oxide emissions from untreated sewage (DLI 2).** The PforR Program will provide 76,300 households with access to safely managed sanitation that is treated to national standards at existing wastewater treatment plants with a total capacity of 1,587 liters per second. Ninety percent of this installed capacity includes pretreatment, aeration tanks, solids separation, extended aeration, sedimentation, and sludge treatment. CORAASAN plans to install methane capture technology at the Cienfuegos wastewater treatment plant.
- **Wastewater sludge reuse (DLI 2).** This wastewater treatment bi-product in the form of sludge is taken from primary and secondary treatment tanks by CORAASAN's largest wastewater treatment plant (Rafey – 1,217 liters per second) and once thickened and dried is being used as the organic manure for agricultural purposes locally. Use of organic manure from the wastewater treatment plants can reduce dependency on chemical fertilizers and thus help indirectly to reduce the emissions from fertilizer industries.
- **Promote the use of green technologies (DLIs 1, 2, and 8).** The participating WSS service providers will incorporate solar panels for self-generation of green energy to power water and wastewater pumps and treatment processes where technically and economically feasible.

Citizen Engagement

7. **Citizen engagement and social accountability are well protected by national legislation, although there is room for improvement at the WSS service provider level.** Nationally, there is a 311 hotline for citizens to provide complaints, requests, and feedback to the central government, which are then directed to the relevant institution. At the utility level, each WSS service provider has various mechanisms for dealing with complaints and claims, but they are not interlinked or consolidated into a single database. Although the participating WSS service providers have social management structures to respond to communities' claims and concerns about WSS services, they lack an institutional social intervention policy that can identify and respond to social needs while integrating the full scope of relevant social actors.
8. **The operation recognizes that improving citizen engagement, transparency, accountability, and customer orientation will be critical for the PforR Program to achieve its intended results.** Citizen engagement strategies will consider (i) improved design, representative delivery, and transparent reporting via online publication of the results of client satisfaction surveys; (ii) community engagement strategies to inform clients about the expected level of service in their area and strengthen client relations; (iii) improved grievance redress and feedback channels; (iv) design and implementation of complaint handling through, for example, surveys, citizen report cards, mobile phone hotlines, or information and communication technology-enabled ticketing systems so that complaints are managed transparently; and (v) strengthening the WSS service providers' household connectivity strategies, including to incentivize connections to sewerage networks and regularize informal water supply



connections. The information collected through the client satisfaction surveys and the different complaint handling mechanisms can be used as a part of the participating WSS service providers' internal management performance evaluation and as a decision-making tool to identify areas for improvement and prioritize activities. The implementation of these mechanisms will build the providers' capacity for adopting integrated monitoring systems. The results framework will track an intermediate indicator on the percentage point improvement in customer satisfaction, from a baseline established in Year 1.

Gender

9. **Dominican women face structural and sociocultural obstacles to gender equity that affects labor participation, salaries, and opportunities for professional advancement, which subsequently makes them more vulnerable to economics shocks.** Women's rate of economic participation is 47.6 percent, compared to 71 percent for men, while the wage gap for similar jobs is rated 3.88 out of 7.⁶⁸ Female-dominated occupations continue to occupy the lowest pay scale⁶⁹ and women face unequal opportunities because of social norms concerning the type of work and level of managerial responsibility considered suitable for women. Accordingly, women are underrepresented in decision-making spaces. These factors contribute to a rating of 70 percent on the Global Gender Gap Index,⁷⁰ which places the Dominican Republic at position 21 of 25 countries in the Latin America and the Caribbean region.
10. **The operation will address gender issues at several levels: households, water resource professional workforce, and WSS utilities.** By increasing access to safely managed WSS services, the PforR Program will reduce women's burden of domestic and caretaking responsibilities. The operation will support an inclusive approach to developing a diverse cohort of water resources management professionals by conducting targeted outreach, using gender-inclusive language and images in recruiting materials, enlisting female mentors, and identifying gender-specific incentives and disincentives. This professional pipeline will prepare the future sectoral leaders and incorporating a gender and broader inclusion approach from its inception will be fundamental to equitable outcomes. The operation will also promote women's participation in decision-making positions in water resource management institutions and will promote women's groups involvement in the development of water resource management policies and strategies.
11. **At the level of WSS service providers, the operation recognizes that fostering more diverse and inclusive utility management is fundamental for overall improvement of services.** Evidence demonstrates that diverse and inclusive institutions perform better in several indexes, including better decision-making, more innovation, better representation of customers, and even more profit.⁷¹ In the water sector, greater inclusion of women can help generate more adequate and sustainable solutions and improve water conservation.

