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INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

DOCUMENT FOR A PROPOSED LOAN

IN THE AMOUNT OF US\$150 MILLION TO

THE DOMINICAN REPUBLIC

FOR THE

DISASTER RISK MANAGEMENT DEVELOPMENT POLICY LOAN WITH A  
DEFERRED DRAWDOWN OPTION FOR CATASTROPHE RISKS

September 19, 2017

Social, Urban, Rural and Resilience Global Practice  
Latin America and the Caribbean Region

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**DOMINICAN REPUBLIC - GOVERNMENT FISCAL YEAR**

January 1–December 31

**CURRENCY EQUIVALENTS**

(Exchange Rate Effective as of September 14, 2017)

Currency Unit = Dominican Peso (RD\$)

US\$1.00 = RD\$47.62

**ABBREVIATIONS AND ACRONYMS**

ACP-EU	African, Caribbean, Pacific-European Union
Cat DDO	Deferred Drawdown Option for Catastrophe Risks
CCA	Climate Change Adaptation
CCRIF SPC	Caribbean Catastrophe Risk Insurance Facility Segregated Portfolio Company
CDRP	Country Disaster Risk Profile
CES	Committee of Health Emergency ( <i>Comité de Emergencia de Salud</i> )
CNE	National Emergency Commission ( <i>Comisión Nacional de Emergencia</i> )
CR	Consultation and Request
CPS	Country Partnership Strategy
DR	Dominican Republic
DPF	Development Policy Financing
DGIP	General Directorate for Public Investment ( <i>Dirección General de Inversión Pública</i> )
DPL	Development Policy Loan
DRM	Disaster Risk Management
END	National Development Strategy ( <i>Estrategia Nacional de Desarrollo</i> )
ENFT	National Labor Force Survey ( <i>Encuesta Nacional de la Fuerza de Trabajo</i> )
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GFDRR	Global Facility for Disaster Reduction and Recovery
IADB	Inter-American Development Bank
IGN	National Geographic Institute ( <i>Instituto Geográfico Nacional</i> )
IMF	International Monetary Fund
INDRHI	National Institute for Hydrological Resources ( <i>Instituto Nacional de Recursos Hídricos</i> )
ISH	Hospital Safety Index ( <i>Índice de seguridad hospitalaria</i> )
IVACC	Climate Change Adaptation and Vulnerability Index ( <i>Índice de vulnerabilidad y adaptación al cambio climático</i> )
JICA	Japan International Cooperation Agency
LCR	Latin America and the Caribbean Region
LDP	Letter of Development Policy
M&E	Monitoring and Evaluation
MEPyD	Ministry of Economy, Planning, and Development ( <i>Ministerio de Economía, Planificación y Desarrollo</i> )
MH	Ministry of Finance ( <i>Ministerio de Hacienda</i> )
MINERD	Ministry of Education ( <i>Ministerio de Educación</i> )
MOPC	Ministry of Public Works and Communications ( <i>Ministerio de Obras Públicas y Comunicaciones</i> )

MSP	Ministry of Public Health ( <i>Ministerio de Salud Pública</i> )
NFPS	Non-financial Public Sector
OISOE	Office of Engineers Supervisors of State Works ( <i>Oficina de Ingenieros Supervisores de las Obras del Estado</i> )
PAHO	Pan-American Health Organization
PFM	Public Financial Management
PNGIRD	National Plan for Comprehensive Disaster Risk Management ( <i>Plan Nacional para la Gestión Integral del Riesgo de Desastres</i> )
PNRRS	National Plan for Seismic Risk Reduction ( <i>Plan Nacional de Reducción del Riesgo Sísmico</i> )
PIP	Public Investment Project
SNIP	National Public Investment System ( <i>Sistema Nacional de Inversiones Públicas</i> )
TA	Technical Assistance
WHO	World Health Organization
WRCB	Water Resource Coordination Board
y/y	Year-on-Year

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**DOMINICAN REPUBLIC  
DISASTER RISK MANAGEMENT DEVELOPMENT POLICY LOAN  
WITH A DEFERRED DRAWDOWN OPTION FOR CATASTROPHE RISKS**

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**SUMMARY OF PROPOSED LOAN AND PROGRAM  
DOMINICAN REPUBLIC  
DISASTER RISK MANAGEMENT DEVELOPMENT POLICY LOAN  
WITH A DEFERRED DRAWDOWN OPTION FOR CATASTROPHE RISKS**

Borrower	Dominican Republic
Implementation Agency	Ministry of Finance
Financing Data	IBRD Loan Terms: US dollar denominated IBRD Flexible Loan with a fixed spread, disbursement-linked, with level repayments on January 15 and July 15 each year, with a final maturity of 19 years, including a grace period of 12 years. Amount: US\$150 million
Operation Type	Development Policy Loan with a Deferred Drawdown Option for Catastrophe Risks
Program Development Objective(s)	The development objective of the proposed operation is to support the Government of the Dominican Republic in: (a) strengthening institutions for improved climate and disaster resilience in priority sectors; and (b) establishing mandatory regulations for climate and disaster risk reduction in public investment and construction works.
Pillars of the Operation and Results Indicators	<p><b>Pillar A: Strengthening institutions for improved climate and disaster resilience in priority sectors</b></p> <ul style="list-style-type: none"> <li>• Contingent liabilities associated with disasters are published and incorporated in the medium-term fiscal framework published by the Ministry of Finance.</li> <li>• Percentage (%) of public schools for which a disaster risk assessment has been conducted.</li> <li>• Percentage of public schools with a disaster risk assessment which are included in a rehabilitation and retrofitting program.</li> <li>• Number of risk-prone areas in main watershed basins that have been prioritized, by hydrological and hydrometeorological studies, to undergo improvements in water management.</li> </ul> <p><b>Pillar B: Establishing mandatory regulations for climate and disaster risk reduction in public investment and construction works</b></p> <ul style="list-style-type: none"> <li>• PIPs approved in the SNIP after technical standards came into effect (July 20, 2017).</li> <li>• Number of health facilities constructed before 2011 and receiving an operating permit after the approval of the technical regulations have been assessed using the Hospital Safety Index.</li> <li>• Number of construction works with a building permit that have been inspected by the MOPC following the norms established by the updated Regulation for the Supervision and General Inspection of Works (R-004).</li> </ul>
Overall risk rating	The overall risk associated with this operation is <b>Moderate</b> .
Climate and disaster risks	Are there short- and long-term climate and disaster risks relevant to the operation (as identified as part of the SORT environmental and social risk rating)? YES
Operation ID	P159351

**IBRD PROGRAM DOCUMENT FOR A PROPOSED  
DISASTER RISK MANAGEMENT DEVELOPMENT POLICY LOAN  
WITH A DEFERRED DRAWDOWN OPTION FOR CATASTROPHE RISKS  
TO THE DOMINICAN REPUBLIC**

**1. INTRODUCTION AND COUNTRY CONTEXT**

1. The proposed operation is a stand-alone US\$150 million Disaster Risk Management Development Policy Loan with a Deferred Drawdown Option for Catastrophe Risks (Cat DDO). It has been designed to support the efforts of the Government of the Dominican Republic (the Government) to quickly mobilize resources in the aftermath of a natural catastrophe including public health-related events and to strengthen the disaster risk management (DRM) and climate change adaptation (CCA) systems in the country.

2. The proposed operation builds on a detailed assessment of the country's key DRM and CCA regulatory and institutional framework as well as an analysis of the public health-related emergency system. The achievements and lessons learned from previous World Bank technical assistance (TA) work implemented in the Dominican Republic between 2011 and 2015 lay the foundation for the proposed operation. The proposed operation supports actions undertaken by the Government, in particular by the Ministry of Finance (MH) and Ministry of Economy, Planning and Development (MEPyD), to improve the management of contingent liabilities associated with climate and disaster risks by increasing the Government's ability to access timely resources in the aftermath of a natural catastrophe. The Government's existing DRM and CCA systems have a robust legislative framework, and their directives have been well-articulated in relevant policies and plans. The proposed operation enhances their effectiveness by facilitating the implementation of critical second generation priority policies in DRM and CCA across different sectors. The Government has also put in place an epidemiologic surveillance system and a rapid response mechanism to swiftly detect and manage outbreaks and public health-related events. Additionally, a new World Bank financed investment project currently under preparation will complement this operation and will focus on Improving the Quality and Efficiency of Health Services in the Dominican Republic (P163031) to enhance preparedness and increase the capacity of the country to respond to public health-related events.

3. **Geological and climate-related disasters pose major challenges for the sustainable growth and resilient development of the Dominican Republic (DR).** The DR is highly exposed to a wide range of hydrometeorological hazards (for example, hurricanes, tropical storms, flooding, and drought) and geophysical hazards (for example, earthquakes and landslides). The country faces high vulnerability to adverse natural events exacerbated by unplanned urban growth, land degradation, and weak enforcement of building codes and zoning regulations. The DR is ranked 21 out of 171 countries in the United Nations' World Risk Index (<http://weltrisikobericht.de/english/>). This high level of exposure and vulnerability to disasters materialize in frequent impacts to the most vulnerable population. Hurricane Georges, in 1998, resulted in large economic losses equivalent to 14 percent of gross domestic product (GDP). A recent publication from the World Bank and MEPyD estimates the historical economic impact of disasters over 1961–2014 at about 0.69 percent of GDP or US\$420 million per year.<sup>1</sup> Based on the Country Disaster Risk Profile (CDRP) for the DR developed by the World Bank in collaboration with the MH, during

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<sup>1</sup> U.S. dollar 2010. This figure is considered a very conservative assessment as no significant earthquake has occurred during that period. MEPyD y Banco Mundial. 2015. *Gestión Financiera y Aseguramiento del Riesgo de desastres en la Republica Dominicana*.

the potential 15-year deferral drawdown period of the Cat DDO, there is about a 55 percent likelihood of direct economic losses comparable to the level of losses of Hurricane Georges in 1998.<sup>2</sup>

4. **Public health-related shocks caused by endemic, epidemic, and emerging diseases also constitute a significant threat to the D R.** In 2009, the H1N1 influenza outbreak killed 23 persons in DR and caused economic and social disruption. Hispaniola had not experienced one single case of cholera during 100 years until the 2010 cholera epidemic that started in Haiti. While the first cases in DR were limited to marginal rural areas, the 2011 rainy season prompted an increase in cases.<sup>3</sup> In 2014, the chikungunya<sup>4</sup> outbreak affected a significant share of the population in the country and around 60% of the population in Santo Domingo. An assessment conducted by MEPyD after the chikungunya epidemic concluded that the upsurge in health services coupled with the absenteeism in the workplace implied a cost equivalent to 0.2% of GDP. More recently, the Zika virus had a limited impact in the population, while still having a short-term economic impact of around 0.57% of GDP mainly due to foregone income and fiscal revenues.<sup>5</sup> In response to those different diseases outbreaks, the authorities have developed specific protocols to prevent, identify, control, and reduce the associated impact of public health-related events while following international standards.

5. **Climate change is anticipated to increase the frequency and severity of hydrometeorological hazards in the DR, reinforcing the need to actively strengthen climate and disaster risk management policies to ensure sustainable development.** Temperature variability in the tropical regions is highly correlated with the occurrence of cyclonic and associated events such as floods and landslides. Between 1984 and 2013, an observed 1°C to 3°C increase in maximum temperatures has given rise to more frequent occurrence of flash floods. Consequently, over the last decade, extreme rainfall events in the period between May and October have increased by 20 percent to 30 percent. By 2050, minimum temperatures are expected to increase between 1°C and 3°C, and maximum temperatures will likely see another 2°C to 3°C increase. While the dry season will likely further intensify with up to a 50 percent decrease in rainfall in provinces such as Independencia, Puerto Plata, San Juan, and Santiago, the rainy season could see a 100 percent increase in accumulated rainfall. Crop production is expected to decrease by half during 2020–2050 because of climate variability, and in some coastal areas, climate change models predict a sea level rise of over 100 cm by 2100. Likewise, climate change is expected to increase the incidence and reproduction of the 'Aedes mosquito'-related diseases responsible for diseases such as dengue, chikungunya and Zika.

6. **Economic losses triggered by disasters in the DR can hamper poverty reduction efforts and threaten advances in shared prosperity.** The DR is one of the countries in the Latin America and the Caribbean Region (LCR) that has experienced the highest average economic growth in the past 20 years. In 1990, the country's gross national income per capita was only 58 percent of the regional average, climbing to 97 percent in 2016. During the period 2005–2015, per capita income for individuals in the bottom 40 percent grew at an annual rate of 4.7 percent, compared to 2.6 percent for the richest 60 percent. In the same period, the DR's poverty reduction rates were higher and growth of the middle class was slower compared to the LCR. Poverty decreased by 13.8 percentage points (pp) in the LCR and by 15.5 pp in the DR, while the size of the middle class increased by 10.7 pp in the LCR and only by 9.7 pp in the

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<sup>2</sup> In 2015 U.S. dollar. In the CDRP those losses have a return period of about 27 years.

<sup>3</sup> According to PAHO/WHO, the DR had 29,463 cases and 423 fatalities.

<sup>4</sup> Chikungunya is a mosquito-borne viral disease.

<sup>5</sup> World Bank Group, "The short-term economic costs of Zika in Latin America and the Caribbean" February 18, 2016.

DR. Consequently, the vulnerable population<sup>6</sup> in the DR increased at a faster rate than in the LCR (6.1 pp in the DR compared to 2.5 pp in the LCR). Although many people have moved out of poverty in the DR, they remain at risk of slipping back into poverty if affected by adverse natural events, against which they cannot protect or insure themselves. Adverse events can also push people further back into poverty. Shocks created by adverse natural events have regressive distributional effects as vulnerability to climate shocks is higher for the poorest households.<sup>7</sup> At the global scale, it is estimated that the impacts of disasters are more than twice as significant for poor people than anyone else.<sup>8</sup> At the national scale, the climate shocks vulnerability index (IVACC by its Spanish acronym), which measures the likelihood that a household is vulnerable to the occurrence of hurricanes, storms, and flooding given certain socioeconomic and geographical characteristics, is more than double for the poorest households and decreases as the standard of living increases. When Tropical Cyclone Noel hit the country in 2007, 90 percent of the directly affected persons were below the national poverty line.<sup>9</sup> Although gender-disaggregated data are lacking, gender-specific vulnerability of women and children built into socio-economic patterns of the DR have also led to relatively higher impacts of disasters on women and children. In the context of changing climate, the anticipated increase in the frequency and severity of hydrometeorological hazards could threaten to reverse the hard-won development gains of the past years. The policy reforms included in the proposed operation are aimed at increasing long-term resilience to and ability to recover from the adverse impacts of disasters, thereby contributing to the World Bank Group's twin goals of ending extreme poverty and promoting shared prosperity.

**7. Over the past fifteen years, the Government has laid a strong foundation for the national DRM system and taken critical actions to ensure effective response and management of emergency and disaster situations.** The DRM Law 147-02 of 2002 established the National System for Prevention and Mitigation of Disaster Risk integrating the general principles of risk reduction in the country's development planning. Adopting a forward-looking approach, the Government reaffirmed its commitment to reduce vulnerability to climate and disasters risks through the prioritization of DRM and CCA in the 2030 National Development Strategy (END<sup>10</sup>) approved by Law 01-12 in 2012. The 2013 National Plan for Comprehensive Disaster Risk Management (PNGIRD) operationalized selected aspects of the END and facilitated substantial progress in disaster preparedness, implementation of early warning systems and response, and management of emergency situations. More recently, through the adoption of the 2015 National Climate Change Policy, the Government called for strengthening the National Planning System and the National Multi-Year Public Sector Plan to increase the capacity of the Government to promote a 'low-emission and climate-resilient development. However, in spite of the progress already made, establishing a robust DRM system still requires additional critical policy measures and reforms, particularly in the area of mainstreaming climate and disaster risk reduction and management across different sectors.

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<sup>6</sup> The vulnerable are defined as people living on US\$4–US\$10 a day, higher than the poverty line of US\$4, but not enough to be considered part of the middle class.

<sup>7</sup> Báez, Javier E., Alan Fuchs, and Carlos Rodríguez-Castelán. 2017. *Overview: Shaking Up Economic Progress: Aggregate Shocks in Latin America and the Caribbean*. Washington, DC: World Bank.

<sup>8</sup> Hallegatte, Vogt-Schilb, Bangalore; Rozenberg 2017. *Unbreakable: Building the Resilience of the Poor in the Face of Natural Disasters. Climate Change and Development*. World Bank. <https://openknowledge.worldbank.org/handle/10986/25335>.

<sup>9</sup> CEPAL. 2008. "República Dominicana: Evolución de los impactos socioeconómicos de la tormenta Noel", CEPAL México

<sup>10</sup> The END is a policy planning document resulting of an inclusive and broad-based consultative process aimed at defining the long-term development strategy of the country. It is structured around the following four strategic priorities: (a) a social democratic state based on the law; (b) a society with equal rights and opportunities; (c) a sustainable, inclusive, and competitive economy; and (d) a society of environmentally sustainable production and consumption that is adapted to climate change.

8. **Since early 2000 the institutional and regulatory framework for the response to public health-related events has been put in place.** The Government has progressively modernized the country's epidemiologic surveillance system and rapid response mechanism to swiftly detect and manage outbreaks and public health-related events caused by endemic, epidemic, and emerging diseases. The Ministry of Public Health (MSP) has developed regulations to provide operative guidelines for public health-related emergency management. Through Decree 309-07, the National Epidemiologic Surveillance System was created with the objective of "regulating the management of diseases and other important events for the Dominican public health". Decree 309-07 establishes the mechanisms to prevent and control diseases and sets the basis of the epidemiologic surveillance information system. Additionally, Decree 213-09 also establishes the sanitary actions the MSP has to take in case of an emergency caused by a natural disaster.

9. **Building on the strong legal framework, the Government is now undertaking 'second generation' reforms, which seek to mainstream DRM and CCA at the sectoral level and effectively reduce climate and disaster risks through two key sets of policy measures: creating the required sectoral institutional structures and establishing and enforcing mandatory disaster and climate resilience regulations.** Mainstreaming DRM and CCA requires establishing an adequate institutional framework at the sectoral level to ensure risk analysis is integrated as a core element in the design and implementation of public policies. A robust institutional framework is also needed to develop a risk-informed decision-making process and ensure that disaster- and climate-resilient technical regulation standards are an integral part of mandatory regulations specific to each sector. These second-generation reforms are thus essential to translate the overall objectives of the DRM legal framework into concrete disaster and climate risk reduction measures for each individual sector. Altogether, these actions make a critical contribution to strengthening climate and disaster resilience of assets and livelihoods and improving business continuity of essential public services as well as the sustainability of public spending and investments.

10. **The development objective of the proposed operation is to support the Government of the Dominican Republic in: (a) strengthening institutions for improved climate and disaster resilience in priority sectors; and (b) establishing mandatory regulations for climate and disaster risk reduction in public investment and construction works.** The operation supports the priorities of the Government, which has highlighted the sectors of education, water resource management, and fiscal management. Education has been a prominent priority of the Government since 2012 and has received an allocation of 4 percent of GDP each year, representing almost 20 percent of total public expenditure in 2016. Education is the primary recipient of Government expenditure after electricity. Water resource management is a top priority of the current administration, which declared 2016 to 2020 as "four years of water." Finally, sound fiscal management and sustainable public finance remain the overarching priority of the Government. The Government has demonstrated continuous commitment to expanding and strengthening the DRM and CCA agenda in the country. The World Bank is supporting this priority agenda through the implementation of TA activities with the Government, especially to the MH and the MEPyD..

## **2. MACROECONOMIC POLICY FRAMEWORK**

### **2.1 RECENT ECONOMIC DEVELOPMENTS**

11. **The DR's output growth remains strong.** In the first quarter of 2017, the economy expanded by 5.2 percent year-on-year (y/y), following high growth rates registered between 2014–16 (7.1 percent, on average). This growth performance contrasted sharply with that of the average of the LCR, which experienced a contraction of 1.4 percent in 2016. A positive shock caused by historically low international oil prices, coupled with capital spending injections, and a positive impulse stemming from a recovering U.S economy, helped capital formation and consumption to continue to drive growth on the demand side.

On the supply side, tourism arrivals remained at record levels in 2016, growing by over 6 percent (y/y), the fastest in the Caribbean. Meanwhile, abundant rainfall boosted overall farming output by 12 percent in the wake of the 2015 drought. Though it still represents a marginal share of GDP, the mining sector expanded fast, growing at a rate of 27 percent (y/y), followed by finance and construction.

