



BOGOTÁ, D.C.

FINANCIAL PROTECTION STRATEGY OF THE DISASTER RISK AND CLIMATE CHANGE

Programa de Financiamiento
& Aseguramiento del Riesgo de Desastres



MINISTERIO DE HACIENDA Y
CRÉDITO PÚBLICO



SECRETARÍA DE
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INSTITUTO DISTRITAL DE
GESTIÓN DE RIESGOS
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Embajada de Suiza en Colombia
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Financial Protection Strategy of the Disaster Risk and Climate Change

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SUBMISSION



The Capital District stands out for being the first territorial entity to promote active and continuous disaster risk management, with the formulation of risk prevention and mitigation policies for two decades, implemented through the District Risk and Climate Change Management System (SDGR-CC).

It was also the first territory to include financial protection objectives in the District Plan for Disaster Risk and Climate Change Management 2018-2030, with the aim of reducing fiscal vulnerability to disasters. It also created the District Fund for Risk Management and Climate Change of Bogotá, D.C. (FONDIGER), creating a close link between disaster risk management, climate change (CC) and financial protection as an integral part of the said policy.

Thanks to its high technical capacity, the District led the first probabilistic risk studies for seismic events, determining damage and economic losses to buildings, as well as their impact on the population, recognizing the high fiscal impact that this type of event could generate. In addition, Bogotá concentrates the area with the largest population, the highest percentage of production of the national GDP, half of the labor and consumption market, and approximately 50% of the national tax revenue.

For this reason, it was essential for the Ministry of Finance and Public Credit to support the formulation and implementation of the District Strategy for Financial Protection against Disaster Risk and Climate Change. We are grateful for the support of the Swiss Embassy in Colombia - SECO - and the World Bank, as well as the commitment of the Institute for Disaster Risk Management (IDIGER) and the District Finance Secretariat in the development of this strategy.

JOSÉ ROBERTO ACOSTA RAMOS

Director of Public Credit and National Treasury
- DGCPTN

PROLOGUE



Disaster risk and the increasingly present reality of climate change impose, in cities like Bogotá, the need for a local government with knowledge and capacity to plan and implement disaster risk management actions, with the aim of reducing the degree of vulnerability and contributing to the well-being, security, sustainable development and quality of life of citizens.

That is why, through the District System for Risk Management and Climate Change (SDGR-CC), we work to know the territory, analyze the threats of natural and unintentional anthropic origin that we face, reduce the risk of disasters with prospective and corrective measures that promote the protection of the lives of all inhabitants and prepare ourselves to provide an adequate response to emergencies, through an articulated work between the public, the private

and the community, in order to build a less vulnerable city.

In this regard, we are very proud to present the “Financial Protection Strategy of the

Disaster Risk and Climate Change” for the Capital District, an instrument developed thanks to the joint efforts of the District Institute for Risk Management and Climate Change (IDIGER), the District Secretariat of Finance (SDH), the Ministry of Finance and Public Credit (MHCP) and the World Bank (WB), with funding from the Swiss Embassy in Colombia - Economic Cooperation and Development.

This tool provides an ex-ante guiding framework for reducing and financing the Capital District’s contingent liabilities in the event of disasters, in order to establish an optimal portfolio of financial instruments, as well as the order of precedence in their use and, thus providing resources for emergencies or disasters of great impact, especially in the recovery, rehabilitation and reconstruction processes.

We are sure that this type of action allows Bogotá to have the necessary tools to better face the events that may arise and position it as one of the most resilient cities worldwide.

JUAN MAURICIO RAMIREZ CORTÉS

District Secretary of Finance

PREFACE



Comprehensive risk management not only corresponds to the knowledge of threats, the corrective and prospective reduction of those situations that affect citizens, as has been customary for a long time in

terms of engineering works and relocation of vulnerable populations and timely attention to the materialization of threats, it also corresponds to those measures such as those we are applying of public policies in this financial protection document, which establishes in itself the evident responsibility of the district administration to face those complex situations that affect the population of the capital in every sense.

That is why the effects of climate change, the threatening situations in the Capital District and public development policies must be combined for the effective construction of an orderly city, less vulnerable and with an effective solution to the problems of its population.

GUILLERMO ESCOBAR CASTRO

Director General of the District Institute for
Risk Management and Climate Change - IDIGER

Rationale

Financial protection (FP) is a component of disaster and climate risk management, as well as of fiscal, economic and financial development management, and of social protection. Thus, this Strategy provides the guiding framework to reduce and finance, *ex ante*, the contingent liability of the Capital District in the event of disasters.

Ex ante financial preparation will allow establishing an optimal portfolio of financial instruments and the order of precedence of use, in order to provide financial resources to save lives at risk and attend to

the three post-disaster stages: emergency, rehabilitation and reconstruction. The availability of resources can contribute to the reconstruction of infrastructure and housing and therefore to the economic recovery without aggravating the fiscal situation.

Scope

The district financial protection strategy against disaster risk and climate change (in line with the national level strategy) is a component of Bogotá's public policy for disaster, fiscal and climate change risk management that seeks to contribute to the fiscal vulnerability management.

Acronyms

AMVA	Área Metropolitana del Valle de Aburrá (Metropolitan Area of Valle de Aburra)
AF	Adaptation Fund
ANI	Agencia Nacional de Infraestructura (National Infrastructure Agency)
CC	Climate Change
CCE	Agencia Nacional de Contratación Pública - Colombia Compra Eficiente (National Public Procurement Agency - Colombia Procures Efficiently)
CDGR-CC	Consejo Distrital de Gestión de Riesgos y Cambio Climático (District Council for Risk and Climate Change Management)
COP	Colombian Pesos
COVID-19	Virus Sars Cov 2
DNP	Departamento Nacional de Planeación (National Planning Department)
DRFI Program	World Bank Disaster Risk Financing and Insurance Program
DRFM	Disaster Risk Financial Management
DRM	Disaster Risk Management
EAL	Expected Annual Loss
FET	Fondo de Estabilización Tarifaria (Tariff Stabilization Fund)
FNGRD	Fondo Nacional para la Gestión del Riesgo de Desastres (National Fund for Disaster Risk Management)
FONDIGER	Fondo Distrital de Gestión de Riesgos y Cambio Climático (District Fund for Risk and Climate Change Management)
FP	Financial Protection
FP Strategy	Financial Protection Strategy for Disaster Risk and Climate Change
GDP	Gross Domestic Product
DRFM Strategy	Disaster Risk Financial Management Strategy at the national level
GoC	Government of Colombia
IDEAM	Instituto de Hidrología, Meteorología y Estudios Ambientales (Institute of Hydrology, Meteorology and Environmental Studies)

IDIGER	<i>Instituto Distrital de Gestión de Riesgos y Cambio Climático</i> (District Institute for Risk and Climate Change Management)
IPES	<i>Instituto para la Economía Social</i> (Institute for Social Economy)
MADR	<i>Ministerio de Agricultura y Desarrollo Rural</i> (Ministry of Agriculture and Rural Development)
MADS	<i>Ministerio de Ambiente y Desarrollo Sostenible</i> (Ministry of Environment and Sustainable Development)
MHCP	<i>Ministerio de Hacienda y Crédito Público</i> (Ministry of Finance and Public Credit)
MSPS	<i>Ministerio de Salud y Protección Social</i> (Ministry of Health and Social Protection)
PDD	<i>Plan de Desarrollo Distrital</i> (District Development Plan)
PDGRCC	<i>Plan Distrital de Gestión del Riesgo de Desastres y del Cambio Climático para Bogotá D.C.</i> (District Plan for Disaster Risk and Climate Change Management for Bogotá D.C.)
PML	Probable Maximum Loss
PND	<i>Plan Nacional de Desarrollo</i> (National Development Plan)
POT	<i>Plan de Ordenamiento Territorial</i> (Territorial Planning Plan)
PPP	Public-Private Partnership
SDGR-CC	<i>Sistema Distrital de Gestión de Riesgos y Cambio Climático</i> (District Risk and Climate Change Management System)
SECO	Swiss Economic Cooperation in Colombia
SF	<i>Superintendencia Financiera</i> (Financial Superintendence)
SGC	<i>Servicio Geológico Colombiano</i> (Colombian Geological Service)
SITP	<i>Sistema Integrado de Transporte Público</i> (Integrated Public Transportation System)
SNGRD	<i>Sistema Nacional de Gestión del Riesgo de Desastres</i> (National Disaster Risk Management System)
UNGRD	<i>Unidad Nacional para la Gestión del Riesgo de Desastres</i> (National Unit for Disaster Risk Management)



Introduction

The design and implementation of the GoC's DRFM Strategy includes supporting the territorial level in strengthening its Financial Protection (FP). With the support of the World Bank's Disaster Risk Financing and Insurance (DRFI) Program and the Swiss Embassy in Colombia – Economic Cooperation and Development (SECO), the GoC has made progress in strengthening the strategy to reduce its fiscal vulnerability in the event of disasters. The foregoing has been led by the Ministry of Finance and Public Credit (MHCP), with the support and coordination of several public entities such as the National Unit for Disaster Risk Management (UN-GRD), the National Planning Department (DNP), the Financial Superintendence (SF), the Ministry of Agriculture and Rural Development (MADR), the Colombian Geological Service (SGC), the National Infrastructure Agency (ANI), Adaptation Fund (FA), the Institute of Hydrology, Meteorology and Environmental Studies (IDEAM), and the Ministry of Environment and Sustainable Development (MADS). These entities defined an operational plan to implement the DRFM Strategy, which considers, among others, that the subnational entities adopt strategies to reduce their fiscal vulnerability by contributing to the GoC's economic policy management. Consequently, the Ministry of Finance and Public Credit (MHCP) has supported the design and implementation of FP strategies to entities at the subnational level, such as Bogota D.C., the Valle de Aburra Metropolitan Area (AMVA), the Governor's Office of Cundinamarca, the Governor's Office of Putu-

mayo and the Archipelago Department of San Andres, Providencia and Santa Catalina.

Bogota, D.C. has approved the district strategy for financial protection against disaster risk and climate change, within the current national and district regulations framework and as an integral part of the Disaster Risk Management (DRM) policy¹. To manage fiscal vulnerability, Bogota D.C. has established specific commitments regarding Disaster Risk Financial Management. Considering that this contributes to the reduction of fiscal vulnerability at the national level, the MHCP provides assistance in the design and implementation of the Financial Protection Strategy for Disaster Risk and Climate Change (FP Strategy). The city of Bogota is also being supported by the World Bank's Disaster Risk Financing and Insurance Program (DRFI Program) and the Swiss Embassy in Colombia – Swiss Economic Cooperation in Colombia (SECO).²

Bogota, D.C. designed its FP Strategy coordinately with the National Disaster Risk Financial Management Strategy (DRFM Strategy), adopting the policy objectives stipulated at the national level³: (i) Identification and understanding of fiscal risk due to the occurrence of disasters; (ii) Management of financial instruments for risk management; and (iii) catastrophic risk insurance of public assets.