Gender Gap Analysis

⁶⁸ The Global Gender Gap Index assesses countries on how well they are dividing their resources and opportunities between their male and female populations. The equal pay for similar jobs indicator has a scale from 1-7 with 7 being the best.

⁶⁹ Luana Marques-García Ozemela. 2019. "Desigualdades de Género en República Dominicana 2018-2020." IDB-TNI-1632, Inter-American Development Bank, Washington, DC. <https://publications.iadb.org/es/desigualdades-de-genero-en-republica-dominicana-2018-2020>.

⁷⁰ The Global Gender Gap Index tracks the world's progress toward gender parity in four key aspects: political empowerment, health and survival, educational attainment, and economic participation and opportunity.

⁷¹ From a sample of more than 1,000 companies covering 12 countries, companies that ranked in the top quartile for gender diversity on executive teams were 21 percent more likely to outperform on profitability and 27 percent more likely to rank higher in value creation (Hunt et al. 2018). According to data on the Bombay Stock Exchange, from among the top 30 companies, companies with female chief executives have the strongest annual growth rates (Catalyst 2013). In the energy sector, utilities with gender-diverse boards have a significantly higher return on equity than those with less diversity (Ernst and Young 2016). (World Bank, Women in Water Utilities).



12. **There are persistent perceptions representing barriers to female attraction to and recruitment in technical sectors.** Women are less likely than men to study technical subjects. For example, although more women complete tertiary education than men (65.8 percent in 2019),⁷² women account for 35 percent of graduates in the science, technology, engineering, and mathematics fields.⁷³ These values, however, are in line with the Organization for Economic Cooperation and Development countries' average, where in 2016 female engineering students made up 22.6 percent of all students.
13. **Water and sanitation utilities have been historically dominated by men and constructed as a predominately masculine domain.** Such norms create a widespread perception that work in the water sector is more appropriate for men because water and sewer network maintenance requires physical strength. Field-level technical positions are seen as unattractive to women and girls and women who may consider these occupations often internalize these stereotypes and conform to them. Lack of information on employment and career opportunities for women in the water sector prevents women from actively seeking jobs there. Regarding career advancement, promotion policy is not part of internal regulations. It is common for women in the water sector to internalize the social norms that assign leadership roles to men and women often decline opportunities for promotion because they do not feel confident in coordinating with men.
14. **A gender assessment of each participating WSS service provider revealed that women are underrepresented in the water sector in the Dominican Republic.**⁷⁴ In INAPA, CORAASAN, and CORAAVEGA, women represented 24.1 percent, 21.4 percent, and 28.6 percent of the overall workforce, respectively, and 25.7 percent, 30.8 percent, and 35 percent of the engineers, respectively. Occupational gender segregation is also present, with no female construction workers at any of the utilities. Table 21 compares key gender-related statistics from INAPA, CORAASAN, and CORAAVEGA with the average of all utilities surveyed by the Bank globally. Underrepresentation of women in the sector's workforce is a missed opportunity that is likely to lead to less-than-optimal utility performance, because where women are present in decision-making, the decisions will better reflect the needs and preferences of the population they serve.

Table 21. Comparison of WSS service providers' Work-force with the Global, Regional, and Dominican Republic Average

	Share of female employees	Share of female engineers	Share of female managers	Share of female new hires in the last 12 months	Workers' exit rates in the last 12 months (male/female)
INAPA	24.1	25.7	21.4	–	18.6 17.6
CORAASAN	21.4	30.8	50.0	24	–
CORAAVEGA	28.6	35.0	33.3	100	11 15
DR ^a	27.1	31.0	38.0	62	31 30
LAC average	22.0	25.9	29.5	40	15 13.7
Global average	17.7	23.3	20.0	28	8.2 5.9

Note: a. Data are based on four of nine WSS service providers in the Dominican Republic: INAPA, CORAASAN, CORAAVEGA, and CORAAMOCA.

⁷² Organización de Estados Iberoamericanos para la Educación, la Ciencia y la Cultura, *Diagnóstico de la Educación Superior en Iberoamérica*, 2019.

⁷³ United Nations Educational, Scientific, and Cultural Organization (UNESCO). 2017. *Cracking the Code: Girls' and Women's Education in Science, Technology, Engineering, and Mathematics (STEM)*. Paris: UNESCO. <https://unesdoc.unesco.org/ark:/48223/pf0000253479>.

