# Paving the way for prosperous cities and territories

Urbanization and Territorial Review of the Dominican Republic

CARIBBEAN REGIONAL RESILIENCE BUILDING FACILITY



GFDRR 🕼 🗸

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# Introduction

Over the past four decades and prior to the pandemic, the Dominican Republic (DR) experienced high economic growth rates, which were accompanied by an expansion of the middle class and a significant reduction of poverty rate. During the same period, the country became predominantly urban, and its territories evolved from rural and agricultural spaces to large metropolitan areas, consolidating tourism poles in coastal areas and suburban spaces where manufacturing emerged, fueled by the creation of Special Economic Zones (SEZ). In 2020, it is estimated that 82.5 percent of the Dominican Republic's population lives in urban areas; and by 2050 this number will go up to 92 percent. While the economic and territorial transformation of the country has generated opportunities for its population, it has also created a number of challenges which require to be tackled. Such as providing quality basic services, assuring safe and affordable housing solutions to the fast-growing population, assuring firms count with the right enabling environment in the places where they locate and, more recently, supporting the COVID-19 recovery efforts to build a better future for the country. The Government of the Dominican Republic has recognized the opportunities that come with better leveraging its territory and tackling current development challenges; and is pushing to advance an ambitious territorial development reform.

The DR's Urbanization and Territorial Development Review aims to inform and contribute to the Government's effort by (i) providing evidence of the main territorial challenges currently being faced by the country with a specific focus on urban areas and lagging regions; (ii) review the current (and proposed reforms to the) regulatory framework for territorial planning and local government finance; and (iii) inform policy decisions at the national, regional, and local levels for ways ahead to address the territories challenges and embrace its opportunities, and to implement the proposed reforms.

The Review is organized around six notes and one spotlight:

- Note 1 Laying down the facts of urbanization
- Note 2 Addressing territorial disparities at different scales
- Note 3 Adopting a new territorial planning framework
- Note 4 Empowering local governments to meet today's and future challenges
- Note 5 Enabling an inclusive housing sector
- Note 6 Enhancing the integration of tourism with territorial development
- Spotlight Tailoring territorial development instruments: Zonas Francas

## Overview

# By many metrics, the Dominican Republic's development is a success story

**Prior to the pandemic, the country was growing rapidly and poverty was steadily declining.** From 2005 to 2019 the country experienced average growth rates of 4.5 percent per year, compared to less than 1.4 percent in Latin America and the Caribbean (LAC). Poverty was down to 19.9 percent (in 2016) from 34.4 percent in 2008, and the proportion of the middle class grew to 37 percent during the same period, outnumbering the poor for the first time in 2014. The Gini coefficient decreased by 2.5 points from 49.6 in 2008 to 47.1 in 2016 and remained below LAC's inequality levels throughout the period.

The impressive economic growth of the Dominican Republic resulted from decades of structural transformation. The country has experienced noticeable changes in the sectorial composition of its GDP since the early 1990s, with services increasing its weight in the economy over time (from 55 percent of GVA in 1994 to over 65 percent in 2018) and manufacturing and agriculture declining by 10 and 5 percentage points respectively, between 1994 and 2018.<sup>1,2</sup> For the last 25 years, services has been the leading sector in the Dominican Republic (DR), consistently adding 2.5-3 percentage points of growth per year.<sup>3</sup> Among services, the tourism sector has played a critical role in the Dominican economy with a total contribution in 2017 of 11.6 percent of GDP.<sup>4</sup> Over the past decades, the DR has grown to become the Caribbean's lead-

<sup>1</sup> Banco Central de la Republica Dominicana [Central Bank of the Dominican Republic] (BCRD). "Serie homogénea del PIB por sectores de origen 1991-2019. Valores corrientes e índices de volumen encadenados referenciados al año 2007, trimestral." Departamento de Cuentas Nacionales y Estadísticas Económicas [Department of National Accounts and Economic Statistics].

<sup>2</sup> Manufacturing is divided in local manufacturing (decrease of 9 percentage points) and manufacturing of Special Economic Zones (decrease of 1 percentage point).

<sup>3</sup> Services include: Energy and Water; Commerce; Hotels, Bars, and Restaurants; Transport and Logistics; Communications; Financial Intermediaries; Real Estate; Education; Health; Other Market Services; Public Administration; and Defense. Between 1994 and 2018, the broad services sector grew at an annual average of 5.1 percent, exceeding the average annual growth of total value added of 4.9 percent, and contributing between 50 and 65 percent of the growth.

<sup>4</sup> Ministry of Tourism, Dominican Republic. (October 18, 2018). Retrieved from: <u>http://mitur.gob.do/banco-cen-tral-turismo-le-genero-al-pais-us7177-5-millones-en-2017/</u> (November 29, 2019).

ing tourism destination, welcoming 6.4 million visitors in 2019.<sup>5</sup> Tourism is also the largest contributor to exports (40 percent) and foreign exchange earner (31 percent), bringing in US\$ 7.56bn in 2018.

This growth was coupled with a rapid urbanization process and a decline of spatial/territorial disparities at the regional level. From 1994 to 2018, the share of the population living in urban areas went from 56.7 to 81.7 percent, reaching the average in LAC (Figure 1). Furthermore, while economic activities and population are increasingly concentrated in a small number of urban centers in the DR; spatial disparities when measured at the regional and provincial level have been declining since the 2000s. The decline in spatial disparities also appears to be much faster than the one observed in other countries in the region, and when compared to countries with the same level of development (Figure 2). This is likely resulting from both the productivity gains when people move from rural to urban areas and the emergence of tourism growth poles and economic corridors across the country.

#### Figure 1. The Dominican Republic economic growth was coupled with a rapid urbanization process



Urbanization rate vs GDP per capita, 1990–2018

\_\_\_\_\_

5 Which accounts for 20 percent of the visitors in the Caribbean in 2019 (stayover arrivals to the Caribbean totaled 31.5 million, according to the Barbados-based Caribbean Tourism Organization).



Regional inequalities at the first administrative level from 2000 to 2018



Source: data from D'Aoust and All (2021) using Global Monitoring Database.

Note: Theil T index is used to capture spatial inequality as the share of inequality can be attributed to between-regions disparities.

But a closer look reveals challenges that need to be addressed to build forward better

Urban areas are growing in an unplanned and unorganized manner, with weak intraurban connectivity which will limit the country's capacity to reach higher levels of productivity. Most Dominican cities are growing in a sprawled, unorganized manner, and suffer from poor to moderate levels of internal road connectivity which can hinder their economic performance. In fact, DR's urban centers appear to be performing (in terms of economic productivity) below similar cities around the world and in Latin America, and remain far from the productivity frontier. Better management of urban growth is warranted to reduce congestion and maximize agglomeration benefits.





of the population lives in housing structures that are considered structurally vulnerable to adverse natural events.

36%

A significant degree of urbanization is also taking place in the coastline and in flood-prone areas, increasing the country's vulnerability to disasters. More than a quarter of the built-up surface constructed between 1995 and 2015 was built less than 3km away from the coast. Although coastal floods have not been widely experienced in recent years, climate change and coastal erosion will increase the likelihood and impact of these events. Building assets in the DR are also concentrated in a handful of areas, most of which are urban. The concentration of building assets as well as their high vulnerability compounded with the significant exposure to earthquake, hurricane, and flood hazard could lead to potentially large losses and reverse some of the development gains achieved over the past decades (Figures 3 and 4).

Figures 3 & 4. Hurricanes cause large losses more frequently than earthquakes, with greater risk towards the south of the country.

Spatial distribution of hurricanes (left) and earthquakes (right) annual average losses.

Source: Disaster Risk Profile of the Dominican Republic (World Bank, 2018a).

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### 49%

of households in the Santo Domingo Metri area receive electricity less than 20 hours per day



in the Santo Domingo Metro area receive water less than 3 day per week of he in th Dom area

of household in the Santo Domingo Metro area are not connected to the public sewer system

83%



Dominican cities and tourism poles do not have the required infrastructure and basic services to ensure good standards of living and continued competitiveness. Access and quality of basic service provision (electricity, water supply and sanitation, and safe waste collection and disposal) continues to lag in large urban areas and tourism poles. In addition, a large share of Dominicans does not have access to adeguate housing, and more than a third of the population lives in houses considered structurally vulnerable to natural events. Poor service provision and infrastructure quality also hinders the efficiency and productivity of the overall business environment across economic sectors. The inadequacy of basic services is impacting tourisms businesses, reducing their competitiveness, and leading to environmental degradation which is threatening the sector's core assets. Sewage runoff and solid waste are contaminating natural areas and water bodies, leading to algae blooms and damaged coral. Coastal erosion and mangrove depletion have also increased.<sup>6</sup>

Key economic sectors have been unable to fully leverage territorial assets in a sustainable manner and maximize local economic spillovers. The lack of diversification and high seasonality of the tourism sector prevent it from fully utilizing existing capital stock (hotel bed occupation) and reduce its capacity to produce quality jobs. Furthermore, *all-inclusive*, large-scale resorts dominate the sector, creating enclaves of economic activity resulting in a "monoculture" of tourism products, with potential implications for the sector's resilience to

6 "Wave After Wave of Garbage Hits the Dominican Republic." The New York Times. July 23, 2018. https://www.nytimes.com/2018/07/23/world/americas/dominican-republic-garbage.html

shocks and long-term competitiveness. Special Economic Zones (or *Zonas Francas*, ZFs)——which have been used across the country as an instrument for territorial development——continue to exhibit weak links with local firms, which is limiting potential local spillovers. This appears to be the result of a mismatch between the needs of firms located in ZFs and the quality of local products, in addition to current incentives and institutional barriers which limit the tightening of links between ZFs and their territories.





While spatial disparities have decreased, important gaps in living standards persist, both in urban areas and in certain provinces. Even in the most dynamic urban area of the country, Santo Domingo Metro Area, disparities are present, with around 43 percent of the population living in informal settlements in 2010 (latest census).7 Access to electricity is far from even across the Metro Area, and across the country high-income groups have better access to water than low-income groups. Moreover, households in lagging provinces have much lower access to potable water connections, sanitation, waste collection, and the internet. Scarce road networks, poor connectivity to leading areas, and the low quality of roads hinder the development potential of lagging provinces. The qualitative housing deficit is higher in lagging provinces, where a much larger percentage of houses require renovation to reach an acceptable level of quality living standards, while the quantitative housing deficit is higher in leading areas, reflecting the increasing population pressure.

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	LAGGING REGIONS	LEADING REGIONS
roads that are paved	16%	29%
households with access to Internet	17%	34%
households with water connections inside the house	37%	55%
households with toilet inside the household	60%	90%
households with access to clean cooking	73%	90%
households with waste collection service	74%	90%

Some of these challenges have been exacerbated by the COVID-19

**pandemic**. Preliminary estimates indicate that the ongoing economic crisis will result in high levels of unemployment. Even if the depth of the negative impact has been alleviated by the government's responses, poverty is expected to increase to 23.1 percent (from 21 percent in 2019) in the Dominican Republic, likely affecting informal urban workers the most—which will further increase intra-urban inequalities. At the sector-level, tourism has been strongly hit, with visitors' numbers significantly reduced in 2020 by close to 63 percent when compared

to 2019, which translates to an estimated income loss of US\$ 26.8bn (10 percent of GDP) counting direct, indirect, and induced impacts.<sup>8</sup> Furthermore, the crisis is likely to also reduce public revenues—data on central government revenues show a 5.5 percent decline in the first eleven months of 2020, compared to the same period a year ear-lier—making even more pressing the need to efficiently target the scarcer resources.

### There is also a mismatch between the existing territorial challenges and the tools and capacity to respond to them

The country remains very centralized, and local governments--while having few responsibilities--do not have the financial capacity to deliver on their limited functions. In fact, the DR is one of the most centralized countries in the LAC region, with local governments accounting only for 2.4 percent of total government spending (Figure 5). This is partly due to the fact that local governments in the DR play no role in the provision of public education, and other major infrastructure/service provision functions such as urban water supply and sewage. Furthermore, unlike virtually all other major countries in the region, local governments are not allowed to impose a broad-based local tax, such as property taxes. For instance, with the exception of fees for construction and civil registration, none of the local taxes and fees in the National District generated more than the equivalent of US\$ 0.33 per capita. The average level of local government revenues is RD\$ 1,800 (US\$ 35) per capita. Their resulting precarious financial positions hampers their ability to finance capital investments out of their own revenues, or access external sources of capital funding. Instead, they remain largely dependent on the construction of capital works by the central government.

<sup>8</sup> BID, "Nota Sectorial de Turismo para la República Dominicana," November 2020.

## FIGURE 5. The Dominican Republic is among the most centralized countries in Latin America and the Caribbean.

#### Local Governments account for 2.4% of total government spending



Sources: DR figures are from the Ministerio de Hacienda (*Agregación Institucional para la Consolidación de la Ejecución del Sector Público No Financiero*) and refer to 2018. Figures for other countries are from the IMF Government Finance Statistics website and refer to 2018, except in the case of Mexico (2017).

Note: In all cases, figures for general public expenditure include spending by the central government, decentralized institutions, and the social security system. With the exception of Costa Rica, Panama, and El Salvador, data for Central American and Caribbean countries is not available.

The current regulatory and institutional framework makes it hard to have coordinated actions at the local level. With the emergence of very large cities in the DR as well as expected rapid growth in peripheral cities and smaller towns, the current institutional model—which remains very centralized—no longer works. While the central government has attempted to coordinate and prioritize its own capital spending, the fact remains that local governments have little control over the allocation of capital spending within their jurisdictions. As a result, the DR is failing to take advantage of one of the key comparative advantages of local government: their ability to prioritize and coordinate development within their own jurisdictions. This is particularly important to manage urban growth and pursue transformative investments in city centers and poor peripheries, where many actors would need to intervene in tandem, aligning their strategic planning priorities and budgeting cycles.

It also has important gaps to deal with emerging territorial trends. To start, many of the pressing needs for land for both manufacturing and tourism services are occurring in sub-urban or peri-urban areas, while the current regulatory framework is centered around urban areas. This is leading to fractioned territorial planning (urban vs. rural) which does not correspond to reality, nor does it allow for proper management of urban growth and peri-urban areas. There is also a lack of clarity between the competences of the different institutions responsible for territorial planning and instances for inter-institutional coordination. For example, the hierarchy of planning instruments developed by key institutions such as the Ministry of Tourism vs. municipal development plans is unclear. As such, even when strategic territorial planning documents are developed, they face major hurdles in order to be implemented in a coherent way across the different territorial layers (National, Regional, and Local). Lastly, there is little in the existing regulatory framework that would allow the country to better deal with the growing metropolises, such as Santo Domingo, which maintain fragmented administrations and few instances to properly address metropolitan governance.

Furthermore, a sector-based perspective has been prioritized for making territorial development decisions, which is lacking a wider-view and consensus. Responding to the need of planning touristic poles and the weakness of other government entities and levels, land use planning in the DR has been led by tourism development (land-use) plans called PSOTTs, developed by the Ministry of Tourism—–eight of which have been completed so far.<sup>9</sup> However, these are sectoral plans that do not provide an integrated view of the territory, and the current regulatory framework is unclear with regard to their

<sup>9</sup> PSOTTs available (but need to be updated) for Sousa, San Felipe Puerto Plata, Las Terrenas (Samaná Norte), Cabarete, Miches-Seibo-Hato Mayor, Punta Cana-Bávaro-Macao, Unidad Ambiental 2 Macao, and Pedernales.

hierarchy (e.g., versus POTs) or whether they are mandatory for the municipalities included in them. Furthermore, in many of the PSOTTs analyzed, the tourism sector is prioritized over the needs of urban areas, placing urban areas as a liability of the sector rather than a very needed complement for the sector's productivity and growth. In addition, disaster risk management has not been fully internalized in territorial planning, potentially due in part to the lack of availability of disaster risk information.

Most municipalities do not have proper territorial planning instruments to guide development. In fact, only 5 percent of municipalities have land use plans (Figure 6), and 6 percent have constituted and

#### Figure 6. Only 5 percent of municipalities have land use plans.

Dominican Republic Municipalities with Municipal Territorial Plans, by plan status



Source: General Directorate of Territorial Development and Planning (DGODT)

operational planning units. As such the majority of development in the DR continues to be done without following a well-conceived vision of the territory, which has generated room for the subjective arbitration of what can be built where and discretionary decision-making for land-use.

#### The future also holds a different set of challenges

Given that the country already has advanced levels of structural transformation and urbanization, future growth patterns will depend less on moving human capital from less to more productive sectors and more on making existing sectors more productive. This will likely involve applying a different set of tools and increasing capacity at various levels to manage multi-sectoral decision-making and coordinated private-public actions across the territory (as outlined below).

Projected urbanization patterns point to the consolidation of peripheral areas of Santo Domingo and Santiago, and the growth of secondary cities. Between 2010 and 2050, the population of metropolitan Santo Domingo is projected to reach a total population of 4.2 to 5.3 million (up from 3 million in 2010). In addition, all projected growth is going to happen in peripheral municipalities (Santo Domingo Norte, Este, and Oeste) while the Distrito National will face a slight decline in its population. In parallel, there will be a shift in the urban population towards small and medium cities (Figure 7). By 2050, 92 percent of the DR's population will reside in urban areas, and by 2035, 56 percent of the urban population will be living in small/medium sized cities.

Properly managing urban growth, dealing with existing infrastructure gaps, and growing infrastructure needs will be essential to move Dominican cities towards the productivity frontier. The current urban expansion patterns, if maintained, will continue to reduce internal connectivity and lock-in Dominican cities into energy inefficient forms, thereby reducing their economic potential. They will also increase cities' exposure to natural hazards and the housing sector's vulnerability, thus reducing their resilience to existing and future climate events. Together this will limit Dominican cities' ability to reach higher levels of

#### Figure 7. Projections show a shift in the urban population towards small and medium cities.

12 Urban population (by millions of people) 10 8 6 4 2 Santo Domingo Santiago Other cities 0 2005 2020 2035

Urban population by size of cities in Dominican Republic from 2005-2035

Source: World Urbanization Prospects: The 2018 Revision.

Note: Santo Domingo refers to the urban population of the Municipalities of Santo Domingo de Guzmán, Santo Domingo Este, Santo Domingo Oeste, and Santo Domingo Norte.

productivity, which are essential for maintaining the country's growth patterns in the future. Properly managing conflicting or complementary land uses, and financing coordinated investments and initiatives (i.e., renewal of city centers, putting in place public and non-motorized transport alternatives, and moving towards transit-oriented development) while upgrading cities' peripheries (i.e., integrated neighborhood upgrading) will be key to making Dominican cities prosperous for business development and livable environments for their residents.

**Rising productivity across sectors will also require leveraging existing territorial endowments and enhancing sectoral spillovers.** Beyond tackling urban development challenges there is a need to: (i) better

anchor sectoral investments with territorial endowments to maximize local spillovers, (ii) coordinate cross-sectoral investments to enhance local competitiveness, and (iii) implement a national strategy that can guide subnational instruments and actors. An important share of the country's economic activities is located in peri-urban and sub-urban environments, where tourism poles and most Zonas Francas are anchored. As such, it is important to properly integrate these sector's economic activity into existing planning and regulatory instruments. This will enable strengthening of the linkages to local communities, businesses, and institutions. In addition, there is a need to properly plan and coordinate actions in existing and future economic poles in order to assure that they are anchored in the territory's context and that they have the required enabling conditions to flourish (i.e., adequate provision of water, sanitation, electricity, solid waste collection/disposal, local planning instruments, and connecting infrastructure). The inadequacy of basic service provision and environmental degradation is already impacting tourism businesses competitiveness and threatening the sector's core assets.<sup>10</sup> Two, a national vision is needed in both the tourism sector and the Zonas Francas to guide prioritization of investments and planning instruments at the local level.

# The Dominican Government has recognized the need to put the territory and its people at the center of public policy

The Dominican Government has recognized the need to put the territory and its people at the center of public policy. Territorial development is one of the pillars of the Government's Program, embodied in the newly created Vice-Ministry for Territorial Planning and Regional Development (under *MEPyD*). The Program highlights the importance of having effective territorial policies and emphasizes the need to ap-

Sewage runoff and solid waste are contaminating natural areas and water bodies, leading to algae blooms and damaging coral. Coastal erosion and mangrove depletion have increased. Although recent data is scarce, a 2010 report estimated that the disappearance of live corals could increase beach erosion by more than 100 percent on eastern beaches by 2020, and Puerto Plata stagnation (Add references).

prove and implement a territorial planning legislative package to support the integral development of the territory and population. In this context, the Dominican Republic intends to embark on ambitious legislative reforms for enhanced territorial planning and disaster risk management. One major law in those fields has already been approved: (i) the "Ley de la Vivienda, Asentamientos Humanos Dignos y Edificaciones"<sup>11</sup>, while three others are currently in the pipeline for approval: (ii) the draft "Ley Orgánica de Ordenamiento Territorial y Uso de Suelo"; (iii) the draft "Ley de Gestión Integral de Riesgos de Desastres;"<sup>12</sup> and (iv) the proposal of the "Ley Orgánica de Regiones Únicas de Planificación;"<sup>13</sup>

## How can the Dominican Republic pave the way for prosperous cities and territories?

To prepare for the challenges and opportunities emerging in the Dominican Republic, this report advocates for a stronger focus on (i) Constructing an enabling environment for prosperous cities and territories to emerge, (ii) Coordinating action to tackle complex territorial challenges, and (iii) Connecting people, firms, and places to maximize economic spillovers, reduce spatial disparities, and create a more efficient system of cities. These are organized around three Cs:

13 Has the main objective of enabling development at the regional level by coordinating policies, plans, programs, and projects, as well as financial incentives, for territorial cohesion between regions.

<sup>11</sup> Which would, among others, establish an institutional framework for housing policy, including the consolidation of entities at the national level into a new ministry (MIVIVIENDA).

<sup>12</sup> Aims at improved risk understanding through better risk information, promotes decentralization, and even compels local authorities to plan and manage disaster risk.

#### Paving the way for prosperous cities and territories

Urbanization and Territorial Review of the Dominican Republic



### Constructing

an enabling environment for prosperous cities and territories to emerge.



**Coordinating** action to tackle complex territorial challenges that require multiple actors to engage in parallel.

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**Connecting** people, firms, and places to maximize economic spillovers, reduce spatial disparities, and create a more efficient system of cities.

**Constructing an enabling environment for prosperous cities and territories to emerge.** This refers to revising the institutional and regulatory framework of the DR to meet today's and the future's territorial challenges.

To start, there is a need to update the territorial planning regulatory framework through the approval of the currently proposed reforms, such as the Ley Orgánica de Ordenamiento Territorial y Uso del Suelo and linked regulations. Given the lack of territorial planning in the country, this report advocates for a sequenced roll-out of the reform throughout the territory, starting with the development of urban planning instruments in areas of the country which are facing strong development pressure: large urban areas, such as the Santo Domingo

Further details in **Note 3**. Adopting a new territorial planning framework and **Note 6**. Enhancing the integration of tourism with territorial development Metropolitan area, and tourism poles across the country. Realigning land use planning for tourism development to the relevant planning agencies (national and local) is also recommended. In parallel, the country needs to put in place a program to strengthen the institutional capacity for territorial planning at the central and local level and better integrate DRM into territorial planning instruments.

This report also argues for the need to empower local governments to access more robust and stable sources of revenue. The existing plethora of minor taxes should be replaced by a broad-based tax, such as a property tax and/or a business tax. In addition, intergovernmental transfers should be stabilized at a realistic level to avoid the currently observed year-to-year fluctuation. Phasing out inefficient private sector investment incentives—such as those in law 158-01—and redirecting revenue gains to improve basic services and infrastructure might also be warranted to tackle the large infrastructure gap in the country.

The DR also needs to strengthen the institutional framework for housing development and land management. This report recommends: (i) the consolidation of housing agencies and existing programs under the recently created Ministry of Housing and Buildings (*Ministerio de la Vivienda y Edificaciones*, MIVED), (ii) strengthening cadastral and land registry systems and standardizing construction permitting processes to enable the housing market to function better and to stimulate private sector participation, and (iii) bringing housing finance down-market by integrating approaches to include informal income households into housing programs.

Coordinating action to tackle complex territorial challenges that require multiple actors to engage in parallel. This refers to putting in place targeted programs or strategies to rally private and public sector stakeholders at the national and subnational levels and mobilize financial resources at scale to tackle complex territorial challenges. The improvement of the territorial planning regulatory framework and the progressive roll-out of its mandate across the territory should enable coordinated actions at different spatial scales for basic service

Further details in **Note 4**. Empowering local governments to meet today's and future challenges

Further details in **Note 5**. Enabling an inclusive housing sector provision to integrate housing programs into local territorial plans or to better guide private and tourism investments (i.e., construction permits) while taking into consideration local carrying capacities. However, some of the more complex territorial challenges identified in this report require a targeted approach to be able to be tackled in a timely and efficient manner. This is particularly relevant given the highly centralized nature of the Dominican Republic and the few resources that local governments have at hand to finance territorial development (e.g., services and infrastructure) at the local level. Based on the findings of this report, particular attention is warranted to tackle the following territorial challenges.

Finding the most efficient technical solutions, along with financial and institutional arrangements for service provision and strategic urban investments in metropolitan areas and regions. For instance, there is a need to create coordination mechanisms to assure consistency of urban planning instruments and urban mobility investments (i.e., massive transit) in urban areas spread across multiple administrative units. Tackling current solid waste disposal challenges in the country will also require coordination and guidance from the central government to ensure that the most efficient technical solutions (i.e., regional sanitary landfills) are supported.

Tackling entrenched spatial disparities in housing quality and basic service provision in large urban areas through integrated slum or neighborhood upgrading programs. As part of the rationalization and consolidation of housing institutions and programs, it is recommended to expand into slum or neighborhood upgrading programs, as well as to target home improvements as a means of enhancing resilience to natural disasters. Integrated slum or neighborhood upgrading interventions appear particularly relevant for certain areas in the Distrito Nacional, such as the 3<sup>rd</sup> Circumscription. Further details in **Note 1**. Laying down the facts of urbanization

Further details in **Note 2**. Addressing territorial disparities at different scales and **Note 5**. Enabling an inclusive housing sector

## Figure 8. Lagging provinces are mostly located near the border of Haiti and in the northeast corridor from Espaillat to El Seibo.

Classification of regions based on a composed economic productivity measure



Sources: GDP spatial series elaborated by the World Bank; Income per capita from the UNDP, Human Development Index, 2016; and Nightlights using NOAA, VIIRS

Further details in **Note 2**. Addressing territorial disparities at different scales Addressing lagging regional infrastructure and service gaps, and properly tailoring territorial policies to address market failures requires coordinated action across a multiplicity of actors (Figure 8). This requires a better understanding of territorial endowments in lagging areas, tailoring, and sequencing public policy interventions. A good understanding of existing market failures—such as potential coordination failures in place—is also key to boosting private sector development. The in-depth development gaps diagnostic and territorial strategy currently being developed by *MEPyD's* Directorate for the Planning and Development of the Border Area is an example of this approach. Connecting people, firms, and places to maximize economic spillovers, reduce spatial disparities, and create a more efficient system of cities. This refers to making sure that (i) sectoral strategies and interventions take into consideration territorial endowments to maximize economic spillovers, and (ii) territorial planning instruments at the various levels incorporate measures/interventions to better connect lagging and leading areas and create a more efficient system of cities. This is particularly relevant to:

Maximize territorial spillovers through spatially targeted actions in order to better connect a tourism destination with a diverse set of tourism assets and surrounding communities. Achieving this requires Further details in the **Note 6**. Enhancing the integration of tourism with territorial development

FIGURE 9. The absorptive capacity of the territory is key when deciding what type of firms/ZFs to attract if impact wants to be maximized.



The different absorptive capacity of Dominican Republic Municipalities

Source: Authors with data from World Development Indicators.

Note: The variables used are % of the population with tertiary education (Census, 2010); % of the labor force employed in agriculture (ENFT, 2015); % of working age population (ONE Estimation, 2015

enabling the public sector to work together with the private sector in order to support tourism diversification through coordinated territorial action along tourism circuits. For instance, by enabling the development of destination management offices, and by supporting the development of diversified tourism products.

**Properly assess and maximize the impact that Special Economic Zones can have in their surrounding territories.** Beyond their foreign direct investment objectives, Special Economic Zones (SEZs) can play a role in boosting local economic development by building on local absorptive capacity and endowments. To achieve this, this report argues that there is a need for a more strategic approach to properly locate new Special Economic Zones and enable linkages between current SEZs

Figure 10. Most Dominican cities are sprawled and have moderate to low levels of connectivity.



Level of internal connectivity by city

Further details in the

Spotlight. Tailoring

territorial development

instruments: Zonas Francas

Low internal connectivity, sprawl and organic street network

Moderate internal connectivity, highly sprawled and compact

High internal connectivity, low sprawl and organic perimeter

High internal connectivity, low sprawl and compact

Source: Author's based on data from Duque et al. (2019).

and local firms. In addition, there is a need to recognize the limited spatial impact of SEZs in surrounding communities when located in areas with poor absorptive capacity and spatial endowments.

Improve internal connectivity within and across cities. This report finds that most Dominican cities are suffering from poor internal connectivity, which is associated with lower levels of urban productivity. Improving internal connectivity within cities, combined with urban transport policy, is thus needed to reduce congestion and to foster agglomeration economies at the cores of urban productivity growth. This is particularly important in large urban areas such as Santiago and the Santo Domingo Metropolitan Area. On a national scale, there is also a need to enhance road connectivity between cities. While the country has observed a decline in spatial disparities at the regional level, there are still regions of the country – such as the Border Area with Haiti - which are lagging across several social, basic service provision, and economic indicators. While it is unlikely that these areas will become the country's growth poles, the analysis presented in this report suggests that there is untapped economic potential in selected locations of the Border Area (i.e., Pedernales, around Dajabon, and Monte Cristi). Realizing the potential of selected locations will require improving their connectivity with the rest of the country and international markets.

Further details in Note 1.
Laying down the facts of urbanization and Note
2. Addressing territorial disparities at different scales

The report findings and recommendations are further detailed and covered in six territorial notes and one spotlight which are organized as follows:



# 1. Laying down the facts of urbanization

Oscar Ishizawa Escudero, Joaquín Muñoz Díaz, Paula Restrepo Cadavid and Evelyn Sánchez Hernández

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### Introduction

At the macro-level, the Dominican Republic's accelerated urbanization process is impressive; the country has maintained a remarkably high and sustained GDP per capita in recent decades while successfully completing its structural transformation. Nevertheless, a closer look into its urban centers shows emerging challenges that can prevent recent economic gains from being sustained over time. Urban expansion has occurred in an unplanned manner, decreasing cities' productivity, and has taken place in disaster-prone areas. There is a lack of adequate housing supply, and even in large urban areas, the quality of basic services is poor. Frequent disruption of water and electricity service poses a heavy burden on households and firms. Moreover, workers in urban centers have not fully benefited from the urbanization process, and a mismatch between productivity growth, quality job creation, and wages remains. Even when the Dominican Republic is highly urbanized, the urbanization process will continue. It is projected that the metro area of Santo Domingo, which currently accounts for 59 percent of the economic activity and 36 percent of the population, will keep growing until 2060. Simultaneously, emerging touristic economic poles are expected to attract more population. Meeting the challenges highlighted in this note is important in order to preserve and leverage productivity gains and increase the quality of life for current and future urban dwellers.<sup>1</sup>

This note is divided into four sections. The first section will address the facts of the Dominican Republic urbanization process. The second section will address the current performance—in economic terms—of the country's urbanization; using a set of comparator countries and cities worldwide. The third section will address specific drivers that might prevent Dominican cities and the country as a whole from reaping the benefits of the urbanization process. The last section will provide conclusions.