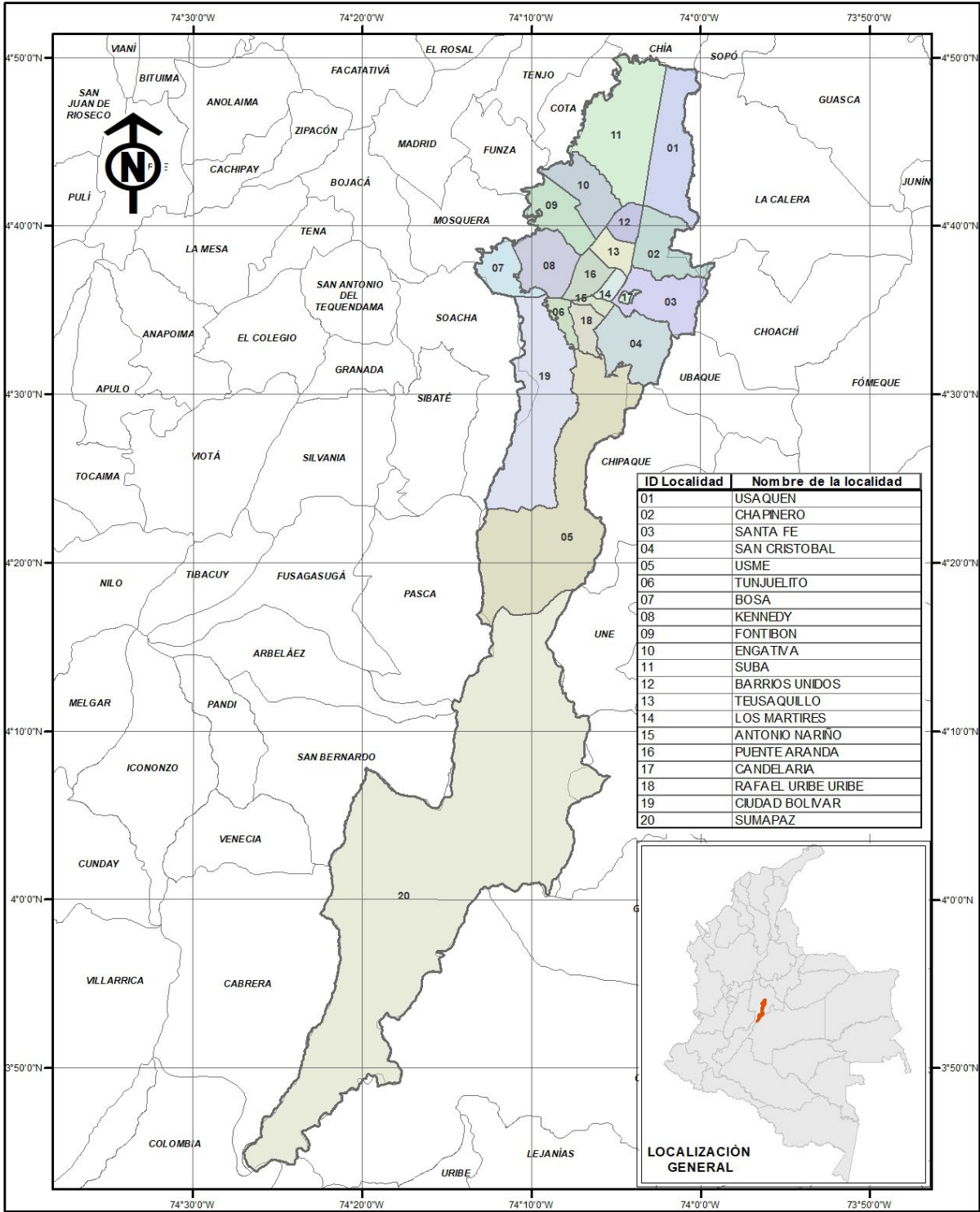
Annex 1, at the end of this document, summarizes important legal aspects and presents the bibliography.

- 1 The "Financial Protection Strategy of the Disaster Risk and Climate Change" was approved at the District DRM and CC Council meeting on September 20, 2022, as recorded in the minutes (Minutes 01 of 2022), in accordance with district regulations.
- 2 The opinions and contents expressed in this document are not the responsibility of the Embassy.
- 3 In the Policy Strategy for Public Financial Management of Disaster Risk due to Natural Phenomena approved in 2013 and updated in 2016.





Background



MAP OF LOCAL DISTRICTS
BOGOTÁ



Bogota is the capital of Colombia and has a population approximately of 8 million. “Bogota is a diverse and multicultural city. Streets from a colonial past converge with thriving modernity. Its 1,636 km² bring together cultures, social classes and urban life with touches of rurality.

The city is located in the Eastern range of the Andes Mountain system, within the department of Cundinamarca, in the Bogota savanna (Sabana).

The capital of Colombia extends over 163,635 hectares, of which 37,972 are urban land (23.2 percent), 122,687 hectares are rural (75 percent) and 2,974 hectares correspond to expansion land (1.8 percent).

It limits to the north with the municipality of Chia; to the east with the municipalities of La Calera, Chochachi, Ubaque, Chipaque, Une and Gutierrez and the municipalities of Guamal and Cubarral (Meta); to the south with the municipality of Uribe (Meta) and the municipality of Colombia (Huila); and to the west with the municipalities of Cota, Funza, Mosquera, Soacha, Pasca, Arbelaez, San Bernardo and Cabrera (Cundinamarca)...

Bogota is subdivided into 20 local districts: Usaquen, Chapinero, Santa Fe, San Cristobal, Usme, Tunjuelito, Bosa, Kennedy, Fontibon, Engativa, Suba, Barrios Unidos, Teusaquillo, Los Martires, Antonio Nariño, Puente Aranda, La Candelaria, Rafael Uribe Uribe, Ciudad Bolivar and Sumapaz.

Sumapaz is the largest local district (78,096 hectares) and is the only completely rural. La Candelaria, on the other hand, is the district which occupies less land (206 hectares)...

There are more than 785,000 companies registered in the Bogota Chamber of Commerce. 31.1 percent of the companies are engaged in trade; 12.5 percent of economic activities are concentrated in industry and 10.1 percent in scientific and technical fields.

Of the registered companies, 0.24 percent are large companies (with more than 200 employees); 0.53 percent are medium-sized (between 51 and 200 employees according to Law 905 of August 2004); 2.3 percent are small (between 11 and 50 employees) and 96.9 percent are micro-enterprises.” According to the World Bank and Los Andes University (2013), Bogota is “the most economically and fiscally productive city, with 26% of the national GDP, half of the labor and consumer markets, and approximately 50% of national tax revenues.”⁴

The Financial Protection (FP) against disaster risk and climate change in Bogota is a district public policy articulated with national level developments and policies. The policy of the National Government in prevention and mitigation of risks due to natural phenomena, embodied in the National Development Plan (PND) 2002-2006, established as objective the reduction of the State’s fiscal vulnerability to disasters due to natural events. Consequently, the national level contracted a US\$250 million credit line with the World Bank for the project to Reduce the Fiscal Vulnerability of the Nation against Disasters. At the district level, with the implementation of the second phase of the national project, a US\$80 million loan was obtained from the World Bank to develop the project “Reduction of the Fiscal Vulnerability of the Capital District against Natural Disasters,” which

4 From <https://bogota.gov.co/mi-ciudad/turismo/informacion-de-bogota-en-2019>. On the other hand, in relation to the rurality of Bogota, it is important to point out that the Information System for the Planning and Monitoring of Rural Development of Bogota D.C. is being developed, which will provide information to decision makers on the Rurality of Bogota. A rural development study is also being prepared.



included a component related to financial protection (FP).

FP against disaster risk and climate change has been in the Bogotá D.C. regulations since 2004. The FP component was initially included in article 25 of District Decree 332, 2004 “Organizing the Regime and System for Emergency Prevention and Relief in Bogotá, Capital District, and issuing other provisions.” This defines as duty of the Planning Commission of the then District System for Emergency Prevention and Relief the support to the District Treasury Secretariat in the formulation and implementation of “a financial strategy to guarantee the investment of resources in risk prevention and mitigation, contingent funds for emergency relief and rehabilitation, the promotion of private risk insurance and other financial instruments in order to reduce the District’s fiscal vulnerability against disaster, calamity or emergency situations” and in general, planning and considering the economic and social contingency impacts that can be generated in the eventual occurrence of a major disaster in the city.

District Decree 423 of 2006, adopting the Plan for Emergency Prevention and Relief of the Capital District, considered the inclusion of FP as one of the Disaster Risk Management (DRM) policies in the Capital District, laying the foundations for the FP Strategy. In relation to private and public assets “of national, regional or district order, and of the structures and functions that support the recovery of the economy after a possible disaster” (article 4 subsection 9), article 6 subsection 5 established the FP as one of the lines of action of the “District Plan for Emergency Prevention and Relief” to carry out the “Financial protection of public and private capital against risk, through the implementation of proper post-event rehabilitation and reconstruction plans and the identification

and implementation of financial mechanisms to reduce the District’s fiscal vulnerability against disasters, as well as the promotion of the insurance of public and private assets and the technical and economic co-responsibility in risk generation by public or private actors.”

District Agreement 546 of 2013 transformed the District Emergency Prevention and Relief System (SDPAE) into the District Risk and Climate Change Management System (SDGR-CC), created the District Fund for Risk and Climate Change Management of Bogotá, D.C. (FONDIGER), which created a close link between DRM, Climate Change (CC) and FP as a comprehensive part of this policy. The FONDIGER has a special Capital District account, with equity, administrative, financial, accounting and statistical independence, and resources, among others, from financial protection strategies against disaster risk and their financial returns. It also laid the definitive foundations of the district financial protection against disaster risk strategy, establishing, in article 11 paragraph I, one of the functions of the District Institute for Risk and Climate Change Management (IDIGER) which was to “Coordinate with the system entities the formulation and execution of a financial strategy that will strengthen the financial protection against disaster risk.”

District Decree 172 of 2014 maintained the district’s financial strategy within the District Risk and Climate Change Management System (SDGR-CC). However, since District Decree 332 of 2004 was repealed, the spirit thereof was maintained in the new regulation. Article 12 provides some of the functions of the District Council for Risk and Climate Change Management (CDGR-CC): “Analyze and approve the financial strategy of the District Risk and Climate Change Management System (SDGR-CC), for the validity of each District Plan for Social



Economic Development and Public Works” and “Analyze and approve the financial protection strategy against disaster risk.”

Bogotá D.C. has conducted seismic risk quantification studies and studies on the technical, legal and operational aspects to implement schemes to strengthen public asset insurance and promote the private housing insurance. Accordingly, Bogotá will use, among others, the technical studies prepared both to quantify the seismic risk and to analyze the technical, legal and operational aspects to strengthen public asset insurance and implement schemes that promote private housing insurance.

In 2013 Colombia established the DRFM Strategy,⁵ which has guided the definition of the activities performed at the national level to advance in Disaster Risk Financial Management. The three policy objectives of this strategy are:

1. Identifying and understanding fiscal risk due to the occurrence of disasters;
2. Disaster Risk Financial Management, which includes the implementation of innovative financial instruments; and
3. Catastrophic risk insurance for public assets.

The DRM legal framework in Colombia considers pandemics within the definition of disasters. Law 1523 of 2012, article 4 subsection 8 and article 51, defines disaster as “...the result that is triggered by the manifestation of one or more unintentional natural or anthropogenic events that, upon finding favorable vulnerability conditions in people, goods, infrastructure, means of subsistence, provision of services or environmental resources, causes human, material, economic or

environmental damage or loss, generating an intense, serious and widespread alteration in the normal operating conditions of society, which requires the State and the national system to carry out emergency response, rehabilitation and reconstruction actions.” It is clear that disasters, and of course epidemics and pandemics, have a significant impact on public health and are considered within the disasters category as conceived by Colombian regulations, including those that, propagated in the form of epidemic, simultaneously, intensely and indiscriminately affect a large number of people for a certain period of time.

The public health contingency generated by the Coronavirus (COVID-19) has magnified the need for resources and budget support to face the occurrence of disasters in Colombia. The pandemic caused by COVID-19 has demanded considerable resources to face the health, economic and social crisis. The Government of Colombia (GoC) and the government of Bogotá, D.C. have made several decisions: the Declaration of a State of Exception of Economic, Social and Ecological Emergency by the President of the Republic (National Decree 417 of 2020); the Declaration of District Public Calamity by the Mayor’s Office of Bogotá, D.C. (District Decree 087 of 2020); and the management of different financial instruments. This includes the creation of solidarity taxes, Emergency Mitigation Funds and the activation in April 2020 of the WB contingent credit line for US\$ 250 million, among others.

This Financial Protection Strategy considers both the objectives established by the MHCP and the principles proposed by the World Bank. The MHCP considered the following objectives: (i) the

5 This strategy was updated in 2016 and 2021. Bogotá’s FP Strategy is aligned with the 2016 national level version. Available at: https://www.irc.gov.co/webcenter/ShowProperty?nodeId=%2FConexionContent%2FWCC_CLUSTER-012574%2F%2FidcPrimaryFile&revision=latestreleased.

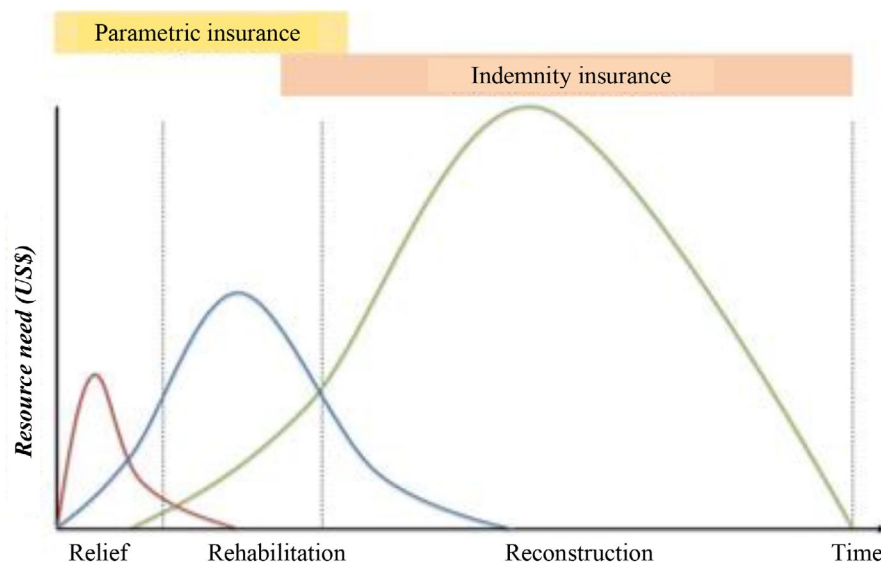


various instruments historically used to deal with the occurrence of disasters; (ii) the financial instruments stipulated by current regulations; (iii) the need to evaluate other financial instruments. Additionally, the Disaster Risk Financial Management principles proposed by the World Bank are:

1. **Timeliness of resources.** In the aftermath of the disaster, not all the resources are required

at the same time. Rapid access to resources is required for the relief and rehabilitation phase. The resources for the reconstruction phase will be required for several months, or years after the event, after completion of the technical studies in order not to build back under vulnerable conditions. Figure 1 presents the three post-disaster phases, and the respective insurance proposal.