**12. The current account deficit remained covered by foreign direct investment (FDI) in 2015–2016.**

A combination of low international fuel prices and rising remittance inflows narrowed the current account deficit to 1.4 percent of GDP in 2016, its lowest level in a decade. While overall exports of goods and services have remained broadly constant in recent years at about 25–26 percent of GDP, gold exports have grown rapidly in both nominal and relative terms, rising from about 4 percent to more than one-third of merchandise exports between 2012 and 2016. Capital goods, especially machinery and equipment for new power plants, accounted for a large share of the increase in imports, but the thriving tourism sector played an important role in offsetting their impact on the external accounts. Net remittances increased by more than 6 percent, slightly increasing in relative terms at roughly 8 percent of GDP. The current account deficit has been comfortably covered by FDI, which averaged 3.3 percent of GDP between 2013 and 2015. This helped increase foreign exchange reserves to over US\$6.5 billion, or roughly four months of imports, by June 2017. Large foreign exchange reserves are especially important given the increasingly higher share of foreign-currency-denominated debt in the country's total debt stock.

**13. Prices have been gradually moving up toward the inflation target band.** Falling fuel prices caused consumer price inflation to drop from an average rate of 4.8 percent in 2013 to an average of 1.8 percent in 2014–2016. But with increasing oil prices, since late 2016, the consumer price index has shown a gradual upward trend, registering a 3 percent increase y/y on average in the first half of 2017 (the Central Bank has an inflation target band of 4 percent +/- 1 percent). In the context of this trend and monetary policy normalization in the U.S, the Central Bank authorities in the DR increased the policy rate by 50 basis points to 5.5 percent on November 1, 2016, and to 5.75 percent on April 3, 2017. The peso has tended to depreciate very gradually against the U.S. dollar at an annual rate of about 3 percent in nominal terms, owing to sterilization efforts by the Central Bank. A gradual shift toward a more flexible exchange rate regime, made in tandem with progress on the forex market infrastructure, would support the build-up of additional cushions to absorb exogenous shocks.

**14. The DR's financial sector is generally sound, but the banking subsector remains concentrated.**

The financial sector's total assets were close to 49 percent of GDP at the end of 2016. The sector comprises 66 financial institutions, including 18 commercial banks, which together hold 86 percent of all financial assets.<sup>11</sup> Key financial sector indicators show robust capitalization, provisioning, liquidity, and profitability ratios. However, concentration is high in the banking sector with three institutions holding almost four-fifths of total banking sector assets, and the state-owned bank Banreservas alone holding roughly one-third of total assets. In the context of solid economic performance, credit to the private sector increased by 10.6 percent (y/y) in the first quarter of 2017.

**15. Despite significant progress since 2013, fiscal-structural rigidities continue to limit the space to build fiscal space for productive spending and buffers for difficult times.**

The Non-Financial Public Sector (NFPS) fiscal deficit deteriorated from 0.3 percent of GDP in 2015 to 2.8 percent of GDP in 2016 (the overall consolidated public sector and the central government deficits also deteriorated to 4.3 percent and 2.7 percent of GDP, respectively); although it is important to note that the out-of-trend improved fiscal balance of 2015 was driven by a one-time transaction with Petrocaribe, which was recorded as a

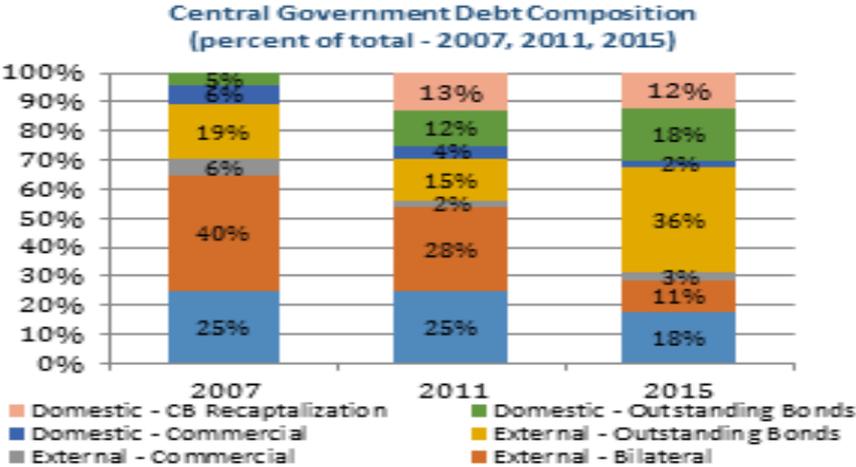
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<sup>11</sup> The sector also includes 10 saving and credit associations, 19 saving and credit banks, 17 credit corporations, and 2 public institutions.

capital grant. The NFPS revenues remained relatively low in 2016, at 14.8 percent of GDP, even though the Government approved various administrative provisions to boost collections in October of that year. Revenue mobilization is weakened, among other reasons, by tax expenditures (estimated at 6.4 percent of GDP in 2016) and high informality. On the expenditure side, the Government has made efforts to contain overall public spending at 17–18 percent of GDP over the last three years, but the growing interest payments represent a key source of pressure.

16. **The debt stock continues to rise gradually, while the Government is diversifying its financing sources (Figure 1).** By end-2016, the NFPS debt stock reached 35 percent of GDP or 50 percent<sup>12</sup> if the Central Bank liabilities are included. Debt indicators expressed as a percentage of Government revenues are elevated: the NFPS public debt stands at over 230 percent of fiscal revenues in 2016, stressing the importance of enhancing revenue collection. External public debt<sup>13</sup> was equivalent to 23 percent of GDP at end-2016, and represents approximately two-thirds of the NFPS debt—public external bonds represent more than one-third of total Government debt. In November 2016, Fitch raised the DR’s sovereign credit rating to ‘BB–’, while Moody’s upgraded the DR’s debt ratings to Ba3 from B1 and changed the outlook from positive to stable in July 2017.

Figure 1. Central Government Debt Composition



<sup>12</sup> World Bank staff computation based on data from national authorities and IMF.

<sup>13</sup> Refers to the NFPS.

**Table 1. DR - Key Economic Indicators, 2014–2019**

	2014	2015	2016e	2017f	2018f	2019f
<b>Real sector</b>						
GDP, constant prices, percentage change	7.6	7.0	6.6	5.2	5.0	4.8
GDP deflator (annual growth)	2.0	1.0	0.8	5.4	4.1	4.5
CPI (period average)	3.0	0.8	1.6	3.0	4.0	4.0
<b>Fiscal accounts</b>						
Revenues and grants (NFPS)	14.8	17.5	14.8	14.7	14.6	14.6
Expenditure (NFPS)	17.9	17.8	17.6	18.2	18.1	18.0
Overall balance (NFPS)	-3.1	-0.3	-2.8	-3.5	-3.5	-3.4
<b>Selected Monetary Accounts</b>						
Credit to private sector	19.5	12.6	11.1	9.6	9.5	9.2
Currency issue	11.7	6.5	5.8	8.8	9.4	9.2
M3	11.8	14	9.1	10.5	9.6	9.4
<b>Balance of Payments</b>						
Current Account Balance	-3.3	-1.8	-1.4	-2.0	-2.6	-2.9
Merchandise exports (percentage change y-o-y)	5.0	-4.6	4.4	5.6	4.3	4.3
Merchandise imports (percentage change y-o-y)	2.8	-2.1	3.4	8.8	5.6	5.8
Foreign Direct Investment	3.4	3.3	3.6	3.1	3.1	3.1
Gross Reserves (months of imports)	3.4	3.7	4.2	4.2	...	...
External Public Debt	22.8	21.9	23.2	23.6	24.5	25.4
Terms of trade (percentage change y-o-y)	0.5	9.8	1.5	...	...	...
Exchange rate (period average, RD\$/US\$)	43.5	45.0	46.0	...	...	...
<b>Memo items</b>						
Nominal GDP (US\$ billion, current prices)	65.3	68.2	71.7	...	...	...
Nominal GDP (RD\$ billion, current prices)	2841	3068	3298	3659	3998	4360
NFPS Debt	33.8	33.1	35.0	35.5	36.9	38.2
Consolidated Public Debt	47.2	47.3	50.1	50.8	52.0	53.2

Note: e = estimates

Source: Dominican authorities, IMF, and WB staff estimates and projections

**Table 2. DR - Fiscal Accounts of the NFPS, 2014–2019**

	2014	2015	2016e	2017f	2018f	2019f
<i>Non-Financial Public Sector (percentage of GDP) unless otherwise indicated</i>						
<b>Total Revenues</b>	14.8	17.5	14.8	14.7	14.6	14.6
Current Revenues	14.6	14.4	14.8	14.7	14.6	14.6
Tax Revenues	13.8	13.5	13.8	13.7	13.7	13.7
Direct Taxes	5.0	4.5	4.7	4.7	4.7	4.7
Indirect Taxes	8.7	8.9	9.0	9.1	9.0	9.0
VAT	4.6	4.8	4.8	4.9	4.9	4.9
Taxes on International Trade	0.9	1.0	1.0	1.1	1.1	1.1
Others Tax Revenues	0.0	0.0	0.0	0.0	0.0	0.0
Non-tax Revenues	0.7	0.9	1.0	0.9	0.9	0.9
Capital Revenue	0.1	0.0	0.0	0.0	0.0	0.0
Grants	0.1	3.1	0.0	0.0	0.0	0.0
<b>Total Expenditure</b>	17.9	17.8	17.6	18.2	18.1	18.0
Current Expenditures	14.9	14.3	14.4	14.7	14.8	14.7
Wages and Salaries	4.6	5.1	4.6	4.4	4.4	4.4
Goods and Services	1.7	1.6	1.4	2.2	2.2	2.1
Interest	2.5	2.7	2.9	3.2	3.3	3.4
Current Transfers	6.1	4.9	5.4	4.9	4.8	4.7
o/w: non-energy sector transfers	4.7	4.1	4.9	4.4	4.4	4.4
Capital Expenditures	3.0	3.5	3.2	3.6	3.4	3.4
Fixed Investment	2.0	2.4	2.2	2.4	2.3	2.3
Capital Transfers	1.0	1.1	1.0	1.2	1.1	1.1
Primary Balance	-0.6	2.3	0.1	-0.4	-0.2	0.0
<b>Overall Fiscal balance</b>	-3.1	-0.3	-2.8	-3.5	-3.5	-3.4
<b>Memo items</b>						
Central Bank fiscal balance (i.e. Quasi-fiscal balance)	-1.3	-1.3	-1.5	-1.3	-1.3	-1.2
Consolidated fiscal balance	-4.4	-1.6	-4.3	-4.9	-4.8	-4.7

Source: Dominican authorities, IMF, and WB staff estimates and projections

**Table 3: DR - Balance of Payments Financing Requirements and Sources, 2014–2019**

	2014	2015	2016e	2017f	2018f	2019f
<b>Gross External Financing Needs; millions USD</b>	5,635	6,454	4,533	4,583	4,782	5,681
Current account deficit	2,170	1,250	999	1,555	2,030	2,203
Medium and Long-term debt amortization	3,465	5,204	3,534	3,028	2,752	3,478
<b>Financing Sources</b>	5,635	6,454	4,533	4,583	4,782	5,681
FDI	2,209	2,222	2,593	2,382	2,531	2,684
Portfolio Investments	1,482	3,458	1,680	1,072	1,136	1,700
Public Sector MLT Disbursements	1,774	1,680	1,324	1,512	1,410	1,530
Change in reserves (- increase)	-652	-772	-894	-480	-500	-510
Other capital flows	822	-134	-170	97	205	277

Source: Dominican authorities, IMF, and WB staff estimates and projections

## 2.2 MACROECONOMIC OUTLOOK AND DEBT SUSTAINABILITY

17. **Growth is expected to remain robust over the medium-term converging toward its potential rate.** GDP is expected to grow at around 5 percent a year over the medium-term, supported by solid domestic consumption. After expanding rapidly during the last three years, investment is expected to

stabilize at an annual growth rate of 4 percent, supported by tourism-led FDI, mining-related inflows, and domestically financed construction.<sup>14</sup>

18. **Increasing oil prices and non-oil imports will contribute to a very gradual increase in the current account deficit, which will remain comfortably covered by FDI.** Imports growth will be partly compensated by the surplus in exports of services, fueled by tourism. The trade deficit is projected to average about 11 percent of GDP during 2018–2020, prompting a slight widening in the current account deficit over 2018–2020. Supported by strong FDI, the DR’s foreign exchange reserves are expected to continue to increase gradually. Nevertheless, exogenous downside risks stemming from natural disasters or larger than expected import price increases may affect the baseline forecast.

19. **Global oil prices are projected to gradually push inflation up to within the Central Bank’s target of 4 +/- 1 percent over the medium term.** Oil prices have a significant effect on transportation, food, and housing utilities costs. The Central Bank, remains strongly committed to maintaining price stability, and ready to tighten its monetary policy stance if warranted.

20. **The NFPS deficit is expected to hover around 3.5 percent of GDP over the medium term, although this excludes deficits arising from quasi-fiscal deficits related to the Central Bank.**<sup>15</sup> Ongoing efforts to improve fiscal efficiency on the administration front and boost revenues are expected to yield moderate fiscal gains. Additional policy measures both on the expenditure and revenue sides are likely needed to strengthen the fiscal position, stabilize debt, and build fiscal buffers. Current public debt levels are assessed as sustainable, but additional fiscal policies would be needed to stabilize the debt trend over the medium term. Under the baseline scenario, the NFPS public debt-to-GDP ratio is expected to rise moderately to about 38 percent of GDP by 2019.

21. **The DR’s macroeconomic policy framework is adequate for the proposed operation.** Nonetheless, the macroeconomic outlook may be vulnerable to downside risks. While the external environment has broadly supported the DR’s growth, particularly over the last four years, uncertainty in global market conditions place downside risks to the region and the country’s economic performance. A faster than expected hike in the U.S Federal Reserve policy rates together with a reassessment of investors’ portfolio allocation may increase borrowing costs, prompting the need for much tighter monetary and fiscal policies. Drastic changes in U.S immigration policies may affect the large inflow of remittances. Finally, global uncertainty may also have an impact on FDI. The materialization of these downside risks could place pressures on the exchange rate and have an impact on growth, external accounts, and public debt. The country has significant exposure to shocks from natural disasters, which can materialize and generate large fiscal costs and need for additional external financing access. These risks are mitigated by the authorities’ commitment to prudent macroeconomic management. Further efforts in implementing fiscal and structural reforms would help the economy’s resilience to shocks. The authorities have been also securing contingent lines of financing as a buffer to face some of these risks. The contracting of this Cat DDO is part of a broader strategy to increase fiscal resilience and mobilize emergency financing (and preparedness) to ease the impact of potential natural disasters. In particular, this operation includes the establishment of new institutional arrangements for estimating, pricing, and

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<sup>14</sup> Regulations passed in October 2016, allowing pension funds to invest in road projects, are expected to boost total investment in road construction and rehabilitation.

<sup>15</sup> Law 167-07 regulates the recapitalization of the Central Bank and establishes that the Government is required to recapitalize the Central Bank through annual transfers. However, as part of its efforts to contain the fiscal deficit, the Government has reduced the amounts transferred to the Central Bank since 2012, thus extending the repayment horizon.

managing fiscal contingent liabilities associated with climate and disaster risks, which can play a pivotal role in addressing the country's vulnerability to these shocks.

## 2.3 IMF RELATIONS

22. **On March 24, 2017, the Executive Board of the IMF successfully concluded the Article IV consultation with the DR.** The IMF Executive Directors welcomed the authorities' commitment to fiscal discipline and encouraged them to take early action to prevent a further build-up in debt, given the strong cyclical position of the economy. They highlighted that strengthening the medium-term fiscal framework will be critical to imparting discipline, predictability, and credibility to fiscal policy. The IMF Executive Board also emphasized that far-reaching structural reforms are needed to secure better longer-term growth and social outcomes and underscore the need to decisively address challenges of the electricity sector. In July 2016, the DR repaid its outstanding debt with the IMF in full, and the authorities formally acknowledged their openness to potentially use this type of lending facility again in the future. The World Bank continues to coordinate closely with IMF counterparts, and the staff regularly exchange views regarding the adequacy of the macroeconomic policy framework and the Government's progress on the structural reform agenda.

## 3. THE GOVERNMENT'S PROGRAM

23. **DRM and CCA are incorporated as key priorities in the 2030 END approved by law in early 2012.** The END<sup>16</sup> explicitly introduces DRM as a cross-cutting requirement and the need to mainstream climate and disaster risks in developing planning by incorporating 'adequate and integral risk management criteria' in all public policies, programs, and projects (Article 13 of Law 01-12). Out of its four strategic objectives, the END also specifies policy actions to be implemented to create an 'efficient risk management system to minimize human, economic, and environmental losses' and an 'adequate adaptation to climate change'. Under those objectives, the Government has started to implement concrete policy actions aimed at: (a) incorporating risk management as an essential component of sectoral, regional, and provincial planning processes and public investment; (b) implementing priority projects to reduce risk, including dam retrofitting, bridges, roads, among others, with the objective to reduce vulnerability and the impacts of climate change; and (c) promoting, in public and private sectors, insurance and access to financial resources for mitigation of disaster and climate-related risks.

24. **The Government has already established a well-thought out legal framework for DRM that is advanced among countries in the LCR.** The DRM Law 147-02 of 2002 established the National System for Prevention and Mitigation of Disaster Risk integrating the general principles of risk reduction in the country's development planning. The National Emergency Commission (CNE) was created as the governing body for the DRM system in the country. The main policy instruments in place are the PNGIRD and the National Plan for Seismic Risk Reduction (PNRRS), both approved by Presidential Decree 275-13 in 2013. The PNGIRD has two main components: (a) establishing the national objectives for risk prevention and mitigation, together with the definition of the strategies and programs for implementing those objectives; and (b) establishing the institutional coordination mechanism for emergency response and recovery in the case of a disaster. The PNRRS defines the key objectives for government sectors to reduce risk factors associated with seismic risk and includes technical guidelines for the development of sectorial plans to reduce the potential impact of seismic events. These two instruments have allowed the

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<sup>16</sup> Approved by Law 01-12 (2012), the END is an apolitical policy-planning document as a result of an inclusive and broad-based consultative process aimed at defining the long-term development strategy of the country. The END is available at <http://economia.gob.do/mepyd/wp-content/uploads/archivos/end/marco-legal/ley-estrategia-nacional-de-desarrollo.pdf>

Government to achieve substantial progress in implementing an effective emergency and disaster response system and have raised awareness of the importance of incorporating climate and disaster risks into planning across all Government sectors to build resilience to disasters and climate-related shocks. Beyond the progress made until now, additional policy reforms are required to implement the END and increase the capacity of priority sectors to adequately reduce climate and disaster risks and improve the management of contingent liabilities associated to disasters and climate-related risks.

25. **The legal framework for DRM has been further strengthened recently with new emphasis on climate change.** In September 2015, the National Climate Change Policy was approved through Decree No. 269-15 to establish the mechanisms and instruments to better cope and adapt to climate change. This policy aims at enhancing coordination between the National Council for Climate Change and the MEPyD, and strengthening the National Planning System and the National Multi-Year Public Sector Plan to increase the capacity of the Government to promote a ‘low-emission and climate-resilient development.’ This policy also clearly articulates the DRM and CCA agendas, highlighting that in both cases there is a need to adopt a cross-sectoral approach to reduce vulnerability to natural hazards and recommending the establishment of common institutional frameworks to increase the capacity to shape development planning in a more resilient way.

26. **The Government has in place an epidemiologic surveillance system and a rapid response mechanism to swiftly detect and manage outbreaks and public health-related events.** The Government has progressively modernized the country’s epidemiologic surveillance system and rapid response mechanism to swiftly detect and manage outbreaks and public health-related events caused by endemic, epidemic, and emerging diseases. In the case of an emergency related to natural disasters, the Committee of Health Emergency (CES) chaired by the MSP is in charge of conducting and coordinating actions related to prevention, preparation, mitigation, and emergency response. The General Health Law N° 42-01 establishes in article 58 that the MSP, in coordination with other institutions, will *“implement activities related to prevention or mitigation and preparation of treatments to be ready to confront disasters [impacts on health] adequately”*. The institutional and regulatory framework for the response to public health-related events complies with International Health Regulations based a regional assessment by the Pan American Health Organization (PAHO) and World Health Organization (WHO).<sup>17</sup> Nevertheless, the assessment found that the DR needs to improve their capacity on both the surveillance and response aspects of the system.<sup>18</sup>

27. **In response to different endemic, epidemic, and emerging diseases outbreaks in recent years, the authorities have also developed specific protocols to prevent, identify, control, and reduce the associated impact of public health-related events.** In 2010 for example a ‘Contingent Operational Plan for the Risk of Cholera Outbreak’ was launched by the MSP. More recently, in 2015 the MSP issued a ‘Preparation and Response Plan for the Zika Virus’, providing the main operational guidelines to address this public health-related event. This plan is also applicable for other ‘*Aedes mosquito*’-related diseases such as dengue, yellow fever, and chikungunya.

28. **To further mainstream DRM and CCA at the sectoral level and ensure effective implementation of climate and disaster risk reduction policies, the Government has now moved to a ‘second generation’ of strategic reforms using a two-fold approach aimed at: (a) ensuring critical infrastructure and physical assets are disaster and climate resilient to reduce potential future human and economic losses; and (b)**

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<sup>17</sup> The International Health Regulations is a set of agreed international principles and procedures that govern how PAHO and WHO member countries report and respond to health events of potential international concern.