## 1. Laying down the facts of the DR's urbanization

# **1.1** While already highly urbanized, the Dominican Republic continues to urbanize at a fast pace

The vast majority of the population in the Dominican Republic lives in urban areas. According to official estimates, in 2020, 82 percent of the Dominican population resided in municipal seats or municipal districts, defined as urban areas.<sup>2</sup> Since urban measures vary from country to country, we take a slightly different approach to understand where the Dominican Republic stands with regard to urbanization compared to the rest of the world. We estimate that in the Dominican Republic around 73 percent of the population lives in

<sup>1</sup> This study assesses urban development challenges with regard to urbanization trends, population growth, economic growth, and estimated natural hazard risks due to earthquakes, hurricanes, and floods. Other climate change effects related to these factors are not covered in this study due to scope and data limitations.

<sup>2</sup> Oficina Nacional de Estadística. "Estimaciones y proyecciones de la población urbana por año calendario, según sexo y grupos quinquenales de edad, 2000-2030." Urban population is defined by the Dominican government as the people who live in municipal seats or municipal districts; the population that does not reside in these areas is considered rural population.

contiguous, densely populated urban areas— "urban clusters"<sup>3</sup>—and 81 percent lives either in urban cores or within 60 minutes of urban cores (*agglomeration index*). These levels of urbanization are very similar to the average of the LAC region, which is estimated to be between 73.5 percent (*cluster algorithm*) and 71.6 percent (*agglomeration index*); and are above the average for Central America and Caribbean countries, which range between 60 and 67 percent according to different urbanization measures (see Figure 1).





Source: Data on agglomeration index and cluster algorithm comes from Roberts et al. (2017) which uses 2012 LandScan data. Data for 2019 comes from the World Development Indicators, based on World Urbanization Prospects: The 2018 Revision.

Note: Mexico is classified as part of South America. Values in the graph represent the weighted mean.

The rate at which the DR is urbanizing (1.9 percent) is well above the average for the LAC region and the Caribbean, converging with Central American countries and international comparators. Using data from World Urbanization Prospects to analyze the country's urban trend, we can observe that for most of the 2000s, the Dominican Republic has had a higher urbanization rate than the average of any other region in Latin America (see Figure 2). The country followed a similar urbanization trend as other Central American countries, in which urban growth started decelerating around 2000 and reached an average of 2 percent in 2019; in the Dominican Republic, urban growth began to decline steadily in 2004, from 3.5 to 1.9 in 2019. During the same year, Panama, Honduras, Guatemala, and Belize in Central America had a higher urban-

<sup>3</sup> In a proposal to analyze urbanization trends in Latin America and the Caribbean and their relationship with the development and structural transformation of the countries, Roberts et al. (2017) use two methods to characterize urbanization. The first, the *cluster algorithm*, adopts a spatial-demographic approach to identifying urban areas, classifying cells in a population grid according to their density, and then grouping them into "urban clusters" — spatially contiguous groups of cells with a population density of at least 300 people per square kilometer and with an aggregated population of the cells exceeding 5,000 inhabitants. The second method, the *agglomeration index*, defines urban areas from a labor market perspective. It first identifies urban cores as "sizable" settlements based on a population threshold. Later, it defines the commuter shed as the areas located within a travel time of 60 minutes. People living in the urban core and in the commuter shed are considered urban population.
ization rate than the Dominican Republic. Nevertheless, these countries have a lower percentage of urban population, ranging from 45 to 67 percent. Costa Rica is the only Central American country with a similar urbanization trend to the Dominican Republic, with slightly lower levels of urban growth at 1.8 percent and 79 percent of the urban population. In the Caribbean, only Haiti surpasses the Dominican Republic's urban growth rates, with 2.8 percent in 2019. In fact, when compared with countries with similar population density and geographical characteristics across the world, the Dominican Republic stands out for having higher urban growth from 1970 until recently, when it started to converge with their urban growth rate.<sup>4</sup>



Source: Authors, with data from the World Development Indicators based on World Urbanization Prospects: The 2018 Revision.

For an international benchmark of the urbanization process, three countries with similar geography (islands with similar total area) and population, from different income groups, are used as international comparators for the Dominican Republic. Sri Lanka is the comparator from the same income group (upper-middle-income), while Ireland is a comparator from the high-income group, as an aspirational comparator. Finally, Papua New Guinea is selected as a comparator for the lower-middle-income group. For this set of comparators, in 2015, the Dominican Republic also had a higher urban growth rate, closely followed by Papua New Guinea at 2.14 percent. For more detail on the selection of international comparators, see Ferreyra and Roberts (2018).

### **1.2 Urbanization has led to the concentration of population and economic activities in a few cities**

**Urban population is highly concentrated in the metropolitan areas of Santo Domingo and Santiago.** By 2020, it is estimated that around 43 percent of the urban population will live in these metropolitan areas.<sup>5</sup> As of 2015, the Santo Domingo metro area accounted for around 59 percent of the national GDP; one of the highest shares in LAC.<sup>6</sup> Comparing the distribution of the urban population and economic activities across cities, the Dominican Republic has a higher concentration of urban population and economic activity than the average of LAC countries. This phenomenon is not unique to the Dominican Republic; as countries develop, population concentration increases in cities, making it generally beneficial for economic growth. Nevertheless, if population is too concentrated, especially in large cities, congestion costs rise, hindering the country's economic growth and productivity (World Bank, 2009). In Figure 3 we use spatial Gini coefficients to measure the dispersion of economic activity and population, which have a value of 0 when these factors are equally distributed across cities in the country and a value of 1 when they are concentrated in a single city. For economic activity, the Gini coefficient in the Dominican Republic is 0.86, compared to 0.82 in LAC and 0.85 for international



Figure 3. Urban population and economic activity are more concentrated in the Dominican Republic than the average for LAC and Central American countries

Source: Authors, based on data from Restrepo et al. (2017).

Note: Dotted lines represent average values for Central America, solid lines represent the average for LAC.

<sup>5</sup> Estimation using data from World Urbanization Prospects: The 2018 Revision.

<sup>6</sup> Only Nassau (Jamaica), San Juan (Puerto Rico), and Paramaribo (Suriname) reported a higher GDP concentration than Santo Domingo. In a set of 24 LAC countries, the average GDP share of capital cities in 2015 was estimated at 34 percent. Calculations based on data from Oxford Economics (2016).

comparators. Similarly, urban population concentration has an average of 0.78 in Latin America and 0.82 in the Dominican Republic (see Figure 3). Population concentration is much lower in international comparators, which report an average value of 0.70.<sup>7</sup>

### **1.3 Building assets are also heavily concentrated in the two largest** metropolises

As with other Small Island Developing States, building assets in the Dominican Republic are concentrated in a handful of areas, most of which are urban. The total building exposure for 2016 was estimated at US\$ 153.1 billion, or two times the GDP at the time, of which two-thirds corresponds to residential buildings and one-third to non-residential buildings.<sup>8</sup> 85.5 percent of the economic value of the building stock is located in urban areas. Furthermore, more than half is concentrated in the country's two main urban centers (Figure 4), with 34.2 percent located in Santo Domingo, 14.4 percent in the Distrito Nacional, and 9.7 percent in Santia-



Source: Country Disaster Risk Profile for the Dominican Republic (World Bank, 2018a).

<sup>7</sup> The spatial Gini coefficients estimate the degree of dispersion of population and economic activity; the latter is proxied by nighttime light concentration in an urban system, ranging from 0 (equal distribution across all cities) to 1 (concentration in a single city). Data from Restrepo et al. (2017), updated and expanded.

<sup>8</sup> A residential and non-residential building exposure model was developed to assess the characteristics of the building stock of the country as part of the Country Disaster Risk Profile for the Dominican Republic (World Bank, 2018). The analysis was based on data from the 2010 census, as well as information from national accounts and satellite imagery to check and calibrate the results. The main outcome of the exposure model is the estimation of the replacement value for 2016 of the residential and non-residential building assets of the Dominican Republic, disaggregated at a 1x1 km2 resolution by type of construction in urban and rural areas.

go. The significant degree of hazard compounded by the high concentration of exposed assets could result in potentially large losses from catastrophic events.

### Box 1.

### The cost of disaster risk in the Dominican Republic

Earthquake and hurricane risk in urban areas of the Dominican Republic is significant. Potential losses from these events can damage private and public infrastructure and disrupt businesses and the provision of basic services. The World Bank's Country Disaster Risk Profile for the Dominican Republic estimates the Annual Average Losses (AAL) to the country's building stock at US\$ 642 million (0.89 percent of the 2016 GDP)—of which, US\$ 552 million (0.77 percent of GDP) corresponds to losses in urban areas, with US\$ 318 million (0.44 percent of GDP) concentrated in the Distrito Nacional and Santo Domingo alone (Figure B1.1). AAL from hurricanes were estimated at US\$ 297 million (0.41 percent of GDP).<sup>o</sup>

**Hurricanes cause large losses more frequently than earthquakes.** In any given year, there is a 10 percent probability of having building stock losses that exceed US\$ 1.837 billion (2.55 percent of GDP) due to a hurricane, and an equal probability of having losses exceeding US\$ 295 million (0.41 percent of GDP) due to an earthquake. The risk profile of the country implies that the Dominican Republic suffers from relatively frequent and severe hurricanes, with greater risk towards the south of the country. Besides the direct damages to buildings and infrastructure, hurricanes can cause large indirect economic losses due to cascading effects and the disruption of businesses and services. For instance, Hurricane Jeanne in 2004 caused indirect losses of about twice the amount of losses due to physical damage.

Although less frequent than hurricanes, large earthquakes could occur in the Dominican Republic. In any given year, there is a 0.1 percent chance that an earthquake will cause more than US\$ 21 billion in damages (29.4 percent of GDP). An event of this magnitude would have catastrophic effects at the household level, create significant fiscal shocks, and exacerbate macroeconomic imbalances. The most vulnerable housing units are those constructions that do not appropriately withstand seismic actions—those made of unreinforced concrete block masonry, steel light frame, and other light materials—which correspond to 596,487 housing units (18.5 percent of the total number of housing units in the Dominican Republic). 64 percent of these housing units are located in urban areas.<sup>b</sup>



## **1.4** New economic poles and corridors across the country are also urbanizing rapidly

**Tourism poles and key economic corridors are also a driving force behind urbanization.** Between 1987 and 1996, the growth rate of built-up surface in the Dominican Republic averaged 2 percent annually, which increased to 3.2 percent between 1997 and 2008 before slowing down in the aftermath of the 2008 financial crisis to an annual average of 1.2 percent between 2009 and 2015. An analysis of satellite-derived built-up surface data from the World Settlement Footprint Evolution (WSF-Evo)<sup>9</sup> from 1985 to 2015 (see Figure 5) suggests that urban expansion has predominantly taken place in three locations in this period: (i) in the province of Santo Domingo; (ii) in the metro area of Santiago, and (iii) the eastern province of La Altagracia and the northern province of Puerto Plata. Additionally, the north-south economic corridor connecting Santiago and Santo Domingo, and the neighboring provinces to these metro areas (La Vega and San Cristobal) have experienced a relevant increase in built-up surface, benefitting from the activity of both urban agglomerations.<sup>10</sup>

<sup>9</sup> The World Settlement Footprint Evolution (WSF-Evo) is a database created by the German Aerospace Center that tracks the evolution of human settlements.

<sup>10</sup> Based on the WSF-Evo report, which provides a yearly classification of earth surface as being built or not at a 30m spatial resolution between 1985 and 2015. The measurements for built-up surface are derived from satellite imagery and don't account for the floor area of multi-story buildings.



#### Figure 5. Built-up surface increase by province between 1985 and 2015

Source: Authors, based on the WSF-Evo report from the German Aerospace Center.

# **1.5 Projections suggest that the Dominican Republic is moving towards a more balanced urban system with new urban growth poles emerging and consolidating**

By 2050, 92 percent of the population of the Dominican Republic will be living in urban areas, mainly in small and medium-sized cities across the country. This means that the urban population will increase from 9.1 million people in 2020 to 12.2 million people in 2050. While the large metropolitan areas of the country, Santo Domingo and Santiago, will continue to see a growth rate similar to the national one (between 1.7 and 1.2 percent respectively); cities with less than 300,000 inhabitants are going to absorb a large portion of the population increase. By 2035, 56 percent of the urban population (6.2 million people) will be residing in small and medium-sized cities.<sup>11</sup>

In the large metropolitan areas, population growth will be concentrated in the peripheral municipalities—while population will remain stagnant in the city-centers. Population in the metropolitan area of Santo Domingo is projected to grow between 37 to 73 percent from 2010 to 2050, reaching a total population of 4.2 million to 5.3 million people, depending on fertility rate and migration (see Figure 6).<sup>12</sup> While the

<sup>11</sup> World Urbanization Prospects: The 2018 Revision. Online Edition. Estimated growth rates are calculated from the 2020 to 2035 projections.

<sup>12</sup> Gonzalez 2016, using the IX Censo Nacional de Población y Vivienda, 2010.

projection variations vary greatly, all the scenarios forecast that population growth will continue until 2060, in contrast to other cities in the LAC region that are more advanced in their demographic transformation, such as Havana and San Juan, which are projected to reach their maximum population by 2030. The population of the peripheral municipalities of the Distrito Nacional will grow at an accelerated rate. While, in 2010, 31 percent of the metropolitan population was concentrated in the Distrito Nacional, with 69 percent in the peripheral municipalities, by 2050, it is expected that the Distrito Nacional share will decrease to 18 percent of the metropolitan population (see Figure 8). Santiago, the other major city in the Dominican Republic, would experience a moderate increase in population growth of around 19.6 percent, moving from 664,000 in 2020 to 794,000 by 2035 (see Figure 7).



Figure 6. Population growth in Santo Domingo under different demographic projections

Source: Reproduced from Gonzalez 2016, using the IX Censo Nacional de Población y Vivienda, 2010.



Source: Reproduced from Gonzalez 2016, using the IX Censo Nacional de Población y Vivienda, 2010.



#### Figure 8. Urban population by size of cities in the Dominican Republic (2005–2035)

Source: World Urbanization Prospects: The 2018 Revision.

Note: Santo Domingo refers to the urban population of the Municipalities of Santo Domingo de Guzmán, Santo Domingo Este, Santo Domingo Oeste, and Santo Domingo Norte.

# 2. The economic performance of the Dominican Republic's urbanization

2.1 At a macro-level, the Dominican Republic urbanization process has been coupled with impressive growth in GDP per capita

**Global evidence shows that urbanization accompanies economic growth.** The relationship between GDP growth and urbanization has been broadly documented, and international evidence shows that most countries reach middle-income status only after a significant population resides in cities (for examples, see Quigley 2008; Fujita, Krugman and Venables 1999, Henderson and Wang 2005). As cities develop, growing agglomeration leads to economies of scale in production and provision of basic services, raising productivity in non-agricultural sectors and contributing to economic growth, which in turn makes cities more attractive.<sup>13</sup> As shown in Figure 9, compared to other countries in Central America, such as Honduras and Guatemala, as well as to its international peers, the Dominican Republic has experienced a consistent and steeper urbanization pattern accompanied with sustained GDP per capita growth, converging towards the regional LAC average.



### Figure 9. Urbanization rate vs GDP per capita (1990–2018)

Source: Authors, with data from World Development Indicators.

<sup>13</sup> For a comprehensive review of scale economies and urbanization, the reader is referred to *World Development Report 2009: Reshaping Economic Geography.* World Bank, 2009.

The Dominican Republic is well advanced in its structural transformation, with service as the leading economic sector. In the last two decades, service has increased its relevance, accounting for more than 60 percent of the economy since 2005. Conversely, GDP contributions from the industry and agricultural sectors declined by 6 to 8 percentage points between 1991 and 2018, respectively (Figure 11). The importance of the service sector is also true in the job market. Employment growth in the service sector has been the largest contributor to total employment in the last 20 years, and the service sector has gained in participation relative to the industry and agricultural sectors. The share of total employment by the service sector increased by 11 percentage points between 2000 and 2020, from 60 to 71 percent (Figure 10). The tourism sector plays a critical role in the Dominican economy, in 2019, it contributed 16.3 percent of the GDP and 17.3 percent of total employment (of which 5.6 percent correspond to direct jobs).<sup>14</sup>



### Figure 10. GDP composition in the Dominican Republic by sector

Source: World Development Indicators.

<sup>14</sup> These estimations include GDP and number of jobs created directly, as well as indirect and induced jobs created by travel and tourism, according the World Travel Tourism Council (2019).



#### Figure 11. Employment composition in the Dominican Republic by sector

Source: World Development Indicators.

### 2.2 At the city level, economic performance appears mixed

Santo Domingo and Santiago perform economically below the expected level for other cities of the same size in the world and in LAC. Agglomeration economies are expected to enable a bigger city to be more productive than a smaller one (when holding all other factors constant). To measure the economic performance of Dominican cities and compare them to other urban centers around the world, we use nightlight intensity data<sup>15</sup> which is an accurate predictor of economic performance (Henderson et. al. 2012). To test the relationship between population agglomeration and economic productivity, nighttime light intensity was compared to the city population in 2012. In Figure 12, the positive relationship between urbanization and productivity is observed for all Dominican cities (in purple), but the two largest and economically important cities in the country, Santo Domingo and Santiago appear to be performing below what is expected for cities with the same size in the world (fitted black line representing the global trend) and in LAC cities (fitted green line representing the LAC trend). Santo Domingo GDP per capita in 2015 was US\$ 12,068, which is higher than the average for capital cities in Central America during the same year, US\$ 8,950, but still lagging behind the levels of leading cities, such as Panama City and San Jose, as well as the average for capital cities in South America (Figure 14).

<sup>15</sup> The nightlight intensity data comes from the Visible Infrared Imaging Radiometer Suite (VIIRS) from the National Oceanic and Atmospheric Administration.



Figure 12. Santo Domingo and Santiago were performing economically lower than expected in comparison with the alobal trend and with other LAC cities

Source: Authors, based on Oxford Economics, 2016 data from Roberts et al. (2017).

Note: Black line represents the fitted line for all cities and green line represents the fitted line for LAC cities. International comparators are Ireland, Sri Lanka, and Papua New Guinea.

In contrast, secondary cities seem to be performing above the global trend given their city size; but most remain below the LAC trend. Represented in purple, secondary cities in the Dominican Republic have a mean urban area productivity that is slightly higher than expected, given their size, compared with cities around the world. Once this comparison is narrowed to only Latin American cities, we can observe that they perform economically below other cities in the region with a similar population.<sup>16</sup>

## 2.3 In the years prior to the pandemic, Santo Domingo appeared to be catching up in terms of economic growth

After the downturn experienced between 2005 and 2010 related to the global economic crisis, Santo Domingo became one of the fastest growing capitals in the LAC region. From 2005 to 2010, Santo Domingo experienced a dramatic reduction of the growth rates in GDP per capita, with growth declining from 7.9 percent in 2006 to 1.1 percent in 2009. Nevertheless, in the years that followed, up until 2015—the last year for which data is available—Santo Domingo's economy grew at high rates, as shown in Figure 13 (Santo Domingo

<sup>16</sup> When we assess the city economic performance of Ireland, the aspirational comparator for the Dominican Republic from the high-income group, the capital city, Dublin, and secondary cities all perform above the global productivity average, which highlights the benefits of population agglomeration on economic performance across all urban areas in a country.

in green). Between 2010 and 2015, its GDP per capita grew an average of 4.4 percent from 2010 to 2015, positioning it as the third-largest growth rate among LAC capitals, only behind Panama City at 7.1 percent and Lima at 4.6 percent GDP per capita growth for the same period. Unlike these two capital cities, which exhibited erratic growth in recent years, Santo Domingo maintained continuous growth. Furthermore, in real terms, the GDP per capita of the Dominican capital is above the average for the capitals of Central America. However, San José and Panama City have a higher GDP per capita (see Figure 14)



### Figure 13. GDP per capita growth rate in selected LAC capital cities

**Economic growth in Santo Domingo and at the national level have followed a similar growth trend in the last decade.** By 2015, Santo Domingo reported GDP per capita growth of 5.7 percent, slightly higher than the 5.6 percent growth at the national level (see Figure 15). Nevertheless, as Santo Domingo functions as the epicenter of economic activity, its GDP per capita of US\$ 12,068 in 2015 was double the national level, which is reported at US\$ 6,834<sup>17</sup>.

<sup>17</sup> Oxford Economics, 2016.





Source: Authors, based on Oxford Economics, 2016.



### Figure 15. GDP per capita growth rate: Santo Domingo and the Dominican Republic

# 2.4 Economic growth in Santo Domingo appears to be driven by increased labor productivity and not by job creation

Economic growth in Santo Domingo has been driven by labor productivity, while employment growth has been minimal. Dynamic economic growth calls for both sustained productivity growth and consistent job creation. Based on an exercise linking aggregate growth per capita to job creation, output per worker, and population structure (share of working-age population), it appears that in Santo Domingo growth from 2005 to 2015 has been unbalanced and has been mainly driven by labor productivity without corresponding job creation. From an average growth of 4.48 percent in annual gross value-added (GVA) per capita from 2005 to 2015, the yearly contribution of labor productivity to growth has been 3.47 percent (77 percent of the total) while new jobs contributed only 0.55 percent (12 percent of the total). The remaining 0.46 percent (10 percent of the total) was related to a change in the working-age population. Figure A1 (annex) shows the marginal contribution of labor productivity, job creation, and population structure to total GVA growth for the mentioned period.

When comparing growth distribution with other Latin American capitals, Santo Domingo follows a pattern similar to Mexico City and other cities in South America, such as La Paz, Lima, and Quito (Figure 16). The average pattern of growth distribution in capitals in Central America seems to be similar to Santo Domingo's development, as shown in Figure 17. However, a closer look shows that growth drivers in Central American capitals are widely heterogeneous. Workers' productivity was a significant contributor only in Panama City, with a higher effect than employment creation. In South American capitals, growth distribution is more homogeneous and akin to Santo Domingo's, with workers' productivity as the primary contributor to growth followed by job creation.



### Figure 16. Average growth decomposition South American capitals and the Dominican Republic (2005–2015)

Source: Authors, based on Oxford Economics, 2016.



### Figure 17. Average growth decomposition in Central American capitals and the Dominican Republic (2005–2015)

### From 2010 to 2015, the lack of job creation has negatively impacted the economic growth of Santo Domin-

**go.** To assess the components of growth for the most recent years, the same exercise was repeated for 2010 to 2015. During this period, labor productivity increased its relevance, accounting for 3.8 percent (93 percent) of the total average growth of 4.1 percent of annual GVA per capita, while the lack of job creation negatively impacted growth, reporting -0.08 percent (-2 percent of the total) of the total percentage of annual GVA. The impact of changes in population structure to growth experienced a decrease in its contribution to growth, accounting for 0.35 percent (8.6 percent of the total) of the total percentage of annual GVA.

### Box 2

### Decomposition of growth at the national level

The core driver of growth in the Dominican Republic from 2000 to 2017 has been the steady increase of labor productivity. A similar exercise linking per-capita value-added growth to employment and demographic factors, including changes in labor participation, in the Dominican Republic illustrates that a continuous increase in labor productivity has been the main driver of the country's economic growth, as well as that of Santo Domingo. For the complete period of 2000 to 2017, per-capita value-added growth increased at an annual rate of 3.45 percent, of which 2.71 percent (79 percent of the total) was contributed by labor productivity growth (Figure B2.1). Of the other factors, work-

 $\rightarrow$ 

ing age population was the second largest contributor (11 percent of total growth), whereas job creation only added 3 percent of the total growth during this period. Focusing on the most recent period of analysis at the national level, from 2010 to 2017, we can observe that, consistent with the analysis in Santo Domingo from 2010 to 2015, the lack of job creation has also hindered economic growth at the national level.



### Figure B2.1. Growth decomposition in the Dominican Republic (2000–2017)

Job creation in the Dominican Republic and Santo Domingo fluctuated in the last decade, and has declined since 2012. Employment growth in Santo Domingo follows the national trend; from 2010 to 2015, employment has increased at an average rate of 2 percent at both levels (Figure 18). Nevertheless, since 2012, employment growth declined from 5.5 percent to 0.9 percent in 2015 at the national level, and from 5.9 to 0.8 percent in Santo Domingo. From a regional perspective, employment growth from 2010 to 2015 in Santo Domingo has been similar to other Latin American capital cities, with an average of 2 percent. Nonetheless, Santo Domingo should aspire to more balanced growth, as exemplified by Panama City, where employment generation contributed 58 percent of the increase of annual gross value-added growth (GVA) from 2010 to 2015, while employment productivity contributed 39 percent. During this period, Panama City reached an average employment growth of 4 percent, double that of Santo Domingo.

Job creation should be directed to produce quality jobs and raise wages. Whereas employment growth seems to be in line with the rates observed in other countries, the Dominican Republic is lagging in terms of the quality of jobs and job remuneration. Despite the sustained increase in productivity shown at the national level and in the country's capital during the last the 15 years, real wages in the Dominican Republic have remained stagnant and economic and labor productivity growth have drifted apart from wage







Source: Dominican Republic Jobs Diagnostic (World Bank, 2020).

increases since 2000s (see Figure 19).<sup>18</sup> Signs of the current poor and deteriorating job quality are the high degree of job informality, estimated at 58 percent in 2018, and employment concentration in less productive, unskilled labor-intensive sectors. In this sense, employment creation policies should be centered on increasing the quality of the new jobs, particularly regarding wage, job type, insurance protection, and skills match (World Bank, 2020).<sup>19</sup>

## 2.5 Evidence suggests that urban workers in the Dominican Republic are not fully benefiting from the effects of urbanization

Cities can produce unique advantages for firms and workers, increasing overall productivity and economic gains for firms and workers. According to urbanization theories, cities can generate higher productivity than rural areas because of positive externalities. One of the positive externalities is called agglomeration economies, which assumes that since the work market is larger in cities, each person is more likely to find her or his "perfect" job, thereby increasing productivity. The second positive externality is that urban workers tend to have higher skills which generate positive spillovers on productivity. Moreover, cities can also provide better conditions for firms' growth with a wide and diversified range of providers of goods and services, which helps drive the growth of the local economy. Following this line of thought, it is expected that, due to all the benefits of urban areas, firms in cities could generally afford to pay higher wages than rural firms given that the characteristics of their employees and the urban context favor their productivity (Ferreyra and Roberts, 2018).

Nevertheless, urban workers in the Dominican Republic do not seem to be fully benefiting from the effects of agglomeration. In the LAC Flagship report, Ferreyra and Roberts (2018) study the effects of the positive externalities of urbanization on workers by comparing the difference in wages between urban and rural workers in 15 LAC countries. In the Dominican Republic, as across LAC countries, urban workers tend to have more years of schooling than their rural counterparts, which can partially explain wage differences. In this sense, the authors find that in these countries, the rural nominal wage would be 38 percent higher if the characteristics of rural workers were the same as those of urban workers. This percentage, associated with the value of the characteristics of the workers, which is defined as workers premium, is only 20 percent in the Dominican Republic, the lowest in all the sampled countries (see Figure 20). Moreover, once the workers' observed characteristics, including education, are controlled, the nominal wage increase for workers associated with the benefit of residing in cities—known as urban premium—is, on average, 36 percent in LAC countries, while in the Dominican Republic the wage increase is only 17 percent (see Figure 20). In sum, urban workers in the Dominican Republic receive fewer benefits associated with their characteristics (such as education) and with the benefits of living in cities, than urban workers in other countries of the region.

18

<sup>19</sup> Informal employment is defined by the lack of social security coverage, employment contract, and other benefits.



#### Figure 20. Worker and urban premium in LAC

Source: Ferreyra and Roberts, 2018.

High concentration of skills in the cities of the Dominican Republic seem to provide slight benefits to workers. Similar to the theory of agglomeration economies, the human capital externalities theory states that cities generate higher productivity due to the accumulation of individuals with higher human capital and skills, which leads to workers exchanging ideas and learning from each other. Ferreyra and Roberts (2018) also test this theory by looking at the effects of aggregating human capital and productivity, as measured by wage increase. In all LAC countries studied, the relation between these two factors is positive, nevertheless, in the case of the Dominican Republic, while positive, this relationship is weak. The country has the lowest returns in wage increases from the concentration of human capital, either when measured by the average years of schooling or by share of college graduates in cities.

### 3. Emerging challenges of urbanization

Along with the urbanization processes, a series of challenges have emerged that must be addressed. Among them, (i) a large part of the urbanization is taking place in areas prone to natural events with little urban planning, and (ii) a good part of the population lacks adequate access to services and housing. These points are described below.

## 3.1 A significant degree of urbanization has taken place along the coastline and in flood-prone areas

**Rapid urbanization has taken place in coastal areas, accompanying tourism development.** Between 1996 and 2015, a quarter of the built-up surface constructed in the Dominican Republic was built in close proximity to the ocean—less than three kilometers away. Coastline urbanization has been most pronounced in the easternmost municipality of Higüey, where 40 percent of the built-up surface constructed in the same period took place along the coastline—in response to increased demand from the tourism sector. The municipality of Santo Domingo Este—part of the metro area of Santo Domingo—has also experienced significant coastline urbanization, with 46 percent of the built-up surface constructed within three kilometers of the coastline over the same period. Other touristic coastal areas that have experienced a relevant increase in built-up surface in recent years, include Puerto Plata, Boca Chica, La Romana, and Sosúa.

Although coastal floods have not been widely experienced in the Dominican Republic in recent years, climate change and coastal erosion could increase the likelihood and impact of these events. Multiple sources of coastal flooding risk threaten the Dominican Republic's large coastline, specifically, sea level rise and the occurrence of tropical storms, hurricanes, or tsunamigenic earthquakes. Rapid urbanization is compounded by the reduction of natural protections, such as mangroves and coral reefs, resulting in increased exposure and vulnerability of coastal areas to adverse natural events. Due to deforestation, mangrove area was halved between 1980 and 2005 (FAO, 2007), and coral reef loss could lead to beach erosion<sup>20</sup>. A regional study for Central America shows, for instance, that the impact of hurricanes in storm surge prone areas decreases significantly as the width of mangrove belts increases (Del Valle et al., 2019). In the Dominican Republic, coastal flooding risk is predominantly localized in the eastern touristic pole of Higüey, bringing challenges and opportunities for the urbanization process of the region.<sup>21</sup>

<sup>20</sup> It is estimated that if live corals disappeared as a consequence of disease, pollution, sedimentation, overfishing, or warming ocean temperatures, beach erosion rates in the Dominican Republic could increase by more than 100 percent on eastern beaches and by more than 65 percent in the south in ten years (Wielgus et al, 2010).