Figure 1. The timeline in post-disaster financing



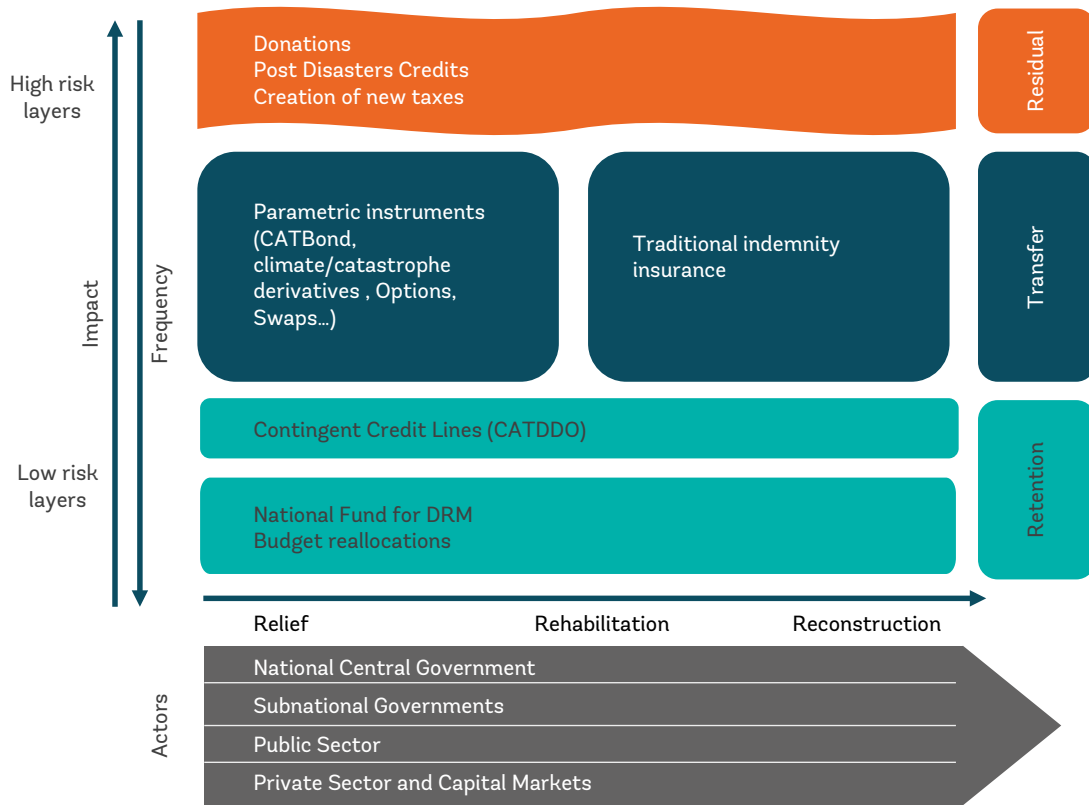
Source: Adapted by Mahul and Ghesquiere, 2010

2. **No financial instrument can cover all risks.** It is proposed to consider an optimal combination of different financial instruments to cover the different risk layers according to frequency and intensity. The DRFM Strategy at the national level establishes a layered financing strategy for

disasters, which considers ex-ante and ex-post instruments (Figure 2). "...Risk retention is used for recurring, less severe events, financed through reserves and contingent credits; the risk that exceeds the retention capacity of the state is transferred through financial market instruments..."



Figure 2: Risk Layered Financial Strategy for Disasters at the National Level



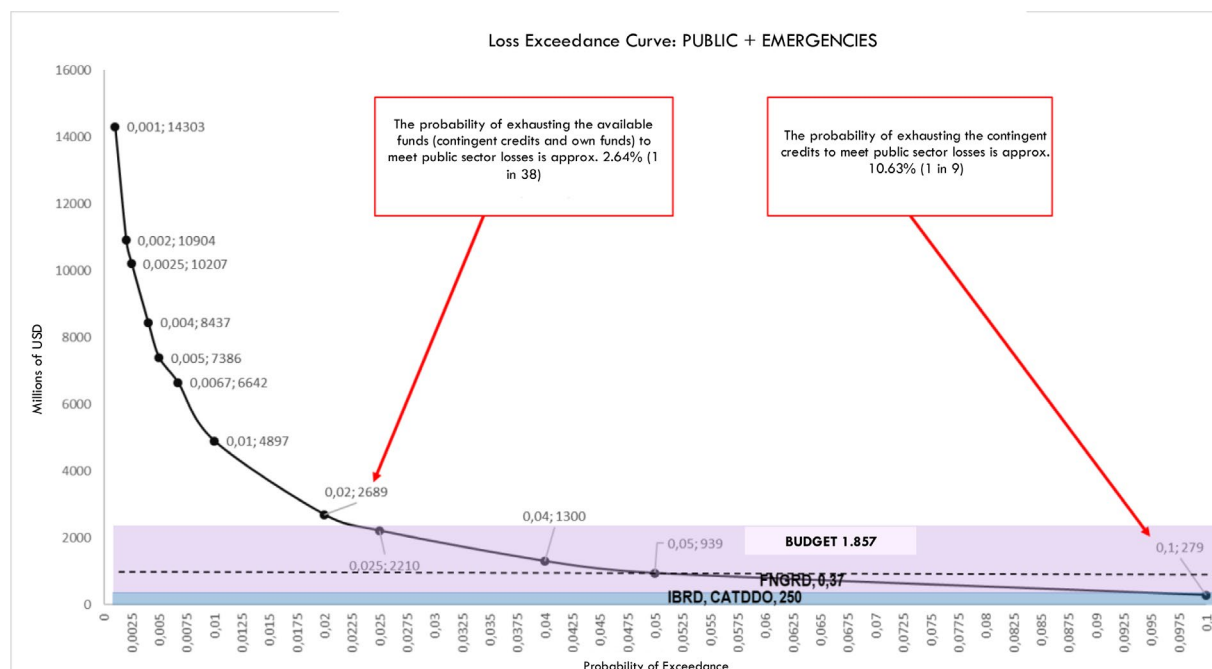
Source: Ministry of Finance and Public Credit (2021)

3. **How the money reaches the beneficiaries is as important as where it comes from.** Financial Protection must contribute to the design of mechanisms and information systems that allow resources to be transferred transparently and in timely manner to the most vulnerable population affected by disasters.
4. **Making sound financial decisions requires correct information.** Decision-making requires robust information and analysis that allow, among other things, understanding fiscal risk, performing quantitative analysis and generating tools for decision-making, such as financial gap

and cost-benefit analysis. To evaluate the Seismic Cat Bond within the Pacific Alliance framework, Colombia developed a stochastic analysis of the financial gap, determining the annual probability of exhaustion of the current financial instruments (National Fund for Disaster Risk Management (FNGRD), budget reallocation and contingent credit line) to have a point of reference for structuring the Cat-Bond to have access to resources for devastating events. It was shown that the instruments to date in the country were insufficient.



Figure 3: Financial Gap Analysis



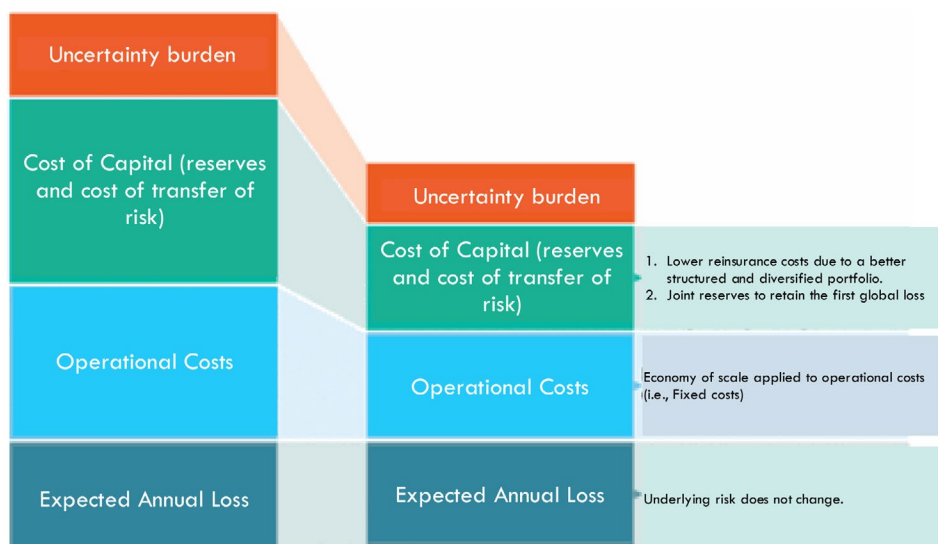
Source: MFMP (2018), Ministry of Finance and Public Credit of Colombia

5. **Benefits of diversification.** “Aggregating risk in larger and more diversified portfolios, catastrophic risk pooling at the national level or regional level between countries can reduce the cost of access to international insurance markets. Risk pooling generates diversification benefits that are reflected in reduced insurance premiums...” (World Bank, GFDRR and SECO, 2014, pg. 74), this is illustrated in Figure 4. As an example, in 2018 the Pacific Alliance countries (Chile, Colombia, Mexico and Peru) jointly issued a catastrophic bond, which allowed reducing the fiscal exposure of the four

countries, transferring the risk of earthquake, helping to respond quickly to the occurrence of a disaster and taking advantage of the benefits of diversification. This joint Catastrophic Bond generated advantages for the countries and for investors: i) savings, by sharing the costs of structuring the bond issuance; and ii) reduction in the price of the coverage (premium), since the joint issuance offers the market an opportunity for diversification (risks from four different geographical areas).



Figure 4: Benefits of Diversification



Source: World Bank, GFDRR and SECO (2014)

Bogotá D.C. defined FP strategic lines within the 2018-2030 District Plan for Disaster Risk and Climate Change Management (PDGR) for Bogotá D.C.⁶ The PDGR includes a component on the Financial Protection Strategy for Seismic Risk (main risk for the city), with the following strategic lines of action articulated with the national level:

1. Identification and understanding of the fiscal risk due to the occurrence of disasters: (i) Evaluation of earthquake damage and its continuous updating.
2. Management of Financial Instruments for Risk Management: (i) Implementation of contingent credit for disaster response and recovery; (ii)

Design and implementation of instruments for post-disaster recovery; (iii) Development of the financial protection subaccount of the District Fund for Risk and Climate Change Management (FONDIGER).

3. Catastrophic risk insurance of public assets: (i) Promotion and implementation of the insurance of fiscal assets; (ii) Promotion of housing insurance.

Bogotá seeks to strengthen its FP. Bogotá requested support from the MHCP to strengthen its FP strategy articulately with the DRFM Strategy, considering its particularities.