<sup>18</sup> Implementation of the International Health Regulations. PAHO-WHO; September 2016

**strengthening the management of contingent liabilities associated with disasters to ensure timely financial response and adequate recovery capacity.** Since the education, health, housing, and public infrastructure sectors concentrate about half of the direct economic losses caused by the major hydrometeorological events in the country in the last 40 years, the Government has prioritized these sectors in policy reform and institutional strengthening. In the context of an increasing debt-to-GDP ratio, the Government is also aware that a significant event could potentially exacerbate macroeconomic weaknesses and pose significant risks to the sustainability of public finances. In response, the Government, under the leadership of the MH, is taking key actions to effectively manage contingent liabilities associated with disasters and climate-related shocks and ensure contingent funding in case of disasters. The policy reforms supported by this operation fill the gaps and address the key challenges in the Government's current DRM and CCA systems by charging relevant financial departments with legal authorities and mandates, delegating critical responsibilities at the sector level, defining the standards to which DRM and CCA tasks must be carried out, and strengthening compliance.

#### 4. THE PROPOSED OPERATION

##### 4.1. LINK TO GOVERNMENT PROGRAM AND OPERATION DESCRIPTION

29. **The development objective of the proposed operation is to support the Government of the Dominican Republic in: (a) strengthening institutions for improved climate and disaster resilience in priority sectors; and (b) establishing mandatory regulations for climate and disaster risk reduction in public investment and construction works.** In providing support for DRM and CCA, this operation promotes a comprehensive, multisector approach to managing disaster and climate risks. The proposed operation builds on extensive TA work in close collaboration with the MEPyD aiming at mainstreaming DRM and CCA in territorial planning, public investment, and public finances in the DR (P128311). The Cat DDO option of the proposed operation can be used to provide timely liquidity in case of a natural catastrophe including public health-related events. The policy framework for the proposed operation supports areas prioritized in the 2030 END. The Government's program is set forth in the Letter of Development Policy (LDP) (annex 2).

30. **Climate co-benefits for the proposed operation are expected to be high.** CCA considerations are explicitly integrated in Prior Actions 1 to 5, which represent 83 percent of the total prior actions. More generally, climate change is anticipated to increase the frequency and severity of hydrometeorological hazards in the DR (flooding, drought, and cyclones, see paragraph 3). Therefore, policy actions included in this operation will directly contribute to enhancing the country's capacities to adapt to climate change.

31. **The proposed operation provides a critical line of contingency financing and is part of the Government's fiscal strategy to address contingent liabilities associated with natural catastrophes including public health-related events and climate-related shocks.** Disasters from adverse natural events represent significant explicit and implicit contingent liabilities to the Government. Based on the results from the World Bank CDRP, the DR could experience an annual average loss from earthquake and hurricanes equivalent to about 4.3 percent of the 2017 budget.<sup>19</sup> In response, the Government has adopted a two-fold approach aiming at: (a) strengthening the resilience of infrastructure and assets to reduce potential future economic losses; and (b) contracting specific contingent lines of credit to ensure timely financial response capacity in the aftermath of a disaster. The proposed operation will allow the Government to increase the availability of immediate liquidity in the aftermath of a natural catastrophe. The Government currently has a US\$100 million parametric contingent line of credit with the Inter-

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<sup>19</sup> Estimations based on probabilistic risk assessment that take into account a very comprehensive catalogue of possible events to provide a more robust quantification of disaster risk in comparison to short-term historical records.

American Development Bank (IADB), which is triggered by predefined and agreed-upon parameters related to the intensity of hurricane and earthquake events. This instrument does not cover disasters associated with extreme rainfall or drought events. The IADB's contingent credit loan is accompanied by a policy reform program, which is structured around policy actions complementary to those supported by the proposed operation.

32. **The design of this operation takes into account lessons learned from many years of World Bank operations in the area of DRM and Cat DDO programs, as reflected in the Independent Evaluation Group Report 'Hazards of Nature, Risks to Development'.**<sup>20</sup> This operation also incorporates key lessons learned from prior Development Policy Financing (DPF), such as the Cat DDOs in Panama and the Philippines in 2011, Sri Lanka in 2014, and Peru in 2015, as well as the DRM DPF in Bolivia in 2015. Key lessons learned include the following: (a) a successful Cat DDO operation needs to align actions and activities with government priorities; (b) DRM policy is most effective when based on adequate risk identification, including both physical and fiscal risks; and (c) the implementation of a DPL with a Cat DDO should be set within a broader financial protection strategy against disasters and climate-related shocks.

33. **The Cat DDO allows countries to secure rapid access to financing in the event of a natural catastrophe.** The Cat DDO can serve as bridge financing while funds from other sources (for example, concessional funding, bilateral aid, risk transfer instruments, or reconstruction loans) are being mobilized. The Cat DDO has a 'soft' trigger, as opposed to a 'parametric' trigger, which means that funds become available for disbursement after the declaration of a state of emergency because of a natural catastrophe as defined in the following paragraph. Drawdown conditions, financial features, and renewals are as follows:

- **Drawdown triggers.** Loan Proceeds may be withdrawn upon a declaration of a State of Emergency<sup>21</sup> by the President that has been declared to respond to an imminent or occurring natural catastrophe, which may include public health-related events, through an Executive Decree in accordance with Article 128(1)(g), 262, 265, and 266 of the DR's Constitution of 2015, under terms and conditions specified in the Loan Agreement.
- **Financial features.** The financial features of the DPL with a Cat DDO are similar to those available for the DDO for DPLs, with one exception: the DPL with a Cat DDO would have a revolving feature by which the amounts repaid before the closing date would be available for drawdown in accordance with the terms of the Loan Agreement.
- **Drawdown period and renewals.** The proposed operation includes a deferral period of up to three years. During this time, the World Bank will monitor that the Government is continuing to implement the program being supported in accordance with its LDP. A Cat DDO may be renewed if the implementation of the program set out in the LDP remains satisfactory to the World Bank and macroeconomic policies are adequate. A Cat DDO may be renewed four times for up to three years each time, for a total deferral of 15 years.

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<sup>20</sup> World Bank. 2006. *Hazards of Nature, Risks to Development: An IEG Evaluation of World Bank Assistance for Natural Disasters*. Independent Evaluation Group. Washington, DC: World Bank.

<sup>21</sup> *Estado de Emergencia*.

#### 4.2. PRIOR ACTIONS, RESULTS AND ANALYTICAL UNDERPINNINGS

34. The proposed operation will support the Government's 'second generation' reforms of its DRM and CCA systems to mainstream and enable risk reduction across the programs at the sector level. The program has two pillars: Pillar A - Strengthening institutions for improved climate and disaster resilience in priority sectors; and Pillar B - Establishing mandatory regulations for climate and disaster risk reduction in public investment and construction works. The policy reforms supported by the proposed operation ensure the sustainability of the Government's efforts and commitment to a holistic approach to disaster risk reduction based on accountability and international best practices adapted to the context of the DR.

35. **The analysis undertaken during preparation of the current institutional and regulatory framework for the response to public health-related emergencies found that the system has the necessary regulatory instruments to manage and effectively respond to public health-related events.** The analysis undertaken reviewed the two key aspects for an efficient management of public health-related emergencies: (i) institutional and regulatory; and (ii) capacity building. Given that the institutional and regulatory framework complies with international standards, the Government's efforts in public health preparedness and management is focused on strengthening their capacity to respond to public health-related events. A World Bank-financed project in the Health sector is under preparation focusing on Improving the Quality and Efficiency of Health Services in the Dominican Republic (P163031). The proposed project will include a component focused on strengthening the provincial directorates to conduct regular public health activities which will aim at increasing the capacity of the country to respond to public health-related events. The Government is also receiving support on these issues from PAHO, WHO and CDC<sup>22</sup>.

##### ***Pillar/Objective A: Strengthening institutions for improved climate and disaster resilience in priority sectors***

36. **Through the reforms included in Pillar A, the Government is establishing the necessary institutional structures to mainstream DRM and CCA in three high-priority sectors.** To ensure risk-informed public decision making and enhance risk analysis as an integral part of the design of public policies, it is critical to set up the right institutional structures that have the mandates, competences, and accountabilities to oversee risk assessments and coordinate the different entities within and outside each sector. Such an institutional framework is essential for mainstreaming DRM and climate resilience into the decision-making process. The proposed operation will support fiscal management, school infrastructure and water resource management in these aspects.

**Prior Action 1:** *The Government has established new institutional structures for quantifying, pricing, and managing contingent liabilities associated with climate and disaster risks by: (i) establishing an interinstitutional body to assess and quantify the socioeconomic and fiscal impacts of natural disasters; (ii) granting legal mandate to the MH's General Directorate for Fiscal Analysis and Policy to estimate and assess the impacts of disaster and climate-related risks on fiscal accounts as part of managing contingent liabilities; and (iii) granting legal mandate to the MH's General Directorate of Public Credit to manage the contracting of financial instruments for risk transfer according to the country's applicable legislation.*

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<sup>22</sup> With the support of the Centers for Disease Control and Prevention of United States, the Ministry of Public Health (MSP) has trained more than 500 health workers who completed the Field Epidemiology Training Program; 405 completed the basic level and 107 the intermediate level.

37. **In the context of rising debt-to-GDP ratio, climate and disaster shocks could exacerbate macroeconomic weaknesses and pose significant risks to the sustainability of public finances.** Based on historical data for 1961–2014, economic losses associated with disasters in the DR average the equivalent of 0.69 percent of GDP.<sup>23</sup> Based on the results of the World Bank CDRP, there is an annual 1 percent probability that losses from hurricanes reach at least the equivalent of 11.8 percent of 2016 GDP. Additionally, losses from earthquakes have an annual 1 percent probability to reach at least the equivalent of 8.2 percent of 2016 GDP.<sup>24</sup> Economic losses of the magnitude of Hurricane Georges have an annual occurrence likelihood of 3.7 percent. These numbers reflect contrasting situations in which minor recurring events are constantly limiting fiscal space, while less frequent but more severe events could create significant fiscal shocks and exacerbate macroeconomic imbalances. Standard & Poor’s estimates, for example, that a large disaster could trigger significant macroeconomic consequences and a potential downgrade of the sovereign rating of three notches, which is the most significant downgrade in the sample of 48 countries assessed.<sup>25</sup>

38. **The role of the MH has been marginal in the DRM system until recently.** The MH has historically not considered climate and disaster risks when designing the fiscal risk management and debt strategy of the country, and it is not part of the CNE. On the other hand, the entities of the DRM system do not have a mandate nor the expertise to assess the fiscal and economic impacts of disasters. This creates an important knowledge gap and significantly limits the understanding and quantification of the economic and fiscal impacts of disasters in the country. Currently, in the hours following the occurrence of a disaster, the Emergency Operation Centers conduct rapid damage and needs evaluations to inform emergency responses and planning. This assessment does not provide a monetary value of losses nor an overall estimation of the economic losses associated with the event. Line ministries with infrastructure directly affected by disasters, such as the Ministry of Agriculture and the Ministry of Public Works and Communications (MOPC), have developed their own ad hoc procedures to assess infrastructure and production damages and losses to have a rough quantification for rehabilitation and reconstruction needs purposes. These assessments are neither harmonized nor systematized and are not properly shared within the rest of the Government. This situation is preventing the MEPyD and other planning units from accessing reliable sectorial information to develop adequate planning for reconstruction activities and resources needed. More importantly, it precludes the MH from being able to efficiently allocate resources and assess fiscal needs after a disaster.

39. **To respond to the adverse impacts of disasters, the Government relies mainly on ad hoc procedures by reallocating ongoing expenditures, contracting post-disaster debt or simply not being able to attend to the needs of the affected population.** Public funding allocated to the recovery and reconstruction process in past events was essentially the result of ad hoc arrangements influenced by the prevailing macroeconomic conditions and the political economy factors in place. Insuring public assets allows the Government to transfer some of its fiscal risk to the reinsurance and capital markets. In this setting, disaster impacts entail a high opportunity cost as resources previously allocated to ongoing development projects would be reassigned to cover the recovery and reconstruction and new debt contracted in the aftermath of disasters is negotiated in non-optimal financial conditions (with higher

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<sup>23</sup> U.S. dollar 2010. This annual average is considered a very conservative assessment as no significant earthquake occurred during this period - the 2003 earthquake in Puerto Plata is the only one included. *Source:* MEPyD y Banco Mundial. 2015. *Gestión Financiera y Aseguramiento del Riesgo de desastres en la Republica Dominicana.*

<sup>24</sup> Estimations based on a probabilistic risk assessment that takes into account a very comprehensive catalogue of possible events to provide a more robust quantification of disaster risk in comparison to short-term historical records.

<sup>25</sup> Standard & Poor’s. 2015. “Storm Alert: Natural Disasters Can Damage Sovereign Creditworthiness.” Ratings Direct, September 2015.

liquidity requirements and uncertainty). Reassignments through ad hoc process may also delay emergency and recovery efforts, hampering the efficiency of the whole reconstruction process.

40. **To address this situation, the Government has undertaken a set of reforms to build the required institutional structure to efficiently manage contingent liabilities associated with disasters and strengthen the financial capacity to recover after a major event.** First, the MH, through Ministerial Resolution No. 146-2017, has established the required institutional structure and technical arrangements for management of contingent liabilities associated with disasters. It gives the legal responsibility to the MH to increase the fiscal capacity to respond to disaster and climate impacts by developing and implementing a cost-efficient strategy. The resolution instructs the General Directorate for Fiscal Analysis and Policy to explicitly assess these contingent liabilities as a part of the MH's broader fiscal risk management strategy, which identifies and quantifies all sources of contingent liabilities. With the support of the World Bank, the MH is currently in the process of assessing explicit and implicit contingent liabilities associated with disasters and climate-related risks, as part of the comprehensive TA program mobilized to implement the proposed operation (see paragraph 69).<sup>26</sup> Based on enhanced understanding of those contingent liabilities, the MH will be able to price climate and disaster risks and develop and implement a cost-effective strategy combining risk retention and risk transfer instruments. In addition, the World Bank is currently supporting the Government to better understand the Caribbean Catastrophe Risk Insurance Facility Segregated Portfolio Company (CCRIF SPC) coverages, the choice of parameters and operation of the parametric insurance. Tapping into the CCRIF SPC will allow the DR to use the private financial market to fill another gap for disaster risk financing.

41. **For the first time since the approval of the DRM Law in 2002, formal coordination between the MH and the national DRM system has been established.** Through the CNE resolution No. 1-2017, the Government established the requirement to systematically assess and quantify the socioeconomic impacts of disasters and has given the coordination role to the MEPyD. The MEPyD and the MH, jointly with the sectoral ministries, are developing a standardized methodology for post-disaster damage assessment that will be applied by each line ministry in the aftermath of a natural catastrophe to generate the required information for recovery and reconstruction planning. A unified database will be created for the use and sharing of this information. With this information, quickly available in the aftermath of a natural catastrophe, the MH will quantify the potential fiscal impacts and take the necessary actions to be able to clearly target and allocate resources effectively.

42. **Expected results.** With the establishment of the described institutional structure, the Government will be required to systematically quantify contingent liabilities to disasters and integrate these results into the debt sustainability analysis regularly developed by the MH to inform the overall Government debt strategy. This policy reform will result in the incorporation of contingent liabilities associated with disasters and climate-related risks in the national medium-term debt strategy as a core element of the fiscal risk management strategy. A better understanding of these contingent liabilities and their fiscal impacts will be instrumental in the MH developing a more articulated and cost-efficient strategy for financial protection against disasters. Ultimately, the establishment of this new institutional structure will help understanding not only the economic cost but also the fiscal cost of disasters, creating evidence to promote risk reduction investments as a cost-efficient way to reduce future climate and disaster losses.

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<sup>26</sup> Those efforts are part of a broader strategy of the MH supported by the U.S. Treasury and the IMF and aimed at strengthening fiscal risk management by better understanding and quantifying different sources of contingent liabilities (that is, pensions, state-owned enterprises, public-private partnerships).

**Prior Action 2:** *The Government has strengthened its capacity to incorporate safety standards in the management of school infrastructure by: (i) creating a General Directorate for Risk Management within MINERD; (ii) creating a General Directorate for Building Rehabilitation within MINERD with responsibility for existing school infrastructure rehabilitation and retrofitting; and (iii) centralizing the supervision of school infrastructure construction under the MOPC and in coordination with MINERD.*

43. **Since 2012, the Government has made education a prominent priority, leading to rapid expansion of school infrastructure.** A total of 4 percent of GDP has been allocated annually to the pre-university education sector from 2013 to 2015 (up from an average allocation of 2 percent during 2008–2012). Out of the budget assigned to the education sector, about 30 percent has been allocated to the National School Building Program launched by the administration in November 2012. The number of classrooms in the country has increased by 40 percent in the last four years which requires strong attention to the management of this infrastructure and ensuring its disaster and climate resilience.

44. **The capacity to efficiently manage the existing school infrastructure and incorporate risk analysis in the design and construction of new school infrastructure has historically been limited.** The decision-making process regarding the location of new schools has been mainly driven by land availability and has failed to consistently consider the exposure of those areas to natural hazards. This has led, in the past, to building schools in flood-prone areas, as evidenced during the heavy flooding in the northern part of the country in late 2016, where many schools were affected. Regarding school construction norms, national guidelines providing ‘prototype design models’ for school buildings were developed in 2012.<sup>27</sup> The guidelines were never approved as a binding document and the sector has not yet adopted a specific standard for seismic-resistant design of new schools. Although the MOPC is legally responsible for overseeing construction of all public buildings, including schools, an ad hoc arrangement for school infrastructure construction was established in 2012. Under this arrangement, construction oversight of new schools became a joint responsibility of the MOPC and the Office of Engineers Supervisors of State Works (OISOE). The splitting of supervision between those two actors has further fragmented the oversight of compliance regulations.<sup>28</sup> In the meantime, construction has been executed by a myriad of private actors selected through a lottery with the objective of promoting transparency in public procurement. Altogether, this highly fragmented institutional framework hampered systematic quality control and enforcement of existing regulations in building new school infrastructure.

45. **Recognizing this problem, the Government has established a new institutional structure to develop a risk-informed school infrastructure management system and increase its capacity to rehabilitate and retrofit existing schools as well as incorporate mandatory safety standards in the construction of new schools.** The recently created General Directorate for Risk Management within the Ministry of Education (MINERD) has the explicit mandate to: (a) increase the resilience of school infrastructure to disasters and climate risks; (b) assess the risks to existing and future infrastructure; and (c) monitor the application of construction norms for school infrastructure; as stated in the Departmental Resolution 18-2016. In addition, through Departmental Resolution 01-2017, the General Directorate for Rehabilitation of Buildings was created within the MINERD, generating institutional capacity to directly retrofit and reduce climate and disaster risk of existing school infrastructure. The General Directorate for Rehabilitation of Buildings works in close collaboration with the General Directorate for Risk

<sup>27</sup> “Guía técnica para la construcción de escuelas seguras y modelos prototipos.”

<sup>28</sup> According to Decree 625-12, the MOPC was in charge of 60 percent of the new school buildings and the OISOE of the remaining 40 percent. The OISOE is an independent entity of engineers that focuses on construction supervision but is also mobilized to support the execution of top priority projects. The OISOE has high discretionary power and does not necessarily follow the building codes and norms established by the MOPC.

Management. It will oversee rehabilitation and retrofitting works in vulnerable schools identified as part of the risk assessments undertaken by the General Directorate for Risk Management. Finally, the Government has decided to centralize oversight of construction of new school infrastructure under the responsibility of the MOPC by Decree 348-16 dated December 2, 2016. This centralization is key to streamlining the process of construction supervision and enhancing the Government's capacity to enforce existing building regulations and systematically increase disaster resilience of new schools. This unified institutional framework for the construction of new schools also simplifies and enhances collaboration between the General Directorate for Risk Management of the MINERD and the MOPC to enforce the mandatory safety standards for the construction of new infrastructure.

46. **Expected results.** Because of this enhanced institutional structure, the MINERD is now able to define and implement a structural improvement and upgrading strategy of school infrastructure, including critical climate and disaster risk reduction measures. This strategy will encompass both short-term school infrastructure needs, as well as medium and long-term measures to strengthen infrastructure maintenance, operation, and planning. The creation of this new structure will result in an increased number of existing schools being assessed for climate and disaster risks and will be instrumental to ensure proper implementation of a comprehensive infrastructure management program including the implementation of rehabilitation and retrofitting works. A comprehensive risk assessment creates the baseline information to formulate an integrated program for school infrastructure management and ensure prioritization and cost-efficiency of vulnerability reduction measures such as structural retrofitting. Rehabilitation and retrofitting of schools will span a large time horizon as it could imply interruption of services in the schools being rehabilitated. A second key result under this pillar will thus be the increase in the number of schools rehabilitated and retrofitted, which will significantly reduce climate and disaster risk in the overall school infrastructure in the country. To support this effort, the MINERD recently requested support from the World Bank's Global Program for Safer Schools to provide technical assistance to elaborate a strategic plan for safer and more inclusive school infrastructure.