⁷⁴ The team used the human resources survey developed by Equal Aqua.



15. **The operation will support consideration of gender inclusion in all aspects of utility management and service delivery, with particular focus on encouraging organizational diversity and thus improved overall utility management by supporting the WSS service providers' human resource departments' efforts to increase gender equity in the workplace.** A Gender Action Plan will be developed during the first year of the PforR Program, based on a more detailed gender diagnostic,⁷⁵ with minimum criteria to be specified in the verification protocol in the operations manual. The Gender Action Plan will include specific actions on improving gender inclusion of the WSS service providers both internally (through, for example, development of inclusive policies, gender sensitivity training, and human resources activities to enhance gender equity in the workplace across all job roles and to change gendered stereotypes about work) and externally (through, for example, gender-sensitive consultations on investment activities and including women in behavior change and awareness campaigns). The results framework will track an intermediate indicator on the percentage of women in engineering and technical positions.⁷⁶

Gender Results Chain

Gender Gap Analysis
<ul style="list-style-type: none"> • Female employees are a small proportion of WSS services staff: Women comprise only 24.1 percent, 21.4 percent, and 28.6 percent of INAPA, CORAASAN, and CORAAVEGA employees, respectively. For female engineers, the respective figures are 25.7 percent, 30.8 percent, and 35 percent, respectively. On average, 34 percent of the managers are female, with variations among utilities. • Strong gender norms on the type of work considered appropriate for women tend to deter them from applying to technical and managerial positions. • Contractors hired by the utilities for civil works have limited or no female employees.
Gender Actions
<p>Develop a Gender Action Plan during the first year of the PforR Program, with actions to be implemented in Years 2-5. The completion of the target percentage of actions during each year of the PforR Program will be verified. The following actions are proposed to be included, among others, in the Gender Action Plan:</p> <ul style="list-style-type: none"> • Establish an employment plan and transparency goals with regard to staff promotion processes and criteria • Technical and leadership training for women; mentoring programs for women • Outreach programs with schools and communities (for example, career talks, showcasing of female role models in technical fields, female representatives to present the work of the water organization) • Awareness campaigns for administrative staff and managers to address gender bias or indirect discrimination • Training to recruitment committees on implicit gender bias and indirect discrimination and promoting implementation of the legal requirement on gender-balanced recruitment committees • Publicize the recent Decree 312-22 raising paternity benefits to 15 days and encourage staff to use the benefit • Gender-sensitive communications campaigns and consultations on PforR Program activities, including on the design and construction of condominal sewerage systems, and develop communications campaigns specifically for women and children on water conservation practices
Gender Indicator
<ul style="list-style-type: none"> • Percentage of women in engineering and technical positions

⁷⁵ The Gender Action Plans will be developed in agreement with the National Plan for Gender Equality and Equity 2018-2030 (*Plan Nacional de Igualdad y Equidad de Género 2018–30*) and the national policy of gender equality and equity, which is aligned with article 39 of the Constitution of the Dominican Republic.

⁷⁶ Engineering positions refers to those that require professionals with degrees in engineering (sanitary, chemical, civil, electrical, systems, and any engineering science professional) and architecture. Technical positions refer to those related to the design, operation, maintenance, and management of water and sanitation systems (for example, specialists in electricity, plumbing, cartography, network cadasters, or construction budgeting).

**ANNEX 11. Water Pact 2021–36 and the Government Program Expenditures***Table 22. Water Pact 15-Year Vision 2021–36, Investments in Water Supply and Sanitation (US\$, millions)*

	Water supply	Sanitation	Total
Capital expenditure	1,904	855	2,759
Recurrent operating expenditure	3,022		3,022
Total			5,781

Table 23. Government program Supported by the MPA for the Entire Country over 10 years (2023–32) (US\$, millions)

	Water supply	Sanitation	Total
Capital expenditure	952	427	1,379
Recurrent operating expenditure	1,209		1,209
Total			2,588

Note: The government program is the Water Pact's 15-year capital expenditure for water supply and sanitation discounted to 10 years, with 75 percent of costs considered directly related to the program. Operating expenditures are estimated based on historical expenditures for all water supply and sanitation providers and discounted to 10 years, then discounted to 60 percent of the total operating expenditure to account for expenditures directly related to the Program.