6 Approved by the District Council for Risk Management and Climate Change, Ordinary Session of November 9, 2018



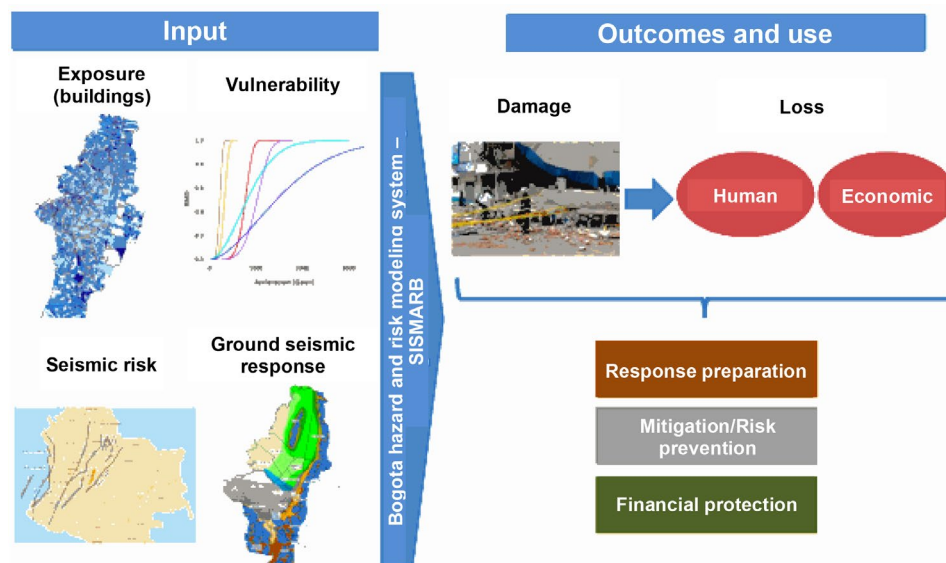


Exposure to disasters and climate change

Bogotá, D.C. concentrates the territory with the highest population and percentage of GDP production in Colombia and is highly exposed to seismic risk. The seismic risk represents the greatest risk. Earthquakes are characterized by a low rate of occurrence and high impact, which can greatly affect the infrastructure and the population in the city. “In order to prioritize actions to reduce seismic risk in the

city, studies have been carried out for several years, to estimate, for probable seismic events, the damage and economic losses in buildings and the impacts on the population. A new update of scenarios was prepared in 2018...”⁷ This information, as shown in figure 5, is used for the FP. The quantitative results are presented in figures 6 to 7.

Figure 5: Possible uses for seismic risk information



Source: Presentation on Modeling seismic risk in buildings for the city of Bogotá 2018 SISMARB Version, available at: <https://www.idiger.gov.co/rsismico> (consulted May 8, 2020)

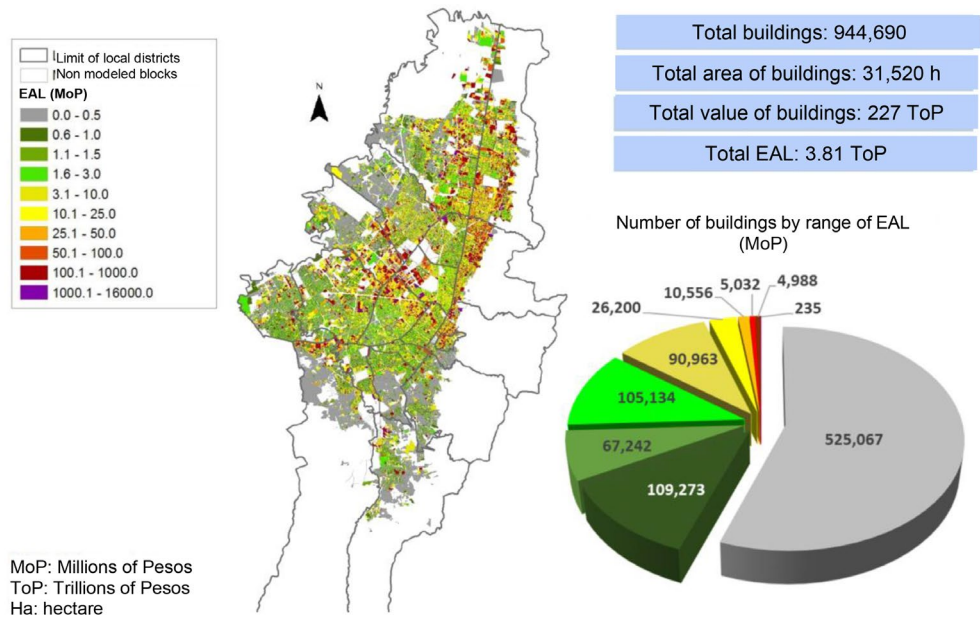
This study estimates an Expected Annual Loss of 1.68%, with an annual probability of 1%, and a loss of 10.84% of the exposed value of the building portfolio (public and private) in the city. Figures 6 and 7 show that seismic risk studies report an Expected Annual Loss (EAL) of 3.81 trillion pesos, which represents 1.68% of the exposed value of the building portfolio in the city, estimated at 227 tril-

lion. Likewise, it is projected that a seismic event with a return period of 100 years could generate expected losses of 10.84%, and that a seismic event with a return period of 500 years could generate expected losses of 20.30%. These loss estimations show the need to implement financial protection instruments, including risk transfer.

7 From <https://www.idiger.gov.co/rsismico>



Figure 6. Probabilistic estimation of losses, Expected Annual Loss in MoP



Source: Presentation on Modeling seismic risk in buildings for the city of Bogota Version 2018 SISMARB, available at: <https://www.idiger.gov.co/rsismico> (accessed May 8, 2020)

Figure 7. Probabilistic estimate of losses, Probable Maximum Loss Table (PML)

Exposed amount: 227 trillion pesos		
EAL 3.82 trillion pesos (16.83%)		
Return period (years)	Loss	
	PML (ToP)	%
2	1.2	0.51
5	4.2	1.85
10	7.6	3.34
20	10.4	4.56
50	18.0	7.95
100	24.6	10.84
250	39.3	17.31
500	46.1	20.30
1,000	52.0	22.92
2,500	48.8	21.50
5,000	63.2	27.84
10,000	65.6	28.92

ToP: Trillions of Pesos
0/00: per thousand

Source: Presentation on Modeling seismic risk in buildings for the city of Bogota 2018 SISMARB Version, available at: <https://www.idiger.gov.co/rsismico> (consulted May 8, 2020)



Bogotá, D.C. also faces the risk of floods, mass movements and torrential floods. The urban area of Bogotá is divided into four main drainage basins which correspond to the Torca, Salitre, Fucha and Tunjuelo rivers. All these basins feed into the Bogotá River as the main receptor. Given the risk of flooding, interventions have been carried out and various flood risk reduction measures have been implemented, reducing the areas most at risk of flooding and therefore their exposure. In relation to the mass movements of the hill slopes in Bogotá D.C. (30,776 Ha) in the urban area, approximately 9% is categorized as high risk (2,776 Ha) exposing 214,000 inhabitants. The local districts with the greatest susceptibility to landslides, according to their risk rating, are, in order: Ciudad Bolívar, Usme, San Cristóbal, Usaquén and Rafael Uribe Uribe. Finally, there are 70 basins susceptible to torrential flood events. 91% of these basins could generate events in the urban area of the city and 9% in the rural area of the District. (Adapted from www.idiger.gov.co/#Escenarios-de-riesgo).

These hazards may be exacerbated by climate change and climate variability, as is observed today.

Bogotá, D.C. will also be affected by CC, which will increase the average temperature of the city and changes in rainfall level. “According to IDEAM, an increase in differentiated temperature and a change in the rainfall regime are expected for Bogotá throughout its territory.”⁸ Regarding temperature, “An increase in the average annual temperature of 0.8°C, 1.4°C and 2.2°C is projected by 2040, 2070 and 2100, respectively. The analysis uses the average temperature recorded between 1986 and 2005”⁹ as reference, as observed in Figure 8. Regarding the rainfall regime “An increase is estimated of 6.57%, 9.53% and 8.27% by 2040, 2070 and 2100 respectively in the general behavior of rainfall in Bogotá, in relation to the annual rainfall record between 1975-2015. Due to the characteristics of our city, a differentiated increase or decrease is projected by local district,”¹⁰ as seen in Figure 9.

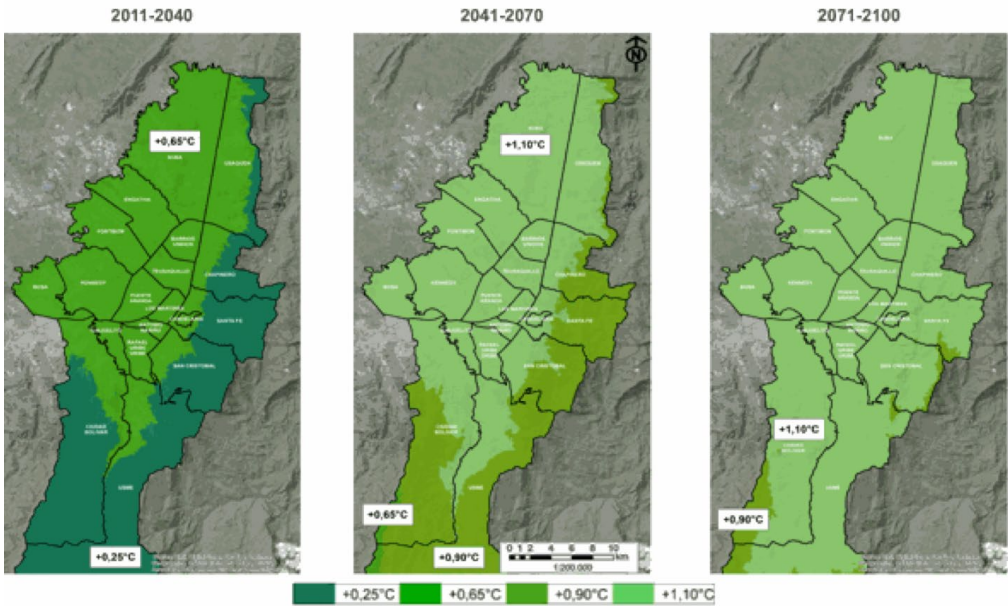
8 From <https://www.idiger.gov.co/rcc>, accessed May 18, 2020.

9 Ibidem

10 Ibidem

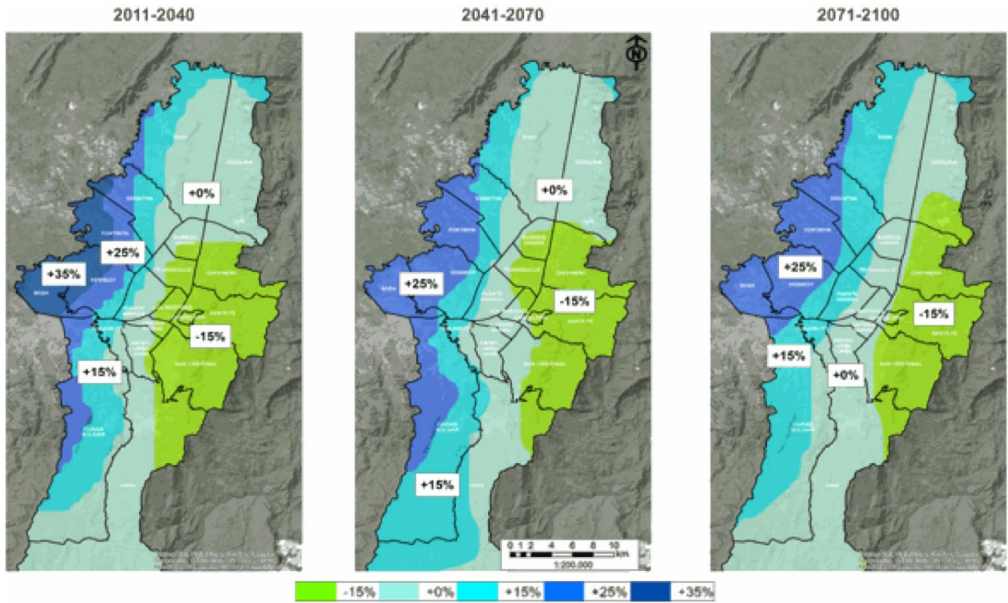


Figure 8. Scenario of annual mean temperature increase in centigrades (°C)



Source: <https://www.idiger.gov.co/rcc>

Figure 9. Rainfall change scenario in percentage (%)



Source: <https://www.idiger.gov.co/rcc>



Climate change creates challenges for Bogotá D.C. *“The evidence for climate change is found in... gradual changes in temperature and precipitation that slowly and progressively transform the climate of a region...”*¹¹ Therefore, the need for the city to be prepared for changes in temperature and precipitation is evidenced. The scenarios of changes are presented in figures 8 and 9, which may include financial protection instruments.

Bogotá, D.C. has been affected by the pandemic caused by the SARS-CoV-2 virus (COVID-19). The SARS-CoV-2 virus (COVID-19) spread rapidly in the city and produced severe impacts in the city's population and economy, in terms of massive infections, high number of deaths, saturation of the health system (especially occupying intensive care units), high demand in the supply of clinical supplies, loss of direct and indirect jobs and a general slowdown in the economy and the productive system.

The Mayor's Office of Bogotá, D.C. adopted general and specific measures to deal with the adverse effects of the pandemic in the city. In order to manage resources to attend to the health emergency and deal with the spread of the pandemic generated by the Coronavirus COVID-19, the Mayor's Office of Bogotá, D.C. adopted different measures, issuing more than 34 District Decrees,¹² which are summarized in Annex 2.