<sup>21</sup> Coastal Risk Screening Tool (Climate Central), and the World Bank's Climate Change Knowledge Portal.

### Figure 21. Rapid built-up surface growth in Higüey



Source: Google Earth, based on Landsat and Copernicus images. Note: Left picture corresponds to 2006, the right picture to 2020.

Built-up surface located in flood-prone areas has increased, accompanying urban expansion in recent decades—with a steep increase since 1996.<sup>22</sup> The metro area of Santo Domingo and the provinces of Santiago and La Vega have the largest built-up surface located in flood-prone areas, with 14.3, 12.6, and 12.5 km<sup>2</sup>, respectively (see Figure 21 and Figure 22) A significant increase was also experienced in the province of San Cristóbal and the touristic provinces of Puerto Plata and La Altagracia (see Figure 23).

<sup>22</sup> WSF-Evo built-up surface data was superimposed with data on expected water depth from a 1-in-100-year flood from the Fathom Global Flood Hazard model (at a 90m resolution). Flood-prone areas are defined as areas where expected water depth is at least 15cm under a 1-in-100-year flood. This model does not consider coastal flooding, and is valid for current climatic conditions only (it does not account for projected sea level rise). The model also does not consider existing flood defenses.



#### Figure 22. Evolution of built-up surface in flood-prone areas in Santo Domingo

Source: Authors, based on the WSF-Evo report of the German Aerospace Center and Fathom's Global Flood Hazard Data.



#### Figure 23. Evolution of built-up surface in flood-prone areas by province

Source: Authors, based on the WSF-Evo report of the German Aerospace Center and Fathom's Global Flood Hazard Data.

## 3.2 Urban expansion is occurring in a disorganized and likely unplanned manner, particularly around tourism poles

In Santo Domingo and Santiago, urban expansion has mainly taken place through the progressive extension of cities. Annual urban expansion between 1985 and 2015 in Gran Santo Domingo, Santiago, and Higüey was classified in three categories based on its connectedness to previously constructed urban areas, using the WSF-Evo dataset following Liu et al. (2010). Newly grown urban patches were classified as either (i) an infill patch, if the new urban patch was mostly surrounded by the old landscape at the time; (ii) an extension or edge-expansion patch, if the new urban patch was mainly surrounded by vacant land; or (iii) as an outlying or leapfrog patch, if the new urban patch was surrounded exclusively by vacant land. The surface occupied by newly grown patches by category of urban expansion is summarized in Figure 24, which highlights how all three urban expansion modes have coexisted over the last thirty years in the three areas studied.

### Figure 24. Evolution of the classification of newly grown patches



Source: Authors, based on the WSF-Evo report from the German Aerospace Center.

The distribution of urban expansion modes has been broadly similar in Gran Santo Domingo and Santiago, which has remained relatively constant over time. In both areas, about 50 to 60 percent of the newly grown built-up surface patches are classified as extension patches, 30 to 40 percent correspond to infilling patches, and only a minor share is classified as outlying patches. This pattern, shown in Figure 25 (for Gran Santo Domingo), reflects an urbanization process where connectedness to main urban areas is critical and the development of new urban poles remains limited. It is noteworthy that infill and extension modes have exhibited opposite trends over time, showcasing the complementarity of the connected extension of cities (edge-expansion) and compactness (infilling) processes in these two consolidated cities. In smaller, developing cities, such as Higüey, edge-expansion has been more prominent, with a lower trend towards compactness, accompanied by leapfrog development. A peak of 20 percent of built-up surface classified as leapfrogging development can be identified between 1997 and 2003, which coincides with the accelerated urban expansion experienced in Higüey at the time. These trends suggest a diffusion phase of urban expansion, with leapfrogging urbanization taking place predominantly in fast developing areas, such as Punta Cana.



Source: Authors, based on the WSF-Evo report from the German Aerospace Center.

Most Dominican cities are sprawling and have moderate-to-low levels of connectivity, which can hinder their economic performance and potential. As described, denser cities can improve labor productivity as they facilitate matching between firms and workers. Nevertheless, other spatial characteristics of the cities, known as urban form, matter for productivity. Duque et al. (2019) analyze three spatial dimensions of cities in Latin America: 1) geometric shape, as circular cities with smooth borders can reduce trip lengths and increase accessibility and have lower costs per capita in providing basic infrastructure (Litman 2015); 2) internal infrastructure of the city, determinate by its road network, and 3) land use patterns, which reflected the spatial distribution of population and buildings within a city.<sup>23</sup> The study identifies that smooth, rounded, compact, and internally well-connected cities tend to have higher productivity levels than rugged or elongated cities, or cities with poorly connected streets. Assessing Dominican cities, most of them are sprawling and have

<sup>23</sup> In the study of Duque et al. (2019), urban form is defined according to the following variables; geometric shape of the urban extend is measured by the roundness and the smoothness of the perimeter to measure a city. For internal infrastructure, the layout of the road network in the city and the degree to which all segments in the network are interconnected are considered. Finally, for land pattern use, sprawl is defined as the population distribution across the city and fullness by the presence of build-up areas as a fraction of the total area of the city.

moderate-to-low levels of connectivity, which might be hindering their economic performance and potential.<sup>24</sup> Compared to other cities in Latin America, in 2010, most cities in Paraguay (77 percent), Colombia (67 percent), Bolivia (63 percent), and Honduras (66 percent) had spatial characteristics that favor productivity (Figure 26). For the Dominican Republic, 46 percent of cities had a joint set of characteristics associated with more productivity, a percentage only above Venezuelan and Cuban cities.



Figure 26. Most Dominican cities are sprawling and have moderate-to-low levels of connectivity

Santo Domingo, Higüey, and La Romana have become less connected as they grow. From 1996 to 2010, Santo Domingo has become more circular—but with a significantly less regular perimeter—and less connected, as its street and road intersection density has been reduced by 8 and 7 percent, respectively. In the case of Santiago, its perimeter has become more unregular, but its internal connectivity has remained constant during the same period. Romana and Higüey present different trends with regard to the shape of the city. Higüey evolved into a less round shape with a less smooth perimeter, while La Romana become more rounded with a more organic perimeter. Nevertheless, internal connectivity has been reduced significantly in both cities, with a decrease in street and intersection density of 18 percent in Higüey and of around 14 percent in La Romana. The loss of connectivity, as shown in the trend from 1996 to 2010 for these cities, can undermine productivity, since connectivity can compensate for other factors of city shape. Even in elongated cities, building denser street networks could lift city productivity toward that of rounded, smoother, and more compact cities

Source: Authors, based on data from Duque et al. (2019)

<sup>24</sup> Duque et al. (2019), analyze all Latin American cities with more than 50,000 people in 2010, a total of 919. For the Dominican Republic, the following cities were selected: Mao, Azua, San Juan, Barahona, Higüey, Bonao, Boca Chica, Bani, Cotui, San Francisco de Macoris, Puerto Plata, San Pedro Macoris, La Romana, Santiago, and Santo Domingo de Guzmán.

(Duque et al. 2019). This highlights the importance of effective urban planning in the Dominican Republic, as policies on infrastructure investments, land use, and zoning regulations influence cities' productivity.

In addition to the loss of connectivity, the inefficient state of the transportation system, especially in the Santo Domingo metropolitan area, is a detriment to the country's quality of life and productivity. It is estimated that the Distrito Nacional receives a "floating population" of one million people during working hours, of which 53 percent come from the municipalities of Santo Domingo Oeste and Los Alcarrizos, 32 percent from Santo Domingo del Este, and the remaining 15 percent from Santo Domingo Norte Nacional (ADN, 2019). This population travel primarily for work reasons to the central area of the Distrito Nacional. Around 70 percent of these transfers are made via public transport, which utilizes vehicles with an average age of 23 years and with low capacity (private cars, called "conchos") which are not appropriate for transportation. Buses represent less than 1 percent of total public transport vehicles (INTRANT, 2017). In general, the transportation system of the Santo Domingo metropolitan area is slow, with travel times exceeding an hour and a wait time of half an hour, and inefficient, with a lack of interconnectivity between urban and interurban routes and the metro system. Likewise, there is a high rate of overlap between urban and interurban routes, with low productivity rates (with values lower than 0.5 passengers / vehicle-km), and low road security (with more than 2,000 accidents per year in public transport vehicles). The inefficiency in the transportation system also affects the business sector, making it difficult to distribute merchandise within the metropolitan area of Santo Domingo. There are no specific regulations for the distribution of cargo in the urban area or for loading-unloading operations on public roads. Regarding the quality of roads, just over 30 percent of the total road network in the metropolitan area of Santo Domingo is paved, and more than 60 percent of these roads are made up of local roads with poor quality pavements. (INTRANT, 2017). Although no uniform data was identified for the rest of the national territory, it is estimated that, in 2015, less than 20 percent of the country's roads were paved, and of those not paved, only 16 percent were roads that can be traveled all year.<sup>25</sup>

In this context, it is essential to prioritize the implementation of actions to improve urban connectivity. Within the greatest efforts to transform mobility in the country, the Dominican government enacted Law 63-17<sup>26</sup> in February 2017. Among its main contributions, the law foresees the design of an integrated public transport system, strengthening private and public operators of ground transportation, the adoption of technological alternatives for greater sustainability, an electronic rate collection system, and the creation of trust funds that allow investment in public and private infrastructure and transportation equipment. However, four years after the approval of Law 63-17, the scope of the law has been limited. Although some progress regarding improving vehicular traffic is in operation, various internal regulations are still pending approval, thereby fragmenting the law's implementation.

<sup>25</sup> Calculation made from the database on road quality, shared by the *MEPyD*.

<sup>26</sup> Law 63-17 on Mobility, Ground Transport, Traffic, and Road Security of the Dominican Republic, enacted on February 21, 2017.

## 3.3 Although poverty has decreased across the country, a large share of the population does not have access to adequate housing

From 2016 to 2019, monetary poverty declined at the national level by 7 percent, and at the same rate in urban and rural areas.<sup>27</sup> Monetary poverty decreased from 28.6 to 21 percent from 2016 to 2019 in the Dominican Republic. In urban areas, poverty was reduced from 27.7 to 20 percent, while in rural areas it went from 32 to 25.4 percent during the same period.<sup>28</sup> In the Metropolitan Region, which groups the Distrito Nacional and the Santo Domingo province, monetary poverty was also reduced from 28.6 to 21 percent from 2016 to 2019. Despite the similar reduction in poverty in urban and rural areas, remarkable differences in the provision and quality of basic services persist by location and income groups.

As a result of the COVID-19 pandemic, the poverty rate in 2020 is expected to increase to 23.1 percent in the Dominican Republic, due to government responses to counteract the economic effects of the crisis. Due to the COVID-19 pandemic, the national poverty rate was projected to reach 29.6 percent, increasing urban poverty to 29 percent and rural poverty to 32.4 percent, if no mitigation policies had been implemented.<sup>29</sup> Nevertheless, the Dominican government implemented two large programs—the Fondo de Asistencia Solidaria



#### Figure 27. Total housing deficit and poverty rate by province

Source: Reproduced from Morillo (2019).

Note: Poverty measured as a percentage of poor households by province, using a multidimensional poverty index based on Morillo (2014). Both variables are for 2010.

<sup>27</sup> According to national poverty measures, the monetary poverty (moderate) line represents the monthly per capita amount of resources that households must have to guarantee their members access to a basket of food and non-food goods and services, which are considered essential for life, including clothing, footwear, cost of housing, home maintenance, health, education, and transportation, among others (Comité Técnico Interinstitucional de Pobreza, 2020).

<sup>28</sup> Extreme poverty has also followed a declining trend between 2016 and 2019; at the national level, the reduction was from 4.5 to 2.7 percent, and in urban and rural areas it was from 3.9 to 2.4 and from 6.9 to 3.9, respectively (Comité Técnico Interinstitucional de Pobreza, 2020).

<sup>29</sup> Data based on calculations from the World Bank's Poverty Team and the Dominican Government.

*al Empleado* (FASE) [Employee Solidarity Assistance Fund] and *Quédate en Casa*<sup>30</sup> [Stay at Home]—to support formal and informal workers through direct monetary transfers. As a result of these policies, poverty is expected to reach only 23.1 percent at the national level, and 22.8 and 24.1 percent in urban and rural areas, respectively.

A large number of Dominicans do not have access to adequate housing. In the Dominican Republic, the housing deficit—the number of housing units that need to be built or renovated to meet minimum acceptable living standards—was estimated at 1.4 million units in 2010 (51.4 percent of the total housing units at the time).<sup>31</sup> Urban areas account for 69 percent of the total housing deficit, although housing deficit prevalence is higher in rural areas than in urban areas (62 vs 48 percent respectively). The rural poor are disproportionally affected, with housing deficit correlating with poverty (Figure 27) which is higher in rural areas. Figure 28 presents the spatial distribution of the housing deficit at the neighborhood level in the main urban poles of Santo Domingo, the Distrito Nacional, and Santiago, identifying that most of the housing deficit in these areas is located in the area north of the Distrito Nacional, and along the periphery of Santiago.<sup>32</sup>







Source: Authors, with data from Morillo (2019).

- 31 The total housing deficit can be divided into qualitative housing deficit, which comprises housing units without the minimum acceptable living standards but that could be brought up to standards with appropriate renovations, and quantitative housing deficit, which represents new housing units that need to be built. In 2010, the qualitative housing deficit was 1,041,215 housing units, far greater than the quantitative housing deficit, which was estimated at 327,996 housing units.
- 32 In the last decade, housing deficit measurements have been controversial due to the existence of multiple measurements with significant discrepancies. While MEPyD estimated the total housing deficit to be 0.9 million units for 2010, the ONE estimated a deficit of 2.2 million housing units for the same year. To settle the discrepancies, Morillo (2019), in collaboration with MEPyD and ONE, produced a new official methodology, which was applied to the 2002–2010 period. As a result, a total deficit of 1.4 million housing units was estimated for 2010 using census data.

<sup>30</sup> The program *Quédate en Casa* was designed to protect informal workers by increasing monetary support to fulfill nutrition needs. FASE focused on supporting formal workers in the private sector with a monetary transfer.

More than a third of the population lives in houses that could be considered structurally vulnerable to adverse natural events. 17.9 percent of Dominicans reside in unreinforced masonry buildings, which are particularly susceptible to collapse in case of an earthquake. Another estimated 18.5 percent of Dominicans live in old, reinforced masonry or concrete buildings built before 1979—the year in which the first version of the seismic analysis and design of structures regulation was put into place to ensure buildings and infrastructure follow seismic-resistant standards (World Bank, 2017). Other factors that compound structural vulnerability to increase the concentration of disaster and climate-related risks include unplanned urban growth, land degradation, and weak enforcement of zoning regulations and building codes.

# 3.4 Despite substantial investments in improving basic service provision, disparities in access to electricity and water persist across urban and rural areas, and across income groups

In recent decades, the Dominican Republic has made significant advancement in expanding electricity access. However, the supply of electricity is unreliable and insufficient, outages are frequent, and many households only have electricity for a couple of hours a day. Practically all of the population is connected to the national grid and receives electricity every day of the week. Nevertheless, half of the population receives electricity on average less than 20 hours a day. The metro area of Santo Domingo stands out as having significant electricity access issues, with 35 percent of the population receiving electricity on average less than 14 hours a day (Figure 29).



### Figure 29. Number of hours that households receive electricity by location (amongst those connected to the power grid)

Source: Authors, based on data from ENHOGAR 2018.

Note: The metro area of Santo Domingo includes the Distrito Nacional and neighboring urban municipalities, except Boca Chica and San Antonio de Guerra. Large cities have more than 100,000 inhabitants.

Access to electricity service and clean cooking fuels illustrates the differences in the provision of services between urban and rural areas and across income distribution. Over 50 percent of rural regions have electricity service for only half of the day (Figure 29). Moreover, while 91 percent of urban households use gas for cooking, this percentage decreases to 72 in rural areas, where 18 percent of households use wood for cooking, and 3.5 percent still use coal (ENHOGAR, 2018). Electricity supply is also more erratic in lower-income households, with a clear relationship between socioeconomic status and electricity hours: 76 percent of high-income households have minimal disruptions to electricity, with 20 to 24 hours of service. This proportion reduces as income declines, reaching 34 percent in very low income and 37 percent in low-income households (Figure 30).33

Figure 30. Number of hours that households receive electricity (amongst those connected to the



power grid) by socioeconomic group

Source: Authors, based on data from ENHOGAR 2018.

Note: The metro area of Santo Domingo includes the Distrito Nacional and neighboring urban municipalities, except Boca Chica and San Antonio de Guerra. Large cities have more than 100.000 inhabitants.

On the other hand, while an important share of the Dominican population in urban areas (79 percent) is connected to the water distribution network (ENHOGAR, 2018), this coverage has not translated into high service quality. Discontinuity of water supply and rationing are common, and the drinking water is of substandard quality. The metro area of Santo Domingo again stands out with service hours below the national average. 70 percent of the households connected to the water distribution network in the metro area of Santo Domingo receive water 3 or less days a week, and only 21 percent has water service 6 or 7 days a week—significantly less than the 46.5 percent of the population living in large cities (Figure 31). Even when water is provided, it is only served for a couple of hours a day.

<sup>33</sup> The socioeconomic groups in ENHOGAR are quintile groups built on the valuation of available goods in the household, weighted by current market prices minus a standard depreciation percentage (ONE, 2011).



Figure 31. Number of days that households have access to water by location (amongst those having access to piped water)

Source: Authors, based on data from ENHOGAR 2018

Note: Santo Domingo metro area includes the Distrito Nacional and neighboring urban municipalities, except Boca Chica and San Antonio de Guerra. Large cities have more than 100,000 inhabitants.

Lower income households also suffer from a poorer water quality supply, but amongst households connected to piped water, disruptions in water service affect all income groups in a similar proportion. More than 80 percent of high, middle, and middle-high income households receive water directly inside the house, with around 10 percent of the high-income households using a waterhole and less than 4 percent of these households, only 10 and 25 percent receive water inside the house. In contrast, in very low and low-income households, only 10 and 25 percent receive water inside the house, and usually piped water comes from aqueducts in the patio of the house. Moreover, due to the lack of piped water, the proportion of households using a waterhole, tank trunk, or water from natural sources (spring, river, or canal) increases in low-income households (Figure 32). Interestingly, households with access to piped water have similar days of water service across income groups (Figure 33); around 50 percent of the households from low to middle and middle-high income groups receive potable water less than four days per week. This proportion decreases slightly to 45 percent for high-income households. This highlights the need to improve water services for low-income houses not connected to piped water. Likewise, it indicates that inefficiency in the provision of piped water represents a generalized issue across income groups and urban and rural population.



### Figure 32. Source of water for domestic use by income group

Source: Authors, based on data from ENHOGAR 2018.

Figure 33. Number of days that households have access to water (amongst those having access to piped water) by socioeconomic group



Source: Authors, based on data from ENHOGAR 2018.

### 3.5 The Dominican Republic faces significant sanitation and waste management challenges

Access to improved sanitation is higher in urban centers than the rest of the country. However, access to the sewerage system remains low. Only 20 percent of households are connected to the sewerage system in the Dominican Republic, and this proportion is even lower in the metro area of Santo Domingo, where only 12.8 percent of the households are connected to the sewerage system—barely above the 5.4 percent of rural areas (Figure 34). Furthermore, about 10 percent of urban households and 21.2 percent of rural households do not have access to safely managed sanitation<sup>34</sup>, and 6.1 percent of rural households do not have any sanitation service at all. Most households with a toilet in the country and in Santo Domingo are connected to a septic tank which—if in irregular conditions or without treatment—can become a threat of groundwater contamination (ONE, 2020).



Figure 34. Sewage connection type by location

Source: Authors, based on data from ENHOGAR 2018

Note: The metro area of Santo Domingo includes the Distrito Nacional and neighboring urban municipalities, except Boca Chica and San Antonio de Guerra. Large cities have more than 100,000 inhabitants.

<sup>34</sup> Safely manage sanitation corresponds to improved facilities which are not shared with other households and where excreta are safely disposed in situ or transported and treated off-site (WHO-UNICEF, Joint Monitoring Programme for Water Supply and Sanitation).



### Figure 35. Waste management disposal by socioeconomic group (income level)

Source: Authors, based on data from ENHOGAR 2018.

Note: The metro area of Santo Domingo includes the Distrito Nacional and neighboring urban municipalities, except Boca Chica and San Antonio de Guerra. Large cities have more than 100,000 inhabitants.



### Figure 36. Waste management disposal by location

Source: Authors, based on data from ENHOGAR 2018.

Note: The metro area of Santo Domingo includes the Distrito Nacional and neighboring urban municipalities, except Boca Chica and San Antonio de Guerra. Large cities have more than 100,000 inhabitants.

Poor population faces a clear underprovision of waste management services. Households in lower socioeconomic levels have less access to waste collection services, compared to middle to high income households, in which almost 90 percent of the households have access to municipal waste collection services (Figure 35). Geographically, in urban areas, between 88 to 96 percent of households have access to municipal collection services (Figure 36), but this proportion is lower in households in the metro area of Santo Domingo, where 6 percent of the households reported dumping their waste on land. Although this percentage seems small, considering the large concentration of population in the metro area of Santo Domingo, the lack of correct waste disposal has created significant environmental problems (see Box 3). Conversely, in rural areas, less than 60 percent of households reported having municipal collection services, and over 30 percent of households burn their waste as their main means of disposal.

### Box 3

### Waste management in the Dominican Republic: Santo Domingo and Santiago

High rates of waste production, flowed waste disposal, and lack of recycling are pressing problems in the country. The Dominican Republic produces more than 4 million tons of solid waste annually, accounting for 11,000 tons per day, which is equivalent to 1.11 kilograms of garbage per person per day, above the average for Latin American countries (Castillo, R. and Castillo, O., 2016). While most solid waste material is made of organic material, the country also produces the highest proportion of plastic waste in Latin America and the Caribbean (Observatorio de Políticas Sociales y de Desarrollo, 2017). Moreover, recycling is minimal, and only 6 percent of the waste is recycled in the country (German Development Cooperation, 2018), losing opportunities to prevent environmental degradation as well as economic opportunities as it is estimated that 50 percent of the waste that ends up in landfills could generate jobs if recycled.<sup>o</sup> While municipal governments have the primary role concerning solid waste management,<sup>b</sup> many of them lack the required resources to provide adequate garbage collection and disposal in landfills ( Japanese Agency for International Cooperation, 2014). As of 2010, the Ministry of Environment and Natural Resources found more than 358 open-air landfills, a considerable number given the country's size. Out of the landfills identified, 66 percent were located on land suitable for agriculture, and 60 percent occupied high hydrological importance areas (Disla, Natanael and Pamela de la Rosa, 2017).

La Duquesa, the largest landfill in the country serving the metro area of Santo Domingo, has reached 70 percent of its capacity, and it is estimated that it could only provide service to Santo Domingo until 2022.<sup>c</sup> Improper environmental regulation in La Duquesa has resulted in chemical leaks and garbage flow directly into the Ozama and Isabela Rivers. In 2018, the Beryl storm, which caused an overflow of tons of garbage from the Ozama River into the streets, brought attention to the pressing problem of waste management in the country (Karasz, 2019). In July 2020, the Dominican Republic Congress voted on the General Law on Comprehensive Management and
Co-processing of Waste, which establishes an institutional and regulatory framework to move the Dominican Republic from a linear economy of use and discard to a circular economy of use-re-cycle-reuse.<sup>d</sup> Setting a functional waste management policy will be fundamental to reducing environmental degradation and protecting livelihoods in the face of the expected population increase in the metro area of Santo Domingo in the upcoming decades.

Additionally, the city of Santiago has taken important steps to improve solid waste disposal and collection. The Rafey landfill, the largest in the city of Santiago, had caused considerable environmental effects as the garbage from the landfill eventually landed in the Yaque del Norte River (the longest in the Dominican Republic, with its center in Santiago), which is used to irrigate crops, such as tobacco, fruits, and vegetables, among others, across the Northwest Line (Ferreras, 2015). The municipal government took several steps to mitigate this challenge, first by creating a holistic approach to trash collection, including more systematic and coordinated garbage collection and improvement of Santa Lucía, the area where the Rafey landfill is located (Deno, 2020). Moreover, through a public-private partnership, a Waste-to-Energy plan (WTE) was established as part of a project to enhance the sorting and management of solid waste in the Rafey landfill.

a Nevertheless, current manual recycling process does not follow any safety procedures for the recyclers (Edelman, D. J., 2019).

- **b** Law 176-07 regarding the Distrito Nacional and Municipalities, which dictates that municipal governments are responsible for the management of municipal solid waste.
- c A very low tax per solid waste generation is applied per ton, dissuading residents and businesses from responsible waste production and recycling. The average tax per ton in other countries, such as the US, is about \$16 per ton while in Santo Domingo the average cost per ton is \$1.95, which is the lowest in the country. The total cost to process each individual ton of waste in the Dominican Republic is between \$17 and \$24 (Edelman, D. J. 2019).
- d The Law stipulates the creation of a National System for Waste Management, which will coordinate between institutions and municipalities and make recommendations to develop a comprehensive solid waste management system. It also instituted the General Directorate for Comprehensive Waste Management, a unit responsible for implementing legal provisions. Furthermore, all programs and projects should follow the guidelines and priorities outlined in the National Plan for Comprehensive Waste Management, whose long-term goals (10 years) would serve as the basis for decision-making at the national and local levels.

e Plan Estratégico de Santiago, 2030.

# 3.6 Tourism and industrial development hinge on the provision of basic services as cities expand

Water provision and sanitation services are lacking in Samaná and La Altagracia, highlighting the need for continuous investments in touristic poles. With regard to electricity, unlike other areas of the country, households in these provinces have longer hours of electricity connection, with about 19 hours a day on average. In contrast, water service hours are less than the national average (11 hours) in Altagracia, where water runs for around 4 hours a day, and in Samaná the average is 8 hours (Figure 37). La Altagracia province also lags on water service quality, with only 25 percent of the households with piped water inside the house. Moreover, while the connection to sewerage is minimal at the national level (20 percent), Samaná and Altagracia report lower proportions of households connected to public sewerage. In the case of waste collection, Puerto Plata is just at the national average with 86 percent of the households with waste collection services, while Samaná reports only 70 percent (Figure 38). Improving waste collection is fundamental to prevent pollution of the natu-

ral endowments of these touristic provinces. Meanwhile, households in Santiago province report to have better water, electricity, waste, and sanitation services than the country's average. In this case, efforts to expand access and increase efficiency in the operation of public services should be put in place to guarantee that the quality of services remains promising as the urban population increases.





Source: Authors, based on data from ENHOGAR 2018.



Figure 38. Households with waste collection services, connection to sewage and piped water (in percentage) in Puerto Plata, Santiago, Samaná and La Altagracia, 2018

# 3.7 Power outages, regulatory mechanisms, and a lack of skilled labor are standing in the way of a productive business environment

At the national level, firms in the Dominican Republic list corruption and electricity as their primary business environment obstacles, challenges that are unique compared to other Latin American countries. Access to finance, inadequate practices of the informal sector, tax rates, and an inadequately educated workforce are the main challenges named in other countries of Latin America (see Figure 39). Nevertheless, according to the Dominican Republic Enterprise Survey in 2010 and 2016, firms consistently selected corruption and electricity as their main obstacle. Concern regarding corruption has increased in recent years as the proportion of firms that mentioned corruption as the main obstacle went from 14.6 percent in 2010 to 18.6 percent in 2016 period. Compared to other LAC countries, only Guatemala, Panama, and Paraguay had a similar or higher share of firms which selected corruption as a primary obstacle.<sup>35</sup>



Figure 39. Top ten business environment constraints in 2016

Source: World Bank Enterprise Survey, Dominican Republic 2016, Country Profile.

Note: Percentage of firms that consider a specific business environment obstacle as the most important one.

**Firms in the Dominican Republic must deal with expensive and unreliable electricity service.** In 2016, 14.6 percent of firms ranked electricity as their main obstacle for business. The Dominican Republic reports having the fourth-highest frequency and third-highest duration of power interruptions among LAC countries and income peers. On average, firms lose 5 percent of their sales because of power outages. Moreover, most firms invest in private generators to mitigate the cost of electricity disruption; approximately 95 percent of large industry firms have electric generators, as do 78 percent of small industry firms. Aside from erratic service, the electric

<sup>35</sup> In the World Bank Enterprise Survey, corruption is measure by bribery incidence (gifts or informal payments), which reflects a firm's experience regarding bribe payment requests across different transactions, including paying taxes, obtaining permits or licenses, and obtaining utility connections.

system in the Dominican Republic has the third-highest industrial electricity prices in the region (World Bank, 2018). This situation hinders the efficiency and productivity of the overall business environment, creating more harmful effects for small firms (World Bank, 2016), which, as of 2018, represented 63 percent of the total firms registered in the country ("Directorio de empresas y establecimientos", or Directory of Businesses and Establishments, 2018, ONE). With regard to location, firms outside of the large economic centers seem to struggle more due to power outages (see Table A1).

At the subnational level, informality along with institutional sectors emerge as bottlenecks for business operation. By disaggregating the obstacles by firm location, we see that informality, tax rate and tax regulations, crime, and an inadequately educated workforce are shared challenges for firms across different regions of the country. Nonetheless, firms located in Santo Domingo report more serious difficulties with corruption and tax administration than firms in other locations. Moreover, even when business licensing is not identified as a major constraint for a firm, obtaining construction-related permits in the country capital usually takes 54 days, above the national average of 40 days, which adds an extra burden to businesses. Interestingly, firms in the secondary economic areas of Santiago, Puerto Plata, and Espaillat seem to have fewer institutional and infrastructure obstacles compared to firms in Santo Domingo and the rest of the country.

Crime and an inadequately educated workforce are highly related to productivity loss. Studying the city's business environment factors and its relationship with productivity, Reyes, Roberts, and Xu (2017) identify the lack of basic protection from crime in cities and the absence of skilled labor among the most damaging factors on firm productivity in Latin America and around the world. In the case of crime, average spending by firms on security across LAC cities is higher than in any other region in the world (Ferreyra and Roberts, 2018). Moreover, efforts to correct the lack of skilled labor are highly needed in the country. Santo Domingo province, which has the highest education level across provinces, reports only 8.9 years of schooling on average (IX Censo de Población y Vivienda, 2010). The mismatch between firms' demands and population skills is aggravated by the fact that only 23 percent of the firms in the Dominican Republic reported offering formal training to workers, which is way below the average in LAC countries (43 percent) (World Bank, 2016).