**Prior Action 3:** *The Government has enhanced flood and drought risk reduction by creating an inter-institutional structure to coordinate and facilitate the work of the Government's institutions responsible for integrated water resource management.*

47. **Water resource management is one of the top priorities of the administration, and 2016–2020 was declared the 'four years of water'.** Effectively managing water resources is critical to sustainable and equitable use, conservation and protection of water resources, and reduction of the potential adverse impact of water scarcity and flood events. Until now, the country lacked a comprehensive institutional framework encompassing the myriad actors involved in water resource management, with roles and responsibilities scattered across sectors. The Water Resource Coordination Board (WRCB) created by Decree 265-16 of September 23, 2016 was established within the MEPyD, bringing a structural change to water resource management in the country, which is no longer addressed at the sectoral level but discussed as a cross-sectoral issue fully integrated as part of the national development planning agenda of the Government. The WRCB works as a high-level inter-institutional body that enhances coordination and aims to formulate and develop a comprehensive national strategy for water resource management.

48. **Flood and drought are the most frequent and recurrent disasters and are strongly affected by water resource management.** The impacts of flood and droughts could be significantly reduced through a comprehensive and functional water resource management system. The National Institute for Hydrological Resources (INDRHI) is the national public entity in charge of dam control, dam management,

and overseeing irrigation policies.<sup>29</sup> An integrated strategy requires a well-structured coordination system that goes well beyond INDRHI's legal and institutional mandate. A well-functioning water management system includes implementing policies that integrate management of the main rivers' upper and lower basins, conducting studies to identify risk-prone areas, and prioritizing investments in critical flood protection and drought management infrastructure. Soil conservation and environmental protection policies are required to increase water retention capacity and diminish sediment buildup. An integrated strategy also entails irrigation and water flow monitoring, and adequate implementation of river canalization works in flood-prone areas. In the aftermath of the massive flooding provoked by tropical storms Noel and Olga in 2009, an 'emergency commission for river canalization and sediment removal' was created through Decree 530-09. Under the leadership of the Ministry of Environment and Natural Resources, this commission, which includes INDRHI, the CNE, and the MOPC, has the objective of identifying flood-prone areas in the main watersheds of the country and designing adequate river canalization and sediment removal works to prevent future flood. Between 2011 and 2016, the commission conducted river canalization works along only 210 km of rivers across the country. Works during this period were conducted on an ad hoc basis in specific areas after flooding events and were not part of an articulated strategy aimed at preventing flooding ex ante. The commission is now attached to the WRCB.

49. **The institutional set-up created through the establishment of the WRCB is a critical step to increase the Government's capacity to reduce flood and drought risks.** This mechanism has prioritized the development of an integrated approach to water management and established five technical committees, one of which is specifically focused on 'Climate and Hydrological Risk Management'. The committee has the objective of identifying, through hydrological and hydrometeorological studies, risk-prone areas of the main watersheds in the country. The committee will further articulate a strategy to prioritize risk-prone areas. Enhanced coordination in the framework of the WRCB ensures that river canalization and flood protection infrastructure plans are aligned with a broader range of actors working upstream on soil and environment conservation (Ministry of Environment) as well as those working downstream on irrigation purposes (Ministry of Agriculture) and water and sanitation entities (aqueducts and sewers corporations). Coordination among those sectors is essential to improve the identification of areas that can benefit from canalization works and sediment removal, which in return will ensure the sustainability of large flood and drought risk reduction investments that protect the agricultural activities and population located in areas downstream.

50. **Expected results.** Under this newly enhanced institutional structure for water resource management, the 'Climate and Hydrological Risk Management' technical committee will initially focus on: (a) identifying risk prone areas in main watersheds through hydrological and hydrometeorological studies; and (b) ensuring that risk mitigation works are well articulated with water needs downstream and dam management strategy upstream for an optimal river flow. In this sense, a key result of this policy reform will be the increase in identified and prioritized risk prone areas receiving river canalization works and cleaning of sediment build-up, which will contribute to reduce flood and drought risks.

***Pillar/Objective B: Establishing mandatory regulations for climate and disaster risk reduction in public investment and construction works***

51. **Under this pillar, the Government is taking crucial steps to implement mandatory regulations for disaster and climate resilient infrastructure, with the objective of increasing its capacity to reduce**

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<sup>29</sup> A new project of law is seeking to transfer INDRHI's role in the supervision of irrigation to the Ministry of Agriculture to ensure that irrigation policies are well aligned with agricultural needs.

**disaster and climate risks and protect the most vulnerable populations.** Reducing disaster and climate risks in essential public infrastructure and private constructions can substantially reduce the human and economic impact of disasters over the long term. Costs are much lower than repairing, retrofitting, and reconstructing buildings and infrastructure in the aftermath of a disaster. Disaster-resilient infrastructure is also key to ensure business and services continuity and enable a quick recovery in the aftermath of a disaster, protecting the most vulnerable population that relies heavily on public infrastructure. Policy reforms under this pillar represent a crucial step toward improving compliance to safety technical standards and regulations.

**Prior Action 4:** *The Government has established mandatory technical standards for incorporating disaster and climate risk analysis into the design and formulation of all public investment projects.*

52. **Since the passing of Law 498-06, in 2006, creating the National Public Investment System (SNIP) and the General Directorate for Public Investment (DGIP) as part of the MEPyD, the DR has made significant progress to increase the effectiveness of public investment projects (PIP) and ensure their resilience to disasters.** In 2010, the first version of the SNIP technical standards was approved, setting minimal criteria for all PIPs in their design and formulation and before their incorporation into the SNIP.<sup>30</sup> The second version of the technical standards, approved in 2013, presented significant improvements, and introduced the requirement to incorporate disaster risk analysis for all large-scale PIPs exceeding US\$10 million. In the past years, DGIP has focused on building technical capacity of public investment officers to ensure proper oversight of compliance to the PIP technical guidelines at the sectoral and territorial level. Capacity-building activities have been expanded to technical staff in the planning units of line ministries and, more recently, to technical staff in charge of public investment working in municipalities.<sup>31</sup>

53. **Despite the progress, the current technical guidelines are not mandatory and are not effective in systematically enforcing the implementation of critical resilience enhancement measures in PIPs.** The processes for incorporating disaster risk analysis, introduced in the 2013 technical standards, were not mandatory and did not apply to all projects as a crosscutting requirement. Risk analysis was still considered as an ‘add-on’ feature, which was not properly embedded in the design and formulation of the new PIP.

54. **The approval of the updated SNIP technical standards in March 2017 represents a critical step to increase resilience to disasters of all new PIPs in the country.** Under those updated standards, a disaster and climate risk analysis is required to be undertaken in the design and formulation of PIPs. This requirement is now a mandatory step for all projects, regardless of size and scope. These guidelines also apply to PIPs designed and formulated by municipalities and thus guarantee a uniform standard throughout the entire country. To ensure that the design and formulation of all new PIPs comply with new technical standards, it will be key to continue strengthening the capacity of technical staff within planning units of line ministries as well as at the local level in municipalities.

55. **The implementation of the technical standards requires official and targeted hazard and risk information.** The creation of the National Geographic Institute (IGN) in 2014, attached to the MEPyD, has established the institutional framework to enhance data management and efficiently use information as

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<sup>30</sup> Once incorporated into the SNIP, PIPs have the potential to be incorporated to and receive funding from the annual budget. Prioritization of projects is done according to the Government’s priorities and available funding.

<sup>31</sup> In 2016, the first projects designed and formulated by municipalities were incorporated into the SNIP, indicating a significant increase in the capacity of subnational actors to design and formulate PIPs

a tool for territorial planning, DRM, and CCA. Hazard and risk information is currently generated by several different technical institutions in the country. The Government recently adopted the IGN strategic plan with the objective of moving forward with the creation of the national spatial data infrastructure and the policy framework governing the collection and exchange of spatial information as well as defining standard formats and metadata. This would facilitate the production of official and targeted hazard and risk information to be used in the risk analysis as required by the new SNIP technical standards. This will also guarantee that the mandate to incorporate climate and disaster risk considerations in all public investment is informed by quality and up-to-date hazard and risk information.

56. **Expected results.** Because of the approval of the updated SNIP technical standards, a disaster and climate risk analysis will be required to be conducted as part of the design and formulation of all new PIPs (including those formulated by municipalities), which will consistently strengthen public investments' resilience to disasters and contribute to prevent the creation of new risks.

**Prior Action 5:** *The Government has issued mandatory technical regulations for granting operating permits to health facilities by requiring: (i) compliance with MSP's guidelines for the design, construction, and finishing of health facilities; and (ii) an assessment of the health facilities built before 2011 using the Hospital Safety Index.*

57. **A large percentage of health facilities in the country are highly vulnerable and exposed to climate and disaster risks.** In 2010, the MSP launched the 'Safe Hospitals' initiative with the support of the PAHO, with the objective of assessing and reducing disaster and climate risks to protect the public health infrastructure in the country. The initiative started with the goal of assessing all major public health facilities in the country with the Hospital Safety Index (ISH)<sup>32</sup> proposed by the PAHO/ WHO. Since 2010, the MSP, with support from the PAHO and the WHO, has trained and certified a first group of evaluators who completed the assessment of 67 public hospitals out of the 164 existing in the country. The ISH provides a snapshot of the probability that a hospital or health facility will continue to function in the aftermath of an adverse natural event based on the assessment of structural, nonstructural, and functional factors. The MSP is building an ISH database, which will include the results for each health facility assessed. This will provide information to the authorities to prioritize and make informed decisions on which facilities most urgently need a full structural assessment to define a retrofitting strategy. The initial results are unambiguous: 70 percent of the assessed hospitals are highly vulnerable to disasters (Category C). Using these results, 62 health facilities were prioritized for reinforcement and/or retrofitting works. The completion of works is expected for the second semester of 2017. Based on an improved understanding of the level of risk in the health infrastructure, the ministry developed and issued, in 2015, a set of guidelines for Safe Hospitals (that is, guidelines for 'construction, design, and architectural finishes for health buildings') aimed at providing the minimum technical standards to ensure resilience to disasters of health facilities.<sup>33</sup>

58. **The approval of mandatory technical standards for granting an operating permit for a health facility represents a critical component to further strengthen the resilience to disasters of hospital facilities.** To be able to operate as a clinical or a surgical establishment, hospitals need to meet all requirements set forth in those technical standards. This entails that new hospitals must comply with the MSP's guidelines for the construction, design, and architectural finishes issued in 2015 (Technical Regulations for the Authorization to provide Clinical and Surgical Services issued by Ministerial Resolution

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<sup>32</sup> [http://www.paho.org/disasters/index.php?option=com\\_content&view=category&layout=blog&id=907](http://www.paho.org/disasters/index.php?option=com_content&view=category&layout=blog&id=907).

<sup>33</sup> Approved by Ministerial Resolution 00019/2015.

1-17), effectively converting those guidelines into a binding requirement. Health facilities built before 2011 must also be assessed by the Hospital Safety Index when requesting their operating permit. This will significantly increase the number of hospitals that will need to comply with safety standards, which will in turn pave the way for a more structured and strategic approach from the MSP to reduce climate and disaster risk in health infrastructure.

59. **Resilient health facilities are essential for effective responses to heightened demands on health care services due to disasters and public health-related emergencies.** Compliance with the MSP guidelines is critical to reduce the potential structural impacts of natural disasters. The ISH also assesses the health facility surge capacity: health care systems need to be ready to cope with larger numbers of patients. The National Epidemiologic Surveillance System regulates the management of diseases and other important events for public health in the DR and establishes the operational mechanism for epidemiologic surveillance including prevention, preparation, mitigation, and emergency response. In response to the different disease outbreaks and public health-related events that have affected the country in the past years, the MSP has developed specific protocols to prevent, control, and reduce the risks and potential impacts associated with those and future hazards. Health facilities play a critical role during public health-related emergencies.

60. **Expected results.** A key result of the approval of the technical standards for operating permit will be that all hospitals built before 2011 will need to be assessed using the ISH to receive an operation permit. This comprehensive and systematic assessment will contribute to a more efficient use of resources allocated for retrofitting and structural risk reduction, and overall to more cost-efficient hospital infrastructure management. The approval of the technical standards for operating permit will also contribute to enforcing the application and mandatory use of the guidelines for ‘construction, design, and architectural finishes for health buildings’, which will in turn significantly expand the application of strong standards for safety and service continuity in health facilities in the event of a disaster. In the long-term, the enforcement of these guidelines will ensure increased resilience of health infrastructure to disasters.

**Prior Action 6:** *The Government has strengthened its technical regulations for the supervision and inspection of construction works by requiring said works to comply with all applicable building regulations.*

61. **The large majority of new construction works in the country are not systematically inspected and supervised, and enforcement of the building code remains limited.** MOPC’s General Directory of Systems and Norms, created under Law 687 in 1982, is responsible for elaborating, updating, disseminating, and supervising the correct implementation of building regulations for both public and private infrastructures. Currently, a set of over 30 regulations serve as the basis for the planning, design, and construction of buildings and other facilities in the DR. One crucial building regulation is on seismic analysis and design of structures (R-001), which is the main legal instrument to ensure that housing, buildings, and infrastructure are built per seismic-resistant standards. The first version of this regulation was dated 1979. It was updated in 2011, which represented a significant improvement to ensure safety of new buildings. R-001 is a state-of-the-art regulation covering the requirements needed in the country for seismic resilience and risk reduction. Significant TA support from Japan International Cooperation Agency (JICA) has also allowed MOPC to further enhance capacity in seismic vulnerability analysis in the country and is key to ensure future updating of this regulation. However, one of the key challenges in developing countries regarding building code regulations is enforcement. Regulation No. R-004, initially adopted by Decree 617-10 in 2010, is the key regulation governing the enforcement of building regulations, defining the rules for supervision, and general inspection of works. Since 2012, the

Directorate of Systems and Norms has made significant efforts to ensure that an increasing number of new construction works and buildings receiving a construction license are properly inspected during construction. Those efforts have been promoted and supported in the framework of the World Bank TA 'DR Improving Competitiveness' (P155652), which identified the improvement in the construction permitting process as a key factor to bolster the investment climate. Efforts are evidenced by the increase in the number of building inspected as a percentage of the number of construction licenses issued each year: from 14 percent of buildings inspected in 2014 to 22 percent in 2015 and 24 percent in 2016—representing 153 inspections in 2016. However, this still represents a limited amount of new construction. This is partly because the entity that owns the construction projects needs to submit by itself a request for inspection, per Law No. 687. The limited technical and human capacity of the MOPC also constrains its capacity to realize timely inspections, which in turn discourages owners of construction works to formally request inspection.

62. **The approval of the updated regulations for supervision and general inspection of works (R-004) is a significant step in improving the number and quality of the supervision and inspection process, thus guaranteeing greater application and enforcement of building regulations.** The regulations include (a) creation of an online portal that facilitates the submission of petition for inspections, (b) an updated inspection sheet to include considerations for all new and existing regulations, and (c) a clear definition of the role and mandate of inspectors, including the mandatory submission of an inspection report that includes detailed pictures. Altogether, these reforms will improve the capacity to ensure that new construction projects meet the technical standards set forth in the building regulations (for example, seismic-resistant standards contained in regulation R-001) and thus increase the resilience to disasters of public and private infrastructure in the country.

63. **Expected results.** Under a strengthened supervision and inspection framework, the number and quality of inspections is expected to increase. The number of private construction projects that are properly inspected is expected to increase significantly. This will contribute to an increase in the number of construction works that comply with all technical standards and building regulations in place in the short term, ensuring safety and resilience to disasters of the building environment and infrastructure in the country in the long term.

64. **The policy reforms supported under the Cat DDO are grounded in sound analytical work, as described in the analytical underpinning described in table 4.**

**Table 4. DPO Prior Actions and Analytical Underpinnings**

Prior Actions	Analytical Underpinnings
<b>Pillar/Objective A: Strengthening institutions for improved climate and disaster resilience in priority sectors</b>	
<p><b>Prior Action 1:</b> The Government has established new institutional structures for quantifying, pricing, and managing contingent liabilities associated with climate and disaster risks by (i) establishing an interinstitutional body to assess and quantify the socioeconomic and fiscal</p>	<p>Lederman, Daniel, and Justin T. Lesniak. 2017. <i>Open and Nimble: Finding Stable Growth in Small Economies, Summary</i>. Washington, DC: World Bank. © World Bank. <a href="https://openknowledge.worldbank.org/handle/10986/26304">https://openknowledge.worldbank.org/handle/10986/26304</a>  License: CC BY 3.0 IGO. This publication notes that for small economies limited territory plays a role in shaping how economies are affected by natural disasters. Aside from direct impacts on GDP growth, disasters exacerbate many other macroeconomic problems small states face. They create trade and fiscal imbalances that can lead to higher levels of debt, and they may also decrease savings and investment in the region because of the uncertainty they cause. Thus, exposure to natural disasters does not just increase external volatility, but</p>

Prior Actions	Analytical Underpinnings
<p>impacts of natural disasters, (ii) granting legal mandate to the MH's General Directorate for Fiscal Analysis and Policy to estimate and assess the impacts of disaster and climate-related risks on fiscal accounts as part of managing contingent liabilities and (iii) granting legal mandate to the MH's General Directorate of Public Credit to manage the contracting of financial instruments for risk transfer according to the country's applicable legislation.</p>	<p>is also a potentially important factor in the remaining two sets of common challenges to small states: fiscal management and low long-term savings rates.</p> <p>Banco Mundial and MEPyD. 2015. <i>Gestión Financiera y Aseguramiento del Riesgo de Desastres en República Dominicana</i>. This publication includes a diagnostic of the economic and fiscal impact of disasters and climate shocks and provides policy options to start building the Government's financial protection against natural disasters.</p> <p>Ministry of Finance and Public Credit of Colombia. 2011. "Contingent Liabilities: The Colombian Experience."  <a href="http://treasury.worldbank.org/bdm/pdf/Contingent_Liabilities_Colombian_Experience.pdf">http://treasury.worldbank.org/bdm/pdf/Contingent_Liabilities_Colombian_Experience.pdf</a></p> <p>"Improving the Assessment of Disaster Risk to Strengthen Financial Resilience." Joint G20 Publication by the Government of Mexico and the World Bank on the necessity of quantifying contingent liabilities in assessing disaster risk  <a href="http://documents.worldbank.org/curated/en/606131468149390170/pdf/709880WPOP13020BLIC00GFDRROG200High.pdf">http://documents.worldbank.org/curated/en/606131468149390170/pdf/709880WPOP13020BLIC00GFDRROG200High.pdf</a></p> <p>Vegh, Carlos, Daniel Lederman, and Federico R. Bennett. 2017. <i>Leaning Against the Wind: Fiscal Policy in Latin America and the Caribbean in a Historical Perspective</i>. LAC Semiannual Report. Washington, DC: World Bank. © World Bank. <a href="https://openknowledge.worldbank.org/handle/10986/26364">https://openknowledge.worldbank.org/handle/10986/26364</a> License: CC BY 3.0 IGO. This report notes the pro-cyclical properties of fiscal policy in LCR and argues for a prudent stance that would err on the side of saving too much during upswings and perhaps borrowing too little during downturns. This 'excessive' saving could be viewed as the cost of self-insurance and hence a price that needs to be paid for living in shock-prone or more volatile external environments.</p> <p>Sebastian, Acevedo. 2016. "Gone with the Wind: Estimating Hurricane Climate Change Costs in the Caribbean." IMF Working Paper, WP/16/199, Washington, DC. <a href="http://www.imf.org/external/pubs/cat/longres.aspx?sk=44333.0">http://www.imf.org/external/pubs/cat/longres.aspx?sk=44333.0</a>. This publication notes that elasticity of damages to GDP ratio with respect to maximum wind speeds is three in the case of landfalls and estimates that the average annual hurricane damages in the Caribbean will increase between 22 percent and 77 percent by the year 2100, in a global warming scenario of high CO<sub>2</sub> concentrations and high global temperatures.</p>
<p><b>Prior Action 2:</b> The Government has strengthened its capacity to incorporate safety standards in the management of school infrastructure by (i) creating a General Directorate for Risk Management within MINERD; (ii) creating a General Directorate for Building Rehabilitation within MINERD with</p>	<p>United Nations: Safe Schools Selected Reports.  <a href="http://www.unisdr.org/we/campaign/schools-hospitals">http://www.unisdr.org/we/campaign/schools-hospitals</a></p> <p><i>Guía Técnica para la Construcción de Escuelas Seguras</i>. 2013. Dirección General de Ordenamiento y Desarrollo Territorial (DGODT), MEPyD, BID y Ministerio de Educación  <a href="http://economia.gob.do/mepyd/wp-content/uploads/archivos/libros/Guia_Escuelas_Seguras_WEB.pdf">http://economia.gob.do/mepyd/wp-content/uploads/archivos/libros/Guia_Escuelas_Seguras_WEB.pdf</a></p> <p><i>Diagnóstico sobre la Situación de la República Dominicana en cuanto a la reducción de riesgos a desastres</i>. An independent assessment on disaster risk reduction in DR by the United Nations Office for Disaster Risk Reduction (UNISDR) and partners.  <a href="http://www.unisdr.org/files/14652_InformeEvaluacinDignosticoRRDfinal1.pdf">http://www.unisdr.org/files/14652_InformeEvaluacinDignosticoRRDfinal1.pdf</a>.</p> <p>This publication notes progress in education sector but argues that there is room</p>