Among these measures, the attention and subsidy to the most vulnerable population, relief for the payment of taxes and mitigation of the economic impact, actions to preserve jobs and local busi-

ness fabric, relief in the operational deficit of the Integrated Public Transport System (SITP) and actions and incentives for safe economic reactivation. The District Administration adopted measures such as: establishment of the Specific Action Plan for the attention of the public calamity under the coordination of IDIGER, creation of the “Bogotá Solidarity at Home District System” (monetary transfers, exchangeable bonds and subsidies) to attend to the most vulnerable population, adjustment in dates for the payment of taxes, “Transitory Contribution of Solidarity Leasing in the Emergency” for the poor and/or vulnerable population, increase in the indebtedness quota management, modifications in the Annual Budget of Revenue and Income and Expenses and Investments for fiscal year 2020, issuance of the 2020-2024 District Development Plan (with the aim of consolidating a new social contract towards equal opportunities, recovery of losses derived from the emergency, redistribution and economic reactivation to address and mitigate the effects of the pandemic), specific actions to mitigate the Economic Impact and Economic Reactivation for the preservation of jobs and the business fabric, especially micro, small and medium-sized enterprises, as well as actions to alleviate the operational deficit of the Integrated Public Transport System (SITP) caused by the measures to restrict the level of occupation of mass public transport services.

In relation to the impact of COVID-19, as of February 7, 2022, confirmed COVID-19 infections in Bogotá represented 28.8% of the total ac-

11 Source: IDEAM and Ministry of Environment and Sustainable Development, Basic Concepts of Climate Change, available at <http://www.cambioclimatico.gov.co/otras-iniciativas> (Accessed July 22, 2020).

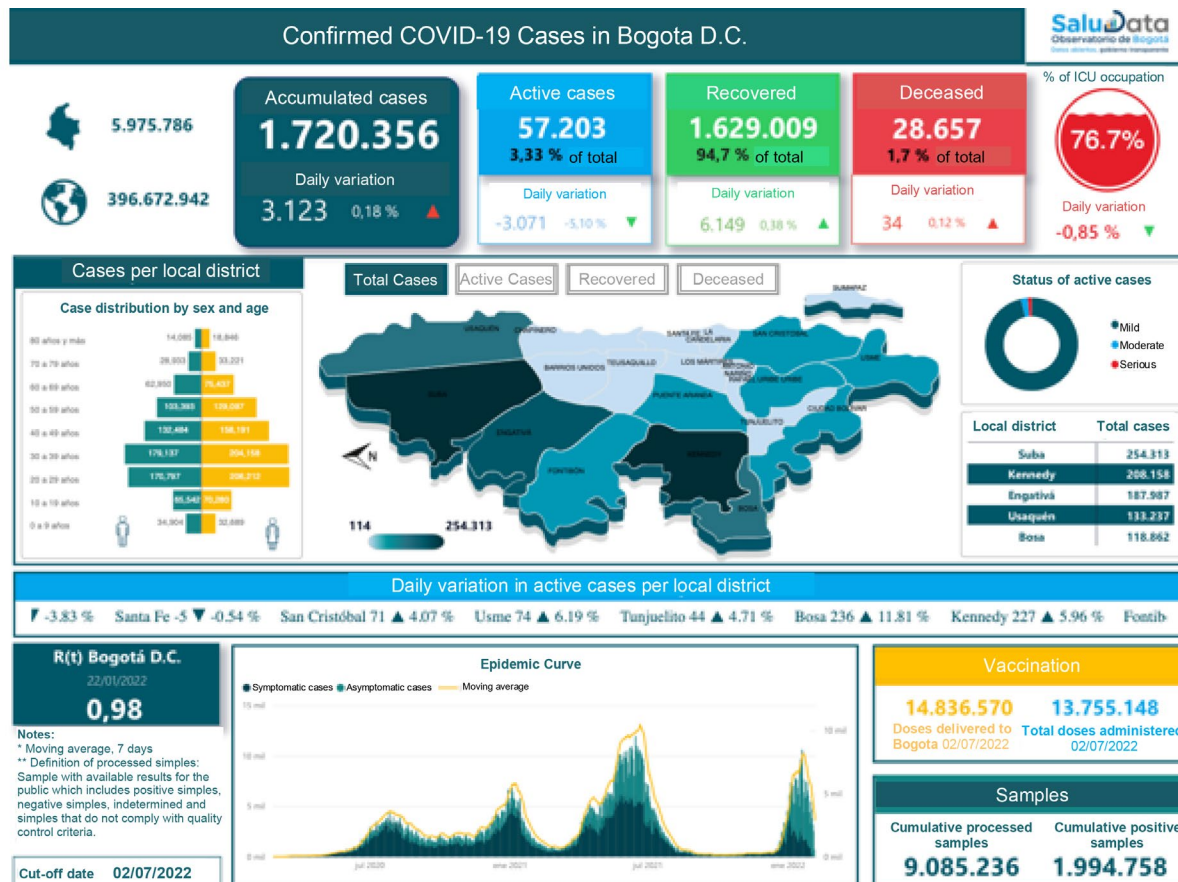
12 Complete consolidation of the District and National regulations of all the normative hierarchies issued, based on the Pandemic situation by SARS-CoV-2 (Covid-19) in Colombia and in Bogotá, D.C. Available at: <https://www.alcaldiabogota.gov.co/sisjur/listados/tematica2.jsp?subtema=34144&cadena=>



cumulated infection cases in the country. According to figures reported by the Bogota Health Observatory, the behavior of confirmed Covid cases in Bogota

shows 3.33% active cases, 94.7% recovered, and 1.7% deceased (Figure 10).

Figure 10. Confirmed cases of COVID-19 in Bogota



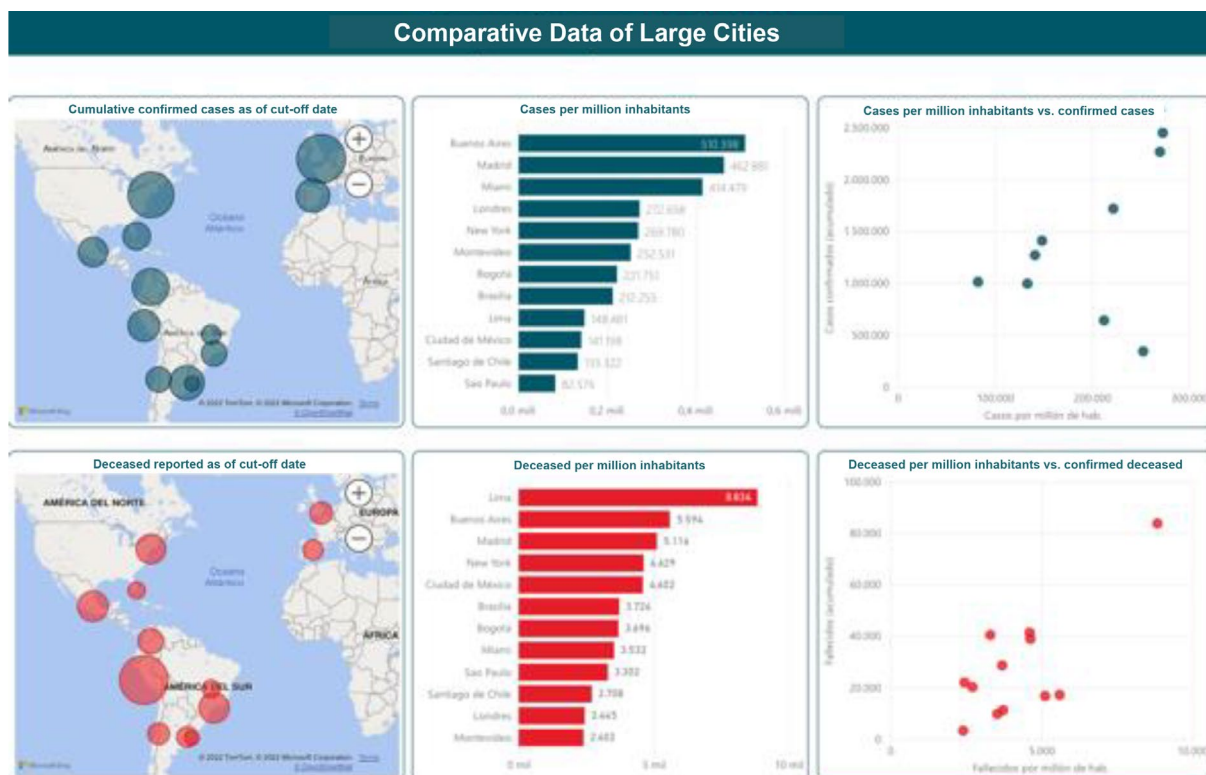
Source: <https://saludata.saludcapital.gov.co/osb/index.php/datos-de-salud/enfermedades-trasmisibles/covid19/>

As of February 7, 2022, Bogota had 738.7 active cases per 100,000 inhabitants. According to the Bogota Health Observatory, “Bogota has 738.7 active cases of Covid-19 per 100,000 inhabitants and a mortality rate of 444.6 per 100,000 in men and 288.9 per 100,000 in women. When comparing Bogota with

Miami, New York, Madrid, London and the main cities of Latin America, the capital of Colombia ranks seventh according to the number of cases per million inhabitants (221,751).” The comparison of large cities mentioned is presented in Figure 11.



Figure 11. Comparative Data of Large Cities



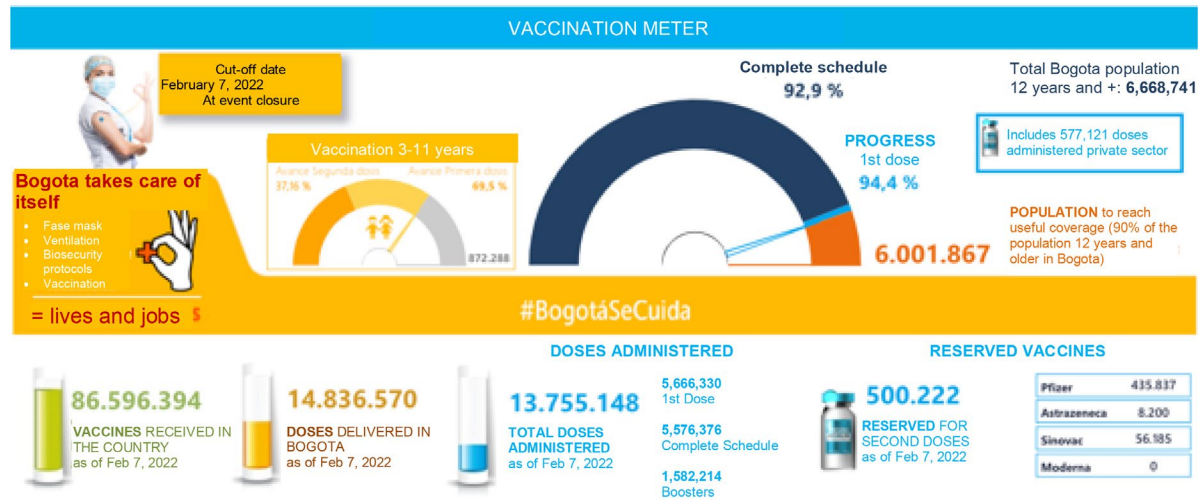
Source: <https://saludata.saludcapital.gov.co/osb/index.php/datos-de-salud/enfermedades-trasmisibles/covid19/>

Bogotá presents important advances in vaccination for the population older than 12 years. As of February 7, 2022, according to the figures reported by the Bogotá Health Observatory, of the total population of Bogotá over 12 years old, 92.9% have re-

ceived the complete vaccination schedule and 94.4% have the first dose. In relation to the 3 to 11 year-old population, 37.16% have received the second dose and 69.5% have the first dose (Figure 12).



Figure 12. Vaccination against COVID-19 in Bogotá

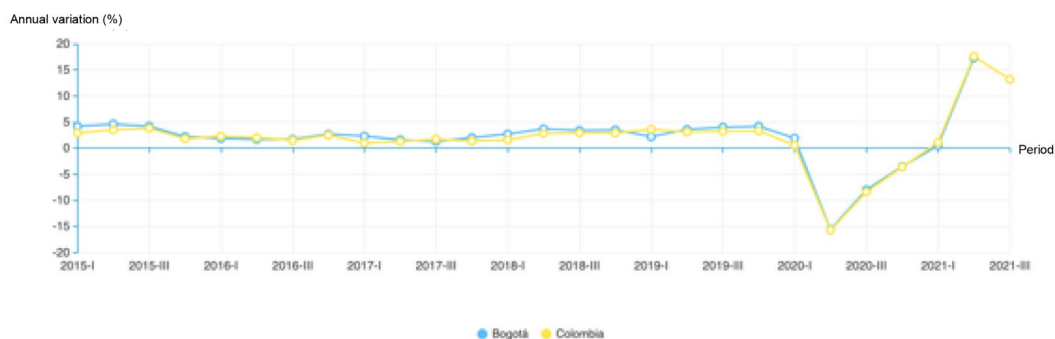


Source: <https://saludata.saludcapital.gov.co/osb/index.php/datos-de-salud/enfermedades-trasmisibles/covid-19-vacunometro/>

Bogotá's GDP is beginning to recover from the economic impact of COVID-19. Figure 13 reflects the recovery of the Gross Domestic Product of Bogotá for the second quarter of 2021, which is aligned with the recovery at the national level. It is worth

mentioning that according to the Statistical Report on economic growth of the Economic Development Observatory of the Bogotá Development Secretariat, following the GDP projected for 2020, Bogotá contributes 26% of the national GDP.