### 4. Conclusions

The impressive economic growth that has followed the Dominican Republic's urbanization process needs to be matched with more inclusive and better opportunities for urban workers. In recent decades, the country has embarked on a remarkable urban development process, that, even with the deceleration of the urban arowth rate in the most recent years, is expected to continue until 2060 in Santo Domingo, the major urban center. Assessing the relationship between economic productivity and urban growth, in 2012, Santo Domingo and Santiago performed below the global and LAC average productivity levels, but by 2015 Santo Domingo seemed to catch up, increasing economic productivity, as reflected by its GDP per capita level. Nevertheless, as shown by growth decomposition analysis, this growth has been sustained throughout a remarkable disparity between labor productivity and job creation in the capital and across the country, which has impacted economic growth negatively in recent years. Moreover, the Ferreyra and Roberts (2018) analysis showed that urban workers in the Dominican Republic have seen only meager benefits from the urbanization process compared to other LAC countries. The metro area of Santo Domingo is endowed with a large population and concentrated economic activity, elements that, when efficiently combined, highlight its remarkable potential to rapidly leverage agglomeration benefits to increase the country's economic potential. Now that the great process of urbanization in the Dominican Republic is slowing down and the economic benefits associated with the urbanization process and the structural transformation of the country (from an agricultural economy to a service economy) are reducing, the country faces new challenges to continue increasing its productivity and economic growth. These new challenges consist of the use of its endowments, such as its human capital. The country will lose a unique opportunity if it fails to create better economic opportunities, such as more and quality jobs for urban dwellers in the capital and in emerging urban areas. Moreover, the unique characteristics of its cities and territories, like its economic and population agglomeration, connectivity, and natural resources, also need to be considered in order to guide policies aimed at increasing territorial development.<sup>36</sup>

Investing in effective urban planning in the Dominican Republic, especially for leveraging internal connectivity, is essential to creating more productive cities as the urbanization process evolves. In recent decades, about 50 to 60 percent of the growth in built-up surface in Santo Domingo and Santiago has been classified as expansion outside the city borders. Edge expansion and leapfrog development have become more prominent in smaller cities, indicating a trend of cities becoming less compact and more sprawled. As these characteristics negatively affect productivity, investing in internal city connectivity, such as building denser street networks and public transportation policies, is critical to preserve and lift the cities' productivity. Moreover, enhancing coordination on infrastructure investment policies, land use, and zoning regulations, particularly across municipalities in large metropolitan areas and touristic poles, would make it possible to effectively regulate the upcoming urban expansion. In the case of the Santo Domingo metro area, coordination between the authorities of the Distrito Nacional and the surrounding municipalities is crucial, not only to regulate urban traffic, but also to increase access to public services (e.g., health institutions, as well as educational and recreational centers) and economic opportunities in an equitable way across the territories that comprise the metropolis.

<sup>36</sup> For more on this topic, see note 2, "Regional Disparities in the Dominican Republic".

As cities grow close to the ocean, it becomes more important to develop integrated disaster risk management plans. Urban plans should focus on protecting private and public infrastructure, as well as preserving natural assets from adverse natural and climate-related events. The development of the tourism sector has brought significant challenges to reaping the benefits of becoming more urbanized, ranging from ensuring adequate environmental and territorial management to implementing appropriate climate change adaptation and mitigation policies. Municipalities such as Higüey and Santo Domingo Este, as well as Puerto Plata, Boca Chica, La Romana, and Sosúa, have experienced a significant increase in built-up surface from 1996 to 2015, mainly associated with tourism development.

The improvement of quality of life must be prioritized, and the foundations for an equitable and sustainable growth of the territory should be laid. Investments in public services to ensure the reliable provision of water and electricity, sustainable waste management, and sewer connections in urban areas are crucial. Currently, the metro area of Santo Domingo lags on water and electricity services, with service hours below the national average and that of other urban centers. Increasing service reliability across all income groups in Santo Domingo would allow for a more inclusive urban development. Additionally, to pave the path to more sustainable growth, it will be necessary to implement a functional waste management policy to serve the metro area of Santo Domingo aligned with the new legal framework (the General Law on Comprehensive Management and Co-processing of Waste), increase the connection to sewerage, to reduce the risk of groundwater and land contamination, and strengthen wastewater management.Furthermore, generating an adequate business environment through more transparent and efficient management of public services, both federal and municipal, while ensuring the reliable supply of electricity in urban areas, would positively impact the capacity of firms—especially small ones—to operate and take advantage of the large and growing urban market.

Aside from the Santo Domingo metro area, provinces with important industrial and tourist centers should focus on putting basic services in place to absorb the additional population coming their way. As tourist and industrial activities generate jobs, it is expected that people will migrate to the most important cities and surrounding areas, generating higher demand for public services. In this sense, due to their industry potential, provinces with great tourist attractions, such as Puerto Plata, Samaná, Altagracia, and Santiago, need to pay special attention to timely increases in access to and quality of basic services for their current and future population.

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### Annex

Additional graphs on economic indicators



Source: Authors, based on Oxford Economics, 2016.

#### Table A1. Top obstacles for firms' performance by location, 2016

	Santo Domingo	Santiago, Puerto Plata, Espaillat	Rest of the country
Regulations			
Customs & Trade Regulation	20%	6%	4%
Practice of Competitors in Informal Sectors	50%	47%	45%
Labor Regulations	19%	12%	11%
Market Factors			
Access to Land	6%	1%	2%
Access to Finance	13%	17%	14%
Inadequately Educated Workforce	33%	31%	29%
Institutions			
Courts	29%	14%	24%
Crime	34%	26%	33%
Tax Rates	41%	36%	38%
Tax Administration	30%	33%	34%
Business Licensing and Permits	6%	5%	8%
Political Instability	23%	21%	14%
Corruption	35%	29%	25%
Infrastructure			
Electricity	35%	27%	50%
Telecommunications	20%	6%	10%
Transport	16%	8%	12%

Note: Percentage of firms answering that the variable is a major or a very severe obstacle. Sampling weights were used. The colors are scaled according to all values in the table from smallest percentage to largest (green to red).

Source: World Bank Enterprise Survey Dominican Republic, 2016.

# 2. Addressing territorial disparities at different scales

Paula Restrepo Cadavid and Evelyn Sánchez Hernández

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### Introduction

An even distribution of economic development across territories is unrealistic and goes against market forces, but this does not necessarily have to result in territorial inequalities with regard to access to opportunities and diverging living standards. Over the past 50-60 years the Dominican Republic has adopted sectoral policies with territorial impact such as the development of Special Economic Zones, or *Zonas Francas*, and the development of tourism poles<sup>1</sup>. More recently, there is a revived interest in strengthening territorial planning and targeting funds for territorial development, with a particular focus on less developed areas such as the provinces bordering Haiti. This spotlight aims to contribute to the ongoing discussion by carrying out an assessment of regional disparities in the Dominican Republic. To do so, it proposes a classification of provinces into leading, transition, or lagging areas based on a set of measures of economic performance. This spotlight also conducts an assessment of how economic performance correlates with other indicators or territorial endowments, such as human capital, infrastructure, natural capital, market access, and existing service provision. Lastly, given the government's interest in the border region, this spotlight focuses on provinces in the development of the region's strategic plan.

This spotlight reveals that lagging provinces are mainly located near the border of Haiti and in the northeast corridor from Espaillat to El Seibo. Aside from inter-provincial disparities, differences are also evident at a lower spatial scale: between Santo Domingo Province and the Distrito Nacional and internally within the Distrito Nacional. This assessment highlights the need to take into consideration specific territorial endowments for the design of public policies and the application of ongoing territorial initiatives and reforms.

### 1. Territorial Disparities – Why do they matter?

Territorial differences in economic performance are inevitable but do not need to result in disparities with regard to opportunities and living standards. As countries develop, there is a concentration of population (urbanization) and economic activities in certain areas. The agglomeration of population and firms benefit the creation of economies of scale, which increases economic productivity and income generation. Nevertheless, this concentration does not necessarily have to result in divergences with regard to opportunities and living standards across regions. The benefits of agglomeration can be distributed across regions when places are well connected and those well-connected regions specialize in areas and markets in which they are more productive. Nonetheless, this equilibrium has been challenging for many countries to reach, leading to the consolidation of leading areas and entrenched lagging regions. These divergences can be the result of different causes, such as the inability of lagging areas to realize full returns on their endowments, restricted business environment, lack of complementary infrastructure to reach national or external markets, coordination failures, or lack of adequate human capital. The persistence of territorial inequalities has multiple short- and long-term consequences. It impacts the well-being and opportunities of people living in lagging

<sup>1</sup> For an extensive description of these policies, please refer to Spotlight: Zonas Francas and Territories in the Dominican Republic and Note 3: Tourism and Territorial Development in the Dominican Republic.

areas, resulting in higher levels of migration and poverty. It can also lead to the underutilization of territorial endowments and the emergence of "low-growth traps," potentially dragging national growth. Moreover, entrenched and high levels of territorial disparities at different scales (such as between provinces and within cities) have the potential to generate social unrest and pose a threat to the overall economic development and territorial cohesion of a country.

Territorial development uses a spatial lens to identify regional growth drivers and assess economic potential and existing bottlenecks to unleash it in both leading and lagging areas. The increasing disparities in economic development, and the emergence of low-growth regions across countries, illustrate the need for a better understanding of regional growth drivers and what policymakers can do to unlock growth at different subnational levels. Territorial development is development using a *spatial lens* to align investments to local challenges while considering the region's economic specialization, natural endowments, jobs, and living standards in relation to the rest of the country. Territorial development recognizes that while lagging regions might have underexploited economic potential, all regions do not have the same growth potential due to differences in endowments and structural conditions (Farole et al., 2018).

Several governments have used territorial development initiatives to tackle regional inequalities. The concern over large and growing regional disparities has motivated governments to shift from the traditional national-wide view to approaches tailored to different territories. For instance, the European Union's Cohesion Policy has focused on reducing disparities between member countries and regions through structural and investment funds to help regions become more competitive. Additionally, through the Catching-up Regions Initiative, the EU has offered tailored technical support to identify regions' bottlenecks (e.g., urban development, connectivity, or administrative capacities) and has helped local stakeholders to maximize the impact of regional investments in Poland and Romania (Kriss et al., 2019). Likewise, Brazil's government has been active in the adoption of a territorial development approach, first focusing on providing funds for territorial development initiatives for less developed areas, while also strengthening local capacities. More recently, it has implemented a policy directed at decentralizing and internalizing development by benefiting regions with low socioeconomic indicators, population decline, and the consolidation of a polycentric network of cities<sup>2</sup>.

In recent years, the Dominican Republic has revived its interest in moving away from spatially blind policies in favor of spatially sensitive approaches. In 2018, the Ministry of Economy, Planning and Development (*MEPyD*) created the *Observatorio de la Zona Fronteriza* (Observatory for the Border Area) to facilitate the evaluation and analysis of policies for provinces along the border with Haiti, which have been part of a special development area since 2001. Moreover, after the 2020 election, the Government Program established "Territories and Spaces" as one of its seven transversal pillars, recognizing the relevance of creating capacities and opportunities where the people reside and establishing the intention to evaluate policies according to levels of spatial convergence for reducing inequalities in quality of life and opportunities. In alignment with these factors, this document has two objectives, first, to explore and describe spatial disparities patterns at the provincial level in the Dominican Republic, and second, to focus on border areas in order to inform the government's strategic plan for this area of the country.

<sup>2</sup> The National Policy for Regional Development (PNDR) was presented in 2007 and restructured in 2019.

# 2. What do regional disparities look like in the Dominican Republic?

Regional disparities in the Dominican Republic are in the middle of the distribution when compared to Latin America, and they have decreased faster than in most countries in the region and in the World. As mentioned, spatial inequalities are not unique to the Dominican Republic. We use welfare levels from harmonized household surveys on a global scale (Global Monitoring Database) from 2000 to 2018 to capture the degree and change of the subnational difference in the Dominican Republic at the first administrative level—*Regiones de desarollo.*<sup>3</sup> Data shows (Figure 1) that, globally, as countries get richer, inequalities between places decrease. This pattern is consistent in Latin American countries (orange line), and remarkably, the trend seems to be more pronounced in the Dominican Republic (green line), implying that regional differences decreased faster in the country compared to the regional and global trend. Within Latin America, the Dominican Republic is positioned in the middle of the distribution in terms of the magnitude of regional inequalities, with greater subnational differences than in Ecuador, Chile, Argentina, Mexico, Bolivia, and Costa Rica. Conversely, Peru, Guatemala, and Haiti report the largest regional inequalities in the region.<sup>4</sup>

At the provincial level, inequalities also seem to be decreasing in recent years. The survey information used for the international comparison shows that even at a lower administrative level—the province inequality decreased from 2014 to 2017 when we compare the welfare levels (in orange in Figure 2) between provinces. An alternative way to measure inequality at the province level is by comparing the maximum (top 1%) relative to the minimum (bottom 1%) welfare ratio (in gray in Figure 2). The difference in the welfare ratio (max/min) seems to be lower than the average measures of welfare and seems to have a more pronounced decrease over the years. Interestingly, it also shows that in 2017, the welfare ratio (max/min) had a similarly low level as in 2009, after suffering a drastic increase in 2010.

Designing policies to address regional disparities first requires identifying which regions are falling behind. The methods to identify lagging regions vary in practice (Farole et al., 2018), but are commonly based on economic productivity measures, such as GDP per capita or income levels. Due to the lack of official GDP statistics at the Dominican Republic's subnational level, this note uses a composed economic productivity measure, integrated by three weighted indicators.<sup>5</sup> The first indicator—intensity of nightlights per capita—has been identified as an accurate predictor of economic development (Henderson et. al. 2012). The second indicator is derived from an estimation of subnational GDP per capita, which combines economic development from nightlight radiance and agricultural productivity using spatial data (Ishizawa & Blanchard, 2020). Finally, the third indicator is income per capita, adjusted by purchasing power parity, as computed

<sup>3</sup> The welfare aggregates employed are used to compute poverty rates at international US\$ PPP levels and are spatially deflated to account for price differences between subnational regions.

One caveat of the global comparison is that it takes into consideration the number of first administrative regions, which varies across countries, as these are defined unilaterally by each country. In the Dominican Republic the first administrative level, *Regiones de desarollo*, comprises a total of 11 regions, but in the United Kingdom, the first administrative level comprises 37 regions. With a larger the number of regions, there is a higher probability of finding greater welfare differences, as they might reflect the heterogeneity of territories more clearly. In this sense, the inability to construct a unique definition of administrative regions for all countries can affect the global comparison. Nevertheless, the difference in the number of first administrative regions in Latin American countries is not that large, between 3 (Ecuador and Guatemala) and 16 (Chile), and in different exercises controlling for the number of regions, the Dominican Republic remains in the middle of the distribution regarding the magnitude of regional inequalities.

<sup>5</sup> The three economic productivity measures, nightlights per capita radiance, spatial GDP per capita, and income per capita, were normalized on a scale from 0 to 1 and later combined, giving each of them an equal weight.



#### Figure 1. Regional inequalities from 2000 to 2018 (first administrative level)

Source: Data from D'Aoust and Lall (2021) using Global Monitoring Database.

Note: Theil T index is used to capture spatial inequality as the share of inequality that can be attributed to between-regions disparities.



#### Figure 2. Inequalities between provinces (second administrative level) 2000 to 2017

Source: Data from D'Aoust and Lall (2021) using Global Monitoring Database.

Note: Theil T index is used to capture spatial inequality as the share of inequality that can be attributed to between-regions disparities. Between-province differences and welfare ratio values were normalized for the comparison



#### Figure 3. Regional disparities can be observed through the composed economic productivity measure

Sources: GDP spatial series elaborated by the World Bank; Income per capita from the UNDP, Human Development Index, 2016; and Nightlights using NOAA, VIIRS.

by the UNDP (2016). When these three measures are mapped separately, slightly different patterns emerge regarding how each province performs (see Annex; Figure A1.2). Nevertheless, similar results are shown in the three measures, such as low productivity levels in Dajabón and Elías Piña, along the border with Haiti, and in Monte Plata, and in contrast, high levels of economic productivity in the southeast corridor from San Pedro Macoris to La Altagracia, as well as in Puerto Plata and Santiago.

The compounded economic productivity measure reveals that lagging provinces are mostly located near the border of Haiti and in the northeast corridor from Espaillat to El Seibo. Using the combined economic productivity measure, provinces<sup>6</sup> were classified as *Leading*, if their score was above the 80th percentile, *Transition*, if the score was between the 80th and 60th percentiles, and *Lagging*, if it belongs to the bottom 40th percentile. As shown in Figure 3, leading provinces align across the corridor from Santiago to Santo Domingo, excluding Monte Plata, and continue in the southeast coastal area to La Altagracia. On the other hand, lagging provinces are located along the border with Haiti and in the northeast coast corridor from Espaillat to El Seibo.

<sup>6</sup> With regard to the scale selected to measure territorial inequalities, the provincial level was identified as the lowest administrative level with more static and perdurable borders and administration than municipalities, which are more susceptible to restructuring their territorial limits.

# 3. How does economic productivity relate to other indicators?

Far from only considering economic productivity as the primary determinant of development, it is fundamental to assess the interaction of economic outcomes with other relevant variables. Social and spatial infrastructure and human endowments in the regions are key to understanding the underlying characteristics or patterns that promote or deter growth and to constructing policy strategies around these axes. For instance, a mining province might show very solid economic performance in terms of GDP or income per capita but present an overall lagging region profile with high unemployment, high inequalities, poor access to services, and low accumulation of human capital. With this in mind, in this section, different indicators are compared across three development categories: (1) Housing and Services, (2) Human Capital, and (3) Employment Structure.

## 3.1 Service quality and housing conditions gradually decrease with the level of economic productivity

Households in lagging regions have lower quality of services. The level of economic productivity of a province is closely related to the quality of the household services, as shown in Figure 4. On average, 55 percent of households in leading areas have water connections directly inside the house, and 90 percent of them have a toilet inside the house, access to clean cooking, and municipal waste collection. The level of access and quality of service gradually decrease with the level of economic productivity. For instance, in lagging areas, only 37 percent of households report having water connections directly inside the house, 60 percent have a toilet inside the household, and around 70 percent have access to clean cooking and waste collection services. While at the national level, 31 percent of households have access to internet access, this proportion drops to 17 percent in lagging areas. Only hours of water and electricity service in households do not seem to follow this pattern. The unreliability of electricity provision affects households throughout the territory, with leading and lagging provinces having around 18 hours of electricity service. The average hours of services declines a little in transition provinces to 16, mainly due to the limited service in San Juan province, where households report having just 6 hours of electricity. In contrast, regarding the number of hours of water service, transition areas have slightly better access to water, with an average of 11 hours of service, while households in leading and lagging areas have around 9 hours of service.

Lagging areas suffer from a higher housing deficit, with a higher demand for quality housing units, while leading areas have a higher quantitative deficit. The housing deficit—the number of houses that have to build or renovate to reach an acceptable level of quality living standards—is 66 percent in lagging provinces and decreases to 51 percent in leading areas. Taking a detailed look into the needs of housing, as shown in Figure 5, lagging areas have a higher need for repairs and improvements in the current qualitative housing deficit—estimated at 54 percent—compared to leading or transition areas, where the qualitative deficit falls to 33 percent and 48 percent, respectively. In the case of the quantitative deficit—the number of houses that need to be built (or arranged) so that people that require accommodation have a decent space—the deficit is higher for leading areas, at 17 percent, followed by lagging areas at 12 percent, and finally, transition areas, with only a 10 percent deficit.



Source: ENHOGAR, 2018.



Lagging provinces have the highest proportion of poverty, yet some leading and transition areas have a larger number of poor people. According to international poverty measures<sup>7</sup>, in lagging provinces, around 31 percent of the population live in poverty, which is a higher proportion than in transition and leading provinces—which report poverty levels of 27 percent and 21 percent, respectively. Nevertheless, looking at the numbers of poor people rather than the proportion of the population, Santo Domingo province and the Distrito Nacional alone have around 26 percent of the poor population in 2015. Santiago, another leading province, as well as San Cristobal and San Juan, which are in the transition province category, have between 7 to 5 percent of the poor population within each of their territories.

## 3.2 Leading provinces report higher levels of human capital and a more educated labor force

Leading provinces have higher levels of human development, which is related to better access to education. Considering three different dimensions of human development: health, income, and education, it is possible to observe that human development is positively related to economic productivity, with leading provinces having higher scores in the human development index (UNDP, 2016). Even when the dimension of income is removed from the index, a positive relationship between human development and economic productivity remains at the provincial level. Interestingly, when analyzing the health dimension, which includes infant mortality, health coverage, and human and physical health resources, the difference across the three types of provinces is minimal, with transition areas having a slightly better score in the health dimension. Regarding the education dimension, which covers literacy and basic and medium education coverage and completion, there are striking differences, as the score in leading areas is double that of lagging areas, which highlights disparities in education access.

The difference in education level between leading and lagging provinces remains when evaluating labor forces. As the human development analysis shows, education access differs depending on economic productivity level, and this is also reflected in the education level of the population in the labor market. As Figure 6 shows, in general, a larger share of the working-age population has a higher education in leading areas (21 percent), compared to transition (17 percent) and lagging areas (13 percent). Nevertheless, worker education level in leading areas is quite heterogeneous, with the Distrito Nacional having the highest share of workers with tertiary education (39 percent), while in other leading provinces such as La Altagracia, San Pedro de Macorís, and La Romana, less than 16 percent of the working-age population have a higher education, which is a lower proportion than the average for transition provinces. In contrast, the share of tertiary education levels seems to be more homogeneous across lagging provinces.

<sup>7</sup> Poverty headcount ratio at \$1.90 a day (2011 PPP) (% of population), coming from HDD data at subnational estimation.



#### Figure 6. Share of working-age population with tertiary education

Source: IX Censo de Población y Vivienda 2010 – Dominican Republic.



#### Figure 7. Employment density (number of employees per 1,000 working-age population)

Source: IX Censo de Población y Vivienda 2010 – Dominican Republic.

# 3.3 Employment structures diverge depending on economic development level, with leading provinces focusing more on high-productivity sectors

The labor market seems to be more prolific in leading areas than in transition and lagging provinces. When looking at the density of employment in Figure 7, as expected, economic productivity is positively associated with jobs availability. In general, employment density is higher in leading areas than in lagging provinces, but there is a large variability in employment for the latter. Some lagging provinces with a large share of agricultural employment have similar employment density to leading ones. In contrast, only Monseñor Nouel, classified as a leading province, has an employment density below the national average (448 employees/1,000 working-age people). A prolific labor market is relevant as jobs and earnings translate into economic and social benefits for households and individuals. Moreover, jobs also have significant positive economic and social externalities, as workers become more efficient in the presence of other workers and tend to invest more in building the human capital of the next generation (Farole, 2018). While employment density does not account for the quality of the jobs, the Dominican Republic job market has been characterized by low-job creation, which is accompanied by a proliferation of low-quality jobs and wage mismatch (World Bank, 2020). In this sense, strategies to lead quality job creation are critical for economic development, especially in lagging areas.



#### Figure 8. Employment structure by region type, 2010

Source: IX Censo de Población y Vivienda, 2010 – Dominican Republic.

Note: Basic services includes construction, wholesale and retail trade, transportation, accommodation, and food service activities; advanced services includes information and communication, finance and insurance, real estate, professional, and scientific and technical activities.

**Employment structures differ for leading and lagging regions**. As shown in Figure 8, basic services, including wholesale and retail trade, transportation, and accommodation activities, dominates the employment market in the three types of regions. Still, important differences in the rest of the employment structure are relevant to define the productive potential of each province. Lagging and Transition provinces have higher agricultural employment shares, at 25 percent and 18 percent, respectively, compared to leading areas (5 percent). They also have a much lower share of high productivity and tradable activities, with a notably low proportion of industry employment—mainly through shifting out of agriculture and into industry and services—could contributing substantially to their future growth. Nevertheless, to successfully achieve this change, strategies are required to strengthen the capacities of workers, competitiveness, and the innovation capacity of local firms, as well as to remove distortions in the business environment. In the case of lagging areas, in provinces such as San Jose de Oca, Pedernales, and Elías Piña, where agriculture still represents more than 35 percent of employment, targeted sectoral approaches in agriculture to raise productivity and increase value-added agricultural outputs are fundamental, while complementary policies to increase capacities to support investments in value-added services or manufacturing are advised.

# 3.4 Assessing the spatial and population endowments and connectivity of a region is fundamental in order to define accurate development policies

Spatial endowments as geography and their interaction with population are essential factors for the development of a region. Population density is associated with accelerated productivity gains, as the concentration of people and firms creates larger and more dynamic commercial and labor markets. Market access, which is defined as proximity in Figure 9, is fundamental for firms as it determines their market potential. Major market accessibility allows firms to reach markets at lower transportation costs for inputs and outputs.

Most of the lagging areas have poor spatial endowments that limit their economic potential. Figure 9 shows the distribution of population density (agglomeration) and market access (accessibility) for all the provinces in the country. Most lagging regions are positioned in the upper-left area of the graph, representing low population density and low market accessibility (Sparse and Peripheral). The fact that lagging regions lack market scale and density results in firms being less likely to settle in these areas due to the limited potential to exploit the productivity associated with agglomeration and connectivity. This situation can generate an overall weak competitive environment for firms since fewer firms are interested in investing and building capabilities in these areas. In provinces with very low spatial endowments, policies to enhance equality of opportunity, specifically by developing institutions to support social services and focusing on human capital accumulation, should be prioritized to increase economic productivity. For lagging areas with higher-than-average accessibility but slim density (Sparse & Central), such as Dajabón and Monte Plata, improved connectivity to the nearby agglomeration, such as Santo Domingo and Santiago, can increase their economic performance. When looking at the good connectivity and population endowments of Espaillat (Dense & Central), its low economic productivity is unexpected. In this case, interventions to address governmental and institutional failures or weaknesses are essential in order to identify and tackle potential factors that deter its ability to take advantage of its population and location endowments. A summary of recommendations based on the spatial and population endowments of the provinces is shown in Table 1

#### Figure 9. Spatial endowments: density and proximity



Note: Density is the proportion of the population living in areas of high density (more than 300 ppl/km2) (GHS-POP, 2015). Proximity is the average travel time to the nearest city, in minutes), Malaria Atlas project (2015). Lines represent the mean value.





#### Figure 11. Road characteristics by type of province, 2015

Low market access and poor road density/quality can significantly limit a territory's capacity to develop. There is a close relationship between market access and quality road infrastructure, as the latter lowers the costs of labor and intermediate goods for firms, facilitating access to different markets across territories. Moreover, increased road quality is associated with positive social outcomes for households. Some evidence shows that road paving increased household-level acquisition of durable goods (vehicles, appliances, and home improvements) through its positive effect on property values and credit access (Gonzalez-Navarro & Quintana-Domeque, 2016). Road infrastructure is also relevant to reducing territorial disparities. Evidence from Brazil (Bird and Straub, 2014) shows that access to roads reduced inequality in spatial distribution of economic activities among regions. Similarly, transport improvement is associated with the decentralization of production and population from core cities to peripheral areas (Baum-Snow 2007; Baum- Snow et al. 2012).

Scarce road networks and low-quality roads hinder the development potential of lagging provinces. Market access levels are similar across leading and transition areas, Figure A1.3 shows (see Annex). Most lagging provinces suffer from low levels of accessibility which seems to be related to the low density and low quality of roads. As shown in Figure 10, large road networks are concentrated in the corridor of Santiago to Santo Domingo and throughout the coastal area from San Cristobal to La Altagracia. There is a remarkably low density of roads in lagging areas, which are mostly in the bottom 30th percentile of the distribution. The quality of roads also limits accessibility for the population living in lagging areas. The percentage of paved roads in leading areas (29 percent) is almost double that of lagging areas (16 percent) (see Figure 11). Even when considering passable roads, which groups paved and unpaved roads where cars can transit all year, a significant difference between lagging and non-lagging areas remains. As road infrastructure is fundamental to enable economic and social development and to facilitate the distribution of economic outcomes across regions, assessing the needs of internal and inter-regional road improvements and setting strategies to address those needs is critical.

# 3.5 Lagging areas need to build on their endowments to enhance their economic performance

In general, lagging provinces face common social and infrastructure deficiencies that constrain long-term growth prospects. As observed before, lagging areas have a less educated labor force and a less prolific labor market. Moreover, they suffer from lower living standards, which is reflected by lower levels of waste collection, sanitation, and water services, and a higher deficit in housing quality and quantity. In general, their spatial and population characteristics—being far from markets and with lower density than the average—work against their potential to create agglomeration economies. Nevertheless, these characteristics do not mean that their economic and social outcomes cannot be improved, and only highlight the need for tailored approaches that take into consideration existing endowments and economic potential.

Development policies in the Dominican Republic should be directed to build upon regional endowments. Following the approach in Farole et al. (2019), promoting regional development aims to maximize regional potential—in terms of income and quality job creation, and by ensuring equality of opportunity for individuals to achieve their potential. In this sense, the scope of interventions needs to be assessed depending on the regional contexts (see Table 1). Considering the characteristics of the lagging areas in the Dominican Republic, which are poorly densely populated and far from large markets, the main priority should be strengthening endowments—human capital and institutions to support quality social services—as well as internally connective infrastructure, which are areas where these regions clearly fall behind, while at the same time implementing adequate sectoral policies to remove distortions from growth and build endowments. Place-based interventions in these areas, such as large industrial projects, are riskier due to the relatively small market available in terms of labor and consumers, and the high transportation cost that firms would face to become established in these areas and bring their products to larger markets.

For lagging areas with better market accessibility but still low population density, such as Dajabón and Monte Plata, the priority is to improve connectivity to large markets, such as Santiago. Sectoral investments, such as specialization policies, can be particularly important in these regions. These specialization policies, though, should be directed in order to identify and focus resources on sectors that are in line with existing or latent regional comparative advantages and where there is potential to leverage strong cluster effects.<sup>8</sup>In the case of Espaillat, with good connectivity and population density, identifying and understanding the governmental or institutional failures that prevent investment and economic growth in the province is the first step to addressing them. Finally, across all lagging areas, approaches focusing on removing distortions and on making sectoral targeted investments should be supported by an ongoing strengthening of endowments at both the individual and institution level.

<sup>8</sup> In case regional comparative advantage is not identified, establishing an environment that incentivizes experimentation and facilitates market entry and exit by improving the business regulatory environment, setting equal conditions for competition, and transparent governance may allow the specialization potential to emerge over time.

#### Table 1. Policy recommendations for lagging regions based on spatial endowments

#### **Sparse & Periphereal:** low connectivity & population density

Making new sectoral strategies in these regions is risky due to their thin market. **A heavy emphasis on endowment-building (skills and institutions)should be prioritized in these regions:** enhance equality of opportunity by developing institutions to support social services provision and focus on human capital accumulation.

**Provinces:** Pedernales, Elías Piña, Santiago Rodríguez, Independencia, Baoruco, San Juan, San José de Ocoa, Hato Mayor, Samaná, Azua y El Seibo.