Prior Actions	Analytical Underpinnings
responsibility for existing school infrastructure rehabilitation and retrofitting; and (iii) centralizing the supervision of school infrastructure construction under the MOPC and in coordination with MINERD.	to strengthen dialogue between the scientific community and the Government to reduce risk. JICA y ONESVIE. 2014. <i>Reducción de la vulnerabilidad sísmica de las edificaciones escolares en la Provincia de San Cristóbal</i> . This is the first comprehensive risk assessment of school infrastructure in the San Cristóbal Province of the Dominican Republic.
<b>Prior Action 3:</b> The Government has enhanced flood and drought risk reduction by creating an interinstitutional structure to coordinate and facilitate the work of the Government’s institutions responsible for integrated water resource management.	World Bank. 2013. “Resilient Coastal Cities: The Economic, Social, and Environment Dimensions of Risk.” <a href="http://documents.worldbank.org/curated/en/572351468162859546/pdf/786070WPO14-OR00Box377349B00PUBLIC0.pdf">http://documents.worldbank.org/curated/en/572351468162859546/pdf/786070WPO14-OR00Box377349B00PUBLIC0.pdf</a> . The authors argue that public investments in flood protection are one of the most important adaptation tools for coastal cities.  Báez, Javier E., Alan Fuchs, and Carlos Rodríguez-Castelán. 2017. <i>Overview: Shaking Up Economic Progress: Aggregate Shocks in Latin America and the Caribbean</i> . Washington, DC: World Bank. License: Creative Commons Attribution CC BY 3.0. This report notes that one of the most important ways to strengthen risk management requires an investment in risk management infrastructure and technology. Lack of information on relevant risks constraints the ability of public and private agents to price risks.
<b>Pillar/Objective B: Establishing mandatory regulations for climate and disaster risk reduction in public investment and construction works</b>	
<b>Prior Action 4:</b> The Government has established mandatory technical standards for incorporating disaster and climate risk analysis into the design and formulation of all public investment projects.	“2013 Global Assessment Report on Disaster Risk Reduction, From Shared Risk to Shared Value: The Business Case for Disaster Risk Reduction” (GAR13), United Nations Office for Disaster Risk Reduction (UNISDR). <a href="http://www.preventionweb.net/english/hyogo/gar/2013/en/home/GAR_2013/GAR_2013_2.html">http://www.preventionweb.net/english/hyogo/gar/2013/en/home/GAR_2013/GAR_2013_2.html</a> . This publication looks at how public regulations shape disaster risk.  “National Strategy to Strengthen Human Resources and Skills to Advance Green, Low Emissions, and Climate Resilient Development.” Dominican Republic, 2012, Mitigation and Adaptation Framework. <a href="http://www.unclearn.org/sites/default/files/estrategia_nacional_para_fortalecer_los_recurso_humanos_republica_dominicana_08_2012_0.pdf">http://www.unclearn.org/sites/default/files/estrategia_nacional_para_fortalecer_los_recurso_humanos_republica_dominicana_08_2012_0.pdf</a>  World Bank. 2013. “Building Resilience: Integrating Disaster and Climate Resilience into Development GFDRR.” <a href="https://www.gfdr.org/sites/default/files/publication/Building%20Resilience%20.pdf">https://www.gfdr.org/sites/default/files/publication/Building%20Resilience%20.pdf</a>  DKKV (German Committee for Disaster Reduction). 2011. “Adaptive Disaster Risk Reduction: Enhancing Methods and Tools of Disaster Risk Reduction in Light of Climate Change.” <a href="http://www.dkkv.org/fileadmin/user_upload/Veroeffentlichungen/Publikationen/DKKV_43_Adaptive_Disaster_Risk_Reduction.pdf">http://www.dkkv.org/fileadmin/user_upload/Veroeffentlichungen/Publikationen/DKKV_43_Adaptive_Disaster_Risk_Reduction.pdf</a> . This study formulates recommendations to strengthen practical multi-stakeholder linkages for collecting and sharing information to monitor and reduce disaster risk.

Prior Actions	Analytical Underpinnings
<p><b>Prior Action 5:</b> The Government has issued mandatory technical regulations for granting operating permits to health facilities by requiring: (i) compliance with MSP’s guidelines for the design, construction, and finishing of health facilities, and (ii) assessment of the health facilities built before 2011 using the Hospital Safety Index.</p>	<p>WHO (World Health Organization). 2015. “Hospital Safety Index Guide for Evaluators.”  <a href="http://www.who.int/hac/techguidance/hospital_safety_index_evaluators.pdf">http://www.who.int/hac/techguidance/hospital_safety_index_evaluators.pdf</a></p> <p>Ministerio de Salud Pública Organización Panamericana de la Salud/Organización Mundial de la Salud. 2013. <i>Hospitales Seguros: Sistematización de experiencias en la República Dominicana</i>.  <a href="http://www.paho.org/dor/index.php?option=com_docman&amp;task=cat_view&amp;gid=673&amp;Itemid=222">http://www.paho.org/dor/index.php?option=com_docman&amp;task=cat_view&amp;gid=673&amp;Itemid=222</a>. This publication outlines the existing Safe Hospitals program and the framework upon which hospitals have been evaluating, noting shortfalls in DRM.</p>
<p><b>Prior Action 6:</b> The Government has strengthened its technical regulations for the supervision and inspection of construction works by requiring said works to comply with all applicable building regulations.</p>	<p>UNECE (United Nations Economic Commission for Europe). 2013. “Geneva UN Charter on Sustainable Housing.”  <a href="https://www.unece.org/fileadmin/DAM/hlm/documents/Publications/UNECE_Charter_EN.pdf">https://www.unece.org/fileadmin/DAM/hlm/documents/Publications/UNECE_Charter_EN.pdf</a>. This publication outlines on improving the resilience of buildings to natural hazards.</p> <p>Ministerio de Economía, Planificación y Desarrollo, y DGODT. 2011. <i>Plan Nacional para la Reducción de Riesgo Sísmico</i>. This publication outlines the existing approach to reducing seismic risk.  <a href="http://www.preventionweb.net/files/35861_decreto27513pngirdpnrrs1.pdf">http://www.preventionweb.net/files/35861_decreto27513pngirdpnrrs1.pdf</a></p>

**4.3 LINK TO CPF, OTHER BANK OPERATIONS AND THE WBG STRATEGY**

65. **The proposed operation is fully consistent with the World Bank’s Country Partnership Strategy (CPS) for FY2015–18 (Report No. 89551-DO), which acknowledges that the high vulnerability to climate-related shocks is a key factor limiting further improvement in shared prosperity.** Under Results Area 3, ‘supporting the Government in building resilience to external shocks’, the CPS has included the DPL with a Cat DDO instrument as a potential option to be presented to the Government. The proposed operation will contribute to the achievement of the outcomes included in Results Area 3, in particular regarding activities related to ‘mainstreaming DRM in territorial planning and public finances’ and increasing the resilience of infrastructure. Through the proposed operation, the World Bank will continue supporting the Government to enhance its legal, technical, and institutional capacity to build resilience against climate and disaster risks.

66. **The objectives of the proposed operation are aligned with the ongoing World Bank Group operations in the country, as well as the World Bank Group’s strategic goals of ending extreme poverty and promoting shared prosperity.** The policy reforms included in the proposed operation include inputs from different sectors and complement the overall World Bank lending and TA program in the country. The following ongoing operations have contributed to the design of the proposed operation: Support to the National Education Pact Project (P146831), Strengthening the Capacity to Produce and Use Quality Education Statistics (P163049), Dominican Republic Municipal Development Project (PRODEM - P095863), DO Emergency Recovery & Disaster Management (P109932), and Dominican Republic Strengthening Management of Public Finances DPL (P155425). The proposed operation could also indirectly contribute to enable policy reform to promote the use of agricultural index insurance as an effective way of managing risk, contributing to TA provided by the Global Insurance Index Facility (IFC-00600785). The proposed

operation will also directly complement the following World Bank-financed investment projects under preparation: Improving the Quality and Efficiency of Health Services in the Dominican Republic (P163031) and DR Resilient Agriculture and Integrated Water Resources Management (P163260).

67. **A comprehensive and significant TA program has been mobilized to support the Government in the preparation and implementation of this operation.** The TA program (TF0A4033) is funded through the ACP-EU Natural Disaster Risk Reduction Program and the Japan Mainstreaming Disaster Risk Management in Developing Countries managed by the GFDRR. The activities under the TA program are being implemented jointly with the MH and the MEPyD. The objective of the TA program is to improve the Government's capacity to build physical and fiscal resilience to disasters to ensure shared prosperity. The TA program will also support the MH and MEPyD in the implementation of policy reforms included under the proposed operation. Activities include the development of policy tools to support the strengthening of resilient public investment (Pillar B), and strengthening the financial and fiscal resilience to climate and disaster risks in the country (Pillar A). In addition, in the framework of the preparation of this operation, the MINERD requested the World Bank's support to identify climate and disaster risk reduction needs in school infrastructure and to elaborate a strategy aimed at making schools safer and more inclusive. In response, jointly with the Global Safe Schools Program (GFDRR/World Bank) and the Education Global Practice, a second component of the TA program will be focused on Safer Schools and support the implementation of results indicators included under Pillar A of the proposed operation. This operation will also benefit from the implementation of a GFDRR Rapid Social Response grant on Strengthening Social Protection Interventions for Disaster Preparedness and Response in the Dominican Republic (P164854).

#### **4.4 CONSULTATIONS, COLLABORATION WITH DEVELOPMENT PARTNERS**

68. **The Government program supported by the proposed operation incorporates a process of consultations and citizen engagements.** The policies supported by the proposed Cat DDO have been defined as a development priority in the DR and many of them are embodied within the 2030 END, which is itself the result of an extensive participatory process to define the critical policy areas for the development of the country. In addition, policy reforms supported by the proposed operation have been subject to different consultations among the Government, private sector academia, and civil society, which have helped improve the design of prior actions. In the education sector, the establishment of a citizen engagement process in 2012, that is the Dominican Initiative for Quality Education, to ensure that all policy reforms in the education sector are implemented in consultation with the civil society and with the advice of international organizations has been key to establish the development of a risk-informed infrastructure management service as one of the priority of the MINERD. The establishment of the WRCB also has been accompanied by an extensive consultation process with the participation of private sector and civil society representatives, which has contributed to the establishment of the 'Climatic and Hydrological Risk Management' technical committee as part of the five working groups of the Board. Finally, before their approval, the regulations for supervision and general inspection of works (R-004) have been reviewed and amended by the National Building Regulations Commission (CONATRIA by its Spanish acronym), an interinstitutional independent technical commission comprising senior local engineers and representatives from academia acting as peer reviewers in the elaboration of new building regulations.

69. **The World Bank Group maintains active dialogue and collaboration with various agencies engaged in DRM and technical cooperation in the DR.** The proposed operation also complements and builds upon past and ongoing work from these other agencies also prioritizing DRM and CCA. The United Nations Development Assistance Framework 2012–2016 includes DRM as one of the four result areas and specialized agencies such as the PAHO are supporting government efforts in the health sector. The EU has

also integrated disaster risk reduction in its strategic framework and is supporting the strengthening of DRM policies with a €2.2 million program. Also through the EU, the Disaster Preparedness Program is promoting disaster preparedness and, as part of these efforts, four country documents have been elaborated and endorsed by the CNE. JICA has also been supporting efforts to strengthen government capacity to analyze seismic risk and design building codes accordingly. Finally, in September 2017, this operation will be presented at the local DRM forum, which includes a broad range of actors related to DRM (that is nongovernmental and civil society organizations, academia, private sector, government, and donors) and constitutes the most inclusive platform for DRM-related issues in the country.

## 5. OTHER DESIGN AND APPRAISAL ISSUES

### 5.1 POVERTY AND SOCIAL IMPACT

70. **The overall poverty and social impacts of the policies supported by this Cat DDO are expected to be positive, starting with policies in Pillar A.** The adoption of mechanisms to increase the Government's fiscal resilience and capacity to mobilize resources in the aftermath of a disaster is designed to have positive poverty and social impacts. Enhancing the ability of the Government to provide assistance and start reconstruction shortly after a disaster hits would shorten the transition back to the pre-disaster livelihoods and infrastructure levels. According to the IVACC, which measures the likelihood that a household is vulnerable to the occurrence of hurricanes, storms, and flooding given certain socioeconomic and geographical characteristics, the poorest households are more than twice as vulnerable than the richest households, and the vulnerability decreases as the standard of living increases.<sup>34</sup> Gender-specific vulnerability of women built into socio-economic patterns of the DR have also led to relatively higher impacts of disasters on women and children. Although gender-disaggregated data are lacking, disaster impacts are not "gender neutral". After tropical storm Noel in 2008 a rapid assessment conducted by United Nations Population Fund (UNFPA) and the International Research and Training Institute for the Advancement of Women (INSTRAW) concluded for example that several women in affected areas were victim of violence, including sexual and intra-family violence. Likewise, women reported more systematically an increase in workload and care-giving functions, as well as deterioration in working conditions.<sup>35</sup> Strengthening the Government's capacity to quantify the socioeconomic and fiscal impacts of disasters will also enable the identification of the most vulnerable population and, consequently, the preparation of investment projects (for example, retrofitting works) to make these communities more resilient. Regarding Prior Action 2, many schools are often used as emergency shelters, and incorporating risk analysis in the design and construction of school infrastructure will have dual benefits for the surrounding community.

71. **Hydrometeorological events have substantial detrimental welfare effects, especially on female-headed households, and the potential to undo gains in poverty reduction in any given year.** According to rainfall data for the period 2001–2012, heavy rain can result in increases in moderate poverty of 1.7 pp and in extreme poverty of 1 pp. Wind speed data for the period 2001–2012 indicates that strong winds<sup>36</sup> result in increases in moderate poverty of 1.9 pp and of 0.6 pp in extreme poverty. These increases would wipe out the observed average y/y poverty reductions in the country since 2006. Strong winds are not

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<sup>34</sup> Based on Single System of Beneficiaries - SIUBEN. 2013. *Análisis de los datos resultantes de IVACC* [Analysis of data from the IVACC]. For this analysis of vulnerability, standard of living is measured using a multidimensional index of living conditions (ICV for its acronym in Spanish). The five regions in the country most vulnerable according to the IVACC include four of the five poorest regions in monetary terms.

<sup>35</sup> Wendy y Dynis (2008). "La evaluación rápida sobre salud sexual y reproductiva, violencia y la situación de las personas vulnerables afectadas por la tormenta Noel en la República Dominicana". UNFPA/INSTRAW.

<sup>36</sup> Defined as winds with highest sustained speed exceeding 92 km/h.

only associated with a reduction in the average per capita labor income by 2.9 percent, but would also result in an additional 2.5 percent reduction for female-headed households. Consequently, Prior Action 3, which aims to reduce the risk of floods, is expected to have positive welfare impacts. Both labor and total per capita income decrease by about 2 percent after heavy rains, and the share of households with at least one school-age child who is not enrolled in school increases slightly. Estimates also suggest a small but statistically significant increase in overcrowding in homes,<sup>37</sup> which might be caused by the reconfiguration of households as a response to (partial) damage to dwellings. In other words, heavy rains and strong winds have the potential to undo the gains in poverty reduction in any given year. Increasing the capacity to cope with and manage these shocks will likely reduce these negative impacts and shorten their duration.

**72. Under Pillar B, the reforms seeking to reduce disaster and climate risk in public investment, health infrastructure and construction works are expected to have positive social impacts.** Strengthening the capacity of Government to ensure physical resilience to disasters in PIPs will likely reduce the cost of damages caused by natural disasters, on average 0.69 percent of GDP per year between 1961 and 2014. About one-third of the total damages and losses caused by the four most severe hydrometeorological events in the country, were accrued in the four sectors covered in this operation: education, health, housing, and infrastructure. Reducing disaster risk in critical infrastructure not only reduces the recovery burden on the Government, but it also minimizes the human costs of disasters and promotes quick recovery for households. Disaster-resilient safe hospitals are designed to remain operational in the aftermath of disasters, increasing the ability to respond effectively to post-disaster health needs and minimize interruptions in care for existing patients. Disaster-resilient public infrastructure also minimizes post-disaster business and livelihood interruptions.

## **5.2 ENVIRONMENTAL ASPECTS**

**73. Overall, it is anticipated that policy reforms supported by the proposed operation will have positive indirect effects on the DR's environment, forests, and other natural resources.** Reforms included in this operation will not cause significant direct environmental effects as they are primarily aimed at strengthening the institutional framework and improving regulations for increased resilience and reduction of disaster and climate-related risks. In concrete terms, policy actions supported by this operation primarily seek to reduce the vulnerability of assets, infrastructure, and public finances. They are not directly geared to transform the environment or ecosystems but rather focused on reducing the vulnerability of the state and increasing its capacity to cope and respond to adverse natural events.

**74. Under Pillar A, the reforms seeking to strengthen the institutional structures for climate and disaster resilience in fiscal management and education infrastructure and watershed management are expected to have positive environmental effects.** Specifically, under Prior Action 1, a standardized disaster assessment methodology will allow for a better understanding of the potential damages that might be caused by a natural catastrophe to infrastructure and public/private facilities. This methodology will allow for a better understanding of the environmental impact of disasters that will help inform environmental protection policies that aim to achieve increased climate and disaster resilience. Under Prior Action 2, management of school infrastructure will systematically comply not only with safety and construction standards, including reduced vulnerability of education infrastructure to adverse natural events but also with the national environmental regulations applicable to construction and rehabilitation of school facilities. Improving school infrastructure will also increase children's access to adequate water supply and sanitation. Under Prior Action 3, enhanced integrated water resource management (quality

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<sup>37</sup> Defined as having more than three persons per sleeping room in a dwelling.

and quantity) through improved multi-stakeholder coordination at the basin level will incentivize sound natural resources management and planning of economic activities in basins. It should also lead to strengthening soil conservation policies in key areas of the country.

75. **Under Pillar B, efforts to improve technical standards and regulations for climate and disaster risk reduction in public investment and construction works are expected to have positive effects on the environment.** Specifically, under Prior Action 4, SNIP technical standards will allow mainstreaming of DRM considerations through a risk analysis into the design of all new PIPs. This can contribute to the prevention and mitigation of impacts derived from adverse natural events on infrastructure, local population's livelihoods, and public health. From Prior Action 5, it is expected that the location and design of hospitals would consider better safety standards, which is likely to have none or slightly positive environmental effects. Prior Action 6 will contribute to ensure greater enforcement of the different regulations governing building construction and could therefore result in greater compliance with the applicable national environmental regulations, which would have positive effects on the environment and population.

76. **The DR has in place environmental systems to mitigate the potential negative effects of programs implemented as a result of the supported policy reforms.** The General Law on the Environment and Natural Resources (Law 64-00) is the legal framework that regulates the actions of the country's productive systems with respect to the environment and natural resources. The regulatory instruments developed under the legal framework of the law include environmental standards concerning protection against noise, air quality, and emissions, environmental management of solid non-hazardous waste, water quality, and a standardized procedure for environmental assessments. These instruments have been implemented effectively under the supervision of the Vice Minister for Environmental Management of the Ministry of Environment and Natural Resources, in coordination with the various ministries, public institutions, and private sector. The DR has historically demonstrated a consistent track record in its capacity to enforce pertinent laws and environmental quality standards.

77. **The DR has also in place a comprehensive legal framework to regulate the use of hazardous chemicals and pesticides.** The Pesticides Division of the Ministry of Agriculture oversees the enforcement of this regulatory framework through requiring mandatory registry of pesticides and chemicals used in the country. The use of hazardous chemicals and pesticides is further regulated through Resolution No. 506-05, by which the DR adheres to the Rotterdam Convention. The Rotterdam Convention covers the control and use of pesticides and industrial chemicals that have been banned or severely restricted for health or environmental reasons.