Figure 13. Bogotá and Colombia GDP, 2015-2021

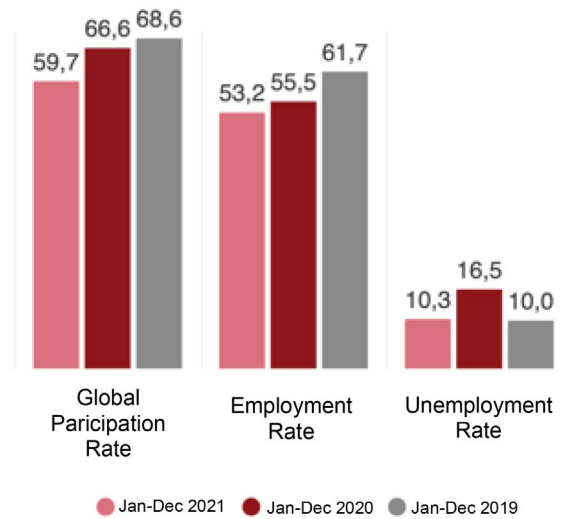


Source: <https://www.ccb.org.co/observatorio>, taken from DANE, National Accounts, 2021



The unemployment rate in Bogotá is also beginning to recover from the impact of COVID-19. Before the pandemic, the unemployment rate was 10%; in 2020 it reached 16.5%; and in 2021 it reached 10.3% (Figure 14).

Figure 14. Global Participation, Employment and Unemployment Rate, Bogotá D.C, December 2019-2021



Source: <https://www.ccb.org.co/observatorio>, from DANE, Great Integrated Household Survey (GEIH) - Labor Market, December 2021. Published January 31, 2022





Legal Framework

The legal framework at the national level and in Bogotá D.C. establishes various responsibilities related to FP. A general overview of these responsibilities is presented in this section, and a more detailed description in Annex 1. The legal framework for the national level establishes that the acquisition of insurance policies for public buildings is mandatory in Colombia (both for the national and the subnational level). Additionally, the laws approving the National Development Plan (PND) establish the responsibility of the MHCP to design a strategy for insurance against natural and/or unintentional man-made disaster risks, aimed at reducing the fiscal vulnerability of the State. On the other hand, Law 1523 of 2012 establishes the operation in Colombia of the principles of concurrence of competences (between national and subnational entities of the public, private and community spheres that constitute the SNGRD) and of subsidiarity, which, when positive, mandates that authorities at the national level should support lower-ranking or subnational authorities when they do not have the means to face the risk or its materialization into disaster.

The legal framework of Bogotá D.C. includes various FP-related responsibilities. Bogotá D. C., within its special regime as the Capital District, generated a regulatory framework that establishes specif-

ic functions and responsibilities with respect to FP. The District Institute for Risk and Climate Change Management (IDIGER) has the following functions: to coordinate with the entities of the system the formulation and execution of the financial strategy that strengthens financial protection against disaster risk. Its main financing instrument is the District Fund for Risk and Climate Change Management of Bogotá, D. C., (FONDIGER). Its general purpose is to obtain, collect, administer, invest, manage and distribute the necessary resources for the operation of the District System of Risk and Climate Change Management (SDGR-CC), under inter-institutional schemes of co-financing, concurrence and subsidiarity, for the development of Risk and Climate Change Management processes. Consistent with the aforementioned legal framework, the 2018-2030 District Plan for Disaster Risk and Climate Change Management for Bogotá D.C., approved by the District Council for Risk and Climate Change Management, involves the objective of reducing high impact seismic vulnerability, which includes the PF strategy of the Capital District. It is worth mentioning that the District Finance Secretariat (Risk Control Office) must review the different financial alternatives for the implicit contingent liability management that supports DRM and climate change in the Capital District.





Policy Objectives

The strategic lines of Bogota D.C. include the insurance of private sector assets. Additionally, the SDGR-CC and FONDIGER, within their objectives and purposes, consider not only FP, but also CC. Within this context, and as already mentioned, a component of the PDGR is a Financial Protection Strategy for Seismic Risk, which *“Includes public provisions to leverage the financing of relief and recovery of large-scale disasters. The strategy is based on the consideration of seismic risk as the main risk scenario for the city, since this disaster can cause enormous losses far beyond those that could occur due to disasters associated with mass movements, floods or any other risk scenario in the city.”* This strategy includes the following strategic lines of action: (i) Identification and understanding of fiscal risk due to the occurrence of disasters; (ii) Management of Financial Instruments for Risk Management; and (iii) catastrophic risk insurance of public assets. In order to strengthen the FP strategy, its scope was extended to other types of events such as hydrometeorological risks and epidemics.

First policy objective: Identification and understanding of fiscal risk due to the occurrence of disasters

Generating information to analyze and support decision making is the basis of any FP Strategy. To advance in the implementation of the FP Strategy in Bogota, D.C., the following is required, among others:

1. **Conduct risk assessment studies of the main risks.** In the case of Bogota D.C., it was established that the risk that could generate the greatest economic impact would be an earthquake. In this sense, the city must regularly update the earthquake damage scenarios, which are an input to estimate the resources required to cover the

damage and loss scenarios, as well as to evaluate alternative financial instruments to manage them.

2. **Define the fiscal impact of the occurrence of historical events.** Gathering historical information on disaster losses will help measure the resources needed to cover the different phases after the occurrence of disasters (emergency, rehabilitation and reconstruction).
3. **Understand the level of exposure and insurance of the inventory of public assets.** A web information system to manage information on the characteristics of the properties and their property insurance policies, sustainable over time, will allow to negotiate better conditions, in accordance with international standards for the insurance of the inventory of public assets, due to the reduced uncertainty of the portfolio of risks to be covered. Within this context, Bogota, D.C. will evaluate the web information system that the MHCP is implementing.
4. **Incorporate disaster risk analysis into the district public investment process, as well as climate change adaptation studies.** Strengthening the technical and legal instruments to incorporate disaster risk analysis and adaptation to climate change in the district public investment process will reduce the vulnerability of the infrastructure built with the city's public resources.

Second policy objective: Management of financial instruments for Risk Management

Currently, the FP strategy of Bogota D.C. has ex ante instruments that enable allocating resources in the event of disasters, which can be complemented with ex-post financial resources that can be mobilized after the occurrence of an event of any kind.



Ex-ante financial instruments in force:

Resources of the Annual Budget of the Capital District. In the event of a disaster Bogotá D.C. can reallocate resources from the budget to attend to the disaster emergency.

Fondiger. In the transformation context from the District Emergency Prevention and Relief System (SDPAE) to the District Risk and Climate Change Management System (SDGR-CC), article 12 of District Agreement 546 of 2013 created the District Fund for the Risk and Climate Change Management (FONDIGER) as a special account of the Capital District, with equity, administrative, financial, accounting and statistical independence, managed by the IDIGER, without legal status to comply with the object and scope of the SDGR-CC. The Mayor, in District Decree 174 of 2014, regulated the operation of FONDIGER, granting it the general purpose of obtaining, collecting, investing, managing and distributing the necessary resources for the operation of the SDGR-CC, under inter-institutional schemes of co-financing, concurrence and subsidiarity, for the development of Risk and Climate Change Management processes in accordance with the specific provisions of Article 13 of District Agreement 546 of 2013 and generically by Law 1523 of 2012.¹³

In relation to the FONDIGER resources, the CDGRD-CC, in accordance with the PDGR and the district procedures for adaptation to climate change, will establish the resource guidelines. In addition to their cumulative nature and the fact that they, in no case, will be withdrawn for reasons other than the

DRM (in compliance with the provisions of the paragraph of article 54 of Law 1523 of 2012). Resources have the following sources¹⁴:

1. The resources of the special account of the District Treasury Secretariat (District Treasury) called “Risk Management Fund - Law 1523 of 2012” referred to in the paragraph of article 12 of Decree No. 164 of April 12 of 2013.
2. The resources and assets that IDIGER transfers to it.
3. An annual sum of compulsory inclusion in the District budget, no less than 0.5% of the current tax revenues of the Central Administration for free-use.
4. The contributions that may be made by entities and companies of an international, national, department, district or private nature and natural persons.
5. Resources from financial protection strategies against disaster risk.
6. Financial returns.

Public asset insurance. As already mentioned, in Colombia the insurance of public assets is mandatory, both at the national and territorial level.

Ex-post financial instruments:

Creation or modification of District Taxes. The District Council can establish, reform or eliminate levies, contributions, taxes and surcharges.

Disposal of shareholding in District companies. It is possible for the Capital District to alienate (buy, sell, negotiate, etc.) all or part of its companies or the

13 It is worth mentioning that FONDIGER has not been expressly and/or exhaustively assigned a specific function related to the management, acquisition or holding of financial protection instruments or mechanisms against disaster risk.

14 From Article 16 of District Agreement 546 of 2013.



shareholding in them, prior authorization by the District Council through the respective Agreement.

Indebtedness. Contracting local and/or external debt is an alternative to obtain resources to deal with the occurrence of disasters.

To complement the aforementioned instruments, Bogotá D.C. will evaluate other financial instruments and consider mechanisms to strengthen some of the current instruments:

1. **Strengthen FONDIGER.** Strengthening of FONDIGER also includes the strengthening of the financial protection sub-account created by Agreement 006 of December 29, 2016 of the Board of Directors. Additionally, Bogotá D.C. is evaluating a potential design of a distribution methodology of FONDIGER's resources.
2. **Evaluate the contracting of contingent credit lines.** Implementation of contingent credit lines for disaster response and recovery.
3. **Design and implementation of instruments for post-disaster recovery.**
 1. **Assess the feasibility of implementing a scheme to promote household insurance for private individuals.** Bogotá is interested in evaluating the feasibility of establishing a scheme to promote household insurance for private individuals. For this purpose, it will evaluate the national and international schemes and experiences of insurance pools of private property against disasters, and that may be useful to promote the insurance of private parties in the event of a disaster in

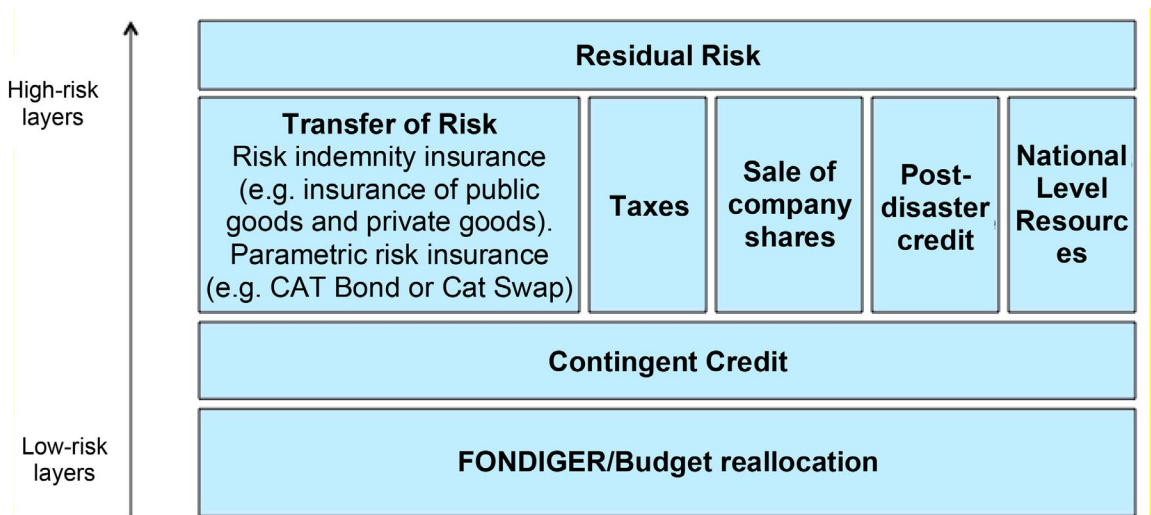
Bogotá D.C., where more resources can be assigned to support the most vulnerable population.