#### Dense y periphereal: ow connectivity & nigh population density

Market and government failures may be creating distortions that result in underperformance. Typical place-based sectoral and spatial investments can be effective in overcoming coordination failures to unlock agglomeration. Still, the emphasis shoul be on identifying and addressing these market and government failures.

Province: María Trinidad Sánchez.

**Sparse and central:** good connectivity but low population density

For these relatively well-connected provinces, the priority is to improve internal connectivity to the nearby agglomerations in order to increase economic performance.

Provinces: Dajabón and Monte Plata.

**Dense y central:** high connectivity & high population density

These regions are unlikely to be lagging due to their location premium and population endowment. If they are lagging, enact interventions to identify and address governmental or/and institutional failures or/and major institutional weaknesses.

Province: Espaillat.

Source: Authors based on the typologie developed by Farole, T., S. Goga and M. Ionescu-Heroiu (2018)

Sectoral policies need to strengthen the potential of the productive areas of the region. With regard to their productive profile, lagging areas in the Dominican Republic, especially along the border with Haiti, are highly dependent on agriculture, and a shift to more productive sectors might be unrealistic or undesirable. These provinces should aim to upgrade their agricultural capacities in order to make better use of their comparative agricultural advantages. In this context, raising productivity in the agricultural sector should be a central approach for developing these regions. For other lagging provinces, such as Samaná and Espaillat, where the agricultural sector is less prominent, the focus should be on facilitating the ex-

pansion of manufacturing and more specialized services, with an emphasis on removing distortions in the business environment in order to attract investment, on designing and implementing strategies to develop key sectors where a regional comparative advantage exists, and on strengthening competitiveness and the innovation capacity of local firms and workers. Finally, it is important that regional policies also consider lower scales inequalities by assessing the internal disparities that can be present within provinces, metropolitan areas, or cities (See Box 1).

#### Box 1

#### Spatial differences within the country: why scale matters?

Policy makers should not be blind to lower scale inequalities, as similar types of spatial differences for the dimensions mentioned above (e.g., living standards, infrastructure, and development) can also occur at different scales, such as regional, provincial, or within city borders.

Santo Domingo Province vs. the Distrito Nacional. When we pay attention to Santo Domingo's area, large inequalities between the Distrito Nacional and the province of Santo Domingo, which surrounds it, emerge. Looking at the indicators presented earlier, the Distrito Nacional stands as a leading area due to its high economic productivity, while Santo Domingo province falls into the transition category. Moreover, the Distrito Nacional reports the highest level of human development in the country, with or without considering the income dimension. In contrast, in Santo Domingo province, human development level is classified as "medium-low," and as "low" when the income dimension is removed. Santo Domingo province has a less educated labor force, with 25 percent with tertiary education, compared to 39.5 percent in the Distrito Nacional and employment density is lower than the Distrito Nacional. Regarding services, fewer households in Santo Domingo province have a water source inside the house (55 percent vs. 68 percent in the Distrito Nacional), hours of electricity are lower (16 hrs. vs. 19hrs. in the Distrito Nacional), and internet access is lower (34 percent vs. 48 percent in the Distrito Nacional). Moreover, the qualitative housing deficit is higher in Santo Domingo province (31 percent) than in the Distrito Nacional (25 percent), while the demand for more housing units is the same in both areas (12 percent). Finally, the Distrito Nacional has the highest proportion of paved roads in the country (56 percent), and 96 percent of the roads are passable. These proportions fall in Santo Domingo province, with paved roads at 35 percent and passable roads at 67 percent.

**Distrito Nacional inequalities.** Going into a lower territorial scale, it is also possible to observe acute disparities within the Distrito Nacional's borders. An analysis of different living standard indicators shows how Circumscription 3 (C3), one of the three circumscriptions that comprises the Distrito Nacional (which is located in the eastern part of the Distrito Nacional), as well as the northeast part of Circumscription 2 (C2), which is adjacent to C3, present remarkable deficiencies in living standards. C3 is the most agglomerated area of the Distrito Nacional, with 8 out of the 14 neighborhoods reporting a population density above 30,000 inhabitants per squared kilometer,

almost three times the Distrito Nacional average (11,000 inhabitants/km2) (ADN, 2019). This high population density is accompanied by poverty and housing challenges. The neighborhoods in C3 reported the highest number of houses classified as poor or extremely poor, according to a multidimensional poverty measure, which evaluates the housing conditions and the socioeconomic characteristics of the inhabitants (Med, 2016). Moreover, while in 2010, a large percentage of the population in the Distrito Nacional (41 percent) lived in "tugurios"—defined as a type of housing lacking basic infrastructure or access services—the density of this type of housing extended primarily across C3 and in the northwest area of C2 (Figure B1.1, in yellow). A similar pattern was present for informal settlements (Figure B1.1, in red), which is housing that does not meet legal requirements for construction (e.g., land property). The density of informal settlements is the highest in C3. In addition to these deficiencies, while green spaces in the Distrito Nacional are below the recommended threshold<sup>a</sup>, it is interesting to note that poor households, which are predominantly concentrated in C3, lack access to green spaces, which represent less than 1 percent of the C3 territory. Finally, natural risks pose an additional risk for this area of the Distrito Nacional (ADN, 2019). In a 25-year scenario with regard to the rise of water levels in the Isabela and Ozama rivers, water incursion would exclusively affect the neighborhoods in C3 (ADN, 2019). Moreover, as Figure B1.2 shows, the rivers' channels, which extend largely across C3 and C2, highlight that potential flooding would mainly affect areas with a large portion of informal housing (tugurios) and poor households, especially in C3.

Integrated policies to address the two types of disparities need to be set in place. Addressing the economic and social differences between the Distrito Nacional and Santo Domingo province is key to maintaining the productivity of the largest metro area in the country in the upcoming years, as it is expected that 70 percent of the metropolitan population will reside in the Santo Domingo province by 2050. Bringing services such as education and hospital facilities closer to citizens residing in the Santo Domingo province could eliminate unnecessary congestion from people traveling every day to the Distrito Nacional to attend school or university or for basic health or administrative services. Moreover, coordination policies between local governments to develop more effective transportation links between the Distrito Nacional and peri-urban areas would help to increase the spillover from the Distrito Nacional to the surrounding areas of the Santo Domingo province, as people could travel more easily to their jobs and firms, thereby reducing congestion. In terms of basic service provision, a forthcoming law proposal suggests the possibility that the municipalities that currently comprise the metro areas of Santo Domingo and Santiago could create metropolitan governments that would be responsible for water supply and sewerage within their territories, with the possibility that these functions could expand in the futureb. Either through the creation of a unique metropolitan entity, as this law proposes, or through the establishment of other formal coordination mechanisms between municipalities, an integrated approach to enhance basic service quality, service facilities, and efficient transportation across the metro area of Santo Domingo need to be set in place to ensure efficient and inclusive urban expansion.



Source: Images from ADN, 2019









Source: Images from ADN, 2019

Lastly, for the Distrito Nacional where divisions between informal and formal housing are accompanied by a lack of services, it calls for an urban planning approach with a resilient focus that includes land reform policies to allow land use regularization and zoning, as well as establishing building codes that take natural threats into consideration. This urban strategy should include actions to strengthen local institutions and build capacity in order to allow equal delivery of public services across the Distrito Nacional.

<sup>a</sup> With only 5 meters of green spaces per inhabitant, green spaces in the Distrito Nacional are below the recommended UN-Habitat threshold of 15 meters per inhabitant (ADN, 2019).

<sup>b</sup> Anteproyecto de Ley Organica (currently under a review process)

Source: Images from ADN, 2019.

### 4. How border areas compare to the rest of the country?

4.1 Border provinces in the south have a stronger agricultural profile, while provinces in the north have a more diversified economic profile

The border provinces<sup>9</sup> have a unique productive profile, with agriculture and public service accounting for 40 to 60 percent of employment. In Pedernales, Elías Piña, Monte Cristo, and Bahoruco, agriculture is an important job source, employing between 30 to 40 percent of the labor force, and except for Santiago Rodríguez, employment in the industry sector and advance services in these provinces is below the national average at 12 and 6 percent, respectively (see Annex; Figure A1.2). Santiago Rodríguez province is closer to the national employment distribution, with basic services (e.g., commerce and transport) and industry employing 50 percent of its labor force. Finally, the share of public sector jobs is higher than the national average (19 percent), with employment in this sector representing up to 27 percent and 30 percent in Elías Piña and Independencia. Recently, the government has developed plans for large projects to increase the economic growth of these provinces, as shown in Box 2.

<sup>9</sup> Border provinces are Pedernales, Elías Piñas, Santiago Rodriguez, Monte Cristi, Baorucco, Dajabón and Independencia

#### Box 2

#### **Recent investments in border areas**

From 2012 to 2019, governmental investment in border provinces has been directed to infrastructure projects, mainly in transport (30 percent), with almost 40 percent focused on infrastructure, such as school, sewerage, and sanitation network improvement. At the provincial level, 45 percent of the budget has been concentrated on projects in Monte Cristi, improving its sewerage infrastructure and the rehabilitation of the highway from Valverde province. In the southern provinces, investment in the construction of the Monte Grande Dam is notable (MEPyD, 2020). For 2021, public investment supporting this effort is expected to represent 12.2 percent of the national budget and will be mainly directed to finalize the projects mentioned above (MEPyD, 2021).

Moreover, two large projects to take advantage of the area's potential have been proposed by the government. The first one, in the south, focuses on establishing a tourist development in Pedernales province and its surrounding areas through the "Pro-Pedernales Trust," which includes the construction of an airport and more than 10,000 rooms in hotel complexes.a In the north, the second project, Manzanillo Maritime Hub, involves promoting the development of an international free trade and services area in the Monte Cristi area, which would allow intercontinental cargo freight.

http://mitur.gob.do/listo-el-fideicomiso-para-construir-10-mil-habitaciones-en-pedernales/
Source: Authors, using data from MEPyD (2020 and 2021)

## **4.2 Most border areas present low levels of human development and all of them face remarkable challenges in basic service provision**

**Human development is low in five of the seven border provinces.** Looking at the human development index without the income component, which focuses on health and education coverage and access, Pedernales, Elías Piña, Bahoruco, and Independencia are at the bottom of the distribution, with the lowest levels in the country (see Figure 12). Similarly, Monte Cristi, which, although it jumps to the medium-low category for human development, is still the worst performer in that category. In contrast, Santiago Rodríguez and Dajabón present a higher score for human development.

There is a difference in access to markets between the border provinces to the south, which have less access, and Monte Cristi and Dajabón in the northwest, which have greater access. Pedernales and Independencia have the lowest levels of market access at the national level. This low accessibility extends to Independencia and Santiago Rodríguez, which are below the bottom 40th percentile in market access (see Annex; Figure A1.3). In contrast, Dajabón and Monte Cristi present better market access levels, with the latter above the 70th percentile at the national level.





#### Figure 13. Waste collection services in border provinces

Figure 12. Human development index (No Income)

Source: Authors, using data from ENHOGAR, 2018
2. Addressing territorial disparities at different scales



#### Figure 14. Cooking fuel in border provinces

Low accessibility in the southwest border provinces is related to their low road density and quality. Pedernales has the country's lowest road density, while Independencia, Elías Piña, Bahoruco, and Santiago Rodríguez, are below the bottom 40th percentile at the national level. Only Monte Cristi reports road density above the national median. Moreover, road infrastructure is deficient. Except for Monte Cristi, around 40 percent of the roads are not paved in the provincial capitals. Because of the lag in road infrastructure, the southern border provinces (Bahoruco, Elías Piña, Independencia, and Pedernales) have limited access to ports, with an estimated travel time to the closest port of 1 to 5 hours, which contrasts with the estimated time range of 30 min to 2 hours for the northern border provinces (*MEPyD*, 2020).

The urbanization process has fallen behind in the border areas in comparison to the rest of the country. Monte Cristi, with 7 percent of built-up area, which is above the interprovincial median (5 percent of built-up area), has double the urban areas of any other border province, followed by Bahoruco and Santiago Rodríguez, with 3.8 and 3.1 percent of built-up area, respectively (see Annex; Figure A1.4). At the municipal level, the built-up area proportion also falls below the inter-municipal average of 7 percent. Only the municipality of Guyubín, in Monte Cristi, is above the national average with 10 percent of built-up area, followed by the municipalities of Monte Cristi, Neiba (Bahoruco), Tamayo (Bahoruco), and Dajabón.

Basic services are remarkably deficient in the border area, with deficient waste collection services affecting all these provinces. The percentage of households with municipal waste collection services in border provinces is below the national average of 85 percent. Pedernales, Elías Piña, and Santiago Rodríguez are significantly affected by this lack of service (see Figure 13). Notably, in five of the seven provinces, including Monte Cristi, the population that burns waste as their primary means of disposal is twice the national average (7 percent).

**Lower access to clean cooking fuels affects border provinces in the southwest.** Elías Piña, Pedernales, and Dajabón are the provinces with the highest percentage of households using wood for cooking in the country, ranging from 20 percent up to 33 percent (Figure 14). Likewise, in Independencia, Bahoruco, and



Monte Cristi, more than 10 percent of the households use coal for cooking, which are the highest percentages in the country. These levels contrast with the national average, in which 88 percent of households have access to gas for cooking, and only 7 percent use either coal or wood.

The lag in quality of sanitation services affects Monte Cristi, which has the highest levels of productivity in the border area, to the same degree as Elías Piña, the province that lags the most at the national level. Despite the differences in their economic development levels, around 60 percent of households use latrines in both Monte Cristi and Elías Piña (Figure 16). Once again, the southwestern provinces are the ones most affected by the low quality of service provision. Bahoruco, Independencia, Pedernales, and Elías Piña are the only provinces at the national level in which more than 10 percent of households do not have access to any sanitation services. These poor levels are surprisingly deficient in Bahoruco, where one-fifth of the population lacks sanitation services.

The disparities between border provinces in the southwest and northwest are present in water service provision. Santiago Rodríguez and Dajabón report a higher proportion of households with access to water inside the house, than the national average (54 percent) (see Figure 15). In contrast, the rest of the households in border provinces primarily access water from a source outside the households. Remarkably, in Elías Piña, 19 percent of the households use water coming from natural sources, such as rivers, springs, or streams.

Border regions have natural resources that can be leveraged to enhance their economic performance. According to spatial estimations, 21 percent of the country's crop area is located in the border provinces, especially in Elías Piña, Bahoruco, and Monte Cristi. Moreover, Santiago Rodríguez has large forest resources, covering 34 percent of its territory, and likewise, forests cover around 10 percent of the area in Pedernales. These regions are also rich in biodiversity, as almost the entire territory of Pedernales, Bahoruco, and Independencia has a higher concentration of biodiversity than the national average. Pedernales has notable natural endowments, such as the Sierra de Bahoruco National Park, along with pristine beaches and

2. Addressing territorial disparities at different scales



marine fauna (e.g., Bahía de las Águilas, Cabo Rojo, and Laguna de Oviedo) which highlight its potential to develop tourist activities.

# 4.3 Border provinces need specific policy approaches to achieve their economic potential

The border area is not homogeneous, and strategies to foster its development should be tailored. Monte Cristi and Dajabón differ from the rest of the border provinces due to their unique spatial attributes and higher connectivity. Along with Santiago Rodríguez, their productive structure seems to be migrating from agriculture to more industry- and services-related activities, which produce higher revenues and can contribute to tackling the economic lag present in those provinces. In the case of Monte Cristi, which already performs as a leading area in terms of economic productivity, a primary focus on strengthening education and health services to favor human capital development is key to continuing this trend. Moreover, economic development should be inclusive and focus on improvement in the quality of basic services, which are currently strikingly lower than expected for the province's economic performance. In the case of Dajabón, which already has good connectivity, increasing road infrastructure and quality, mainly in the capital and in connection to Santiago and the port area of Monte Cristi, would allow it to exploit the benefits of its location (see Table 2). Santiago Rodríguez should also focus on increasing its connectivity to nearby areas, which could accelerate its transformation to a home for more productive sectors by taking advantage of its already high human capital. In Santiago Rodríguez and Dajabón, strategies to increase sanitation services and clean cooking need to be complementary to any other sectoral policy.

#### Table 2. Characteristics and policy approaches for border provinces

Stronger agricultural	Elías Piña, Independencia, Baoruco y Pedernales
profile, scarcely populated and low market access	In these provinces, upgrading current capacities should be prioritzed over encoura- ging new sectoral investments. Due to their strong agricultural profile, policies shoud focus on raising productivity and increasing value-added agricultural outputs or de- veloping the agri-food sector.
	Implementing strategies for tourism in Pedernales can contribute to diversifying hou- sehold income in the region. Nevertheless, this policy should have realistic and mo- dest goals, with a strong focus on creating share growth in communities focused on turism developments.
	Complementary interventions to enhance essential services, such as clean cooking, waste disposal, and sanitation, as well as skill development and internal connectivity, are very much needed.
More sectoral	Dajabón y Santiago Rodríguez
diversity, but	In these provinces with more balanced economic profiles, supporting the sectoral
with low quality	transformation from agricultural to high-value sectors can be done by strengthe-
or low human and connectivity	ning the capacities of workers, competitveness, and the innovation capacity of local firms, and by identifying and removing distortions in the business environment.
resources to develop	For Dajalbón, increasing road infraestructure and connection to Santiago and the
a successful sectoral transformation	port area of Monte Cristi would allow it to exploit the benefits of its location. Moreo- ver, strategies to increase sanitation services and clean cooking must be set in place.
Cardananta	
Good economic	Monte Cristi
performance and	As this province already shows good economic performance, policies need to su-
connectivity but	pport planned sectoral strategies. Increasing skill development for workers, road
low quality of basic	quality, urban planning, and business enviroment would help this province to esta- blish itself as a logistic hub. Moreover, extending access to basic sanitation services
services	blish itself as a logistic hub. Moreover, extending access to basic samilation services

The southwestern provinces, Elías Piña, Pedernales, Bahoruco, and Independencia, should prioritize investments on people-focused approaches. Policies to improve living standards, specifically through the strengthening of institutions that provide basic services (clean fuel for cooking, improving the quality of water service, garbage collection, and sanitation), and to improve the accumulation of human capital, starting with basic education services, must be a priority in the southwestern border provinces (see Table 2). Moreover, due to their high reliance on agriculture, sectoral policies should focus on increasing productivity, promoting value-added products, and facilitating access to credits and connection to value chains for small producers—which are predominant in the southern region. Moreover, increasing the sector's resilience through investment in technology to mitigate drought needs to complement these activities.

and clean cooking is required to improve living standards.

Promoting investments to increase service-related activities, such as the tourism projects planned to be implemented in Pedernales (see Box 2), will also be helpful for diversifying household income sources and taking advantage of the natural endowments in the region. Nevertheless, this strategy should have realistic goals and be modest and measured, with gradual implementation according to the development of the tourism capacities and demand in the area—which are currently low.<sup>10</sup> It is crucial that these investments have a strong focus on creating share growth, with complementary policies to increase internal connectivity for local people to commute to the tourist developments for work, and to tackle deficiencies in basic sanitation and water services, garbage collection services, and clean cooking in the communities surrounding the project.

## **5.** Conclusions

Compared to other Latin American countries, regional disparities in terms of economic performance in the Dominican Republic seem to be decreasing and put it in the middle of the distribution with regard to magnitude. Nevertheless, these inequalities still represent a challenge to reach inclusive growth that matches the great economic performance that the Dominican Republic has had in recent years. Except for Monte Plata, lagging provinces are far from the Santiago-Santo Domingo-La Altagracia economic corridor. Beyond economic output, lagging provinces suffer from low quality sanitation and water services, a lack of waste collection services, and low housing quality. Moreover, human capital is very low due to disparities in access to and quality of education, which affect their current and future development. Finally, their connectivity infrastructure is scarce and deficient.

Territorial disparities are also present at a lower scale, between the Distrito Nacional and Santo Domingo province and within the boundaries of the Distrito Nacional itself. While the Distrito Nacional leads in economic performance, human capital development, and connectivity infrastructure, Santo Domingo province falls into the transition category, with low human capital and low-quality road infrastructure, which is a clear indication that this province is not properly benefiting from proximity to and beneficial spillovers from the Distrito Nacional. Within the Distrito Nacional Circumscription 3 presents a confluence of challenges that threatens urban resilience—high poverty rates, large informal settlement presence, and high risk of flooding. These differences, both between Santo Domingo and the Distrito Nacional and within the Distrito Nacional, can lock or limit the future productive potential of the main economic center of the country.

Moreover, border area development and endowments are not homogeneous, with northern provinces, such as Monte Cristi, Dajabón, and Santiago Rodríguez having greater development in productive sectors, while southern provinces remain more focused on agriculture. Nevertheless, the deficiencies in basic service provision in border provinces are striking compared with the rest of the country. Even in Monte Cristi province, the best performer in the border region, the proportion of the population without access to clean cooking and lacking quality sanitation and water services does not match its level of economic development and falls far below the national average. In this sense, significant efforts on "people-focused" approaches to increase basic service quality and human capital development need to be made.

<sup>10</sup> As of 2018, Pedernales province is reported to have five hotels with only 58 beds available.

As mentioned, the characteristics of the lagging areas do not mean that their economic and social outcomes cannot be improved. Rather, it highlights the need for tailored policies. Policies aimed to increase the economic performance of territories, either a city, metro area, or region, need to be tailored to the specific characteristics persistent in the territory. Understanding and using the existing endowments in the territory, such as its degree of connectivity, population density, the level of education of its labor force, and the industrial focus of the area, must be the centerpiece to create territorial policies. Applying the principle of using existing endowments would lead to creating realistic policies, and possibly lead to more efficient and effective use of public resources. Finally, in addition to these principles, the implementation of territorial strategies should be accompanied by complementary policies. In areas with strong sectoral focus and agglomeration potential, these policies should support sectoral development, such as policies to increased interprovincial and internal connectivity, or to improve the business environment. In less densely populated areas, complementary policies to enhance basic services and skill development, such as improving education services, would facilitate sectoral revitalization and bring overall benefits to the population, preventing the difference in economic levels from translating into a difference in living standards.

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### Annex

### Additional graphs on economic indicators



Sources: GDP spatial series elaborated by the World Bank; Income per capita from the UNDP, Human Development Index, 2016; and Nightlights using NOAA, VIIRS.

#### Table A1.1. Combined economic productivity

Province	Combined economic productivity	Category
San Pedro De Macorís La Romana Santiago La Altagracia Monseñor Nouel Distrito Nacional	0.96 0.94 0.88 0.86 0.85 0.84	Leading
Sánchez Ramírez Puerto Plata Duarte La Vega Valverde Santo Domingo Peravia San Juan Monte Cristi San Cristóbal Hermanas Mirabal Barahona	0.76 0.75 0.66 0.65 0.65 0.59 0.56 0.54 0.53 0.48 0.48 0.46 0.41	Transition
Espaillat María Trinidad Sánchez San José De Ocoa Santiago Rodríguez Azua Samaná Baoruco Pedernales El Seibo Hato Mayor Independencia Dajabón Monte Plata Elías Piña	0.38 0.35 0.35 0.34 0.33 0.29 0.27 0.27 0.27 0.27 0.25 0.23 0.18 0.06 0.04	Lagging

Source: Authors, using data from Ishizawa & Blanchard (2020), World Bank (2016), PNUD (2016) and NASA & NOAA

Note: On a scale from 0 to 1, 1 being the highest productivity and 0 the lowest.



#### Figure A1.2. Employment structure in border areas

Source: IX Censo de Población y Vivienda, 2010 – Dominican Republic.



#### Figure A1.3. Market access map in Dominican Republic, 2015

Source: Malaria Atlas project (2015)-1 km resolution.



Source: World Settlement Footprint Evolution (WSF-Evo) Built-up surface classification of satellite imagery).

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# 3. Adopting a new territorial planning framework

Juana Mariño

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### Introduction

The Dominican Republic has a long-standing political, regulatory, and institutional tradition of defining policies that guide territory-wide public and private interventions. This includes constitutional and legal provisions stemming from an array of approaches that pursue different specific goals. The fundamentals for urban territorial planning date back to the 1940s - 1960s. Since then, a number of provisions have been adopted that are focused on the administrative organization of the territory, the definition of institutional entities, land-use planning functions and competencies across different layers of government, and the inclusion of environmental sustainability and environmental risk management criteria, as well as tourism-related territorial planning.

The Dominican Republic has a long-standing political, regulatory, and institutional tradition of defining policies that guide territory-wide public and private interventions. This includes constitutional and legal provisions stemming from an array of approaches that pursue different specific goals. The fundamentals for urban territorial planning date back to the 1940s - 1960s. Since then, a number of provisions have been adopted that are focused on the administrative organization of the territory, the definition of institutional entities, land-use planning functions and competencies across different layers of government, and the inclusion of environmental sustainability and environmental risk management criteria, as well as tourism-related territorial planning.

However, the regulatory framework has a feebly interlinked structure, has limited spatial and thematic coverage, and has been poorly implemented. The current regulatory framework encompasses a series of constitutional provisions, laws, regulations, and instruments with a feebly interlinked structure and restrained spatial and thematic coverage that fails to cover the entire territory or address the current issues required for adequate territorial planning nationwide. This situation, coupled with the inadequate human, technical, and financial capacities of municipalities has resulted in the following: (i) only 9 municipalities have established operational Urban Planning Offices;<sup>1</sup> (ii) only 10 municipalities have developed their Territorial Planning and Land-Use Plans;<sup>2</sup> and (iii) even in those cases, their implementation has been negligible.<sup>3</sup> On the other hand, 10 municipalities do have Sectoral Territorial Planning and Land-Use Plans.<sup>4</sup>

In this context, land-use planning processes have been led by the central government following a poorly-linked sectoral approach. Key territorial planning processes are being advanced: (i) following a centralized or tourism-oriented approach, with very narrow participation and impact on municipal territorial planning; (ii) territorial planning in intermediate levels—regions and provinces—is not structured<sup>5</sup>; (iii) municipal territorial planning is incipient; and (iv) municipal land management responds to circumstances and contingencies rather than to a strategic territorial planning.

**Furthermore, territorial planning is not yet an integrated and decisive part of government mana-gement.** Most development is being carried out without considering any land-use planning guidelines, thus

<sup>1</sup> Information requested from the General Directorate of Territorial Planning and Development (DGODT) is pending.

<sup>2</sup> According to the information requested by DGODT - see Annex 1.3.

<sup>3</sup> Municipalities with performance ranging between 80% and 95% in this area, according to the ranking under the SISMAP Municipal Performance Report.

Confirmation from DPP – MinTur is pending.

<sup>5</sup> However, on March 9, 2021, the first Southwest Regional Planning and Territorial Development Plan (PRODT-RSO) was presented, which is an important step in this direction.

spawning urban disorder, informality and inefficiency around towns and cities, urban-rural dysfunctionality, territorial inequity, and, in many cases, increased exposure to natural disasters. The lack of effective and binding municipal territorial planning instruments also fosters various forms of soil management discretionary powers, ranging from failing licensing strictness to spontaneous informality.

By acknowledging shortcomings in the existing framework, the DR is shifting towards a new territorial planning approach. The Dominican Republic's Strategic Development Plan 2030 (END) Act N° 1 of 2012, as well as the Dominican Republic's Constitution of 2015, include the first policy guidelines to integrate territorial planning in development planning and define a new regulatory framework for this purpose.<sup>6</sup> While developing these provisions, the government is advancing reforms on territorial planning instruments (the Proposed Law on Territorial Planning, Land Use, and Human Settlements and the Proposed Law on National Territorial Planning and Land-Use Plan - PNOT) and political-administrative organization (the Proposed Law on Unified Planning Regions).

However, implementing the proposed reforms and policies will require well-coordinated strategies and actions by different governmental stakeholders, thereby establishing prerequisites for authorities and citizens to own and implement this new territorial planning system. Doing so will require: (i) defining and adopting national and regional guidelines through PNOT and prioritizing Regional Territorial Development and Land-Use Plans; (ii) having a strategy in place for the development of planning instruments, beginning with prioritized areas (strategic regions and municipalities, lagging areas, and greater areas), as well as a horizon to cover the entire country; and (iii) strengthening the technical and budgetary capacity of territorial planning institutions and ensuring that said instruments adapt to prevailing local conditions.

This note is divided into five sections. The first and second sections summarize the Dominican Republic's regulatory and institutional territorial planning framework. The third section outlines the status and balance of territorial planning so far. The fourth section sums up the efforts and initiatives deployed by the current administration towards new territorial planning in the Dominican Republic, as well as a number of considerations regarding opportunities/challenges to implementing these reforms. The fifth and final section suggests a series of recommendations for implementing the proposed reforms and enabling sustained progress towards new territorial planning in the Dominican Republic.

# **1.** A long-standing political and regulatory tradition shaping territorial planning policies

Over a period that spans almost 80 years (from 1944 to 2020), the Dominican government has adopted a number of territorial organization and planning provisions. As seen in Figure N° 1 below, these numerous provisions have been adopted fragmentarily, with dissimilar timing and divergent approaches. While the first national provisions regarding territorial planning focused exclusively on the urban areas of the most populated municipalities, subsequent government-led territorial planning provisions stemmed from two complementary perspectives: on the one hand, the political and administrative organization of the national territory aimed at decentralizing government institutions and functions; and, on the other hand, national territorial

Currently, laws 64-00, 496-06, and 6232 set some guidelines for territorial planning.

#### Figure 1. Regulatory framework timeline

Organi	Land-Use Planning	ıd Institu	tional				Law 1 National Devel gy (END), imple d-Use Plan () r than three (3	menting not later	Nati	r <b>ee 275 d</b> onal Dis agemer	o <b>f 2013</b> aster Risk at Plan in
	iment inagement ited Economic and S	iocial De	velopment			defines	<b>2004</b> <b>02 of 2004</b> Protected is in the DR			Territo	sed Law on rial Planning, Jse, and nent
Beautifi and Cor	ation, Public cation, nstruction pality of Santo		• 1963 Urban Plar N° 6232 of offices esto municipalii populatior 50,000	1963– TP ablished in ties with	Na Envirc 2000: "The	ntegrated Disc Management i	2001 s and 64 of and- ed of			on Unit Plannir Region	ng is ted Law ional Jse
	1950	196	0	1970	1980	1990	2000	2	010		2020
			5 <b>9</b> 5 <b>220/1959</b> prial Divisior	• <b>1969</b> Dominican Touris N° 541 of 1969	de (. • 1979 Law 84 creates the Secret of Tourism (today Ministry of Tourism	Laws 158/0: 18 Support of tou velopment in p .) with the gre potential (PS ary La ary the Na and of ) Of Pub and territ	<b>34/02</b> uristic poles atest	• 2007 Distrito and Mu Act N° J (COMPE	Nacio nicipa 176 of 2	194, "p the Sto elabor and ex throug a Territ Land L Land L lities 2007	<b>5,</b> article riority of ate the

planning following a socioeconomic planning approach, including specific sectoral territorial planning (urban development, environment, tourism, and risk management).