### **5.3 PFM, DISBURSEMENT AND AUDITING ASPECTS**

78. **The PFM and procurement systems of the DR are relatively strong.** Financial accountability and reporting have improved with the Budget Law, and budget execution is publicly available in electronic format at the web page of the MH. The 2013 World Bank report on Public Expenditure Management and Financial Accountability (PEMFAR I), several Public Expenditure and Financial Accountability assessments from 2007 to 2016, and the 2009 Update Report on the Observance of Standards and Codes on Accounting and Auditing have acknowledged progress made by the Government in advancing reforms in the PFM legal framework and implementing international accounting and auditing standards. Nevertheless, these assessments have also highlighted, as a recurrent theme, the slow pace of reform implementation in general and limitations in the breadth, content, and method of presenting financial information. A positive development is the alignment of budget classifiers with international standards in line with the IMF Government Finance Statistics Manual and the United Nations Classifications of Functions of Government Manual. While budget execution and monitoring have also improved, the 2016 Public Expenditures and

Financial Accountability (PEFA) highlighted that defragmentation of systems and instruments for planning and monitoring of public programs, including procurement and recording of capital assets, among other modules, remain key challenges. There is a greater expectation going forward as recent PFM reform accomplishments have shown enhanced intra- and inter-institutional coordination when following up on policy options.

79. **The Central Bank has well-established procedures that ensure the integrity of its operations.** In its 2010 Staff Report for the 2009 Article IV Consultation and Request (CR) for a Stand-By Arrangement, the IMF commended the DR authorities for the progress made in addressing institutional weaknesses. In its 2013 Article IV CR, the IMF indicated that the DR financial system indicators were broadly satisfactory, welcomed the progress made in implementing risk-based supervision, and advised on the need to contain the financial system's lending to the public sector. As indicated in section 2.3 on IMF relations, the publication of the IMF's Article IV CR in November 2016 ended a four-and-a-half-year period in which no IMF staff report was publicly disseminated. The World Bank continues to coordinate closely with IMF counterparts, and staff regularly exchanges views regarding the adequacy of the macroeconomic policy framework and the Government's progress on the structural reform agenda. Annual audit reports of the DR's Central Bank are publicly available. Audit reports on the Central Bank, performed in 2013–2015, disclosed unqualified (clean) audit opinions on its financial statements.

80. **The MH will follow disbursement procedures of the World Bank to handle DPL with Cat DDO proceeds.** The Cat DDO is the disbursement mode for this operation. Loan proceeds will be disbursed if the pre-specified trigger defined in section 4 paragraph 39 of this document is met and will not be tied to any specific purchase. Once the Loan Agreement is declared effective after Congressional approval, if drawdown conditions for a natural disaster are met, the MH may submit a withdrawal application requesting the World Bank to deposit the proceeds of the loan into the budget account that forms part of the country's official foreign exchange reserves held with the Central Bank and acceptable to the World Bank. Further information of the drawdown triggers, financial features, drawdown period, and renewals are detailed in section 4 of this document. The Government may have the option of drawing down loan proceeds for up to three years. If the implementation of the program set out in its LDP remains satisfactory, the Cat DDO may be renewed up to four times for up to three years each time, for a total deferral of 15 years. Amounts repaid during the deferral period are again available for drawdown. The renewal will follow the applicable World Bank procedures for extending closing dates. The Government will ensure that upon receipt of the loan proceeds, an equivalent amount will be credited in the Government's budget management system to finance budgeted expenditures. Within 30 days of this funds transfer, the MH will provide the World Bank with a written confirmation that the loan proceeds were received in its foreign currency account at the Central Bank and an equivalent amount was credited to the budget management system. The Loan Agreement will include a clause for the provision, upon the World Bank's request, of an audit of the deposit account. Due to the described conditions, no additional fiduciary arrangements are deemed necessary for this operation.

#### **5.4 MONITORING, EVALUATION, AND ACCOUNTABILITY**

81. **The MH is the main agency counterpart of the World Bank for the proposed operation.** The MEPyD is also involved in the coordination and monitoring of the proposed operation for its key role in the Cat DDO program and its position as Governor of the World Bank. The implementation of the program is a shared responsibility with the MH, the MEPyD, and other agencies involved.

82. **The results indicators selected to monitor and evaluate implementation progress and the achievement of program outcomes stem from the institutional reform agenda of the institution that**

**takes the coordination lead for that prior action.** In all cases, the indicators are already being tracked by the associated institution and are used as results indicator in their institutional progress reports. In this context, the operation builds on the existing monitoring and evaluation systems of the Government, which should ensure that program performance is monitored at no additional burden to the institutions. The General Directorate of Public Credit within the MH will be the main counterpart with the primary responsibility to monitor program progress and to ensure the accountability of relevant institutions to the commitments made.

83. **Grievance redress.** Communities and individuals who believe that they are adversely affected by specific country policies supported as prior actions or tranche release conditions under a World Bank development policy operation may submit complaints to the responsible country authorities, appropriate local/national grievance redress mechanisms, or the World Bank’s Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed to address pertinent concerns. Affected communities and individuals may submit their complaints to the World Bank’s Inspection Panel, which determines whether harm occurred, or could occur, as a result of the World Bank’s noncompliance 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 World Bank management has been given an opportunity to respond. For information on how to submit complaints to the World Bank’s corporate GRS, please visit <http://www.worldbank.org/GRS>. For information on how to submit complaints to the World Bank’s Inspection Panel, please visit [www.inspectionpanel.org](http://www.inspectionpanel.org).

## 6. SUMMARY OF RISKS AND MITIGATION

Risk Categories	Rating (H, S, M or L)
1. Political and governance	Substantial
2. Macroeconomic	Moderate
3. Sector strategies and policies	Moderate
4. Technical design of project or program	Moderate
5. Institutional capacity for implementation and sustainability	Substantial
6. Fiduciary	Moderate
7. Environmental and social	Moderate
8. Stakeholders	Low
9. Other	Not applicable
<b>Overall</b>	<b>Moderate</b>

84. **The overall risk of the proposed operation is assessed as Moderate.** The most relevant risks to the achievement of the program development objective include institutional capacity for the implementation and sustainability of the proposed program over the medium and long term, which are assessed as Substantial. For some sectors included in the proposed operation, moderate to low capacity has been observed to design and implement public sector reform programs that requires coordination among different institutions and have a long-term implementation horizon. Risks pertaining to the limited capacity of the Government to implement reforms and sustain them in the medium term would be mitigated by the Government’s commitment to build capacity and allocate resources to specific sectors, including PFM, education, health, water resource management, and DRM. The administration has established coordination mechanisms and collaboration agreements among national ministries to mitigate these risks and the Ministry of Finance has proactively engaged to support DRM-related reforms.

85. **The DR is continuing to enjoy a long period of political stability.** Despite the generally stable political environment, the recent Odebrecht<sup>38</sup> corruption scandal also affected the DR in addition to many other LCR countries and has raised the overall country political and governance risk. The Government has opened an investigation, which is ongoing. Any potential negative results related to future infrastructure works in the context of supported policy reforms could delay implementation of the proposed operation. Risks related to political and governance factors will be mitigated through continuous dialogue with relevant stakeholders to promote transparency and focus on activities in areas in which the impact on inclusive growth and equality is largest.

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<sup>38</sup> Large Brazil-based international construction company.

## ANNEX 1: POLICY AND RESULTS MATRIX

Prior Actions	Proposed Results Indicators to 2020
<b>Pillar/Objective A - Program Development Objective A: Strengthening institutions for improved climate and disaster resilience in priority sectors</b>	
<p><b>Prior Action 1:</b> The Government has established new institutional structures for quantifying, pricing, and managing contingent liabilities associated with climate and disaster risks by (i) establishing an interinstitutional body to assess and quantify the socioeconomic and fiscal impacts of natural disasters, (ii) granting legal mandate to the MH's General Directorate for Fiscal Analysis and Policy to estimate and assess the impacts of disaster and climate-related risks on fiscal accounts as part of managing contingent liabilities and (iii) granting legal mandate to the MH's General Directorate of Public Credit to manage the contracting of financial instruments for risk transfer in accordance to the country's applicable legislation.</p>	<p>Contingent liabilities associated with disasters are published and incorporated in the medium-term fiscal framework published by the Ministry of Finance.</p> <p><i>(Baseline [2016]: Does not exist Target [2020]: Document is published at least since 2019)</i></p>
<p><b>Prior Action 2:</b> The Government has strengthened its capacity to incorporate safety standards in the management of school infrastructure by (i) creating a General Directorate for Risk Management within MINERD; (ii) creating a General Directorate for Building Rehabilitation within MINERD with responsibility for existing school infrastructure rehabilitation and retrofitting; and (iii) centralizing the supervision of school infrastructure construction under the MOPC and in coordination with MINERD.</p>	<p>Percentage (%) of public schools for which a disaster risk assessment has been conducted.</p> <p><i>(Baseline [2016]: 0 Target [2020]: 15% of existing schools as of 2015 [of 6,500 of total schools])</i></p> <p>and</p> <p>Percentage (%) of public schools with a disaster risk assessment which are included in a rehabilitation and retrofitting program.</p> <p><i>(Baseline [2016]: 0 Target [2020]: 30% of the schools assessed and requiring an intervention are rehabilitated and/or retrofitted)</i></p>
<p><b>Prior Action 3:</b> The Government has enhanced flood and drought risk reduction by creating an interinstitutional structure to coordinate and facilitate the work of the Government's institutions responsible for integrated water resource management.</p>	<p>Number of risk-prone areas in main watershed basins that have been prioritized, by hydrological and</p>

	<p>hydrometeorological studies, to undergo improvements in water management.</p> <p><i>(Baseline [2016]: Studies have been conducted in 10 out of the 140 identified risk-prone areas - 7% of total Target [2020]: Studies have been conducted in 50 out of the 140 identified risk-prone areas - 35% of total)</i></p>
<p><b>Pillar/Objective B – Program Development Objective B: Establishing mandatory regulations for climate and disaster risk reduction in public investment and construction works</b></p>	
<p><b>Prior Action 4:</b> The Government has established mandatory technical standards for incorporating disaster and climate risk analysis into the design and formulation of all public investment projects.</p>	<p>PIPs approved in the SNIP after technical standards came into effect (July 20, 2017).</p> <p><i>(Baseline [2016]: 0 Target [2020]: All PIPs approved after the technical standards came into effect)</i></p>
<p><b>Prior Action 5:</b> The Government has issued mandatory technical regulations for granting operating permits to health facilities by requiring: (i) compliance with MSP’s guidelines for the design, construction, and finishing of health facilities, and (ii) assessment of the health facilities built before 2011 using the Hospital Safety Index.</p>	<p>Number of health facilities constructed before 2011 and receiving an operating permit after the approval of the technical regulations have been assessed using the Hospital Safety Index.</p> <p><i>(Baseline [2016]: 0 out of the 164 public hospitals have operating permits and have been assessed through the ISH in 2016 Target [2020]: 25 out of the 164 public hospitals have operating permits and have been assessed through the ISH in 2016)</i></p>
<p><b>Prior Action 6:</b> The Government has strengthened its technical regulations for the supervision and inspection of construction works by requiring said works to comply with all applicable building regulations.</p>	<p>Number of construction works with a building permit that have been inspected by the MOPC following the norms established by the updated Regulation for the Supervision and General Inspection of Works (R-004).</p> <p><i>(Baseline [2016]: 0 inspections following the norms established by the updated Regulation (R-004)</i></p>

	<i>Target [2020]: 80% of private works with a building permit have been supervised and inspected)</i>
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*Note: a. Normas Técnicas del Sistema Nacional de Inversión Pública.*

*"Año del Desarrollo Agroforestal"*

**ANNEX 2: LETTER OF DEVELOPMENT POLICY**



República Dominicana  
*Ministerio de Hacienda*  
*"Año del Desarrollo Agroforestal"*

DM/ 6400

14 SEP 2017

Señor  
**JIM YONG KIM**  
Presidente  
Banco Mundial  
Washington D.C., USA

**Asunto:** Carta de Políticas de Desarrollo - Préstamo para Políticas de Desarrollo en Gestión del Riesgo de Desastres con Opción a Desembolso Diferido ante Catástrofe (DPL con CAT-DDO)

Distinguido Presidente,

Cortésmente, nos dirigimos a usted en representación de la República Dominicana, para manifestarle el compromiso del Estado Dominicano en continuar impulsando los avances hechos hasta el día de hoy, así como seguir fortaleciendo las políticas y acciones en gestión del riesgo de desastres y adaptación al cambio climático. Esto con la finalidad de reducir nuestra vulnerabilidad ante fenómenos naturales adversos y así incrementar la resiliencia del país ante desastres y choques climáticos. Por esta razón, hemos preparado durante los últimos 12 meses junto al Banco Mundial el *Préstamo para Políticas de Desarrollo en Gestión del Riesgo de Desastres con Opción a Desembolso Diferido ante Catástrofe (DPL con CAT-DDO)*, en el que se acuerdan acciones y objetivos con los cuales el Estado Dominicano está altamente comprometido.

A continuación, se describe la situación macro-fiscal de la República Dominicana, la vulnerabilidad del país ante desastres, así como el contexto legal e institucional. Finalmente, se resaltan las reformas prioritarias del Gobierno y el programa de políticas promovido en el marco de esta operación con el Banco Mundial.

**Situación Macro Fiscal**

Contexto económico nacional

Durante el 2016 la economía mantuvo su evolución dinámica al registrar un crecimiento del PIB de 6.6% interanual, manteniéndose su expansión por encima del potencial. Este comportamiento es compatible con la trayectoria de crecimiento que ha mantenido el país en los últimos años.



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El crecimiento registrado es explicado por el incremento de la demanda interna, reflejado en el crecimiento de la formación bruta de capital en 11% para todo el período y cuyo mayor repunte se evidenció en el segundo trimestre del año al ubicarse en 26.5% de crecimiento interanual. El consumo privado y el consumo público incrementaron en 4.8% y 3.3%, respectivamente. No obstante, en términos de incidencia en el crecimiento, el consumo privado explica un 3.4% del crecimiento, mientras que la formación bruta de capital fijo un 2.6%. Por otro lado, las exportaciones de bienes y servicios aportaron 2.3% al crecimiento real, siendo este su mayor nivel de incidencia en los últimos 6 años.

Según la naturaleza de la actividad económica, los sectores que más contribuyeron al crecimiento durante el año 2016 fueron Construcción, Agropecuario y Comercio, los cuales presentaron un crecimiento de 9%, 10% y 6.5%, respectivamente. El dinamismo presentado por estos tres sectores en conjunto explicó casi una tercera parte del crecimiento acumulado. Además, la explotación minera y la intermediación financiera tuvieron crecimientos de dos dígitos, con 26.5% y 11.9% respectivamente.

En el ámbito del mercado laboral, la expansión económica que ha estado experimentando la República Dominicana se ha traducido en un aumento de 148,532 nuevos ocupados, que representa un aumento de 0.6% en la tasa de ocupación, una disminución en la tasa de desocupación de 7.3% a 7.1%, así como una disminución en el resto de indicadores de subutilización de la fuerza de trabajo. Las actividades económicas que más contribuyeron a este resultado fueron los sectores de otros servicios, industrias y comercio.

### Finanzas públicas

En el año 2016, los Ingresos Fiscales del Gobierno Central ascendieron a RD\$484,620.3 millones equivalente a 14.6% del PIB. Esto significó un aumento interanual de 9.7% respecto al año 2015.

Los ingresos corrientes alcanzaron RD\$471,434.6 millones, para un crecimiento absoluto de RD\$39,873.3 millones, equivalente a un aumento de 9.2% respecto al 2015. Por su parte, los ingresos de capital fueron RD\$22.9 millones, para una variación de 51.7% con respecto a los RD\$15.1 millones ingresados en 2015.

Para el año 2016 los ingresos tributarios aumentaron 8.6% con relación al total observado en 2015 al recaudar RD\$453,191.1 millones. La presión tributaria fue de 13.6%.

Los gastos del Gobierno Central para el período de enero – diciembre del 2016 alcanzaron un monto de RD\$562,159.4 millones, correspondiente a un 16.9 % del Producto Interno Bruto (PIB), manteniéndose en el mismo nivel del año 2015.



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En el período enero – diciembre del 2016, fueron ejecutados RD\$471,404.9 millones, por concepto de gastos corrientes, 9.2% por encima al 2015; así como RD\$90,754.5 millones por gasto de capital, presentando un crecimiento interanual de 5.2%.

Al cierre del año 2016, el resultado presupuestario primario del gobierno central fue un superávit de 0.6% del PIB. Ampliando la cobertura del sector público, el resultado primario del Sector Público No Financiero (SPNF) fue un superávit de 0.2% del PIB. Con respecto al resultado global del SPNF, el mismo fue de -2.7% del PIB. Las fuentes de financiamiento del gobierno central ascendieron a US\$3,972.8 millones, de los cuales 42.5% fue a través de colocación de bonos internos, 37.7% bonos globales, 19.8% préstamos de organismos multilaterales y bilaterales.

El saldo de la deuda del sector público no financiero (SPNF) totalizó US\$26,757.9 millones, un aumento de US\$2,604.5 millones equivalente a un cambio relativo del 1078% respecto al 2015. El monto total de la deuda pública del SPNF representa el 37.3% del Producto Interno Bruto (PIB), un incremento de 2 puntos porcentuales respecto al año anterior.

Del total de la deuda del SPNF al 31 de diciembre de 2016, el 65.0% corresponde a deuda externa, la cual presentó un saldo de US\$17,399.9 millones, reflejando un aumento interanual de 8.55% (US\$1,371 millones) respecto al 2015.

*Vulnerabilidad ante desastres originados por fenómenos naturales y marco legal para la reducción del riesgo de desastres y adaptación al cambio climático*

Debido a su posición geográfica y sus características geológicas e hidrometeorológicas, la República Dominicana se encuentra expuesta a la ocurrencia de diversos eventos naturales adversos que, sumados a las condiciones de vulnerabilidad de la población y sus medios de vida, así como presiones dinámicas tales como el cambio climático y la rápida urbanización, representan una seria amenaza a la seguridad de la población y de la infraestructura económica y social, así como a la sostenibilidad del crecimiento. Eventos como las fuertes inundaciones de finales de 2016 en el norte del país, ilustran las potenciales consecuencias de los desastres originados por fenómenos naturales y destacan la urgencia de tomar medidas que permitan fortalecer las políticas de gestión de riesgos climáticos y de desastres. Bajo los efectos del cambio climático se prevé que aumente la frecuencia y la gravedad de las amenazas hidrometeorológicas en el país, recalcando así la urgente necesidad de fortalecer las políticas de reducción del riesgo climático y de desastres con el fin de incrementar la resiliencia del país.



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Ante esa realidad, desde el 2002, la República Dominicana cuenta con un comprehensivo marco legal e institucional de Gestión de Riesgos. A través de la Ley 147-02 sobre Gestión de Riesgos, se estableció el Sistema Nacional para la Prevención, Mitigación y Respuesta ante Desastre (SN-PMR), integrando los principios generales de reducción de riesgos en la planificación del desarrollo del país, así como la Comisión Nacional de Emergencia (CNE), que es el mecanismo coordinador del SN-PMR. Este marco legal e institucional ha permitido que el Gobierno logre avances sustanciales en la aplicación de un sistema eficaz de respuesta a emergencias y desastres, así como en la sensibilización sobre la importancia de incorporar consideraciones de riesgo de desastres en la planificación sectorial.

Por otro lado, el Gobierno Dominicano ha fortalecido su marco institucional para abordar las cuestiones relacionadas con el impacto negativo del cambio climático. En septiembre de 2015, se aprobó la Política Nacional de Cambio Climático mediante el Decreto Presidencial N° 269-15 con el fin de establecer los mecanismos e instrumentos para una mejor adaptación al cambio climático. Esta Política tiene por objeto fortalecer el Sistema Nacional de Planificación y el Plan Nacional Plurianual del Sector Público para aumentar la capacidad del Gobierno para promover un desarrollo resiliente y constituye un elemento clave para seguir fortaleciendo la resiliencia ante riesgos climáticos y riesgos de desastres.

Más aún, el fuerte compromiso de la República Dominicana con avanzar la gestión del riesgo y la adaptación al cambio climático se ve reflejado en su principal instrumento de planificación a largo plazo, la Estrategia Nacional de Desarrollo 2030 (END 2030) establecida mediante la Ley No. 1-12 del 2012, donde la Gestión del Riesgo de Desastres y la Adaptación al Cambio Climático se incorporan dentro de los ejes prioritarios. La END busca integrar los riesgos climáticos y de desastres mediante la implementación de políticas transversales, garantizando que "todos los planes, programas, proyectos y políticas públicas incorporen criterios de sostenibilidad ambiental y adecuada gestión integral de riesgos". A su vez, la END especifica acciones de políticas concretas bajo el Objetivo General 4.2 (Eficaz gestión de riesgos para minimizar pérdidas humanas, económicas y ambientales) y el Objetivo General 4.3 (Adecuada adaptación al cambio climático).