4. **Evaluate risk transfer instruments for seismic events.** For illustrative purposes, it could evaluate a CAT bond or a nationwide CAT bond renewal tranche.
5. **Protocols for the transfer of resources.** The implementation of the aforementioned financial instruments must be accompanied by action protocols, both in face-to-face and non-face-to-face situations, as well as mechanisms and information systems to transfer resources to the most vulnerable population affected by the disaster, from the effects adverse effects of climate change, or due to the pandemic.
6. **Protocols to manage financial instruments.** The implementation of the different financial instruments must be accompanied by face-to-face and non-face-to-face action protocols, in order to be able, for example, to manage debt under more flexible conditions. Additionally, protocols to procure in emergency situations with the resources from the different financial instruments should be reviewed.

Bogotá, D.C. wishes to evaluate the implementation of an optimal combination of financial instruments, such as the one described in Figure 15. In order to establish an optimal combination of financial instruments to attend to the occurrence of disasters, a Cost-Benefit and financial gap analysis will be carried out, regarding their availability in time.



Figure 15. DRFM Strategy for Layered Financing.



The resource management derived from PF instruments carried out by Bogota, D.C. will be developed without prejudice to the principle of subsidiarity established by the SNGRD. Eventually, the national level could allocate resources to deal with the occurrence of a major event in Bogota through the mechanisms and in the manner authorized by the applicable legal system.

Financial Instruments for Climate Change

The PDGRCC establishes, as component 2. Mitigation of Climate Change. The objective is to “Promote Bogota as a sustainable, efficient and low-carbon city,” which means that “Bogota will guide its development towards a minimum generation of greenhouse gases through the implementation of strategies, programs and projects to mitigate climate change in all productive sectors, thus benefiting from the opportunities of green growth, while protecting the environment and making responsible use of its natural resources.”

Within this context, Bogota will evaluate some financial instruments proposed by the national level, such as:

Green bonds “Green bonds are fixed-income instruments with a distinctive feature: the proceeds go exclusively to new and existing projects with environmental benefits. These relate to climate change mitigation or adaptation/resilience and other environmental issues, such as depletion of natural resources, loss of biodiversity, and air, water, or soil” (Sustainable Banking Network, Climate Bonds Initiative and IFC, 2018, pg. 3).

Green Climate Fund. “...the Green Climate Fund (FVC) is established as the main resource of the Convention for the fulfillment of the Climate Change objectives for the paradigm shift towards low-carbon and climate-resilient development, embodied in eight result areas : Low-emission energy, Low-emission transport, Efficiency in buildings, cities and industries, Sustainable land use and forest management, Improved livelihoods of vulnerable communities, Improved health, well-being, food and water security, Resilient infrastructure and Resilience in ecosystems” (SISCLIMA Financial Management Committee, 2017, pg. 10). According to the



Financial Management Committee of the SISCLIMA of Colombia, “*The added value of accessing the resources of the Green Climate Fund lies in the fact that this Fund finances projects with very demanding standards to ensure that they ambitiously and effectively contribute to mitigation and adaptation to climate change, and these capacities to formulate projects are called to be integrated into the frameworks for structuring and approving existing projects in the country*” (SISCLIMA Financial Management Committee, 2017, pg. 8).

Coverage instruments for hydrometeorological events. Taking into account that Bogota presents risks from floods, mass movements and torrential floods, transfer instruments for hydrometeorological events will be evaluated, which could include analyzing tranches of financial instruments jointly with the national level.

Third policy objective: Catastrophic risk insurance of public assets

The FP Strategy includes the strengthening of insurance, for buildings and concessions with the PPP scheme. In Colombia, the insurance of public assets is mandatory (both nationally and territorially). Bogota, D.C. seeks, among other things, that resources stipulated by the regulations be assigned to contract insurance policies, resulting in better coverage at better prices and complying with international standards. In this sense, it plans to evaluate the progress generated at the national level, such as:

1. **Strengthening the insurance of concession contracts through PPP schemes for road infrastructure.** Bogota, D.C. will evaluate the feasibility of adopting the technical guidelines on insur-

ance requirements based on the best practices of the international (re)insurance market proposed by the MHCP, and adapted by the ANI with the participation of FASECOLDA and insurance and reinsurance market players. The enhanced insurance requirements for PPPs help to manage the government’s contingent liability, managing the following risks: (i) Financial risk, transferring the risk to the private sector through insurance and reinsurance; (ii) Credit/counterparty risk, ensuring that the different actors (insurers, insurance intermediaries, etc.) have a high-quality standard; (iii) Underwriting risk, providing relevant, robust, and quality information to insurance companies. Reducing these risks could also benefit the private sector in its efforts to finance infrastructure investment.¹⁵

2. **Strengthening the insurance of public buildings.** Bogota, D.C. will evaluate the feasibility of promoting, in the district entities, the guidelines and instruments prepared by the MHCP and the CCE:

1. The acquisition of Insurance and Insurance Intermediaries through the different alternatives allowed by the legal system, eventually including demand aggregation mechanisms.
2. Adoption of the guidelines and objectives for the insurance of fiscal assets in the event of natural disasters, which seek to generate an instrument to improve the level and quality of the insurance of fiscal assets in the event of natural disasters,¹⁶ through a proposal to strengthen the procurement process for both direct and consequential damage insurance,

15 From MHCP contributions in 2017 to the draft document “Adapting Public-Private Partnerships (PPPs) to climate change: Recommendations for Colombia”, Sisclima Financial Management Committee.

16 Available at: https://www.urf.gov.co/webcenter/ShowProperty?nodeId=%2FConexionContent%2FWCC_CLUSTER-080205%2F%2FidcPrimaryFile&revision=latestreleased



which allows all state entities to: (i) Understand the type of information, complete and robust, which they must have for an adequate underwriting and placement of policy process; (ii) Understand how the information on the underwritten policies should be organized and protected; (iii) Understand how to manage the collection of claims and the

payment of compensation in a timely manner; and (iv) Have inputs to carry out robust risk management. This, in order to obtain the best terms and conditions for the acquisition and, subsequently, the most suitable administration of the underwritten policies, within a robust management scheme for public sector risk management.



Annex 1. Legal Framework

The acquisition of insurance policies for public buildings is mandatory in Colombia (both at the national and subnational level). In accordance with the provisions of articles 34, subsection 21, and 48, subsection 63 of Law 734 of 2002, it is considered a very serious disciplinary offense for any public servant in Colombia (punishable even with dismissal and inability to perform public functions) “not to insure the assets of the State at their real value or to make the corresponding budgetary appropriations”. Other complementary regulations such as Law 42 of 1993 (articles 101 and 107), National Decree 663 of 1993 (article 101, subsection 4) and Law 1474 of 2011 (article 118) establish, among others, fines and the opening of processes of fiscal responsibility to public servants and individuals who manage funds or assets of the State without considering these responsibilities, which must be resolved through any of the legally authorized insurance companies. Therefore, the insurance of public assets (including buildings) is absolutely mandatory in Colombia.

The National Disaster Risk Management System (SNGRD) and the DRFM regulations incorporated in the Laws approving the National Development Plan (PND) contemplate specific aspects of FP. In particular, Law 1523 of 2012 and its regulatory decrees, as well as Law 1955 of 2019 issuing the PND 2018-2022 (article 269), which modified article 220 of Law 1450 of 2011 (PND 2011- 2014) and reiterated the responsibility of the MHCP to design a strategy for insurance against natural and/or unin-

tentional man-made disaster risks, aimed at reducing the State’s fiscal vulnerability. Additionally, the GoC established the inclusion of the subnational level in the DRFM, as a priority within the Medium-Term Fiscal Framework (2018 and 2019), as a key mechanism for the adequate management and sustainability of public finances in the event of natural phenomena.

Law 1523 of 2012 establishes the operation of the principles of concurrence of competences and subsidiarity in Colombia. Unlike the Mexican case, Colombian Law 1523 of 2012 establishes the principles of concurrence of competences (between national and subnational entities of the public, private and community spheres that constitute the SNGRD) and of subsidiarity, which, when it is positive, requires the authorities at the national level to support the authorities of lower rank or subnational when they do not have the means to face the risk and its materialization becomes a disaster or when a value, an interest or a relevant protected legal asset, for the superior authority, is at risk regardless of whether the entity that benefits from the support had previously sought the development and application of DRM policies.

In Bogota, D.C. the Economic, Social, Environmental and Public Works Development Plan of the Capital District 2020-2024 “includes several aspects related to FP.” The 2020-2024 Economic, Social, Environmental and Public Works Development Plan of the Capital District “A New Social and Environmental Contract for the Bogota of the 21st



Century”, adopted by Agreement 761 of 2020¹⁷, in relation to the PF proposes:

Instruments to support the management of the CC in Purpose 2, which corresponds to “Change our life habits to make Bogota greener and adapt to and mitigate the climate crisis”, through the programs:

1. “Program 27. Cultural change for climate crisis management. Its purpose is the self-recognition of Bogota in relation to the dynamics of the climate crisis, its relationship with the environment and the socio-cultural factors of the inhabitants, from which the collective construction and implementation of actions and/or transformations is achieved, to mitigate the effects of this phenomenon, motivating the participation, the exchange of experiences and the articulated planning of the different sectors involved; consolidate agroecological routes around self-sustaining orchards in the Bogota region; and the District Green Growth Strategy with a focus on environmental sustainability, innovation and circular economy.”
2. “Program 30. Efficiency in emergency relief. Reduce the impact, damage or loss of life, the environment, property, infrastructure, and property, generally public or private, in the city of Bogota and the region to which it belongs. Establish an adequate response in a comprehensive and cross-cutting way, through excellence in service under high quality standards, preparation, with specialized equipment, state-of-the-art means of communication and highly qualified and trained personnel. Integrate plans aimed at the organization and execution of the necessary actions for the optimal use of available human and technical resources that supply institutional strengthening in order to guarantee adequate risk management.”

The informed decision-making process supported by robust and accurate information in Purpose 5, which corresponds to “Build Bogota - Region with open, transparent government and conscious citizenship”, through the Program:

1. “Program 53. Information for decision making. Produce information and capacity for decision making in the generation of public value in the planning phases of territorial, environmental, social, economic, cultural development of the city – region, including the rural aspects, associated with the different instruments of the planning of the city – region, such as: formulation, monitoring and evaluation of the PDD, POT, social and cultural facilities, Risk and Climate Change Management (SIRE); Observatories for Women and Gender Equity; information system to identify labor market gaps; information on public policies of the Security, Coexistence and Access to Justice Sector; environmental information of Bogota; spatial data infrastructure of the District (IDECA), cadastral update, and other information from district entities.”

Budget instruments to support disaster risk reduction, reflected in Article 39, corresponding to the Budget Tracker, which states:

2. “The entities that make up the Annual Budget of the Capital District, in accordance with their competencies, will report compliance with cross-cutting policies, through a budget tracer, defined for gender equity, youth, population with disabilities, territorialization and citizen culture, ethnic groups and peacebuilding.

During the budget programming process, the investment projects that will have the new budget tracers referred to in the previous paragraph will be identified.