The following is a summary of the main contents and scope of the provisions comprising the regulatory and institutional territorial planning framework for the DR preceding the END and the Dominican Republic's Constitution, the latter of which are analyzed in the "Advancing Towards a New Territorial Planning" section.

The fundamentals of the current regulatory territorial planning framework date back to the 1940s - 1960s, and embrace an urban planning perspective. Act N° 675 of 1944 on Urbanization, Public Beautification, and Construction, the first relevant law, contains basic definitions for zoning, urban layout, works, and public beautification for the city of Santo Domingo. It is followed by Act N° 6232 of 1963 on Urban Planning, which provides for the establishment of "Urban Planning Offices" in cities with over than 50,000 inhabitants to act as technical, consultative and advisory bodies. At the central government level, the law provides for the establishment of the National Planning and Coordination Board, an advisory body to the Executive Branch.<sup>7</sup> These two laws are still in force.

In the 2000s, the existing regulations were complemented by new laws seeking to foster tourism development, improve risk management, and protect natural resources in the territory. Act N° 158 of 2001 on Tourism Incentives established the Tourism Promotion Fund<sup>8</sup> for underdeveloped areas and new economic development hubs in provinces and localities endowed with great potential, and provided for the development of Sectoral Tourism Territorial Planning and Land-Use Plans (PSOTT) adopted by the Ministry of Tourism. Act N° 64 of 2000 on Natural Resources and the Environment states that territorial planning is an environmental planning instrument, and it requires the *design, formulation, and implementation of a National Territorial Planning and Land-Use Plan that incorporates environmental variables*".<sup>9</sup> Act N° 147 on Risk Management and the regulations thereunder (Decree N° 932) established national risk management policy instruments, <sup>10</sup> as well as the National Disaster Prevention, Mitigation, and Response System (SN-PMR).<sup>11</sup> These instruments do not consider Territorial Planning and, particularly, preventive safety measures in territorial planning and economic and social development plans".<sup>12</sup> Decree N° 874 of 2009<sup>13</sup> on the Regulations of Law N° 147-02 has two provisions on territorial planning<sup>14</sup> and stipulates the creation of the National Integrated Information System,

<sup>7</sup> No references to this Board were found.

<sup>8</sup> Amended by Law N° 195-13, which was enacted on Dec 13, 2013.

<sup>9</sup> Article 31 adopts environmental criteria for land use planning at national, provincial, or municipal levels, taking into consideration the characteristics and ecosystem potential in each region. As a complement, Act N° 202 of 2004 on Protected Areas defines and delimits the PAs in the DR, which shall be excluded from any form of occupancy or economic development other than nature tourism and research.

<sup>10</sup> Article 3 of Law N° 147 of 2002: The National Disaster Prevention, Mitigation, and Response System (The National Risk Management Plan; The National Emergency Plan; The National Integrated Information System; and The National Fund for Disaster Prevention, Mitigation, and Response).

<sup>11</sup> Article 5 of Act Nº 147 of 2002 on Risk Management.

<sup>12</sup> Section 7, Article 7, SN-PMR Roles and Responsibilities.

<sup>13</sup> Decree N° 874 of 2009 approves the implementation of the regulations of Act N°147-02 on Risk Management and repeals Chapters 1, 2, 3, 4, and 5 of Decree N° 932-03.

<sup>14</sup> It stipulates that (i) the Ministry of Environment and Natural Resources is responsible for "requiring the analysis and reduction of risk in territorial planning (...)" (Art. 16), that (ii) "for the formulation and implementation of risk management and emergency plans, the territorial demarcation under the new Territorial Planning and Urban Development Law shall be adopted," and that (iii) "concerning the definition of territorial demarcation (...), with respect to territorial plans, allocations, and appropriations of funds, the Development Regions established under Article 46 of Decree N° 685-00 shall apply". (No "territorial planning and urban development law" was found, and Article 46 of Decree N° 685-00 was amended).

run by the National Emergency Commission to systematize knowledge of hazards, vulnerabilities, and risks. <sup>15</sup> One of the priorities for actions as defined by the regulations includes the "preparation and dissemination of risk maps by province and municipality".<sup>16</sup>

In parallel, public investment planning systems were strengthened along with the role played by planning governing bodies. In 2006, the National Planning and Public Investment System (SNPIP) was created (Law 498 of 2006), which includes Development Councils across different levels of government (national, regional, provincial, and municipal), whose functions include, *inter alia: "promoting the formulation of territorial planning and management plans, projects, and programs, as appropriate.*"<sup>17</sup> The law also establishes that the Ministry of Economy, Planning, and Development is the planning governing body. However, despite mentioning territorial planning, the law specifically targets economic planning for development and public investment.<sup>18</sup> The law does not contain explicit provisions linking public investment plans with Territorial Plans. Locally, Act N° 176 of 2007 on the Distrito Nacional and Municipalities, in addition to creating territorial units, establishes territorial planning as one of key competencies of municipalities.<sup>19</sup>

On a policy level, the importance of reinforcing territorial planning processes clearly stands out in the National Development Strategy (END) and, more recently, in the Dominican Republic's Constitution of 2015. The END (Law N° 1 of 2012) includes territorial cohesion as an overarching objective of Crosscutting Theme II (2.4). Specific objectives and lines of action within it include "incorporating the dimension of territorial cohesion in public policy design and management" (2.4.1) and "bridging the urban-rural and interregional gap with regard to access to services and economic opportunities by promoting organized and inclusive territorial development" (2.4.2). On the other hand, Art. 32 of the END mandates the public sector to implement: "A Territorial Plan to manage territory-wide public policies, regulate land use, encourage the sustainable use of resources, and facilitate comprehensive risk management at both national and local levelswhich shall be designed, approved, and implemented within three (3) years" (a term that expired in 2015). More recently, Article 194 of the Constitution establishes that "the State shall, by operation of law, prioritize the formulation and implementation of territorial planning to ensure the efficient and sustainable use of the nation's natural resources in line with the need for climate change adaptation."To this end, the State will promote the transfer of competencies and resources to local governments, which entails institutional capacity building, HR training, and professionalization policies, with a view to ensuring balanced development towards the fulfillment of its future vision and goal statements.<sup>20</sup>

<sup>15</sup> Article 19 of Decree N° 874 of 2009.

<sup>16</sup> Article 20 of Decree N° 874 of 2009: National Fund for Disaster Prevention, Mitigation, and Response.

<sup>17</sup> Subsection (e), Article 15, Law 498-06.

<sup>18 &</sup>quot;The Distrito Nacional and Municipalities are required to prepare medium- and short-term municipal public investment plans detailing the investment projects under their responsibility" (Article 45), and they are to "record all budgeted investments in each fiscal year in the National Public Investment System" (Article 46).

<sup>19</sup> Subsection (g), Article 19, Act N° 176 of 2007 on Distrito Nacional and Municipalities.

<sup>20</sup> Article 204 of the Dominican Republic's Constitution of 2015.

# 2. A complex institutional territorial planning system plagued by significant gaps

Land use planning responsibility is scattered among various government institutions and agencies at both the central and regional levels (as summarized in Tables 1 and 2). The leading authority is the Ministry of Economy, Planning, and Development (*MEPyD*), which is the governing body for territorial planning and leads sustainable territorial planning and development policy making at the national level. In addition to the *MEPyD*, three Ministries/Technical Agencies must, *inter alia*, advise and guide the use of natural resources (Ministry of Environment and Natural Resources), incorporate risk prevention measures into Territorial Plans (TP), and guide territorial planning in tourism development zones and hubs. At the regional level, the Regional Development Councils<sup>21</sup> are required to promote the formulation of Territorial Plans and participate in the preparation of Strategic Territorial Development Plans, which are instruments that have not been historically driven. However, no reference was found regarding the composition, functions, and competencies of regional and provincial authorities, nor the territorial management instruments that should be developed and adopted for territorial entities.<sup>22</sup>

 Table 1. Main ministries and agencies of the central and subnational government with responsibilities

 related to territorial planning in the Dominican Republic

Ministry of Economy, Planning, and Development (MEPyD)	TP Governing Body of the National Territorial Planning and Management System, in coordination with the Ministry of Environment and Natural Resources <sup>®</sup> .
General Directorate of Territorial Planning and Development (DGODT)b under MEPyD,	Responsible for territorial planning, management, and sustainable public policy making. Preparation of Territorial Planning and Development Plans at the national level and their respective implementation strategies, in coordination with the different sectors and institutions () <sup>c</sup> .
Ministry of Environment and Natural Resources <sup>d</sup>	Advise local governments on the preparation of Territorial Plans (Municipal Office of Environmental Management) <sup>e</sup> . Responsible for "requiring risk analysis and reduction in territorial planning ()"f. "Guarantee land use planning in watersheds" (Department of Water Resources and Watersheds). Actions through Provincial, Municipal, and Regional Directorates.

<sup>21</sup> Article 29 of Decree 685 of 2000: Regulations of the National Planning and Decentralization System.

<sup>22</sup> The DGODT confirmed that "PROVINCE is not a scale defined for national planning."

Ministry of Tourism (MITUR) <sup>h</sup> Sectoral public policy making <sup>i</sup> . Determine and supervise tourism development hubs in the country (Planning & Project Department – DPP) <sup>j</sup> Territorial planning in tourism zones (regulatory, strategic, and infrastructure plans and tourism development land-use plans). Manage private tourism projects.Regional Development CouncilCoordinate and channel citizens' demands to central and municipal governments. Participate in preparing Strategic Territorial Development Plans, as appropriate <sup>k</sup> . Promote the formulation of territorial planning and management plans, projects, and programs, as appropriate <sup>l</sup> .	National Civil Defense	Coordinate the National Risk Management System. "Incorporate risk management criteria in planning, and, particularly, preventive safety measures in territorial planning and economic and social development plans" <sup>9</sup> .
DevelopmentParticipate in preparing Strategic Territorial Development Plans, as appropriatek.CouncilPromote the formulation of territorial planning and management plans, projects,		Determine and supervise tourism development hubs in the country (Planning & Project Department – DPP) <sup>j</sup> Territorial planning in tourism zones (regulatory, strategic, and infrastructure plans and tourism development land-use plans).
	Development	Participate in preparing Strategic Territorial Development Plans, as appropriate <sup>k</sup> . Promote the formulation of territorial planning and management plans, projects,

- c Article 13. Law 496 of 2006.
- d Ministry of Environment and Natural Resources http://ambiente.gob.do/.
- e Municipal Office of Environmental Management https://ambiente.gob.do/viceministerio-gestion-ambiental/.
- f Article 16, Law 874 of 2009 Implementing Regulations of Planning Law.
- g Section 7, Article 7, SN-PMR Roles and Responsibilities.
- h Planning & Project Department https://www.dpp-mitur.gob.do/index.php?page=acerca.
- i Planning & Project Department https://www.dpp-mitur.gob.do/.
- j https://www.dpp-mitur.gob.do/index.php?page=acerca-del-planeamiento-de-zonas-turisticas.
- k Article 14, Law 498-06.
- Article 15. Law 498-06.

At the central government level, the DR has different agencies and systems responsible for creating and managing planning information: the National Statistics Office - ONE; the Public Administration Monitoring System - SISMAP within the Ministry of Economy, Development and Planning; the Environmental Information System - SIA within the Ministry of Environment; the National Integrated Information System - SINI within the National Civil Defense; and the José Joaquín Hungría Morell National Geographic Institute is in charge of managing basic geographic mapping information. Most of the information is on a national or regional scale, and is not suitable for municipal territorial planning.

**The municipalities also play an important role in territorial planning** (see Table 2). Their responsibilities (Law 498-06, Articles 14 and 15) include enforcing territorial planning and urban planning, and land management and urban planning disciplines. In accordance with Act N° 6232 of 1963 on Urban Planning, cities with over 50,000 populations are required to establish an urban planning office. Current regulations contain no specific reference to Territorial Plans or other instruments through which territorial planning competencies would be implemented and adopted. Within the municipalities, the Municipal Development Councils (CMD)<sup>23</sup> must collaborate in the preparation of certain planning instruments, such as the Municipal Development Plan (PMD), whereby sectoral investment lines are defined, and which contain no land management provisions. Note that the functions of the Municipal Planning Council do not include any collaboration in preparing the Municipal Territorial Plans.

Table 2. Municipality territorial planning Competencies Pursuant to Law 176-07				
Municipality	i) Establish an Urban Planning Office (for cities with over 50,000 inhabitants) <sup>a</sup> . ii) Territorial planning, urban planning, land use management, and implementation of urban planning disciplines <sup>b</sup> .			
Municipal Development Council <sup>c</sup>	<ul> <li>i) Collaborate on the preparation of the Strategic Development Plan, the Municipal Development Plan (PMD), and the Annual Plan of Operations (POA) ().</li> <li>ii) Contribute to the institutional capacity building of the Municipal Office of Planning and Programming (OMPP).</li> </ul>			

Act N° 6232 of 1963 on Urban Planning.

Subsection (d), Article 19 – Act N° 176 of 2007 regarding the Distrito Nacional and Municipalities.

c https://www.sismap.gob.do/Municipal/Uploads/Guia/24.%20Guia%20CDM-DGODT.pdf

Act N° 176 of 2007 regarding the Distrito Nacional and Municipalities establishes territorial planning as a competence held by the municipality, but does not define the instrument(s) whereby it is exercised. So far, while rolling out this competence, the municipalities issue levies on land use and buildings which are driven by demand rather than by responding to an overall plan.

# 3. Status and balance of territorial planning in the Dominican Republic

A detailed analysis on the current state of territorial planning in the DR reveals that it is not yet an integral part of any comprehensive planning and development. Despite governmental initiatives to reinforce the institutional and regulatory framework dating back to the middle of the last century, the following key challenges remain: (i) the current institutional and regulatory framework is weakly interlinked and has major gaps; (ii) planning instruments are poorly advanced and implemented across the board (national, regional, and local levels); (iii) strong prevalence of tourism-oriented sectoral territorial planning; (iv) the capacity required to develop planning instruments (and their implementation) is still poor, particularly at the local level; and (v) basic and thematic information required to develop territorial planning instruments is missing. Each of these points is discussed in detail below.

<sup>23</sup> Article 41, Decree 685 of 2000, Regulations of the National Planning and Decentralization System.

# 3.1 The current institutional and regulatory framework is weakly interlinked and has major gaps

There is a lack of clarity in the definition of competencies and institutions responsible for territorial planning and inter-institutional coordination. For example, there is weak definition and coordination between the functions/roles and dependencies of the institutions that currently implement or support territorial planning processes: The *DGODT* within the Ministry of Economy and Planning, the Ministry of Environment, and the Ministry of Tourism; and among the main TP instruments: National Plan for Territorial and Land-Use Management, Regional Plan for Territorial Development and Land-Use Management, Municipal Plan for Territorial Planning, Strategic Tourism Plans, and PSOTTs. Additionally, the relationship between TP and risk management is weak in the regulatory and institutional framework, which does not include other sectors that are critical in terms of linkage between territorial planning and sectoral planning (such as agriculture and infrastructure). Finally, territorial planning-oriented cross-institutional coordination structures are missing, despite being referred to in different regulatory provisions.

There are also significant gaps in the current legislation for the formulation and adoption of TP instruments. Municipal TP competence is not linked with compulsory and binding instruments for the entire municipal territory. Current instruments and guidelines are predominantly urban, which leads to fragmented urban-rural territorial management and vision, as well as a lack of planning in predominantly rural regions and municipalities located outside the main urban circuits. As a consequence of poor institutional linkage, there are no precise guidelines aimed at linking territorial planning and risk management (such as safe location, mitigation of hazard vulnerability, resettlement, and lifeline creation). Finally, there are no national and supra-municipal guidelines and directions that ensure coherence between sectoral planning and territorial planning exercises advanced by the Central Government, e.g., the Suroeste Region Plan, fail to have an actual impact on the territorial planning exercised by municipalities within the region.

# 3.2 Planning instruments are poorly advanced and implemented across the board (at the national, regional, and local levels)

The current status of territorial planning in the DR is simultaneously a cause and effect of the conditions outlined above. At the national level, there is neither a National Land-Use Plan stipulated in the END and the Constitution nor a National System that generates binding guidelines governing the subnational TP. At the regional level, the Plan for Regional Planning and Territorial Development of the Southwest Region has been formulated by the *MEPyD*, and several Tourism Plans for Territorial Planning have been developed without a clear and consistent relationship with the municipal TP plans or processes, as explained below.

At the municipal level, there is evidence of stronger socioeconomic planning in comparison to TP. According to the *DGODT* policy paper "*Políticas Públicas Territoriales y Municipales para el Cambio*," by 2020, 93 municipalities (60%) had formed their Municipal Development Councils (not all of them are active) and 73 municipalities (43.20%) had a Municipal Development Plan,<sup>24</sup> while **only 9 municipalities had territorial plans** (amounting to 5.70% nationwide – see Figures 4 and 5).<sup>25</sup> The status of territorial planning in numerous municipalities of the DR is shown in the *DGODT* maps.<sup>26</sup>

Table 3. Status of municipal territorial plans - Territorial plans						
TD status	Munic	cipios				
TP status	Number	Percent				
With no PMOT	145	93.5				
35% progress	1	0.75				
65% progress	1	0.75				
Finished	8	5				
Total	155	100				

Source: Developed by Author, based on DGODT Map.

The most important urban cluster in the Dominican Republic is Greater Santo Domingo, made up of 8 municipalities, four of which have populations over 50,000 inhabitants.<sup>27</sup> According to the municipalities' official websites, all of them have a Municipal Development Plan, although none of them have either an Urban Planning Office or Municipal Territorial Plans, as seen below:

<sup>24</sup> The Annex includes the maps of Municipalities with CDM and PDM.

<sup>25 37</sup> municipalities have no TP process at all, 7 municipalities have PMD despite not having CMD, 7 municipalities have CDM only, while the rest (90) have CMD and PMD, and only 6 municipalities have CDM, PDM, and POT.

<sup>26</sup> The four maps and their analyses are included in Annex 1

<sup>27</sup> http://www.dominicana.gob.do/index.php/e-municipios/e-localidades/158-municipios



Source: General Directorate of Territorial Development and Planning (DGODT).

Table 4. Greater Santo Domingo institutional structure							
Municipality	UP office	Development plan	Territorial planning				
Distrito Nacional (DN)	X	х	Xª				
Santo Domingo Norte	X	X					
Santo Domingo Este	X	X					
Santo Domingo Oeste		X					

Source: Developed by Author.

a Municipal Ordinance 09 of 2019: https://www.adn.gob.do/joomlatools-files/docman-files/ordenanzas\_2019/ORD.%20NO.9-2019.pdf.

### 3.3 Strong prevalence of tourism-oriented sectoral territorial planning

Addressing the need for territorial planning instruments in tourism development hubs, the DR has championed the creation of a large number of Strategic Plans and PSOTTs covering a significant percentage of the national territory.<sup>28</sup> With regard to these plans, there seems to be a discrepancy between the information provided by the *DGODT* and the one given by the Secretariat of Planning and Projects within *MinTur*. While the *DGODT* reported 4 POTTs, the SPP mentioned 8 PSOTTs<sup>29</sup> approved, with updates pending, which in some cases includes more than one municipality. The Department of Planning and Projects of the *MINTUR* also reports 17 Strategic Plans to be upgraded to PSOTTs.<sup>30</sup>

However, the PSOTTs and the territorial strategies for advancing tourism development hubs are not binding and lack a holistic territorial approach. No specific law or regulation that defines their geographic coverage, the specific scopes of Strategic Plans or the PSOTTs, or their binding nature for the municipalities included in the target area was found. The PSOTT target areas reviewed feature different sizes and are indistinctively in one or more municipalities. Municipal boundaries are not clearly evident. In the PSOTTs reviewed, it was found that the urban areas are considered to be and managed as a tourism function, while they are perceived more as a threat to the surrounding tourist attractions rather than as a complement to and support for tourism, as is typically seen in suburban or rural enclaves with highly autonomous services and minimal interaction with urban areas and local settlements.<sup>31</sup> The formulation and revision of the PSOTT considers the inclusion of national infrastructure works to ensure the preservation of "*key tourist attractions, which critically must adapt to the geographic, climatological, and demographic conditions of the area.*"<sup>32</sup> In addition to the PSOTTs adopted by the Ministry of Tourism, there are a considerable number of decrees and resolutions adopting provisions on land use, densities, building volume, and infrastructure works in different municipalities.

# 3.4 The capacity required to develop planning instruments (and their implementation) is still poor, particularly at the local level

Incipient political-administrative decentralization restricts the capacity of municipalities to plan and implement plans. The responsibilities given to municipalities are limited. However, some have argued that the municipalities lack adequate resources to carry out the few functions assigned to them. Inadequately funded by their own resources and by governmental transfers, municipalities are unable to meet their autonomous competencies, including the formulation, adoption, and implementation of binding Municipal Territorial

<sup>28</sup> Annex 2 describes the OTT Plans provided by the Secretariat of Planning and Projects within the Ministry of Tourism.

<sup>29 4</sup> in the Northern Region (Sosúa, San Felipe de Puerto Plata, Las Terrenas (Samaná Norte), and Cabarete); 3 in the Eastern Region (Miches-Seibo-Hato Mayor, Punta Cana-Bávaro-Macao, and Environmental Unit No. 2 Macao); and 1 in the Southern Region (Pedernales).

<sup>30 10</sup> in the Northern Region (Puerto Plata, Samaná Peninsula, Santiago, María Trinidad Sánchez, Dajabón, La Vega, Valverde, Monte Cristi, San José de Las Matas, and Jarabacoa); 6 in the Eastern Region (Miches, Punta Cana-Bávaro-Macao, Bayahibe, Boca Chica, Higüey, and San Pedro de Macorís); and 1 in the Southern Region (Barahona).

<sup>31</sup> The case of the PSOTT in Cabarete was mentioned: "As a consequence of the disorganized urban growth in the city of Cabarete, part of the swamp and the Cabarete and Goleta lagoons have been gradually encroached upon and occupied, threatening the environmental balance of this important ecosystem and becoming a flood risk for humans, thereby making it a priority to protect this Natural Monument through adequate planning and clear proposals for physical and regulatory intervention."

Plans. Additionally, they are unable to undertake major works and adequately address key municipal challenges (such as uncontrolled urban sprawl and informality and dysfunctionality of the main urban centers and emerging cities, thereby affecting their economic performance and the quality of life of their inhabitants). Incipient administrative decentralization also straitjackets autonomy in terms of municipal planning and management, whereby territorial planning continues to be a highly centralized process detached from local competencies and possibilities.

**Municipalities have little technical capacity for engaging in participatory formulation of planning instruments.** Given the negligible territorial planning processes that the country, and in particular the municipalities, have advanced, there is little understanding and capacity to advance territorial planning processes for both municipalities and citizens. Most of the municipalities do not have Urban Planning Offices, and only 85 municipalities report some level of progress in SISMAP Indicator 2.03, "Regulation and Territorial Planning." Out of these, only 10 report "significant progress."<sup>33</sup> Furthermore, in those locations where Urban Planning Offices exist, their roles mainly focus on addressing urban functionality issues<sup>34</sup> and on issuing land use permits and other urban permits in accordance with general laws. There is no evidence of any activity relating to territorial planning for rural areas.

The implementation of instruments existing at the municipal level is in very early stages – given the technical, financial, and political challenges experienced at the local level. Based on consultations held with a number of municipalities, despite the fact that they have their TPs, the absence of local financial resources and (in some instances) their poor territorial management capacity prevent their actual implementation. Recently, *DGODT* acknowledged this in a report, stating that even though municipalities have their TPs, their implementation is embryonic,<sup>35</sup> while the following situation prevails: "*The non-observance of urban laws and poor land use practices calls for policy interventions and institutional strengthening to ensure the implementation of a sustainable development agenda, particularly in terms of habitat"*.

# 3.5 Basic and thematic information required to develop territorial planning instruments is missing

**The information required to realize planning instruments at different scales is insufficient.** In particular, there is no hazard and risk information – at the municipal scale. The study "Urban Planning and Resilience Building in the Caribbean" ranked Caribbean countries in terms of different "Building Blocks," including availability of disaster risk information. As seen in the tables below (Tables N°5 and 6), the DR scored low in this category, which assesses the existence of good quality risk maps and their use in planning processes.

<sup>33</sup> According to the Municipal SISMAP performance ranking, 85 of the 158 municipalities in the DR report some level of territorial planning performance. Only Santiago scored 95%; 8 municipalities scored 85%; DN: 80% (significant or good progress); 5 municipalities: 65%; 22 municipalities: 60% (some progress); 5 municipalities: 50%; 9 municipalities: 40%; and 24 municipalities: 30% (little progress).

<sup>34</sup> Horizontal and vertical road signs, street signage, municipal taxes for regularization of works pursuant to urban laws, organization of informal vendors on streets, citizenship culture for appropriate parking on public roads, and transportation improvement projects.

<sup>35</sup> No information found on POT implementation status.

#### Table 5. Disaster risk information. Summary of scores per sub-building block, per country

Building block		Disaster risk information		
Number			8.2	
Sub-building block	Risk me	aps	Disaster risk information publicly available	
Belice		3,0	2,0	
Dominica		4,0	3,0	
Dominican Republic		3,0	3,0 3,0	
Guyana		3,0		
Haiti		4,0	3,0	
Jamaica		4,0	3,0	
St. Lucia		3,0	2,0	
St. Maarten		4,0	2,0	
SVG		3,0	2,0	
Sub-B. B. average		3,44	2,56	
B. B. average		3,15		

Source: Urban Planning and Resilience Building in the Caribbean, Policy Research Working Paper.

While its rating on the existence of risk maps is relatively high, the overall country score is 3.0, as summarized in the following table (Table  $N^{\circ}$  6).

Table 6. Summary: building block score: 3.00					
Sub-building block	Indicative measurement scale	Weight	Score		
8.1 Risk map	Risk maps are in development, or there is some information available	2	3		
8.2 Disaster risk information publicly available	Limited information is publicly available	1	3		

Source: Urban Planning and Resilience Building in the Caribbean, Policy Research Working Paper

Moreover, a unified information management strategy that ensures comprehensiveness and availability at the scales required for each territorial planning level, as well as the capacity and conditions for use by local governments, is missing.

# 3.6 Poor territorial planning is causing a number of consequences throughout the Dominican Republic

Economic development zones (cities and tourism development hubs) are growing with significant informality, including settlements in at-risk areas. As noted in Note 1, one of the emerging urbanization challenges in the DR is the significant degree of urbanization along the coastal and flood-prone areas, with flood events occurring in recent years. Although coastal flooding has not been widely seen in the Dominican Republic for the past few years, climate change and coastal erosion could increase their likelihood and worsen their impacts. The Note also points out the inadequate intra- and inter-urban connectivity,<sup>36</sup> as well as the absence of legitimate and binding TP instruments, which leads to high levels of urban disorder, dysfunctionality, and informality (often interpreted exclusively as traffic congestion rather than inadequate planning) along with high levels of irregular land tenure, and also to discretionary urban management that answers to political conjunctures (affinities and feuds) as well as to particular interests and pressures from power groups.

The lack of territorial development guidelines contributes to the discretionary allocation of governmental resources and curtails the impacts of territory-wide public investments. Today, there is no strategic territorial planning approach contributing to the construction of new systems of population-territory relationships, even though the effectiveness of sectoral policies and the sustainability of the development model depend on such an approach. Given the shortage of resources in municipalities, most of the strategic investments are still financed by the central government. The allocation of public investment resources to municipalities and the central government's collaboration have a strong political bias. A close relationship with the central government was mentioned as necessary to receive support for specific projects, which poses a major straitjacket for the decentralization and autonomy of the municipalities.

Finally, territorial planning decisions are fragmented, circumstantial, and remedial, thereby undermining the government's credibility in the eyes of citizens. When confronted with the absence of clear territorial development guidelines, most municipalities are forced to make remedial and reactive land-use planning decisions. In some cases, they are driven more by particular possibilities and interests rather than by medium- and long-term goals that address structural challenges such as uncontrolled urban sprawl, informal development, and public space deficits, among others. The absence of clear territorial planning guidelines undermines credibility and trust in public institutions, as it is a breeding ground for corruption, frequent non-compliance with laws, or discretionary compliance.

<sup>36</sup> Urbanization and Territorial Development in the Dominican Republic, Note 1: "Laying down the facts of urbanization"

## 4. Towards new territorial planning

The central and local governments in the DR recognize the urgent need to improve the regulatory framework, capacities, and quality of territorial planning instruments. In the Housing and Urban Development Report, the national government, through the *DGODT*, summarizes the key issues that need to be addressed in order to strengthen territorial planning and management, as shown in Box No. 1 below. This report identifies three key challenges for incorporating land-use planning as an integral part of territorial planning: (i) formulate territorial management regulations, including a *Law on Territorial Planning and Land Use Management*; (ii) develop more and better development planning at *regional-municipal levels* with a comprehensive approach to the specificities of territory-wide sustainable development, including population dynamics; and (iii) *transfer technical and financial capacities* to municipal governments so that they can exercise governmental powers and respond more effectively and efficiently to the demands and needs of the population living in their territories.

#### Box 1

#### Territorial planning issues to be addressed

- i) Strengthen municipal development planning that, particularly in urban cases, is focused on the problems inherent to urban-rural dynamics;
- ii) Establish regulations and action plans that foster adequate land use, in both urban and rural areas;
- iii) Reinforce urban planning offices to implement territorial planning schemes aimed at promoting adequate land use, according to land capability;
- iv) In view of the high political and administrative territorial fragmentation, promote planning schemes from intermediate units (commonwealths, greater areas, and regions);
- v) Strengthen the cadastral and territorial information system;
- vi) Enhance decentralization, municipalization, and local development processes;
- vii) Strengthen technical and administrative capacities of urban planning offices in municipalities their role should go beyond the simple legalization of works in the city;
- viii) Realize urban and territorial planning for tourism development hubs or zones to alleviate and avert slum formation processes;
- ix) Disseminate Territorial and Tourism Development Plans (POTT) parameters more widely.

Source: DGODT- MEP

The current administration has significant strengths to face these and other challenges:

- Acknowledgement of key TP weaknesses and challenges faced by the country, particularly subnational governmental weaknesses in territory-wide management.
- **Consensus built on the importance and urgency of incorporating territorial planning** into developmental planning and subnational decentralization of governmental functions for climate change adaptation and resilience, integrated risk management, ecological sustainability, social equity, and citizen wellbeing.
- **Political will** to achieve this, in line with the National Development Strategy and President Abenader's Government Agenda.
- Well-defined and committed institutional leadership at the national level, led by the Directorate of Territorial Planning within the Vice-Ministry of Planning in the Ministry of Economy, Planning, and Development.
- **Existence of a regulatory tradition** that is embodied in various policies and laws, reflecting the experience of the Executive and Legislative branches with regard to legislative understanding and management of this subject matter.
- **Recent regional and municipal planning processes** that have become a benchmark to advancing the strengthening of territorial planning across different government levels (the Sureste Regional Plan and Distrito Nacional and Santiago TPs, among others).
- **Reinforce spatial data infrastructure** through TA "Leveraging resilient territorial development in the Dominican Republic."