Table 24. Government program Supported by Phase I of the MPA for the Entire Country over 5 years (2023–27) (US\$, millions)

	Water	Sanitation	Total
Capital Expenditure (CAPEX)	405	181	586
Recurrent Expenditure (OPEX)	544		544
Total			1,130

Note: The government program is the Water Pact's 15-year capital expenditure for water supply and sanitation discounted to 5 years, with 79 percent of costs considered directly related to the program. Operating expenditures are estimated based on historical expenditures for all water supply and sanitation providers and discounted to 5 years, then discounted to 80 percent of the total operating expenditure to account for expenditures directly related to the Program.



ANNEX 12. PforR Program Transfer Allocations to Water Supply and Sanitation Providers, by Year and Disbursement-Linked Indicator

Table 25. Budget Allocations to Water Supply and Sanitation Providers for Anticipated Disbursement-Linked Indicator Achievements (US\$, millions)

DLI	WSS service provider	2023	2024	2025	2026	2027	Total by provider	Percent of PforR	Total for DLI	Percent of PforR
DLI 3	INAPA	0.64	1.04	1.04	1.04	1.03	4.79	2.13	11.25	5.00
	CORAASAN	0.59	0.96	0.96	0.96	0.96	4.43	1.97		
	CORAAVEGA	0.27	0.44	0.44	0.44	0.44	2.03	0.90		
DLI 4	INAPA	0.00	1.04	1.04	1.04	1.03	4.15	1.84	9.75	4.33
	CORAASAN	0.00	0.96	0.96	0.96	0.96	3.84	1.71		
	CORAAVEGA	0.00	0.44	0.44	0.44	0.44	1.76	0.78		
DLI 5	INAPA	0.00	0.00	1.27	1.91	2.55	5.73	2.55	13.50	6.00
	CORAASAN	0.00	0.00	1.20	1.79	2.38	5.37	2.39		
	CORAAVEGA	0.00	0.00	0.53	0.80	1.07	2.40	1.07		
DLI 6	INAPA	0.98	3.00	3.00	3.00	3.00	12.98	5.77	34.50	15.33
	CORAASAN	1.24	4.00	4.00	4.00	4.00	17.24	7.66		
	CORAAVEGA	0.28	1.00	1.00	1.00	1.00	4.28	1.90		
DLI 7	INAPA	0.00	0.00	1.50	2.00	2.25	5.75	2.56	15.25	6.78
	CORAASAN	0.00	0.00	2.00	2.50	3.00	7.50	3.33		
	CORAAVEGA	0.00	0.00	0.50	0.65	0.85	2.00	0.89		
DLI 8	INAPA	0.00	0.00	1.50	2.00	2.25	5.75	2.56	15.25	6.78
	CORAASAN	0.00	0.00	2.00	2.50	3.00	7.50	3.33		
	CORAAVEGA	0.00	0.00	0.50	0.65	0.85	2.00	0.89		
DLI 9	INAPA	1.38	5.10	5.15	5.25	5.30	22.18	9.86	50.50	22.44
	CORAASAN	1.17	4.40	4.50	4.52	4.58	19.17	8.52		
	CORAAVEGA	0.45	2.10	2.15	2.20	2.25	9.15	4.07		
DLI 10	INAPA	0.00	2.55	2.60	2.70	2.82	10.67	4.74	25.00	11.11
	CORAASAN	0.00	2.40	2.45	2.50	2.60	9.95	4.42		
	CORAAVEGA	0.00	1.00	1.05	1.13	1.20	4.38	1.95		
Total		7.00	30.43	41.78	45.98	49.81	175.00		175.00	

Note: CORAASAN = Santiago Water and Sewerage Corporation; CORAAVEGA = La Vega Water and Sewerage Corporation; DLI = disbursement-linked indicator; INAPA = National Water and Sewerage Institute; PforR = Program-for-Results.

Table 26. Total Budget Allocations to Central Government and Water Supply and Sanitation Providers by Year for Anticipated Disbursement-Linked Indicator Achievements (US\$, millions)

Entity	2023	2024	2025	2026	2027	Total
Central government (DLI 1 and 2)	4.63	7.54	12.75	12.77	12.31	50.00
INAPA	3.00	12.73	17.10	18.94	20.23	72.00
CORAASAN	3.00	12.72	18.07	19.73	21.48	75.00
CORAAVEGA	1.00	4.98	6.61	7.31	8.10	28.00
Subtotal providers (USD)	7.00	30.43	41.78	45.98	49.81	175.00
Total providers and central government	11.63	37.97	54.53	58.75	62.12	225.00

Note: Annual values for central government are estimates based on global estimated targets for DLIs 1 and 2 against their respective unit prices.