17 Consulted on May 8, 2018 at <https://bogota.gov.co/yo-participo/plan-desarrollo-claudia-lopez-2020-2024/>



Instruments to support the implementation of instruments that allow taking advantage of the benefits of diversification, reflected in Article 71 corresponding to Coordination with the subnational level, which states:

1. *“Since a commitment of this District Development Plan is the following: subnational integration, the development of joint agendas, facing common and/or shared problems in a coordinated manner, and taking advantage of the comparative advantages of our territory and of the people who we inhabit, it is necessary to develop subnational agendas on four scales...”*

Bogotá, D. C., within its special regime as capital district, designed a regulatory framework that establishes specific functions and responsibilities with respect to FP. Preliminarily, the purpose of the District Risk and Climate Change Management System (SDGR-CC), created by District Agreement 546 of 2013 and Regulated by District Decree 172 of 2014 is to generate synergy in the processes of (i) Understanding the risk, (ii) Risk reduction (PF included within this), (iii) Emergency and disaster management and (iv) Mitigation and adaptation to climate change, following the national DRM public policy established by Law 1523 of 2012 and the guidelines for climate change management in accordance with the provisions of Law 1931 of 2018.¹⁸ The PDGR approved by the CDGRCC through Agreement 001 of November 9, 2018 and adopted through District Decree 837 of 2018, includes the objective of reducing seismic and high-impact vulnerability, which includes the FP strategy of the Capital district. The District Institute for Risk and Climate Change Management (IDIGER) nature, functions, management and ad-

ministration bodies are defined by District Decree 173 of 2014, which executes, guides, and coordinates actions for disaster risk reduction, management of emergencies and adaptation to climate change, contributing to the sustainable development of the city and the protection and improvement of the quality of life of its inhabitants. One of its functions is to coordinate with the entities of the system the formulation and execution of the financial strategy that strengthens the financial protection against disaster risk. Its main financing instrument is the District Fund for Risk and Climate Change Management of Bogotá, D. C., (FONDIGER). Its general objective is to obtain, collect, administer, invest, manage and distribute the necessary resources for the operation of the SDGR-CC, under inter-institutional schemes of co-financing, concurrence and subsidiarity, for the development of Risk and Climate Change Management processes. Its operating regulations are determined by District Decree 174 of 2014. Within the main general expressions of the legal framework of Bogotá, D.C. regarding FP, the following can be highlighted:

1. The 2018-2030 District Plan for Disaster Risk and Climate Change Management for Bogotá D.C., approved by the District Council for Risk and Climate Change Management in its ordinary session on November 9, 2018, includes the Financial Protection Strategy for Seismic Risk (main risk for the city) as a component.
2. District Decree 173 of 2014 (Paragraph 12 article 3), establishes that it is IDIGER's function to *“Coordinate with the entities of the system the formulation and execution of a financial strategy that strengthens the financial protection against disaster risk.”*

18 <https://www.idiger.gov.co/sistema-distrital>



3. District Decree 172 of 2014 (Article 12) establishes the functions of the CDGRCC. These functions include:
 1. Formulate guidelines for the distribution of FONDIGER resources.
 2. Analyze and approve the FP strategy against disaster risk.
4. District Decree 601 of 2014 stipulates that the District Treasury Secretariat (Risk Control Office) must review the different financial alternatives for the management of implicit contingent liabilities that support DRM and climate change in the Capital District (paragraph v of article 9).
5. The Land Management Plan (POT) adopted by District Decree 190 of 2004, establishes (Article 139) that the knowledge about the city's seismic risk must be improved through the monitoring of the accelerograph network.
6. District Agreement 546 of 2013 of the Council of Bogotá, through which the District Emergency Prevention and Relief System (SDPAE) was transformed into the District Risk and Climate

Change Management System (SDGR-CC), and FONDIGER was created.

Regarding FONDIGER:

1. District Decree 174 of 2014 regulates the operation of FONDIGER as a special account of the Capital District with capital, administrative, financial, accounting and statistical independence, as established by Decree Law 1421 of 1993, Law 1523 of 2012, administered by the IDIGER, without legal status to comply with the purpose and scope of the SDGR-CC).
2. District Decree 173 of 2014 (Paragraph 3, article 7) establishes that the General Director of IDIGER has, among its functions, to *"Act as legal representative and ordering authority of the District Institute for Risk and Climate Change Management (IDIGER) and the District Fund for Risk and Climate Change Management (FONDIGER)."*
3. Agreement 003 of 2015 of the District Council approves the Operating Regulations for the Administration and Management of FONDIGER's resources.



Annex 2. Legal framework issued for the pandemic management in Bogotá, D.C. with emphasis on the most relevant provisions in DRFM and measures of relief and economic reactivation

Bogotá, D.C. has been affected by the pandemic caused by the SARS-CoV-2 virus (COVID-19).

To manage resources to attend to the health emergency generated by the Coronavirus COVID-19 and declared by the Ministry of Health and Social Protection (MSPS) through Resolution 385 of March 12, 2020,¹⁹ the Mayor's Office of Bogotá, D.C. adopted different measures to deal with the spread of the pandemic. Within the measures related to the economic management of the public health situation derived from Covid-19, more than 34 District Decrees were

issued by the District Administration, among which the following stand out:²⁰

- ✦ District Decree 087 of March 16, 2020²¹ “*Declaring the public calamity on the occasion of the epidemiological situation caused by the Coronavirus (COVID-19) in Bogotá, D. C.,*” according to the parameters established in Chapter V of Law 1523 of 2012, the mechanisms established for disaster risk financing management were accessed through the formulation of the Specific Action Plan for the attention of the public calamity stated in article 61 of the mentioned law.²²

19 (March 12) “Declaring the health emergency due to the coronavirus COVID-19 and adopting measures to deal with the virus.” Extended until February 28, 2022 through Resolutions 844, 1462 and 2230 of 2020 and Resolutions 222, 738, 1315 and 1913 of 2021. All issued by the Ministry of Health and Social Protection (MSPS).

20 Reference is only made to the most relevant District Decrees and those that established economic or financial management measures to address the public health situation generated by Covid-19 and/or for economic reactivation and return to normality, especially, those issued after the end of the declared public calamity for the same reason. However, the complete consolidation of the District and National regulations of all the normative hierarchies issued based on the Pandemic situation by SARS-CoV-2 (Covid-19) in Colombia and in Bogotá, D.C. It is available at: <https://www.alcaldiabogota.gov.co/sisjur/listados/tematica2.jsp?subtema=34144&cadena=> .

21 Extended by District Decree 192 of 2020 (August 25) “Extending the situation of public calamity in Bogotá D.C. declared by District Decree 087 of March 16, 2020, on the occasion of the epidemiological situation caused by the Coronavirus (COVID-19)”.

22 However, it is necessary to mention that by District Decree 074 of 2021 (March 16) “Declaring the return to normality of the Public Calamity declared by Decree 87 of March 16, 2020 and extended by Decree 192 on August 25, 2020 on the occasion of the epidemiological situation caused by the Coronavirus (COVID-19) pandemic in Bogotá, D.C.” the return to normality of the Public Calamity is declared on the occasion of the epidemiological situation



It was modified to establish the District Institute for Risk and Climate Change Management (IDIGER) as the coordinating entity of the District Risk and Climate Change Management System (SDGRCC), as responsible for adjusting the Specific Action Plan, incorporating the activities necessary to attend to the impacts. Within this framework, the Capital District projected the development of activities for COP \$116,446,765,472, leveraging FONDIGER through the financing of resources for COP \$26,699,712,738.

Within the Specific Action Plan, the Capital District executed resources for COP \$83,285,032,342. FONDIGER financed activities for COP \$27,048,148,874.

Currently not in force due to express derogation.

- ✦ District Decree 093 of March 25, 2020²³, “Creating the Bogota Solidarity at Home District System” to address the social contingency of the vulnerable population in the City of Bogota and

defining the adjustment in the payment dates for property and vehicle taxes.²⁴

The significance of the “Bogota Solidarity at Home District System” is important to highlight, which was financed with the resources allocated in the general budget of the Capital District, with contributions made by the nation, other subnational entities and with donations from individuals and national and international organizations.

Currently not in force due to tacit repeal.

- ✦ District Decree 123 of 2020²⁵, “Creating the Transitory Solidarity Lease Contribution in Emergency” on a monthly basis and for up to a maximum of three (3) months, according to budget availability, for the poor and/or vulnerable population under lease modality for tenancy, pension, shared, joint or individual types with a daily, weekly, monthly or any fraction of less than one month payment frequency, and that due to the emergency could have a greater risk of being affected given their socioeconomic conditions.

caused by the Coronavirus (COVID-19) in Bogotá, D.C., in accordance with the recommendation of the District Disaster Risk Management Council and in compliance with the provisions of Article 64 of Law 1523 of 2012.

23 Modified by District Decree 108 of 2020 (April 08) “Modifying and adding to Decree 093 of 2020 “Adopting additional and complementary measures on the occasion of the declaration of public calamity made by District Decree 087 of 2020” and making other decisions.”

24 Similarly, this Decree established the following as strategies: (i) Entities belonging to the economic development sector may suspend payments of contracts for uses and exploitation of public space and fair participation fees during the emergency period, as well as waive interest to delinquent beneficiaries during the duration of the calamity; (ii) The Institute for the Social Economy (IPES) and the Secretariat of Economic Development (SDE) will manage the targeted linking of popular stores to the Bogotá Solidaria en Casa District System, as part of the network for the provision of goods and services through digital strategies; (iii) Promote instruments and mechanisms to mitigate the economic impact and care for existing employment through the articulation of public-private partnerships; (iv) Carry out pertinent actions and alliances to promote the affected productive sector, by launching lines of credit in alliance with the National Guarantee Fund and Bancolombia, among others.

25 Modified by District Decree 143 of 2020 (June 15) “Delivering guidelines to continue the implementation of the mandatory isolation measure in Bogotá D.C. and making other decisions.”



- District Decree 108 of 2020²⁶ (Modifying and adding to District Decree 093 of 2020), “Creating the District System for the Mitigation of the Economic Impact, the Promotion and Economic Reactivation of Bogotá D.C. against the COVID-19 pandemic, for the preservation of jobs and the business net of the Capital District and in particular of micro, small and medium-sized companies.”

Currently not in force due to tacit repeal.

- District Decree 137 of 2020 extends the presentation and payment dates and authorizes the payment by installments of some district taxes, due to the impact on income and productive capacity derived from the Covid-19 pandemic.
- District Decree 200 of 2020 summons extraordinary sessions to the Council of Bogotá, D.C. for the period between September tenth (10th) and October thirty-one (31st), 2020, for the first and second debate on draft agreements of the District Administration, such as: incentives for economic reactivation, regarding unified property taxes and industry and commerce, product of the Coronavirus pandemic (COVID-19) and the authorization of a debt quota for the Central Administration and Public Establishments of the Capital District.
- District Agreement 761 of 2020²⁷ – Council of Bogotá, D.C. District Plan for District Development

oment “A New Social and Environmental Contract for Bogotá in the 21st Century.” “Article 2. General objective. This District Development Plan aims to consolidate a new social, environmental and intergenerational contract that allows progress towards equal opportunities, recovering the economic and social loss derived from the COVID-19 emergency, capitalizing on learning and solidarity channels, redistribution and economic reactivation created to attend to and mitigate the effects of the pandemic and in this way build with the citizens, a Bogotá where the rights of the most vulnerable are guaranteed through: the expansion of opportunities for social and productive inclusion, in particular of women, youth and families, to progressively overcome the factors of naturalization of exclusion, discrimination and socioeconomic and spatial segregation that prevent equal opportunities and the exercise of a free, collectively sustainable and happy life.”

- District Decree 323 of 2021²⁸ (paragraph, article 1) established that, in the event that the Capital District signs co-financing schemes in conjunction with the National Government to alleviate the operational deficit of the Integrated Public Transportation System (SITP) caused by the measures to restrict the level of occupancy of public transport services within the Covid 19 health emergency framework, and that the resources are effectively transferred and assigned to

26 Modified by Decree 121 of 2020 (April 26) “Issuing transitory measures in order to guarantee the provision of public transport service, mobility in the city of Bogotá, D.C. and compliance with the biosafety protocols to mitigate, control and carry out the proper management of the Coronavirus COVID-19 pandemic, during the state of public calamity declared in the Capital District and making other decisions.”

27 (June 11) “Adopting the 2020-2024 Economic, Social, Environmental and Public Works Development Plan of the Capital District “A new social and environmental contract for the Bogotá of the 21st century.”

28 (August 30) “Liquidating the District Agreement 816 of August 25, 2021 “Issuing some modifications in fiscal matters for the Social and Economic Rescue, guaranteeing the operation of the Public Transportation System, and dictating other provisions.”



the Rate Stabilization Fund (FET), the District Administration will adjust the sources and final execution of the resources approved through District Agreement 816 of 2021 and that are strictly directed to the line of investment Resources Financial Sufficiency of the Transportation System (FET). Likewise, it established that, in the event that the respective co-financing scheme is founded, the resources of the debt quota provided for in District Agreement 816 of 2021 for the FET will be reallocated to programs and projects related to social rescue, job creation and the development

of local infrastructure works in the framework of economic reactivation.

- District Decree 490 of 2021 (December 7) delivering instructions for the maintenance of public order and safe economic reactivation.²⁹
- District Decrees 518³⁰ and 540 of 2021³¹ (article 48) established the economic reactivation with a gender approach to promote the reduction of the differential economic effects of the Covid 19 pandemic on women, the deterioration of their working conditions and the reduction of the feminization of poverty, in accordance with the District Development Plan 2020-2024.

29 This District Decree repealed District Decree 442 of 2021, which in turn had repealed District Decree 376 of 2021, which in turn had repealed District Decree 277 of 2021, which in turn had repealed District Decree 199 of 2021 “Adopting safe economic reactivation measures on the occasion of the health emergency caused by SARS-CoV-2 COVID-19 in the city of Bogotá D.C. and dictating other provisions.”

30 (December 16) “Issuing the Annual Budget of Revenue and Income and Expenses and Investments of Bogotá, Capital District, for the fiscal period between January 1 and December 31, 2022 and issuing other provisions.”

31 (December 24) “Liquidating the Annual Budget of Revenue and Income and of Expenses and Investments of Bogotá, Capital District, for the fiscal period between January 1 and December 31, 2022 and issuing other provisions, in compliance with Decree 518 of December 16, 2021, issued by the Mayor of Bogotá, Capital District.”



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