With this objective in mind, and pursuant to the provisions of the Dominican Republic's Constitution of 2015, three legislative initiatives are in the pipeline of the National Congress. One is a Proposed Draft Law on Unified Planning Regions, another is a Proposed Law on Territorial Planning, Land Use, and Human Settlements,<sup>37</sup> and a bill is also being drafted to introduce the National Territorial Planning and Land-Use Management Plan<sup>38</sup>. The following are non-exhaustive comments on these three legislative proposals. Their overarching purpose is to help further understand and strengthen territorial planning. The initiatives are described as follows:

#### 4.1 Proposed Law on Unified Planning Regions

This proposal's primary objective is to regulate the organization, competencies, composition, functions, and delimitation of 5 Unified Planning Regions. In furtherance of Article 195 "Territorial Delimitation" of the Dominican Constitution,<sup>39</sup> the purpose of the organic law is *"the organization, composition, and delimitation of planning regions\* in the national territory, and is intended to promote enhanced development at national, regional, and local levels by guiding policies, plans, programs, and public investment projects to ensure sustainable local development and greater territorial cohesion."<sup>40</sup> The Law seeks to foster integrated, sustainable,* 

<sup>37</sup> The revised version of this document is the November 2020 "Drafting Proposal."

<sup>38</sup> The revised draft is the consensual version of the National Plan for Territorial Organization, by the Ministry of the Economy, Planning, and Development and the Ministry of Environment and Natural Resources, based on the working documents for the formulation of the PNOT. Version Date: 11.19.2015.

<sup>39</sup> Article 195 – Territorial Delimitation. The name and boundaries of the regions, provinces, and municipalities in which they are divided shall be determined by means of an organic law.

<sup>40</sup> Article 1 – Purpose of Law.

equitable, and coherent regional development. The proposed macro-regions are: 1. Northwest Cibao Region, 2. Northeast Cibao Region, 3. South-Central Region, 4. Eastern Region and 5. Southwestern Region. <sup>41</sup>

The proposed regionalization merges the four northern regions into two new regions, and creates a new region around the Distrito Nacional, called the South-Central Region. This South-Central Region would encompass the regions that previously comprised the eastern and western macro-regions and the Distrito Nacional, while the other provinces would remain the same. The Law does not contain specific considerations concerning the implementation of criteria for this new delimitation or its relationship with previous regionalization classification, so it is not possible to weigh their advantages and shortcomings.<sup>42</sup> The same can be said of the relationship between the proposed regionalization and the development indicators, <sup>43</sup> as seen in the following Figure.

Although the law seeks to rationally organize the territory for more effective use of resources, <sup>44</sup> except for Article 12, Transitional Provision, no other article of this Bill refers to socioeconomic and environmental territorial planning. This suggests that the "territorial planning" concept refers to the political-administrative organization of the national territory as defined in the Dominican Constitution. This assumption seems to be confirmed by the fact that four of the five criteria that the law adopts for purposes of regional delimitation<sup>45</sup>



Source: Developed by Author, based on source map <a href="https://es.wikipedia.org/wiki/Provincias\_de\_lo\_Rep%C3%BAblica\_Dominicana">https://es.wikipedia.org/wiki/Provincias\_de\_lo\_Rep%C3%BAblica\_Dominicana</a>.

41 Article 7 – Delimitation of the national territory into planning regions.

Figure 3. Unified planning regions vs current regions

- 42 Technical paper supporting the proposed RUP (DGODT) is pending.
- 43 Department of Monitoring and Evaluation based on the UNDP Regional Human Development Index (RHDI).
- 44 Article 5 Purpose and Scope of Regionalization for Planning Purposes.
- 45 Article 6 Regional Delimitation Criteria.

have an administrative and budgetary character. The fifth criterion, "Ownership", refers to the historical and cultural relationship of the population with its territory, but does not explicitly refer to environmental or socio-ecological criteria for regional delimitation and management.



Figure 4. Territorial planning regions – Human development index

Source: Developed by Author, based on source map and UNDP Human Development Index Regional (IDHr).

The Ministry of Economy, Planning, and Development, along with decentralized units in each region, would be the authorities responsible for implementing regionalization of statistical information, financing, and socioeconomic development processes and instruments. To that effect, the Law provides that each region shall establish a Deconcentrated Unit, which is attached to the Vice Ministry of Planning of the Ministry of Economy, Planning, and Development, <sup>46</sup> main function of which shall consist of coordinating the formulation of regional and provincial development plans on a territorial level, as well as advising the Development Councils referred to in Art. 14 of Law 498-06. <sup>47</sup> The creation of Decentralized Units of the central government confirms that the regions are not decentralized political-administrative entities, and that their role is to support and coordinate the socioeconomic and administrative planning to be embodied in Development Plans.

The Law mentions no territorial planning functions or instruments (plans). Therefore, it would seem necessary to specify the manner under which the proposed regionalization will enable the achievement of

<sup>46</sup> Article 9: Deconcentrated units at the regional level.

Article 14: Development Councils shall be established at municipal, provincial, and regional levels. They are the participatory body of territory-wide economic and social 47 agents. Their function is to coordinate and channel citizens' demands to the central government and the municipal governments. They will take part in the formulation of Strategic Territorial Development Plans as appropriate.

Objective (d) under Article 1 (*rationally organize the territory for more effective use of resources*) since the only explicit reference to territorial planning is contained in a transitional provision (Article 12), whereby it is established that "*neither new administrative political demarcations shall be created nor existing ones may not be amended until the Law referred to in Article 194 of the Dominican Constitution, which defines the criteria and procedures for such purposes, is enacted.*"

The Law also suggests that the amendment or creation of new political-administrative demarcations is subject to the adoption of the Territorial Planning Law. However, the proposed Territorial Planning and Land-Use Plan (described below) does not include provisions pertaining to the political-administrative or-ganization of the territory. These provisions were part of an earlier version of the Proposed Law on Territorial Planning, Land Use, and Settlement, <sup>48</sup> but were removed in the latest version available. In summary, the law will mainly help to arrange sectoral budget planning on a territorial basis, but without explicit and strategic linkage to the National Territorial Planning and Land-Use Management Plan, it will not have a direct effect on territorial planning.

#### 4.2 Proposed Law on Territorial Planning, Land Use, and Settlement 49

The purpose of the Proposed Law<sup>50</sup> is to establish the regulatory framework for territorial planning and land use planning and for the formulation and implementation of planning instruments—Territorial Plans— across different political-administrative levels. Accordingly, the law adopts the general institutional and legislative framework for the inclusion of territorial planning as an integral part of the development planning process, taking into account environmental, cultural, economic, social, risk management, and sustainable development guidelines.<sup>51</sup> The proposed law is currently in the process of being passed by Congress. The following is a brief description of key aspects of the law and some elements that may be worth reviewing in the Bill, or being included in decrees/guidelines following its approval.

Chapters II and III adopt territorial planning principles and criteria, define public and private property regimes, and establish the binding nature of the approved plans on both private individuals and government agencies and bodies, <sup>52</sup> while safeguarding the right to property in all cases.<sup>53</sup> This provision is clear and relevant to the extent that administrative authorizations<sup>54</sup> are issued based on the applicant's property. However, provisions concerning irregular forms of ownership and land tenure, to which, in principle, TP provisions would not be applicable, seem to be missing.

54 Article 12 Administrative Authorizations.

<sup>48</sup> This deleted section probably included the Article that, as stated by municipal officials, introduced in the POT that "municipal districts that demonstrate the adequate solvency to do so may have their own TP office. It is also indispensable to organize the political-administrative TP, as there are provinces with fewer inhabitants than many municipal districts." This provision was not found in any of the proposed laws reviewed.

<sup>49</sup> Proposed Draft: Proposed (Organic) Law on Territorial Planning, Land Use, and Settlement / Ministry of Economy, Planning, and Development, November 2020.

<sup>50</sup> Article 1 - Purpose of Law.

<sup>51</sup> The project formulation process is led by the DGODT of the Ministry of Economy, Planning, and Development (MEPyD) jointly with the Ministry of the Environment and the Municipal Affairs Committee of the House of Representatives. The Law has had three moments where different specialists have intervened in the formulation of the Bill.

<sup>52</sup> Paragraph Art. 7, Proposed Law.

<sup>53</sup> Article 9. General Regime of Property Rights.

The Law also provides important clarifications regarding the TP institutional framework. Title II stipulates the overall establishment of the National Territorial Planning System, without defining membership, and ratifies the Ministry of Economy, Planning, and Development's role as its coordinator, as well as the creation of Consultative Committees for technical and legal advisory purposes.<sup>55</sup> The MEPyD is also responsible for managing national and regional land use planning,<sup>56</sup> and for providing advice and assistance to municipalities,<sup>57</sup> which are responsible for promoting the formulation, execution, and evaluation of the Municipal Territorial Plans (PMOT)<sup>58</sup> in coordination with the government's municipal district and sectoral boards in their territories.<sup>59</sup> To comply with this provision, all municipalities should establish an Urban Planning Office. All Regional and Municipal Plans must be "technically reviewed" by the Ministry of Economy, Planning, and Development. In addition to curtailing municipal autonomy, the technical review of 10 Regional Plans and 158 Municipal Plans by the DGODT required by this provision may prove to be an unattainable task.

The Law also stipulates that the resources needed to formulate, manage, and implement territorial plans across national, regional, and municipal levels will be sourced from: (i) central government appropriations; (ii) counterpart funds from municipalities and municipal districts; (iii) municipal revenues from penalties imposed on violations of this law; and (iv) international funds.<sup>60</sup> These resources will be used for: (i) training and technical assistance; (ii) provision of technology and equipment; (iii) technical assistance for the preparation, implementation, and revision of territorial plans at national, regional, and municipal levels; (iv) preparation or implementation of municipal and regional plans and projects; (v) strategic environmental assessment; and (vi) TP reporting.<sup>61</sup>

In terms of basic planning instruments, the Law defines three tiers: The National Territorial Plan, Regional Territorial Land-Use and Development Plans, and Municipal Territorial Plans. <sup>62</sup> No Provincial TP is foreseen. The provisions governing the inter-tier linkage of these plans<sup>63</sup> shall be adopted by means of regulations required by the law. In addition to these basic plans, it provides for the formulation of **Special Plans of Supra-Municipal Impact (PEIS)**, and exceptional plans envisaged for the implementation of territory-wide structuring projects prepared by the relevant Ministry (...).<sup>64</sup> Nevertheless, the formulation and adoption of Municipal Territorial Plans shall be subject to the adoption of the National Land-Use Plan and the Territorial Land-Use and Development Plan, <sup>65</sup> while the law makes no reference to the Unified Planning Regions with respect to regional plans or to provincial plans.

**Special Plans of Supra-Municipal Impact** will be formulated by the relevant Ministry, approved by the Council of Ministers, and "*shall not require any administrative authorizations from the municipalities through* 

- 58 Paragraph 1, Article 26 Proposed Law on Territorial Planning, Land Use, and Settlement.
- 59 Article 17 Municipal Territorial Planning Management.
- 60 Article 19 Financing.
- 61 Article 20 Developing Plans and Programs.
- 62 Article 22 Planning Instruments.
- 63 Paragraph II, Article 22.

65 Paragraph III, Article 23.

<sup>55</sup> Articles 13 through 15.

<sup>56</sup> Paragraph 1, Article 25 - Proposed Law on Territorial Planning, Land Use, and Settlement.

<sup>57</sup> Paragraph, Article 17 - Municipal Territorial Planning Management.

<sup>64</sup> Paragraph I, Article 22.
which the infrastructure or the action is to be carried out."<sup>66</sup> This provision seems opposed to municipal decentralization, not only in relation to "**the Greater Area**" included in the list of interventions requiring PEIM, but also to virtually any municipality, given the number and diversity of "structuring projects" (including watersheds) subject to PEIS.<sup>67</sup>It is noteworthy that the list of situations requiring PEIS fails to include PSOTT, which is the closest to this type of plan at the present time.

The Law seems to have some inconsistencies in terms of who may lead the TP formulation initiative, as well as loopholes on how the different governmental entities interact towards the formulation of TPs. The Law stipulates that the TP formulation may be "a national, regional, or municipal initiative, or led by the civil society supported by a national, regional,<sup>68</sup> or municipal authority, as appropriate."<sup>69</sup> The law defines neither the case(s) nor the conditions for the private initiative, which seems to be in contradiction with the provisions of Articles 24, 25, and 26 of the proposed Municipalities Law. It also seems to contribute to TP-related discretionary power. The requirement "to include the Ministries of Economy, Planning, and Development and Environment and Natural Resources (...)"<sup>70</sup> in the formulation, decision making, implementation, follow-up, and evaluation processes raises the following concerns: (i) it fails to mention explicitly the adoption of the respective Plan between TP steps; (ii) it requires the two Ministries to be included in each TP stage and process across all levels, which seems contradictory to the "support" concept and assumes that these two Ministries are endowed with a great implementation capacity; and (iii) it excludes the Ministry of Tourism.

The terms defined in the law build discretions towards the review of the plans. The Law defines the effective periods of the National, Regional, and Municipal Territorial Plans to be 30, 20, and 12 years, respectively, requiring their revision either every 10 years (PNOT and PRODT), every 6 years (PMOT), "or when appropriate."<sup>71</sup> This vagueness with regard to timing, rationale, and requirements for TP revisions undermines the soundness and continuity of territorial planning and could affect inter-tier linkages, erode citizen participation, and foster a new form of " discretionary power," especially if the initiative is either public or private.

Title IV, Soil Classification and Identification for Assigning Soil Types and Use Intensity covers a wide range of classes and types of soils. In addition to potential adjustments to some of them, the Law itself or the National Land-Use Plan could contain provisions more directly oriented towards specific development strategies regarding environmental and socioeconomic considerations (such as productive chains, urban-rural relationship, and strategic systems of relationship between types of uses). Such is the case of Free Zones and tourism developments, which fail to respond to the simple land-use allocation for industrial or tourism uses.

Title V adopts provisions pertaining to the "**Regime of Transition Towards Territorial Planning Instruments**" for those municipalities lacking a Territorial Plan. The law fails to specify the type of municipalities, the reasons behind the absence of such a Plan, transition transiency, or the legal nature of the so-called "**Urban Soil Delimitation Instrument**," along with its relationship to the PMOT or its validity. These aspects should be specified in the proposed law, notwithstanding the fact that the formulation process and the specific con-

<sup>66</sup> Article 28 - Developing the Special Plan and Art. 29 - Impacts of the Special Plan.

<sup>67</sup> Article 27 - Special Plans of Supra-Municipal Impact.

<sup>68</sup> The term "regional authority" seems inaccurate, as the regions fail to have such authorities.

<sup>69</sup> Section 1, Article 23 - Necessary Requirements.

<sup>70</sup> Section 3, Article 23 - Necessary Requirements.

<sup>71</sup> Articles 24, 25, and 26.

tents of the instrument will be regulated thereafter. The foregoing will provide greater clarity with respect to **Regional Planning Subsidiary Rules**.<sup>72</sup>

**Title VI** contains provisions on **Human Settlements**. The lack of provisions linking settlements to different land types and uses prevents understanding. It also prevents the managing of settlements as an integral part of the demographic and socioeconomic dynamics that encourage their emergence and functionally link them to the diverse territories.

**Title VII: Penalties**<sup>73</sup> and **Title VIII: Final Provisions**. They stipulate a two-year deadline as of the law's enactment to prepare the National, Regional, and Municipal TPs. <sup>74</sup> Considering that to date only 10 municipalities have completed their Territorial Plans, the formulation of the remaining 148 PMOTs within the mandatory time frame would imply a financial, technical, and political effort deployed at all levels of the government, which seems unfeasible. Additionally, the simultaneous development of national, regional, and municipal plans will not generate vertical or horizontal harmonization guidelines between TPs, as foreseen in Art. 23, which is discussed above. Nor would it enable any supra-regional guidelines, since the RUP delimitation will occur simultaneously (within 2 years as of the enactment of the Law). <sup>75</sup> These time frames also fail to stipulate deadlines for formulating the regulations of different laws. Finally, the Plans would be deprived of any basic information because the Law tasks the **José Joaquín Hungría Morell National Geographic Institute** to submit the national cartography establishing the territorial boundaries of the Distrito Nacional, provinces, municipalities, and municipal districts (in order to settle existing delimitation conflicts) to the Ministry of Economy, Planning, and Development within a **three-year deadline**.<sup>76</sup>

Note that the only explicit reference to the PSOTT lies in the final provisions,<sup>77</sup> stating that: "The tourism-oriented sectoral territorial planning must ensure consistency with the territorial planning instruments referred to in Article 22 hereto; and said plans shall be approved by resolutions of the Ministry of Tourism and shall be part of the Municipal Territorial Plans or Special Plans of Supra-Municipal Impact, as the case may be. Amendments to these plans shall be governed by this law. This provision does not clarify: (i) the specific scope of 'consistency'; (ii) the prevalence between the two instruments and their order of adoption; (iii) the binding nature of PSOTTs; or (vi) the participation of municipalities in formulating the PSOTTs."<sup>78</sup> This reference to the PSOTTs seems inadequate. Insofar as, according to the sectoral tourism regulations in force, the whole country is declared to be of "tourist interest," the entire territory could be the subject of PSOTTs developed and adopted by the Ministry of Tourism.

- 76 Article 93 of the Proposed Law
- 77 Paragraph, Article 90 Registering Municipal Territorial Plans.

<sup>72</sup> Section II, Article 60.

<sup>73</sup> Comments on this Title are excluded here due to the absence of referential context.

<sup>74</sup> Title VII.

<sup>75</sup> Article 8 -Regionalization Implementing Authority -Proposed Law on Unified Planning Regions.

<sup>78</sup> The DPP Director within the Ministry of Tourism has stated that over the next three years, it is planned that the 8 PSOTTs which have already been adopted will be updated, and that 15 new PSOTTs will be formulated and adopted, which poses challenges with regard to simultaneous planning processes.

#### Table 7. Territorial planning process timelines by proposed laws



## 4.3 The Proposed National Land-Use Plan (PNOT)

The National Land-Use Plan is being formulated under the leadership of the DGODT - Ministry of Economy, Planning, and Development. This Note was prepared based on "Documento de Consulta: Plan Nacional de Ordenamiento Territorial – Dominican Republic." This is a technical consultation document, which is neither finished nor binding. So far, it has advanced its conceptualization, stakeholder awareness, and territorial diagnosis, while the chapters on "Territorial Prospects" and specific land-use planning arrangements are at a very embryonic level.

The National Land-Use Plan (PNOT) has been conceived as a policy paper that informs national land-use decision-making by harmonizing the different sectoral policies. It aims to manage and leverage their resources in order to achieve sustainable development, promote territorial cohesion, and improve the living conditions of the Dominican Republic's inhabitants. The proposed PNOTs are land-use and territorial planning guidelines at subnational levels and represent the territory-wide spatial expression of strategic cross cutting themes stipulated in social, economic, and environmental terms.

**The Plan addresses three priority themes:** (1) Human settlements, which refers to the quality of habitat and the human settlement-territory relationship; (2) Environmental protection and management, by considering the different types of behavior experienced in the society-nature relationship; and (3) Competitiveness

and territorial cohesion, which refers to the achievement of a basic productive structure linked to the local market and the global economy. **It also addresses four cross cutting themes:** (a) Climate Change Adaptation and Risk Management; (b) Gender Approach; (c) Human Rights Approach; and (d) Social Participation.

The last chapter, Territorial Planning and Land Use Policy, seeks to "guide the physical, socio-spatial, and political-administrative organization of the Dominican national territory (...)."It is unclear whether the "National Land-Use Plan," the purpose of which is "to inform national land-use decision-making by harmonizing the different sectoral policies and aiming to manage and leverage their resources in order to achieve sustainable development (...)," adopts in its operative part a "Territorial Planning and Land Use Policy" with a purpose and scope that are closer to those of a law aimed at the political-administrative organization of the territory, as related provisions were included in earlier versions of the Proposed Territorial Planning and Land Use Law, but were dropped in the latest available version. The RUP Bill also contains no provisions relating to overall political-administrative organization.

The Consultation Paper consists of 6 sections: I. Introduction, II. Conceptual Framework, III. Methodological Framework, IV. Territorial Diagnosis, V. Territorial Prospects, and VI. Territorial Planning and Land Use Policy. According to the defined methodological framework, the PNOT formulation consists of five (5) stages: **Stage One:** Stakeholders' awareness and conceptual agreement; **Stage Two:** Territorial diagnosis: knowing the territory, potentials, and restraints; **Stage Three:** Scenario construction; **Stage Four:** Constructed/selected scenario-based programming; and **Stage Five:** Implementation, defining PNOT implementation arrangements and instruments.

The paper stipulates that arrangements must address the creation of national institutions to monitor and implement the actions proposed under the PNOT, as well as to oversee compliance with territorial planning regulations and ordinances. To achieve the objectives and goals set out in the National Development Strategy, the **National Land-Use Plan (PNOT) will be effective for 20 years**.

The last chapter, Territorial Planning and Land Use Policy, seeks to "guide the physical, socio-spatial, and <u>political-administrative</u> organization of the Dominican national territory (...). "It is unclear whether the "National Land-Use Plan," the purpose of which is "to inform national land-use decision-making by harmonizing the different sectoral policies and aiming to manage and leverage their resources in order to achieve sustainable development (...)," adopts in its operative part a "Territorial Planning and Land Use Policy" with a purpose and scope that are closer to those of a law aimed at the political-administrative organization of the territory, as related provisions were included in earlier versions of the Proposed Territorial Planning and Land Use Law, but were dropped in the latest available version. The RUP Bill also contains no provisions relating to overall political-administrative organization.

In short, the consultation paper does not include specific territorial planning guidelines or provisions with regard to the instruments for its adoption. To that end, it states that "although during the work process developed jointly by the MEPyD and the Ministry of Environment, the territory-wide management instruments used across different levels of government have not been discussed in depth, this refers to Critical Topic N° 4, regarding the weak coordination and linkage of policies at different levels of government." Additionally, it does not contain explicit references concerning the relationship between the proposed National Land-Use Plan and the Proposed Law on Unified Planning Regions and proposed Law on Territorial Planning, Land Use, and Settlement. The PNOT must adjust to the new vision of the SNOT and the instruments in the PDL of Territorial Planning.

With regard to the relationship among the ongoing regulatory processes, it was found that the definition, delimitation, modification, competencies, and resources of the basic political-administrative units (regions, provinces, municipalities, and municipal districts) are not addressed by any of the projects. The government decentralization scheme in force to date is maintained, which would seem inadequate for assuming and developing the proposed new decentralized territorial organization system. The complementarity or subsidiarity relationship (contents, scope, institutional framework, timetables, etc.) between the three regulatory processes is not evident either.

## **5. Recommendations**

A non-exhaustive series of recommendations as a contribution to the ongoing processes is displayed below, based on the status and balance of the process components summarized in Figure N° 5.



The Dominican Republic's Constitution of 2015, the National Development Strategy 2012-2030, and the Distrito Nacional and Municipalities Act form the political and regulatory foundation upon which the comprehensive territorial planning process must be built. Other provisions reviewed contain complementary provisions. Three bills under the formulation and adoption process deploy the main provisions adopted in the CP and END—the RUP Law, TP, LU & S Law, and PNOT Law—and are aimed at consolidating a structured territorial planning system in the DR. Overall, this entails developing, adopting, and implementing the pending components, indicated in white background in Figure N° 13, and adequately and explicitly defining the relationships of subsidiarity, complementarity, and functionality among all the components, as well as identifying loopholes and designing the implementation of the system.

**The following is a non-exhaustive list of general recommendations**, relating on the one hand to potential adjustments to the three proposed laws underway and, on the other hand, to a strategy for their regulation and implementation. The recommendations are formulated in relation to the "building blocks" of an integrated territorial planning system, consisting of three structural columns and three levels of development, as summarized in Figure N° 6.



Although all three proposed laws include territorial planning provisions, including contents, scope, resources, instruments, institutional competencies, and information required for national and subnational territorial planning, the Proposed Law on Territorial Planning, Land Use, and Settlement is currently the bill with the broadest regulatory scope and the most advanced level of development. Therefore, the following comments refer mainly to this bill and complement those made in the respective Section.

#### Enhance the regulatory framework to ensure adequate conceptualization and development of TP instruments

Although the current proposed laws provide key elements for advancing towards new territorial planning in the DR, it will be necessary to review and regulate the reforms. The following are some of the key points to clarify the proposed regulations and facilitate the implementation of reforms:

#### **Overall territorial planning**

- I. Regulate the conceptual, legal, and operational relationship between planning instruments: National Land-Use Plan, Regional TP Plans, Special Plans of Supra-Municipal Impact, and Municipal TP, including PSOTTs. Regulations should define the legal nature of each of these instruments (binding, indicative, mandatory, or optional), their prevalence and subsidiarity, content, and scope, and the responsible parties, stakeholders, and formulation processes. Based on these definitions, review and regulate the "Subsidiary Regional Regulations," and define territorial planning processes and/or instruments for provinces and Municipal Districts.
- **II. Review and regulate the provisions relating to Special Plans of Supra-Municipal Impact by specifying:** (i) instances and areas of application, in particular those pertaining to "large areas such as watersheds, greater areas, industrial parks, or other areas of national interest, or similar initiatives defined by their supra-municipal impact"; (ii) their formulation and adoption by "the relevant ministries," which do not necessarily have either expertise or tradition in TP, and with no involvement of the *DGODT*; and (iii) the participation of municipalities included in the Plan, so that the territorial planning of strategic territories is not a centralized process.
- **III.** Clarify/regulate the processes for initiating, formulating, consulting, and implementing national, regional, and municipal POTs. The provision that stipulates that the TP formulation may be "a national, regional, or municipal initiative or led by the civil society supported by a national, regional, or municipal authority, as appropriate" should be revised or regulated. Since the TPs, especially the municipal ones, are binding instruments, the local government must formulate and adopt them, rather than "support" them. Furthermore, clarify the "regional authority" concept, which does not seem to apply in the case of planning units, e.g., the regions. Concerning the private initiative, define who may run this initiative, their legitimacy/representativeness and competencies for this purpose, the commitments of the initiative leader(s), and the recipient municipality.
- IV. Revise deadlines for formulating the TPs and their periods of effectiveness, ensuring that: (i) the laws are regulated prior to their enforcement; (ii) the subsidiarity provisions are observed (1. PNOT, 2. Regional TPs, and 3. Municipal TPs); and (iii) they are legally and technically feasible in order to advance the formulation, adoption, and implementation process, which apparently will not fit the expected timeframes.
- V. Revise and regulate the "Regime of Transition Towards Territorial Planning Instruments" for those municipalities that lack a Territorial Plan, defining to which of them the legal nature of the so-called "Urban Land Delimitation Instrument" applies, including its binding nature, content, scope, and validity, the parties responsible for their formulation and adoption, and their outstanding nature, or transition to a TP, conditions, terms, and purposes as appropriate.

- VI. Review and regulate the revision of TPs across all levels. In particular, the provision that states that *"they shall be revised whenever required by the conditions* (...),"<sup>79</sup> opening the possibility of constant revisions, according to initiatives, interests, and circumstances. In addition to undermining the TP's credibility and effectiveness, it may encourage discretionary powers in the TP and give rise to problems with inter-tier coordination and with the rights acquired by individuals at the municipal level. To counteract these risks, it is suggested to establish differentiated periods of validity for minor adjustments and structural modifications, as well as exceptional situations or conditions for extraordinary revisions.<sup>80</sup> Additionally, define the process to be followed for any review, either ordinary or extraordinary, including citizen participation and consultation or review with the central government.
- VII. Clarify/regulate soil classification and land capability classes, and regulate differentiated forms of land use. First, it seems necessary to make a clearer differentiation between land capability classes and soil classification, especially concerning rural lands comprising a wide array of land use forms/categories which, like urban lands, are subject to conditions of compatibility, complementarity, connectivity, etc., for their delimitation and characterization. From this perspective, agricultural land is not a land capability class but a rural land category.
- VIII. In terms of land use classification, it is recommended that Protected Land be added as a primary land-capability class, which should be delimited not only for existing protected areas or protected lands, but also for future protected lands under different categories and levels and different purposes (biodiversity preservation), such as protection of ecosystem functionality, conservation of special food production, or protection from threats, among others). It would also be important to consider the inclusion of transition categories, both spatially and temporally, between land-capability classes, whereby the potentially conflictive relationship between lower land-compatibility classes is managed and controlled. This category would include buffer zones of protected areas, urban sprawl lands, and suburban lands (as part of rural lands with non-agricultural activities and the like). Finally, it would be important to strengthen the relationship between land uses and infrastructure systems in all land-capability classes in order to leverage opportunities and manage potential negative impacts between the polygon of land uses and its structuring systems.
- IX. Consider the inclusion of complementary territorial planning instruments for specific interventions covering a large number of properties to be managed jointly and simultaneously, in both urban and rural areas (Renovation Plans, Urban Improvement Plans, Partial Urban Incorporation Plans and the like, Informal Settlement Regularization Plans, Integrated Rural Development Plans, Environmental Restoration Plans, Suburban Development Plans, etc.).

<sup>79</sup> Paragraph III, Article 26.

The development of high-impact projects such as those referred to in the article on Supra-Municipal Impact Plans is precisely grounds for deferred review of PMOTs. Territorial planning tends to privilege the definition and delimitation of lands for land-use allocation, based on criteria such as potential and tendencies; however, large infrastructure projects affect the entire system of population-territory relationships, beyond their immediate surroundings and, consequently, the forms and intensities of land use. Incorporating these new relationship systems requires, in many cases, structural adjustments to the Municipalities' PMOTs in their area of influence. Therefore, positive and negative impacts must be foreseen and managed not only through the Special Plan, but also, primarily, through PMOTs, thereby guaranteeing the best enabling conditions for the projects themselves. Thus, it is advisable to regulate the inclusion process of large infrastructure projects so that their positive impacts are leveraged and potential negative impacts are mitigated through PMOTs.