### *Las prioridades del Gobierno y la visión a largo plazo para el desarrollo resiliente y sostenible*

Enmarcando su esfuerzo en la visión de largo plazo proporcionada por la END 2030, el Gobierno Dominicano está ahora implementando una segunda generación de reformas para aumentar la resiliencia del país y asegurar la sostenibilidad del desarrollo a mediano y largo plazo. Estas



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reformas abarcan un amplio abanico de sectores y estructuran el accionar del Gobierno priorizando los siguientes temas: (i) un mejor manejo del recurso agua en todos sus aspectos, (ii) un mejor ordenamiento del territorio para reducir los asentamientos humanos en zonas expuestas a eventos naturales adversos, (iii) un mejor acceso a servicios públicos básicos como educación y salud.

El Gobierno declaró el periodo 2016-2020 el "cuatrienio del agua" y está promoviendo un nuevo enfoque más integral para el manejo del recurso agua. Este cambio de enfoque representa un cambio estructural en la manera de abordar el tema del agua ya que el mismo no se analiza desde la perspectiva sectorial de cada ministerio, sino como un tema transversal de desarrollo. También se acompaña de una firme voluntad de elaborar un nuevo marco legal e institucional que permita potenciar políticas públicas eficientes en el manejo de todos los aspectos del agua -desde la recolección de agua "cuenca arriba" hasta el saneamiento y distribución a los hogares y agricultores "cuenca abajo". Vinculado a este mejor manejo del agua, el Gobierno está priorizando el desarrollo agroforestal en las principales cuencas hidrográficas del país con el fin de mejorar la productividad de los suelos, la acumulación de agua para consumo humano y la calidad de vida de las comunidades y de toda la nación. La creación de Unidad Coordinadora de Proyectos de Desarrollo Agroforestal, directamente vinculada a la Presidencia de la República, responde a la urgente necesidad de implementar estos proyectos vitales para el futuro del pueblo dominicano.

Un segundo eje prioritario para el Gobierno es el del ordenamiento territorial y la readecuación de zonas urbanas vulnerables. El fuerte compromiso del Gobierno para poder planificar mejor el territorio y zonificar el crecimiento urbano se ha concretado a través de la formulación de la propuesta de Ley de Ordenamiento Territorial que se encuentra actualmente en discusión en el Congreso de la República. Esta Ley brindaría el marco legal e institucional requerido para evitar que el crecimiento poblacional ocurra en zonas fuertemente expuestas a eventos naturales adversos. Por otro lado, el Gobierno ha priorizado y llevado a cabo proyectos de readecuación de las zonas vulnerables a inundaciones. En la ciudad de Santo Domingo, la readecuación del barrio de La Barquita que se encuentran a orillas del Río Ozama, ha reducido sustancialmente el riesgo de inundaciones en estas zonas marginadas, contribuyendo al mismo tiempo a recuperar los medios de vidas de las familias ubicadas en estas zonas. Este proyecto se está ahora replicando y ampliando a la zona de Domingo Savio con el objetivo de reducir el riesgo de inundación para las poblaciones más vulnerables.

Finalmente, el tercer eje prioritario en materia de desarrollo sostenible es el de aumentar la cobertura y calidad de los servicios públicos esenciales que son la educación y la salud. Desde



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2012 el Gobierno Dominicano ha hecho de la educación una de sus prioridades principales. Con el objetivo de mejorar la calidad de la educación y el acceso a la misma, desde el año 2013 el Gobierno ha asignado el 4% del PIB al sector, lo cual ha permitido incrementar significativamente el número de aulas a través de todo el país. Esta tendencia seguirá en los siguientes años y se espera que para el 2020 la cantidad de aulas en el país se haya duplicado en comparación con su nivel de 2012. Asimismo, en el 2016 el Gobierno dió inicio a un primer programa de readecuación y ampliación de 62 centros hospitalarios en todo el país con el objetivo de aumentar el acceso a servicios de salud. El fortalecimiento de los servicios públicos de educación y la salud, incluyendo un mejor manejo de la infraestructura para reducir el riesgo de desastres, seguirá siendo un eje prioritario para asegurar la sostenibilidad del desarrollo en la República Dominicana.

### El programa de políticas para la reducción de la vulnerabilidad física y fiscal ante desastres

En el marco de las grandes prioridades antes mencionadas, durante los últimos 12 meses el Gobierno ha trabajado con el apoyo del Banco Mundial para estructurar un programa de política que tiene como objetivo reducir la vulnerabilidad física y fiscal del Estado Dominicano. Este programa está estructurado en base a dos ejes estratégicos y complementarios: (i) reducir el riesgo climático y de desastres en infraestructura pública y activos claves para disminuir las futuras pérdidas humanas y económicas y (ii) fortalecer el manejo de los pasivos contingentes asociados a desastres para incrementar la resiliencia del Gobierno ante desastres y promover una recuperación y reconstrucción rápida y eficiente después de un desastre.

### Reducir el riesgo climático y de desastres en infraestructura pública y activos claves para disminuir las futuras pérdidas humanas y económicas

Con el fin de mejorar la calidad de los proyectos de inversión pública (PIPs) y la capacidad de tomar en cuenta el riesgo asociado a eventos naturales adversos a la hora de formular los mismos, el Gobierno viene realizando esfuerzos significativos desde 2013, fecha en la que se aprobó la primera "Guía para la inclusión de la gestión de riesgo desastres" en la formulación de los PIPs más importantes. Más recientemente, el Gobierno dió un paso significativo con la adopción de la Resolución No. 04-17 del Ministerio de Economía Planificación y Desarrollo (MEPyD), de fecha 28 de marzo 2017, mediante la cual el análisis de riesgo climático y riesgo de desastres en la formulación y diseño de los proyectos de inversión pública se convierte en un paso obligatorio para la formulación de todos los nuevos PIPs. Estas normas técnicas se aplicarán a todas las instituciones del Sector Público, incluyendo los municipios, garantizando así que antes de invertir los recursos públicos se cumpla con un adecuado análisis de riesgo por desastres.



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Otro elemento clave para fortalecer la resiliencia ante desastres de la inversión pública, fue la creación del Instituto Geográfico Nacional a través de la Ley 208-14, estableciendo así el marco legal e institucional para la gestión de la información geoespacial y procurando la progresiva creación de la Infraestructura de Datos Espaciales (IDE) de la República dominicana. La IDE fomenta el intercambio de información geoespacial, incluyendo la información sobre amenazas naturales y riesgo de desastres, estableciendo un mismo formato y una única red de intercambio entre el mayor número de entidades nacionales. Estas reformas constituyen unos avances decisivos que el Gobierno seguirá profundizando en los próximos años para asegurar que los análisis de riesgo requeridos en los PIPs se basen en información de amenazas naturales y riesgos actualizada y certera.

Esfuerzos adicionales también se están llevando a cabo directamente desde los sectores que concentran la mayor parte del gasto público. Como mencionado anteriormente, el Gobierno Dominicano ha hecho de la educación una de sus prioridades principales y ha aumentado considerablemente la inversión en infraestructura educativa. En este contexto, el Gobierno también ha creado una nueva estructura institucional con el fin de asegurar una mejora gestión de la infraestructura escolar y poder así implementar políticas eficientes de reducción del riesgo de desastres y adaptación al cambio climático. Más específicamente, la creación de la Dirección General de Gestión de Riesgos, y de la Dirección General de Rehabilitación de Edificaciones, dentro del Ministerio de Educación, mediante las Ordenes Departamentales No. 18-2016 de fecha 4 de octubre de 2016 y No. 01-2017 de fecha 5 de enero 2017, es un primer paso imprescindible para llevar a cabo las evaluaciones de riesgo requeridas para la infraestructura escolar existente y llevar a cabo las obras de rehabilitación y/o reforzamiento necesarias. Por otro lado, la centralización de la supervisión de la construcción de la infraestructura escolar bajo el Ministerio de Obras Públicas y Comunicaciones mediante el Decreto Presidencial No. 348-16 del 2 de diciembre del 2016, permite eficientizar la acción del gobierno en la supervisión de construcciones escolares, lo cual es clave para asegurar estándares de seguridad comunes en las nuevas escuelas. Estas medidas son la base para desarrollar una estrategia a largo plazo de reducción del riesgo en infraestructura escolar que incluya acciones de reforzamiento y/o rehabilitación de escuelas. Estas acciones serán claves para evitar pérdidas humanas y económicas en caso de desastres y reducir los tiempos de interrupción en la docencia. Estas medidas recobran importancia tomando en cuenta que en muchos casos la infraestructura escolar sirve de refugio durante las emergencias y desastres.

Asimismo, desde 2008 en el sector salud se ha venido desarrollando un programa de hospitales seguros con el objetivo de asegurar que en caso de desastre de gran magnitud los hospitales sigan operacionales y puedan atender la población afectada. A través de la implementación de la herramienta del índice de hospitales seguros en el 2016, se pretende completar la evaluación y habilitación de al menos 25 hospitales públicos para el 2020. Por otro lado, como fruto de los



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esfuerzos previos y en particular la formulación de guías arquitectónicas para hospitales seguros, el Gobierno ha establecido un reglamento técnico obligatorio para habilitar establecimientos de salud, que requiere: (i) el cumplimiento de los lineamientos de diseño y construcción de Hospitales Seguros publicado por el Ministerio de Salud Pública; y (ii) la evaluación del establecimiento de salud con el Índice de Seguridad Hospitalaria. Esta reforma permitirá aumentar paulatinamente el estado de seguridad de los hospitales con el fin de asegurar que los mismos puedan seguir proporcionando los servicios públicos de salud que brindan en un momento crítico como puede serlo un desastre.

Otra reforma de gran alcance que el Gobierno viene empujando ha sido la mejora de los reglamentos y códigos que rigen la construcción y la supervisión de obras en el país. La actualización del reglamento de análisis de vulnerabilidad sísmica de edificios (R-001) en 2011 representó un primer avance importante para asegurar que el país tenga un reglamento de normas sismo-resistentes para edificios de los más avanzados de la región. Sin embargo, consciente de que no todas las obras en el país respetaban las especificaciones del R-001, el Gobierno está ahora trabajando para aumentar su capacidad de hacer cumplir la aplicación de los diversos reglamentos que norman la construcción. Este esfuerzo incluye la actualización del Reglamento para la Supervisión e Inspección General de las Obras (R-004). Este reglamento es clave para asegurar la supervisión e inspección de obras que le compete al Ministerio de Obras Públicas y Comunicaciones es de calidad y cumple con el reglamento de análisis de vulnerabilidad sísmica de las edificaciones (R-001). En consonancia con estas evoluciones reglamentarias, el Gobierno también ha aumentado los recursos técnicos y financieros de la unidad de supervisión y fiscalización del MOPC con el fin de incrementar su capacidad de responder a tiempo y de forma adecuada a las solicitudes de supervisión e inspección de obras.

Finalmente, tras dos años de sequías prolongadas en 2014 y 2015, fuertes inundaciones en la zona norte del país en 2016, y otras dificultades enfrentadas por la población dominicana, el Gobierno ha priorizado el fortalecimiento del manejo del recurso agua -tanto en sus fases de escasez como de exceso- para reducir el riesgo de inundaciones y/o sequías. Considerando que uno de los principales desafíos para mejorar el manejo del agua era la falta de coordinación entre la multiplicidad de actores sectoriales involucrados en el tema, una de las primeras medidas del Gobierno fue la creación de la Mesa del Recurso Agua. La conformación de la Mesa crea un mecanismo de alto nivel para coordinar los actores trabajando tanto en las partes altas de las cuencas en conservación agroforestal como los actores trabajando "rio abajo" en temas de riego y adecuación de ríos. Con esta reforma, el Gobierno ha creado los arreglos institucionales requeridos para diseñar una estrategia nacional de intervención de las zonas vulnerables a inundaciones. Al facilitar la articulación entre los diferentes actores involucrados, la mesa también contribuirá a una implementación adecuada y oportuna de las medidas de intervención



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de las zonas vulnerables, asegurando así que se aumente significativamente la cantidad de zonas vulnerables intervenidas por el Gobierno.

*Fortalecer el manejo de los pasivos contingentes asociados a desastres y promover una recuperación y reconstrucción rápida y eficiente después de un desastre*

Conscientes de que un desastre de magnitud importante podría provocar riesgos significativos para la sostenibilidad de las finanzas públicas, las autoridades han tomado medidas importantes para fortalecer el manejo de los pasivos contingentes asociados a desastres. Como parte de este esfuerzo, y con el fin de fortalecer las capacidades para evaluar el impacto socioeconómico y fiscal de los desastres naturales, se creó en el seno de la Comisión Nacional de Emergencia un equipo interinstitucional para evaluar sistemáticamente el impacto socio-económico y fiscal asociado a desastres. Este equipo también representa el primer arreglo institucional que vincula el Ministerio de Hacienda y la Comisión Nacional de Emergencias y será clave para contribuir a un mejor entendimiento de las necesidades de las medidas de reducción del riesgo de desastres y adaptación al cambio climático.

Por otro lado, el Gobierno ha creado el "Mecanismo Gubernamental para la Gestión Fiscal de Pasivos Contingentes Asociados a Desastres Originados por Fenómenos Naturales" mediante Resolución No. 146-2017 del Ministerio de Hacienda. El mismo establece la necesidad de cuantificar los pasivos contingentes asociados a desastres, así como de desarrollar una estrategia de cobertura para mitigar los riesgos fiscales asociados. Como muestra del compromiso del Ministerio de Hacienda en estas áreas, varios avances ya se han registrado. La Dirección General de Análisis y Política Fiscal está realizando simulaciones de los choques por desastres en sus análisis de sostenibilidad de deuda pública y prevé la incorporación de los riesgos climáticos y de desastres en el marco del análisis de riesgos fiscales que se está generando.

Asimismo, gracias a esta primera cuantificación del riesgo económico y fiscal asociado a desastres, el Gobierno tiene previsto dimensionar una estrategia costo-eficiente de financiamiento por capas del riesgo de desastres. Esta estrategia tiene como objetivo combinar varios instrumentos de retención del riesgo, tales como las líneas de créditos contingentes o los fondos de reservas, con instrumentos de transferencias de riesgos. Entre otras opciones, el Gobierno dominicano se encuentra ahora estudiando la posibilidad de adherirse al CCRIF para adquirir un seguro paramétrico soberano.



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Conclusión

Como se desprende por lo descrito, el Gobierno Dominicano viene realizando importantes acciones y desea reiterar su compromiso para fortalecer la gestión del riesgo de desastres y adaptación al cambio climático en el país a través de la implementación de políticas de reducción de riesgo de desastre en los sectores prioritarios, como educación y salud, así como la mejora de mecanismos de protección financiera contra desastres. A pesar de estos progresos y los destacados avances macroeconómicos y fiscales mencionados anteriormente, el Gobierno Dominicano es consciente de que el país todavía tiene retos importantes por enfrentar para reducir su vulnerabilidad ante desastres y eventos climáticos. En ese contexto, resulta muy importante contar con mecanismos e instrumentos que, en el marco de una política de gestión de riesgo de desastres y adaptación al cambio climático, protejan las finanzas públicas ante la ocurrencia de un desastre de grandes magnitudes y a su vez permitan ampliar la capacidad del Gobierno para dar una respuesta oportuna y adecuada a situaciones de este tipo.

En virtud de lo manifestado, por medio de la presente el Gobierno Dominicano reitera su solicitud de aprobación del Préstamo para Políticas de Desarrollo con Opción de Desembolso Diferido ante Catástrofes (DPL con CAT DDO) por un monto de US\$150.0 millones.

Luego de agradecer el continuo apoyo brindado por el Banco Mundial, se despiden con sentimiento de alta consideración y estima personal.

Atentamente,



**DONALD GUERRERO ORTIZ**

Ministro de Hacienda



**ISIDORO SANTANA**

Ministro de Economía, Planificación y Desarrollo



*“Año del Desarrollo Agroforestal”*

**Unofficial / Informal translation of the LDP to English**

Mr.

**JIM YONG KIM**

President

World Bank

Washington D.C., USA

**Reference: Letter of Development Policy – Disaster Risk Management Development Policy Loan with a Deferred Drawdown Option for Catastrophe Risks (DPL with Cat DDO)**

Distinguished President:

We are writing to you on behalf of the Dominican Republic, to express the commitment of the Dominican State to continue promoting and strengthening the progress made to date in terms of policy and actions in disaster risk management and climate change adaptation. This effort ultimately seeks to reduce our vulnerability to adverse natural events and thus increase the country's resilience to disaster and climate shocks. For this reason, jointly with the World Bank, we have prepared during the last 12 months the *Development Policy Loan with a Deferred Drawdown Option for Catastrophe Risks (DPL with Cat DDO)* in which actions and objectives are agreed upon to which the Dominican State are highly committed. The following sections describe the macro-fiscal situation in the Dominican Republic, the country's vulnerability to disasters, as well as the legal and institutional context. Finally, the Government's priority reforms and the policy program promoted under this operation with the World Bank are highlighted.

**Macro Fiscal Situation**

**Domestic economic context**

During 2016 the economy maintained its dynamic evolution, registering GDP growth of 6.6% year-on-year, maintaining its expansion above potential. This is consistent with the growth trajectory that the country has maintained in the last years.

The registered growth is explained by the increase in domestic demand, reflected in the growth of gross capital formation by 11% for the whole period, and the greatest increase was evidenced in the second quarter of the year, standing at 26.5% year-on-year growth.

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Private consumption and public consumption increased by 4.8% and 3.3%, respectively. However, in terms of growth contribution, private consumption accounts for 3.4% of growth, while gross fixed capital formation stands at 2.6%. On the other hand, exports of goods and services contributed 2.3% to real growth, this being its highest level of incidence in the last 6 years.

At the sectoral level, the sectors that contributed most to the growth during the year 2016 were Construction, Agriculture and Commerce, which presented growth of 9%, 10% and 6.5%, respectively. The dynamism presented by these three sectors together accounted for almost a third of the cumulative growth. In addition, mining and financial intermediation had double-digit growth, with 26.5% and 11.9% respectively.

In the labor market, the economic expansion that the Dominican Republic has been experiencing has resulted in an increase of 148,532 new employed persons, which represents a 0.6% increase in the employment rate, a decrease in the unemployment rate of 7.3 % to 7.1%, as well as a decrease in the other indicators of underutilization of the labor force. The economic activities that contributed most to this result were the service sector, industry and commerce.

#### Public Finances

In 2016, the Central Government Fiscal Revenues amounted to RD \$ 484,620.3 million equivalent to 14.6% of GDP. This represented a year-on-year increase of 9.7% compared to 2015.

Current revenues reached RD\$ 471,434.6 million, for an absolute growth of RD\$ 39,873.3 million, equivalent to an increase of 9.2% compared to 2015. For its part, capital revenue was RD\$ 22.9 million, for a variation of 51.7% compared to the RD\$ 15.1 million entered in 2015.

For the year 2016, tax revenues increased 8.6% in relation to the total observed in 2015 when tax collection was at RD\$ 453,191.1 million. The tax-to-GDP ratio was standing at 13.6% of GDP.

Central government expenditures for the period January - December of 2016 reached RD\$ 562,159.4 million, corresponding to 16.9% of the GDP, remaining at the same level as in 2015.

In the period, January – December of 2016, RD\$ 471,404.9 million was executed, for current expenses, 9.2% above 2015; as well as RD \$ 90,754.5 million for capital expenditure, presenting a year-on-year growth of 5.2%.

At the end of 2016, the central government's primary budgetary result was a surplus of 0.6% of GDP. Extending the coverage of the public sector, the primary result of the Non-Financial Public Sector (NFPS) was a surplus of 0.2% of GDP. The aggregate result of the NFPS was -2.7% of GDP. Central government financing sources amounted to US\$ 3,972.8 million, of which 42.5% was

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through placement of domestic bonds, 37.7% of global bonds, and 19.8% of loans from multilateral and bilateral agencies.

The debt of the NFPS totaled US\$ 26,757.9 million, an increase of US\$ 2,604.5 million equivalent to a relative change of 10,78% over 2015.

The balance of NFPS totaled US\$ 26,757.9 million, an increase of US\$ 2,604.5 million equivalent to a relative change of 10.78% over 2015. The total amount of public debt of the NFPS represents 37.3% of the GDP, an increase of 2 percentage points over the previous year.

Of the total debt of the NFPS as of December 31, 2016, 65.0% corresponds to external debt, which presented a balance of US\$ 17,399.9 million, reflecting a year-on-year increase of 8.55% (US\$ 1.371 million) compared to 2015.

*Vulnerability to natural disasters and legal framework for disaster risk reduction and climate change adaptation*

Due to its geographical location and its geological and hydrometeorological characteristics, the Dominican Republic is exposed to the occurrence of several adverse natural events that, together with the vulnerability of the population and their livelihoods, as well as dynamic pressures such as climate change and rapid urbanization, pose a serious threat to the security of the population and to economic and social infrastructure, as well as the sustainability of growth.

Events such as the heavy floods of the end of 2016 in the north of the country illustrate the potential consequences of natural disasters and highlight the urgent need to take measures to strengthen climate and disaster risk management policies. Under the effects of climate change, the frequency and severity of hydrometeorological events impacting the country is expected to increase, thus stressing the urgent need to strengthen climate and disaster risk reduction policies in order to increase the resilience of the country.

Given this reality, since 2002, the Dominican Republic has built a comprehensive legal and institutional framework for Disaster Risk Management. Through the Law 147-02 on Disaster Risk Management, the National System for Prevention, Mitigation and Response to Disasters (SN-PMR) was established, integrating the general principles of risk reduction in the country's development planning, as well as the National Emergency Commission (CNE), which is the coordinating mechanism of SN-PMR. This legal and institutional framework has allowed the Government to make substantial progress in implementing an effective emergency and disaster response system as well as raising awareness of the importance of incorporating disaster risk considerations in sectoral planning.

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On the other hand, the Dominican Government has strengthened its institutional framework to address issues related to the negative impact of climate change. In September 2015, the National Policy on Climate Change was approved through Presidential Decree No. 269-15 to establish mechanisms and instruments for better adaptation to climate change. This policy aims to strengthen the National Planning System and the National Multiannual Public Sector Plan to increase the Government's capacity to promote resilient development and is a key element in further strengthening resilience to climate risks and disaster risks.

Moreover, the strong commitment of the Dominican Republic to advance disaster risk management and climate change adaptation policies is reflected in its main long-term planning tool, the National Development Strategy 2030 (END 2030) established by Law No 1-12 of 2012, where disaster risk management and climate change adaptation are included as priorities. The END seeks to integrate climate and disaster risks through the implementation of cross-sectoral policies, ensuring that "all plans, programs, projects and public policies incorporate criteria of environmental sustainability and adequate integrated risk management." At the same time, the END specifies targeted policy actions in these areas under General Objective 4.2 (Effective risk management to minimize human, economic and environmental losses) and General Objective 4.3 (Adequate adaptation to climate change).

#### ***Government priorities and long-term vision for resilient and sustainable development***

Building on the long-term vision provided by END 2030, the Dominican Government is now implementing a second generation of reforms to increase the country's resilience and ensure the sustainability of development in the medium and long-term. These reforms cover a wide range of sectors and shape the actions of the Government which has prioritized the following areas: (i) better management of water resources in all its aspects, (ii) better land management to reduce human settlements in areas exposed to adverse natural events, and (iii) better access to basic public services such as education and health.

The Government declared the period 2016-2020 the "water quadrennium" and is promoting a new and more comprehensive approach to water management. This change of approach represents a structural change in approaching the issue of water since it is no longer analyzed from the sectorial perspective of each ministry, but rather as a cross-sectoral priority for development. It is also accompanied by a strong desire to develop a new legal and institutional framework that allows the promotion of efficient public policies in all water management components - from "upstream" water collection to sanitation and distribution to households and farmers "downstream." In parallel, the Government is also prioritizing agroforestry development in the country's main river basins to improve soil productivity, water accumulation capacity and the quality of life of communities and the whole nation. The creation of a Coordinating Unit for

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Agroforestry Development Projects, directly linked to the Presidency of the Republic, responds to the urgent need to implement these vital projects for the future of the Dominican people.

A second priority for the Government is land and territorial management as well as the upgrading of vulnerable urban areas. The Government’s strong commitment to promote a more adequate land use and control urban sprawl has materialized through the formulation of the proposed Bill for Territorial Planning that is currently under discussion in Congress. This Law would provide the required legal and institutional framework to prevent urban growth in areas highly exposed to adverse natural events. On the other hand, the Government has prioritized and carried out slum upgrading projects in areas vulnerable to floods. In the city of Santo Domingo, the readjustment of the La Barquita neighborhood on the banks of the Ozama River has substantially reduced the risk of flooding in these marginalized areas, while at the same time helping to recover the livelihoods of families located in these areas. This project is now being replicated and expanded to the Domingo Savio area with the aim of reducing the risk of flooding for the most vulnerable population.

Finally, the third priority towards a sustainable development is to increase the coverage and quality of essential public services, such as education and health. Since 2012, the Dominican Government has made education one of its main priorities. Since 2013, with the objective of improving the quality and access to education, the Government has increased the budget allocation to 4% of GDP to the sector, which has prompted a significant increase in the available number of classrooms throughout the country. This trend will continue in the following years and it is expected that by 2020 the number of classrooms in the country will have doubled compared to its 2012 level. Likewise, in 2016, the Government initiated a first program for the retrofitting and expansion of 62 hospital centers throughout the country with the objective of increasing access to health services. Strengthening public education and health services, including better management of infrastructure to reduce disaster risk, will continue to be a priority in ensuring the sustainability of development of the Dominican Republic.

#### ***The Policy Program for reducing physical and fiscal vulnerability to disasters***

In the framework of the abovementioned major priorities, during the last 12 months the Government has worked with the support of the World Bank to structure a policy program aimed at reducing the physical and fiscal vulnerability of the Dominican State. This program is structured around two strategic and complementary pillars: (i) reduce climate and disaster risk in public infrastructure and key assets to reduce future human and economic losses, and (ii) strengthen management of contingent liabilities associated with disasters to increase government resilience to disasters and promote rapid and efficient recovery after a disaster.

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#### *Reduce climate and disaster risk in public infrastructure and key assets to reduce future human and economic losses*

To improve the quality of public investment projects (PIPs) and the ability to consider the risk associated with adverse natural events when formulating PIPs, the Government has been making significant efforts since 2013 and approved the first "Guide for the inclusion of disaster risk management" in the formulation of the most important PIPs. More recently, the Government took a significant step forward with the adoption of Resolution No. 04-17 of the Ministry of Economy Planning and Development (MEPyD), dated March 28, 2017, by which the analysis of climate and disaster risks in the formulation and design of public investment projects becomes a mandatory step to all new PIPs. These technical standards will apply to all public sector institutions, including municipalities, ensuring that adequate disaster and climate risk analysis is carried out prior to investing public resources.

Another key element to strengthen the resilience to disasters of public investment was the creation of the National Geographic Institute through Law 208-14, establishing the legal and institutional framework for the management of geospatial information and seeking the progressive creation of the Spatial Data Infrastructure (SDI) of the Dominican Republic. A SDI promotes the exchange and sharing of geospatial information, including information on natural hazards and risks, establishing a single format and a single exchange network between the largest number of national entities. These reforms constitute decisive progress that the Government will continue to deepen in the coming years to ensure that the risk analysis required in the PIPs are based on up-to-date and accurate information on natural hazards and risks.

Additional efforts are also being made directly from the sectors that concentrate the large portion of public spending. As mentioned earlier, the Dominican Government has made education one of its main priorities and has significantly increased investment in school infrastructure. In this context, the Government has created a new institutional structure to ensure improved management of school infrastructure and to implement effective policies for disaster risk reduction and climate change adaptation. More specifically, the creation of the General Directorate of Risk Management and the General Directorate of Building Rehabilitation within the Ministry of Education, through Departmental Orders No. 18-2016 dated October 4, 2016 and No. 01 -2017 dated January 5, 2017, is an essential first step to carry out the risk assessments required for the existing school infrastructure and define the associated retrofitting works. On the other hand, the centralization of supervision of the construction of school infrastructure under the Ministry of Public Works and Communication (MOPC) through Presidential Decree No. 348-16 of December 2, 2016, helps streamlining government action in the supervision of school buildings, which is key to ensuring unified safety standards in building new schools. These measures are the basis for developing a long-term risk reduction strategy for school infrastructure

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that includes adequate actions to retrofit and/or rehabilitate schools. These actions will be key to avoid human and economic loss in the event of disasters and reduce disruption times for students. These measures are even more important considering that in many cases school infrastructure serves as shelters during emergencies in the aftermath of a disaster.

In parallel, since 2008, a “Safe Hospitals” program has been developed in the health sector with the objective of ensuring that hospitals remain operational and can serve the affected population in case of a large disaster. Through the implementation of the Hospital Safety Index in 2016, the Ministry of Public Health aims to complete the evaluation and rehabilitation of at least 25 public hospitals by 2020. Building on previous efforts, and in particular, the development of architectural guidelines for safe hospitals, the Government has also established mandatory technical regulations for the rehabilitation of health facilities, which require: (i) compliance with the design and construction guidelines for Safe Hospitals published by the Ministry of Public Health and (ii) the evaluation of the health establishments with the Hospital Safety Index. This reform will gradually increase the safety of hospitals to ensure that they can continue to provide services in the aftermath of a disaster.

Another key policy reform that the Government is undertaking is the improvement of the regulations and codes that govern the construction and supervision of works in the country. The update of the Seismic Vulnerability Analysis Regulations for Buildings (R-001) in 2011 represented a first critical step towards ensuring that the country has earthquake-resistant regulations amongst the most advanced in the region. However, understanding that not all works in the country comply to the specifications of R-001, the Government is now working to increase its capacity to enforce the application of the regulations for construction of works. This effort includes updating the Regulations for the Supervision and General Inspection of Works (R-004). This regulation is key to ensure the supervision and inspection of works, which are the responsibility of the MOPC, is of high quality and complies with the regulation of analysis of seismic vulnerability of buildings (R-001) among other existing regulations. In line with these regulatory developments, the Government has also increased the technical and financial resources of the MOPC's monitoring and control unit to increase its capacity to respond in a timely and adequate manner to requests for supervision and inspection of works.

Finally, after two years of prolonged droughts in 2014 and 2015, heavy floods in the northern part of the country in 2016, and other difficulties faced by the Dominican population, the Government has prioritized the strengthening of comprehensive water resource management - during both scarcity and excess - to reduce the risk of floods and droughts. Considering that one of the main challenges to improve water resource management was the lack of coordination among the multiplicity of sector actors involved in the issue, one of the first measures taken by the Government was the creation of the Water Resource Coordination Board (WRCB) under the

### *“Año del Desarrollo Agroforestal”*

oversight of the MEPyD. The establishment of this WRCB creates a high-level mechanism to coordinate the different institutions and agencies working both upstream in agroforestry conservation and the actors working downstream on irrigation and river adaptation issues. With this reform, the Government has created the institutional arrangements required to design a national strategy that identifies and prioritizes interventions in areas prone to flooding. By facilitating coordination between the different actors involved, the WRCB will also contribute to scaling up the number of interventions and improvements in water management conducted in risk prone areas.

#### *Strengthening the management of contingent liabilities associated with disasters and promoting rapid and efficient recovery after a disaster*

Aware that a major disaster could pose significant risks to the sustainability of public finances, the authorities have taken important steps to strengthen the management of contingent liabilities associated with disasters. As part of this effort, and to strengthen capacities to assess the socioeconomic and fiscal impact of natural disasters, an inter-institutional team was set up within the National Emergency Commission (CNE) to systematically assess the socio-economic and fiscal impacts of disasters. This team represents the first institutional arrangement where the Ministry of Finance and the CNE work together, and will be key to contribute to a better understanding of the needs of disaster risk reduction and adaptation to climate change.

On the other hand, the Government, through the Ministry of Finance has created the "Mechanism for Fiscal Management of Contingent Liabilities Associated with Disasters Originated by Natural Phenomena" by Resolution No. 146-2017 of the Ministry of Finance. This mechanism establishes the need to quantify the contingent liabilities associated with disasters, as well as to develop a financial protection strategy against disasters to mitigate associated potential fiscal risks. As evidence of the commitment of the Ministry of Finance in these areas, several advances have already been made. The General Directorate of Fiscal Policy and Analysis is carrying out Debt Sustainability Analysis which include the shocks created by natural disasters and foresees the incorporation of climate and disaster risks in the framework of the fiscal risks analysis that is being generated.

Also, thanks to this first quantification of the economic and fiscal risks associated to disasters, the Government plans to elaborate a cost-efficient and risk-layered financing strategy to better manage those potential impacts. This strategy aims to combine several risk retention instruments, such as contingent credit lines and reserve funds, with risk transfer instruments. Among other options, the Dominican Government is now considering joining the CCRIF to acquire sovereign parametric insurance.

#### *Conclusion*

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As can be seen from the above, the Dominican Government is carrying out important reforms and wishes to reiterate its commitment to strengthen disaster risk management and climate change adaptation through the implementation of disaster risk reduction policies in priority sectors such as education and health, as well as the improvement of financial protection mechanisms against disasters. Despite these developments and the notable macroeconomic and fiscal advances mentioned above, the Dominican Government is aware that the country still faces significant challenges to reduce its vulnerability to disasters and climate events. In this setting, it is very important to have mechanisms and instruments that, in the framework of a disaster risk management and climate change adaptation policy, protect public finances in the event of a large-scale disaster and, in turn, increase the capacity of the Government to provide a timely and adequate response to situations of this type.

As a result of this, the Dominican Government hereby reiterates its request for approval of the Development Policy Loan with Deferred Disbursement Option for Catastrophe Risks (DPL with Cat DDO) in the amount of US\$ 150.0 million.

We fully acknowledge the continued and valuable support provided by the World Bank.

Kind Regards,

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**DONALD GUERRERO ORTIZ**

Ministro de Hacienda

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**ISIDORO SANTANA**

Ministro de Economía, Planificación y Desarrollo

## ANNEX 3: FUND RELATIONS ANNEX



IMF Executive Board Concludes 2017 Article IV Consultation with the Dominican Republic

March 27, 2017

Press Release No 17/79

**On March 24, 2017, the Executive Board of the IMF concluded the Article IV consultation<sup>39</sup> with the Dominican Republic.**

**The Dominican economy maintained the strong growth momentum of the past three years, which is only now beginning to taper off toward potential.** Growth averaged 7 percent since 2014, outperforming most emerging markets and all the economies in the Americas, buoyed by domestic demand. Real GDP expanded by 6.6 percent in 2016, with both consumption and investment easing in the second half of the year as financing conditions tightened. Labor markets and social indicators are steadily improving, and real labor income has begun to catch up to the strong productivity growth in the last two years, after remaining stagnant for over a decade.

**Strong growth was accompanied by low inflation and a strengthened external current account, as lower oil prices kept pressures at bay.** Headline and core inflation averaged 1.75 percent during 2016, remaining below the Central Bank's inflation target range of  $4 \pm 1$  percent for over two years. More recently, inflation has begun to pick up with recovering food and fuel prices. The current account deficit narrowed significantly, to an estimated 1.5 percent in 2016, as lower oil prices and a strong growth in tourism and remittances more than offset an underlying weakness in goods exports.

**Fiscal and monetary policies tightened somewhat in 2016, providing a countercyclical offset to the positive output gap.** The fiscal position improved slightly despite increasing spending pressures, as the authorities' strong revenue administration effort had begun to pay off. The consolidated public sector registered a deficit of 4.3 percent of GDP in 2016, which pushed public debt to an estimated 49.7 percent of GDP by end-year. Monetary policy was tightened in November 2016 after remaining on hold for over a year. The policy interest rate was increased from 5 percent to 5.5 percent to prevent potential overshooting of inflation, as commodity prices begin to unwind against a backdrop of a positive output gap and robust credit growth. Financial soundness indicators for the banking system remain strong, with healthy capitalization, low asset impairment, and strong provisioning.

**The economic outlook is favorable.** Growth is expected to slow toward the potential rate of around 5 percent from 2017 onward, while the recent rise in fuel prices will push inflation to target and will widen the current account deficit moderately from 2017 onward. Risks around this baseline outlook are balanced. Key risks stem from the uncertainty surrounding the economic and policy outlook for the

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<sup>39</sup> Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses the country's economic developments and policies with officials. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board.

external trading partners, notably the United States, the outlook for oil prices, higher than expected global interest rates, and the ensuing dollar appreciation.

#### **Executive Board Assessment<sup>40</sup>**

**Executive Directors agreed with the thrust of the staff appraisal.** They welcomed the Dominican Republic's dynamic economic performance, as evidenced by sustained output and employment growth, low inflation, and stronger current account. Directors commended the authorities' pursuit of macroeconomic stability and structural reforms to improve social outcomes. They noted that the medium-term outlook is favorable, but risks remain. Directors encouraged further efforts to consolidate the fiscal position, build larger buffers, strengthen policy frameworks, and advance structural reforms to promote inclusive growth.

**Directors welcomed the authorities' commitment to fiscal discipline and encouraged them to take early action to prevent a further buildup in debt, given the strong cyclical position of the economy.** This would require containing the fiscal deficit this year and moving to meaningfully improve the fiscal balance over the next few years. In light of the heavy debt servicing burden, Directors welcomed the efforts to broaden the narrow tax base through renewed revenue administration reforms. They also encouraged more comprehensive reforms to sustainably broaden the base, simplify the tax system, and streamline tax exemptions and incentives. Directors saw scope for improving the quality of spending, especially on untargeted energy subsidies, while protecting pro-poor and pro-growth spending.

**Directors agreed that strengthening the medium-term fiscal framework will be critical to imparting discipline, predictability, and credibility to fiscal policy.** Recognizing various reform options, they noted that a medium-term fiscal anchor would help guide fiscal policies, while simple and credible rules could support its implementation.

**Directors viewed the current tightening bias of monetary policy as appropriate.** Welcoming the authorities' commitment to continue building reserves buffers, they encouraged a gradual transition to greater exchange rate flexibility to help absorb external shocks. Increased flexibility should be supported by efforts to build up foreign exchange market infrastructure, develop hedging instruments, and reduce balance sheet mismatches in the public sector.

**Directors welcomed the health and stability of the banking system.** They supported ongoing efforts to strengthen the regulation and supervision of nonbanks, bridge the remaining gaps in compliance with the international transparency initiatives, and enhance the macro-financial framework. These reforms would identify and address emerging systemic risks and ensure the financial system's continued support for economic growth.

**Directors emphasized that far-reaching structural reforms are needed to secure better longer-term growth and social outcomes.** They endorsed the ongoing focus on improving the quality of education and providing low-income housing. Decisively addressing challenges of the electricity sector, including weak governance, poor infrastructure, and below-cost pricing is also critical. Directors supported the

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<sup>40</sup> At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities. An explanation of any qualifiers used in summing up can be found here: <http://www.imf.org/external/np/sec/misc/qualifiers.htm>.

authorities' efforts toward improving the business environment, strengthening institutions and governance, and supporting stronger employment growth and social protection.

<http://www.imf.org/en/news/articles/2017/03/27/pr1799-dominican-republic-imf-executive-board-concludes-2017-article-iv-consultation>

IMF Communications Department

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MEDIA RELATIONS

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**ANNEX 4: ENVIRONMENT AND POVERTY/SOCIAL ANALYSIS TABLE**

Prior Actions	Significant Positive or Negative Environment Effects (Yes/No/To be determined)	Significant Poverty, Social, or Distributional Effects Positive or Negative (Yes/No/To be determined)
<b>Operation Pillar A: Strengthening institutions for improved climate and disaster resilience in priority sectors</b>		
<p><b>Prior Action 1:</b> The Government has established new institutional structures for quantifying, pricing, and managing contingent liabilities associated with climate and disaster risks by: (i) establishing an interinstitutional body to assess and quantify the socioeconomic and fiscal impacts of natural disasters; (ii) granting legal mandate to the MH’s General Directorate for Fiscal Analysis and Policy to estimate and assess the impacts of disaster and climate-related risks on fiscal accounts as part of managing contingent liabilities; and (iii) granting legal mandate to MH’s General Directorate of Public Credit to manage the contracting of financial instruments for risk transfer in accordance to the country’s applicable legislation.</p>	No	Positive
<p><b>Prior Action 2:</b> The Government has strengthened its capacity to incorporate safety standards in the management of school infrastructure by: (i) creating a General Directorate for Risk Management within MINERD; (ii) creating a General Directorate for Building Rehabilitation within MINERD with responsibility for existing school infrastructure rehabilitation and retrofitting; and (iii) centralizing the supervision of school infrastructure construction under the MOPC and in coordination with MINERD.</p>	Positive indirect environmental effects are likely.	Positive
<p><b>Prior Action 3:</b> The Government has enhanced flood and drought risk reduction by creating an interinstitutional structure to coordinate and facilitate the work of the Government’s institutions responsible for integrated water resource management.</p>	Positive environmental effects are likely.	Positive
<b>Operation Pillar B: Establishing mandatory regulations for climate and disaster risk reduction in public investment and construction works</b>		
<p><b>Prior Action 4:</b> The Government has established mandatory technical standards for incorporating disaster and climate risk analysis into the design and formulation of all public investment projects.</p>	Positive environmental effects are likely.	Positive
<p><b>Prior Action 5:</b> The Government has issued mandatory technical regulations for granting operating permits to health facilities by requiring: (i) compliance with MSP’s guidelines for the design, construction, and finishing of health facilities; and (ii) assessment of the health facilities built before 2011 using the Hospital Safety Index.</p>	Positive indirect environmental effects are likely.	Positive

Prior Actions	Significant Positive or Negative Environment Effects (Yes/No/To be determined)	Significant Poverty, Social, or Distributional Effects Positive or Negative (Yes/No/To be determined)
<p><b>Prior Action 6:</b> The Government has strengthened its technical regulations for the supervision and inspection of construction works by requiring said works to comply with all applicable building regulations.</p>	<p>Positive indirect environmental effects are likely.</p>	<p>No significant effect is anticipated.</p>