#### Urban territorial planning

- X. Draft provisions and guidelines on territorial planning of city systems and urban centers. Among others, it is important to adopt criteria and provisions on the relationship among urban centers (city systems) as well as with their direct (urban edges, suburban areas, and neighboring towns) and indirect (regions supplying food, water, etc.) areas of influence as a basis for the classification, delimitation, and allocation of land uses for urban expansion, suburban, and rural areas, as well as for placing strategic facilities and services in urban areas (not exclusively those required to meet basic needs). <sup>81</sup>
- XI. In urban, urbanizable, urban expansion, and suburban lands, these provisions are associated with the construction of public spaces (road system, green and recreational space system, utility infrastructure, and equipment) in rural lands. On the one hand, they are related with protected area systems, equipment, and road infrastructure for intra- and inter-municipal, regional, and national connectivity, and, on the other hand, with the spatial and functional inclusion of dispersed human settlements in territorial consolidation. This turns out to be particularly important with regard to tourist enclaves and free trade zones, the two "sectors" prioritized by the END, as well as to Special Supra-Municipal Plans. In both cases, these sectors are located in suburban developments in the area of influence of urban centers with which they do not yet maintain balanced relations based on complementarity and interdependence. In tourism, this could be the basis for redefining the relationship between PSOTTs and PMOTs.<sup>82</sup>
- XII. Identify and regulate differentiated forms of land management so that in addition to assigning land uses, "treatments" are assigned to the various sectors of the territory in order to achieve desirable development conditions based on the present situation at the time of adopting the Municipal Land-Use Plan ("Development," "Consolidation," "Conservation," "Rehabilitation," "Renovation," and "Redevelopment").
- XIII. Adopt provisions pertaining to the creation of public systems for different uses, treatments, and plans in such a way as to ensure the availability of land (direct purchase, administrative appropriations and expropriation, and assignments) and full compliance with its social and ecological functions (rules on location, dimensions, characteristics, intensity of uses, furniture, landscaping, etc.).
- **XIV. Consider complementary provisions to regularize land tenure** which are required for issuing permits and licenses in the development of TPs.
- XV. Strengthen the interaction between integrated disaster risk management and territorial planning, including provisions designed to address climatic variations. In Integrated Disaster Risk Management (IRDM), "exposure" should be explicitly stated as a factor that, jointly with hazard and vulnerability, constitutes the "risk itself." "Exposure" is the direct expression of the spatial dimension of risk. It has to do with the existence of settlements, infrastructure, or other activities in portions of hazard-prone terrain. Failing to understand exposure makes it impossible to assess vulnerability. Acknowledging and managing these exposure situations is the basis for risk prevention and, hence, the key factor in territorial planning. It is also vital to strengthen the incorporation of climate variation-related provisions. These are mainly related to watershed territorial planning, use restrictions and temporary or permanent occupation of

<sup>81</sup> Understanding the urbanization history and dynamics of the process as well as the current situation (model) and trends (scenarios) in the Dominican Republic is a good starting point for defining a relevant strategy that strengthens territorial and urban planning and responds to situations and perspectives differentiated by type of region.

<sup>82</sup> In this regard, it would be interesting to weigh more specifically the impact that the relationship with its immediate context has on "performance," "spillover," and "lagging factors."

flood-prone zones, increased declaration and preservation of urban, rural, and marine protected areas, preservation or promotion of forest cover on slopes, increased permeable green areas, and urban tree planting (for aquifer recharge, runoff management, CO<sub>2</sub> abatement, microclimate control, environmental quality, and social distancing possibilities).

XVI. Review and, if necessary, make adjustments as required to the municipal regime of own and shared competences (Act N° 176 of 2007 regarding the Distrito Nacional and Municipalities) to ensure harmonization and consistency between the new provisions on territorial planning and the competences of the municipalities.<sup>83</sup>

#### Strengthen TP institutional and financial capacities

Moreover, adequate implementation of the proposed reforms requires strengthening the existing institutions' capacities throughout all governmental levels (Ministries and local governments), reinforcing inter-institutional coordination bodies, and regulating/defining competencies and relationships not covered by the proposed laws. Among others, this would mean:

- I. Complement and regulate the creation of the National Planning System by defining the participating institutions, competencies, and forms and instances of participation in order to have an effective comprehensive sectoral-territorial approach to development planning (in particular, the engagement of the governmental agencies responsible for housing, infrastructure, agricultural development, and risk management, which to date do not seem to have played a role in TP).
- **II.** Redefine and regulate institutional competencies and relationships between ministries across all levels of planning, including those between *MEPyD* (*DGODT*) and *MinTur* (*DPP*), as a basis for harmonization between TP and PSOTT across the board. It is also necessary to regulate the structure, competencies, and performance of regional instances, including provinces, as well as Municipal Districts (which are not mentioned in the proposed laws).
- III. Improve the *DGODT's* capacity to absorb the additional burdens envisaged in the Law concerning the formulation of the PNOT and regional plans, and support the formulation of municipal TPs and their technical review. To adequately manage the participation of the *DGODT* and the *SNP*, it is suggested to regulate the support and review functions as part of a step-by-step territorial planning enhancement strategy by focusing the greatest initial efforts on the development of guidelines and regulations and designing a subnational implementation strategy.
- IV. Enhance the territorial planning capacity of municipalities. To do so, it is necessary to regulate and operationalize the provision of Territorial Planning Offices, or their equivalent, in all municipalities, not only in those cities with over 50,000 inhabitants. This effort should be part of a prioritized and staggered strategy to create enabling conditions for compliance with the Law. This regulation may be directed to adjust the minimum number of inhabitants per municipality and municipal districts, to promote the formation of associations of municipalities if the less populated municipalities are adjacent, and to define Supra-Municipal instances (provincial or regional), providing TP support to those municipalities without an OPM.
- V. Free up resources to implement the reform (fund planning processes and strengthen institutional ca-

<sup>&</sup>lt;sup>83</sup> The territorial planning competencies or provisions that may complement the current socioeconomic planning functions under the Distrito Nacional and Municipalities Act were identified.

**pacity).** Implementing the reform appropriately will also require releasing financial resources to bridge the wide gaps in the development of planning instruments that have been built up over the previous decades. Supporting territorial management entails the estimation of probable new resources projected in the proposed PT law (Art. 19) and their comparison with the estimated costs of the activities to be covered (Art. 20) so as to establish the adequacy of the former and the need to raise them (amendment, adjustment, or complementation of current public financing laws in the context of decentralization; additional municipal tax revenue from new fees; and services or taxes). Additionally, schedule revenues and expenditures, while bearing in mind activity sequencing.

VI. Consider additional lines of financing for risk mitigation processes and projects (generation of information and preparation of hazard and risk maps, stabilization works, structural retrofitting of buildings, acquisition of lands to prevent occupancy, resettlement of communities or infrastructure from areas of unmitigable risk, among others). Conditioning access to these resources with the formulation and adoption of the respective PMOT can be an incentive for municipalities and communities.

# Develop a strategy for implementing territorial planning based on clear prioritization of territory-wide processes and instruments.

The refinement, adjustment, and linkage of the regulatory framework and the institutional structure is critical though insufficient to launch and consolidate a reliable, effective, and sustainable territorial planning process in the Dominican Republic. Experience shows that laws, even the best ones, do not automatically create per se the proper conditions for their enforcement. It is, therefore, imperative to devise a clear strategy for prioritizing instruments and actions with short, medium, and long term horizons that include both the completion and regularization of the regulatory and institutional framework as well as compliance capacity building. Overall, the most important activities to be developed and their potential time frames are considered as follows. This should be adjusted in accordance with the effective availability of resources.

# In the short term, that is, within the next two years, it is important to engage on five fronts (Activities 1 to 7, Table N° 8):

- I. Review, adjust, and arrange the proposed laws being discussed, which constitute the regulatory framework for the new territorial planning, until their congressional approval and enactment. Given that the proposed National Territorial Planning and Land-Use Management Planning Law is the most behind schedule to date, the process may require longer for it than for the other two bills. (Activity 2)
- II. Establish both the National Planning System (3) and the National Information System (4) upon adoption of the regulatory framework (definition of members, functions and roles, processes, bodies, regulations, budgets, etc.) so that they become the core bodies to advance the subsequent phases of the process.
- **III. Regulate the three framework laws**, in particular, the Territorial Planning, Land Use, and Settlement Law. (Activity 5)
- **IV.** Create Deconcentrated Units in each of the five Unified Planning Regions so that they guide and support the formulation of the Regional and Municipal Territorial Plans. (Activity 6)
- V. Design the inter-institutional strategy for launching the staggered formulation of the subnational (regional and municipal) TPs to address territorial planning priorities as well as the capacities of the responsible bodies across different levels of government (Activity 7).

#### Table 8. New territorial planning implementation strategy and timetable

A	ctivity	Period																	
		Ye	ar 1	Yeo	ar 2	Yeo	ar 3	Yeo	ar 4	Yea	r 5	Yec	ar 6	Yec	ar 7	Yea	r 8	Yea	r 9
1	Adjustment and approval of the proposed laws on Unified Planning Regions and Territorial Planning, Land Use, and Settlement.																		
2	Completion and passing of the National Land-Use Plan Law.																		
3	Creation and implementation of the National Territorial Planning System.																		
4	Establishment and start-up of the National Information System.																		
5	Regulation of adopted laws																		
6	Creation of the Unified Territorial Planning Regions (RUPs).																		
7	Design strategy for implementing subnational TP process.																		
8	Formulation of Regional TPs - Priority 1																		
9	Phase One: Technical and budgetary strengthening of municipalities with Priority 1																		
10	Formulation of Municipal TPs of Municipalities with Priority 1 (50 Municipal TPs)																		
11	Formulation of Regional TPs - Priority 2																		
12	Phase One: Technical and budgetary strengthening of municipalities with Priority 2 (50)																		
13	Formulation of Municipal TPs of Municipalities with Priority 2 (50)																		
14	Formulation of Regional TPs - Priority 3																		
15	Phase One: Technical and budgetary strengthening of municipalities with Priority 3 (50)																		
16	Formulation of Municipal TPs of Municipalities with Priority 3 (50)																		
17	Follow up implementation of Municipal TPs of Municipalities with Priority 3																		
18	Review and adjust Municipal TPs of Municipalities with Priority 1 - Strategy review and adjustment.																		
Sou	Regional POT Municipal POT Institu	utionc	al strer	ngh p	roces	S				lan ma Idjustn		ring c	and	. 1			ormat	ion	

Territorial prioritization will contribute to concentrating human and financial efforts and resources in key territories nationwide. Prioritization may respond to urgency criteria, i.e., give priority to the development of territorial planning instruments in areas highly exposed to natural disasters and/or with socioeconomic dynamics in need of particular attention (such as high population growth or lagging areas). Urgency-based prioritization would be justified under Act N° 176 of 2007 regarding the Distrito Nacional and Municipalities. <sup>84</sup> Another prioritization criterion would focus on areas or regions of strategic relevance—with the potential to take on new socioeconomic and/or environmental functions through innovative territorial planning. Prioritization may also consider urban expansion patterns and socioeconomic characterization factors (systems of urban-rural relationships, regional functionality in the national context, population attractiveness or expulsion factors, informality, social vulnerability, institutional framework, etc.) and socio-ecological factors (ecological functionality and ecosystem services supply, natural resource base, and natural hazards, e.g., geological, geomorphological, hydrometeorological, productive potential, etc.). The above would also enable the identification of typologies of regions as a benchmark for more tailored territorial planning fitting each typology. In this context, Haitian border zone calls for special analysis, and, probably, equally particular responses in terms of territorial planning and management.<sup>85</sup>

The training strategy could be designed and developed under the "learning by doing" approach, whereby the TP formulation builds or strengthens understanding and capacity for analysis and decision-making among the participants in the process, especially among staff members of the Planning Offices and municipalities overall. In seeking to make the time and resources available more efficient (such as consultancies, support from universities, etc.), it is recommended to design and develop support/training by clustering municipalities. Doing so will also help strengthen criteria standardization as well as territorial interrelation. It is advisable to actively involve universities so that academic-political interaction will help build a critical mass of professionals in land use and territorial planning.

#### Next, in the next 2.5 – 4 years, it is important to support the formulation of top priority regional and municipal POTs (Activities 8 to 10 of Table N° 8):

- I. Formulation of Regional TPs Priority 1, in line with the priorities defined in Phase One. Ideally consistent with RUP and with the participation of territorial and sectoral units from the central government (Activity 8).
- **II.** Phase One: Technical and budgetary strengthening of municipalities with Priority 1, located in prioritized region(s). Municipal training and strengthening should be advanced in parallel with the formulation of regional TPs, fostering synergy between the two activities as much as possible so that municipalities engage in the formulation of regional TPs and thus build ownership and knowledge for the formulation of their municipal TPs. This synergy will also contribute to the adjustment and synchronization of multi-scale institutional participation (Activity 9).

<sup>84</sup> Article 100 of Act N° 176 of 2007 regarding the Distrito Nacional and Municipalities establishes the following municipality prioritization criteria for government assistance: (a) they are located in extreme poverty areas according to [sic] sources and studies by the Ministry of Economy, Planning, and Development; (b) due to their geographic location or population settlement, their essential services are more expensive; (c) they have suffered the consequences of catastrophic events that, due to the magnitude of damages, affected population and, in the absence of local resources, require special temporary assistance; and (d) they enjoy a recognized environmental value or a greater tourist interest.

<sup>85</sup> o be discussed with the government in workshops.

#### III. Formulation of Municipal TPs of Municipalities with Priority 1 (50 Municipal TPs) (Activity 10).

Following this same logic and the critical evaluation of results during the first phase, successive phases involving approximately 50 municipalities will be carried out over the next 5 to 8 years to develop POTs with Priority 2 and 3. (Activities 11 to 17).

In the long term; i.e., beyond the next 8-10 years, the consolidation of the territorial planning system in the DR and the TP revision phase will be launched.

Upon completion of the second phase (medium term), the DR is expected to have adequate institutional capacity and territorial planning instruments throughout all planning and government levels, including an effective monitoring system for tracking their territory-wide development, which **might kick off the revision and adjustment phase of municipal TPs adopted 6-8 years earlier** (Activity 18 from Table 8).

## References

# Regulations of the Government of the Dominican Republic:

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Act N° 6232 of 1963 on Urban Planning http://lexgeo.com/leyes/Ley6232.pdf

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Law 14 of 1991 on Civil Service and Public Administration <u>http://www.oas.org/juridico/spanish/mesi-</u> <u>cic2\_repdom\_sc\_anexo\_1\_sp.pdf</u>

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Act N° 41 of 2008 on Public Service. <u>https://obser-</u> vatorioserviciospublicos.gob.do/baselegal/Ley-41-<u>08-Funcion-publica.pdf</u> Decree N° 874 of 2009 approving the Regulations of Law N° 147-02 <u>http://defensacivil.gob.do/transpa-</u> <u>rencia/base-legal/item/Decree-874-09-de-aplica-</u> <u>ción-ley-147-02</u>

Act N° 1 of 2012 on the Dominican Republic's Strategic Development Plan 2030 (END) <u>https://mepyd.</u> gob.do/mepyd/wp-content/uploads/archivos/end/ marco-legal/ley-estrategia-nacional-de-desarrollo.pdf

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## Annex 1.

### Status of territorialized planning in the DR

Four maps provided by the *DGODT* display the geographic distribution of the three indicators of the status of territorial planning in the DR (Map 1: Formation of Municipal Development Councils - **CMD**; Map 2: Formulation and Adoption of Municipal Development Plans - **PMD**; Map 3: Formulation and Adoption of **Municipal Territorial Plans and POTTs**); and Map 4: Aggregate Planning Processes.





Speaking of CDM and PMD, the Suroeste Unified Planning Region (*RUP*) seems to be the most advanced, while the other four *RUPs* report similar status, as seen in the following table regarding PMDs. <sup>86</sup>

<sup>&</sup>lt;sup>86</sup> DGODT was asked if it was required to have a Regional Land-Use Plan. Its response is pending.



## Annex 2.

## Status of tourism territorial planning processes:

Information provided by the Secretariat of Planning and Projects of the Ministry of Tourism on the status of the tourism territorial planning processes being carried out by the agency is included below.

#### Table A2.1. Tourism territorial planning and management instruments 1

EXISTING STRATEGIC PLANS								
NORTH	Puerto Plata Península de Samaná Santiago María Trinidad Sánchez Dajabón La Vega Valverde Monte Cristi San José de Las Matas Jarabacoa	EAST	Miches Punta Cana-Bávaro-Macao Bayahibe Boca Chica Higüey San Pedro de Macorís	SOUTH	Barahona			
PSOTT								
NORTH	Sosúa San Felipe Puerto Plata Las Terrenas (Samaná Norte) Cabarete	EAST	Miches - Seibo - Hato Mayor Punta Cana-Bávaaro-Macao Unidad Ambiental 2 Macao	SOUTH	Pedernales			
Source: Secr	etariat of Planning and Projects - MinTur							

#### Table A2.2. Tourism territorial planning and management instruments 2

#### **PSOTT - MISSING**

- NORTH Samaná (Zona Sur) Monte Cristi Espaillat María Trinidad Sánchez Playa Dorada Montellano - Punta Bergantín
- EAST Bayahibe Isla Saona Boca Chica Circunvalación Verón Hato Mayo La Romana La Vacama hasta Miches San Pedro Boca de Yuma
- SOUTH Baní Azua Barahona Municipio Pedernales

**PSOTT - APPROVAL/UPDATE PENDING** 

NORTH Cabarete

EAST Bávaro - Macao - Punta Cana Miches Boca Chica

#### SPECIAL PLANS

- \* Regulations for housing in tourist destinations (priority, collective and second residence)
- Special Plan Punta Bergantín
- Special Plan Circunvalación de Verón

Source: Secretariat of Planning and Projects - MinTur

# 4. Local Governments

William Dillinger

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## Introduction

The Dominican Republic is one of the most centralized major countries in Latin America. At present, local governments account for only 2.4 percent of total government spending. As shown in Figure 1, this is far below the proportion in other countries in the region, and is on par with last-place Panama. In part, this reflects their relatively limited role in the provision of public services. Unlike in Brazil or Colombia, for example, local governments in the DR play no role in the provision of public education. But unlike in other countries, major infrastructure functions—urban water supply and sewerage and major transport infrastructure—all fall, in effect, under the purview of the central government.

The small role of local government also reflects constraints on their funding. Unlike virtually all other major countries in the region, local governments in the DR are not permitted to impose a broad-based local tax—such as the property tax. They are instead dependent on central government transfers—which are perpetually underfunded—and a wide array of obscure taxes and nuisance fees, none of which generate significant levels of revenue on their own. Their resulting precarious financial positions hampers their ability to finance capital investments out of their own revenues, or to access external sources of capital funding. Instead, they are largely dependent on the construction of capital works by the central government.



Figure 1. Local spending (in general government spending percentage) in Dominican Republic and other Latin American countries

Sources: DR figures are from the Ministerio de Hacienda Agregación Institucional para la Consolidación de la Ejecución del Sector Público No Financiero) and refer to 2018. Figures for other countries are from the IMF Government Finance Statistics website and refer to 2018, except in the case of Mexico (2017). In all cases, figures for general public expenditure include spending by the central government, decentralized institutions, and the social security system. With the exception of Costa Rica, Panama, and El Salvador, data for Central American and Caribbean countries is not available.

With the emergence of very large cities in the DR as well as expected rapid growth in peripheral cities and smaller towns (see Note 1) this model no longer works. It is true that the central government has attempted to coordinate and prioritize its own capital spending. But the fact remains that local governments have little control over the allocation of capital spending within their jurisdictions. As a result, the DR is failing to take advantage of one of the key comparative advantages of local government: their ability to prioritize and coordinate development within their own jurisdictions.

This problem appears to be compounded by management problems within local governments themselves. Credible data on the quality of local management is hard to come by—particularly given the constraints on field visits posed by the Covid crisis. However, local governments lack the tools for planning and controlling urban development (see Note 3). They also face difficulties performing the few functions that are exclusively assigned to them—such as solid waste management.

This note is divided into four sections. Section 2 provides key institutional and fiscal background: the structure, functions, and revenues assigned to local governments. It focuses in particular on the system of revenue assignment, and the difficulties local governments have had in securing an adequate and stable level of funding. Section 3 focuses on the internal management of local government. (Due to the data constraints described above, this discussion is curtailed.) Section 4 then discusses directions for reform, focusing first on revenue issues: whether local governments currently have the resources required to perform their existing responsibilities and whether the structure of those revenue sources should be changed. This section also discusses the structure of local governments, including proposals to consolidate small local governments into larger jurisdictions. It concludes with a list of recommendations. Section 5 provides a summary.

## 1. Structure, functions, and revenues of local governments

The Constitution of the Dominican Republic defines the country as a unitary state, divided for administrative and political purposes into a national district, regions, provinces, and municipalities. Regions and provinces are essentially administrative arms of the central government—the chief executives of the provinces are appointed by the president. The municipalities constitute the basic unit of local elected government. They are legal entities, with budgetary autonomy and administrative powers and are entitled to own property. The mayor (síndico) and council members (regidores) are directly elected. The national district has the status of a municipality as well as a province.

**Municipalities in many cases contain one or more subordinate units of government, termed districts** (distritos). These govern distinct parts of the municipal territory. The Municipio of San Jose de Ocoa, for example, contains four distritos, in addition to the territory governed directly by the municipio itself. Except in the municipios surrounding the Distrito Nacional and Santiago, districts tend to have small populations (under 20,000). The municipal law defines districts as deconcentrated units of their respective municipal governments.<sup>1</sup> Nevertheless, district council executives and council members (directores and vocales, respectively) are directly elected. As of 2017, there were 158 municipios and 234 distritos municipales. In this chapter, the term "local governments" (LGs) refers to municipios and distritos municipales together.

<sup>1</sup> Under the municipal law, deconcentration is defined as the delegation of authority and functions to a lower level of administration.

The legal framework for local government is largely set out in a single law. The 135-page Ley del Distrito Nacional y los Municipios (Law 176/07) sets out the powers and functions of local government, the process for electing mayors and council members, and the budget formulation and financial reporting processes that are to be observed. It also sets out the revenues assigned to the local level, but only in broad terms. A separate law (Law 166/03) sets out the terms of central government transfers to local governments.

#### **1.1 Local governments have limited functions**

While the municipal law permits local governments to perform a wide range of functions, in fact their responsibilities are very limited. According to Article 18 of the municipal law, a municipal government "shall exercise the management of its own functions, within the framework of the Constitution and the relevant laws" (Dominican Republic, 2007a). "Own functions" are defined as those that are exclusively assigned to local governments in accordance with the Constitution, sectoral laws, and the municipal law itself. Article 19 of the municipal law lists 15 such functions. They include the construction and maintenance of urban streets and rural roads, traffic management, management of solid waste, street cleaning, street lighting, firefighting, the maintenance of parks, and the operation of markets and cemeteries (see Figure 2). Article 20 goes on to define most of these as obligatory functions. (The only major exceptions are traffic regulation and land use control.) Article 79 separately defines the functions of municipal districts. These largely reiterate the functions assigned to the municipal level with the exceptions of fire-fighting, park maintenance, operation of markets and slaughterhouses, and land use planning and control.

The law also authorizes local governments to engage in "shared or coordinated functions" such as water supply and sewerage and prevention of disasters.<sup>2</sup> These include water supply and sewerage, social protection, public security, public health, public education, and civil defense, and the prevention of disasters. In practice, the role of local governments in provision of these services is minimal. Local governments have no direct role in the provision of urban water supply or sewerage. These services are instead provided by regional companies in metropolitan Santo Domingo<sup>3</sup> (CAASD) and Santiago (CORAASAN), as well as in Puerto Plata (CORAAPLATA), Moca (CORAMOCA), and La Romana (CORAAROM). All these companies are directly subordinate to the Office of the President rather than to the local governments they serve. The national water and sewerage authority (INAPA) provides these services in other cities and towns. Community-based water boards do so in rural areas.

The local role in disaster-related infrastructure is also very limited. The law on disaster risk management (Law 147-02) requires the various levels of government (central, regional, provincial, and municipal) to collaborate in preventing and responding to disasters, noting specifically that each level will "freely and autonomously exercise its activities in this regard, in strict accordance with the attributions that each of them has been specifically assigned in the Constitution." But the vast majority of spending on DRM occurs at the central level. According to BOOST data, municipalities spent only RD\$ 1.2 million (US\$ 24,000) in total on "civil

<sup>2</sup> The law defines these as "shared or coordinated powers (are) all those that correspond to the function of the public administration, except those that the Constitution assigns exclusively to the Central Government, guaranteeing as minimum powers the right to be duly informed, the right to be taken into account, the right to participate in coordination, and financial sufficiency for their proper participation."

<sup>3</sup> Including the Distrito Nacional and the province of Santo Domingo.



defense and disaster risk management" in 2018. The central government, in contrast, spent RD\$ 11.6 billion (US\$ 46 million) or ten thousand times the amount spent by the local governments.<sup>4</sup>

Local governments also play a relatively minor role in providing tourism infrastructure. Note 3 of this report describes the dominant role played by central government ministries and agencies in the development of tourism. Tourism elements fall within sector plans for the Ministry of Public Works & Communications; Environment & Natural Resources; and Economy, Planning & Development. CEIZTUR, a central government agency, is responsible for implementing infrastructure plans in tourism areas. The main touchpoint between local government and the tourism sector occurs at the issuance of land-use permits.

The local role in social services and security is also minimal. Local governments as a group devote only about four percent of their budgets to social assistance and about two percent of their budgets to public security. Spending on education is negligible.<sup>5</sup>

In addition to these specific services, the Local Government law also assigns local governments responsibility for certain planning and regulatory functions. According to the Local Government Law, local governments are responsible for land use planning and management: "land-use planning, urban planning, land management, execution, and urban discipline." But they are not alone in this. As described in Note 2, these responsibilities are shared with various central government entities. Territorial planning is a responsibility of the Ministry of Economy, Planning, and Development (MEPyD) in coordination with the Ministry of the Environment and Natural Resources. Within the Ministry, the General Directorate of Territorial Planning and

<sup>4</sup> Detailed data on *central* government spending on disaster management is available only for 2017 and covers three institutions (Ministerio de Agricultura, Ministerio de Obras Públicas y Comunicaciones, and Ministerio de Medio Ambiente y Recursos Naturales). Of total central government spending on disaster management, 86 percent was spent by the Ministerio de Obras, largely on the reconstruction of roads and bridges. The largest single contract (RD\$ 431 million) was nevertheless for the reconstruction of flood control works (reconstruction of hydraulic works, adapting waterways, clearing canals and drainages, and constructing retaining walls) in the province of Monte Cristi in response to floods in 2016. Smaller amounts were spent on the reconstruction of housing. A detailed breakdown of central government spending, by project, is available on the Government website.

<sup>5</sup> According to BOOST data for 2018, local governments spent 0.9 percent of their budgets on education. Virtually all of this was devoted to "teaching not attributable to any level."

Development (DGODT) is responsible for formulating public policies for territorial development within the framework of the National System for Land Management and Planning. This legislation has been supplemented by a vast array of additional laws and regulations mandating, inter alia, the creation of municipal development councils and the production of municipal development plans (PMDs) and various kinds of land use plans (planos de ordenamiento territorial—POTs). It should be noted that this legislation has not been widely implemented. Only ten of the 151 municipalities recently surveyed by the DGOT have active CDMs. Only eight have completed POTs. And only six have both a development council and the entire suite of planning documents required by law.

#### 1.2 Local expenditures reflect local government's limited responsibilities

The largest single category of municipal expenditure is "administration." According to data from the General Budget Directorate (DIGEPRES) spending on "administration" accounted for roughly 30 percent of total local government expenditures in 2019. (BOOST data for 2018 provides further detail. Of total local spending on administration in that year, two-thirds was spent on the offices of the mayor and council, and the remainder on "administrative, financial, fiscal and economic management and planning.")

**Solid waste management was the largest category of sectoral expenditures in 2019**. It accounted for 22 percent of the total (see Figure 3). Transportation (i.e., road construction and maintenance) accounted for eight percent. Spending on sports, social protection, and other specific sectors accounted for a total of 27 percent. A large proportion of local government expenditures—14 percent—were not classified at all.

This pattern of functional expenditures is consistent among local governments of different sizes and locations. Figure 4 illustrates the functional distribution of LG expenditures in metropolitan Santo Domingo and Santiago, and the average for all other LGs. As shown, "administration" is consistently the largest category of functional expenditures among all three groups, although the proportions are considerably smaller in metropolitan Santo Domingo (22 percent) than in Santiago (32 percent) or the smaller jurisdictions (33 percent). By the same token, solid waste management is consistently the largest category of sectoral expen-



Source: Ministerio de Hacienda (2020c).

ditures, accounting for 27 percent of local government expenditures in metropolitan Santo Domingo and 24 percent in Santiago, but only 14 percent in the smaller jurisdictions. Road transport makes a larger claim on local budgets in the smaller jurisdictions—an average of eight percent of the total, as opposed to four percent in metropolitan Santo Domingo and only two percent in Santiago.<sup>6</sup>

However, there are variations in spending among the municipalities and districts that comprise metropolitan Santo Domingo. Figure 5 illustrates the level of spending in each of the four municipalities that constitute the core of metropolitan Santo Domingo.<sup>7</sup> As shown, "administration" is the largest category of expenditure in only two of them: Santo Domingo Este and Santo Domingo Norte.<sup>8</sup> In the Distrito Nacional and Santo Domingo Oeste, solid waste management is the largest category of expenditure. (It should be noted that because the level of revenues varies among the local governments that comprise metropolitan Santo Domingo, the level of spending on these functions varies considerably. In per capita terms, the Distrito Nacional spends fifty percent more on solid waste management than Santo Domingo Oeste.)

The central government accounts for the overwhelming majority of urban infrastructure investment in the DR. According to the most recent MEPyD report on public investment, capital spending (including spending by public enterprises, decentralized entities, and social security institutions) totaled RD\$ 64.4 billion in 2019 (MEPyD, 2020a). Municipalities spent only RD\$ 32 million, or 0.05 percent of the total amount. The largest sector of total government capital spending was transport, which accounted for 21 percent of the total in 2019. Major investments in the sector included the widening of the Santo Domingo beltway (undertaken by the Ministry of Public Works and Communications) and extensions of the Santo Domingo metro (undertaken by the Oficina para el Reordenamiento del Transporte). The housing and community services sector accounted for about five percent of total government capital spending. Major investments in this sector including a slum upgrading project in the La Barquita neighborhood of Santo Domingo del Este (undertaken by the Office of the Presidency) and the expansion of the bulk water supply system in Santo Domingo del Norte (undertaken by the central government's regional water supply company, CAASD).

**Government attempts to force local governments to increase their own capital spending have been unsuccessful.** As described in Box 1, the municipal law requires local governments to spend at least 40 percent of their total revenues on capital works. This requirement, though, is not enforced. According to the Ministry of Finance's most recent report on municipal spending, capital works constituted only 26 percent of total municipal spending in 2019 (Ministerio de Hacienda, 2020c).

<sup>6</sup> Metropolitan Santo Domingo is defined here as the Distrito Nacional, the municipios of Santo Domingo Este, Norte, and Oeste and their respective distritos. The figure for Metro Santo Domingo represents the combined expenditures of all four jurisdictions. Metropolitan Santiago is defined as the municipio of Santiago and its distritos. Together, metropolitan Santo Domingo and Santiago account for 30 percent of the Dominican Republic's total population.

<sup>7</sup> The figures for Santo Domingo Este and Oeste also include their respective distritos municipales.

<sup>8</sup> Excluding "not classified" which accounts for 27 percent of total expenditures in Santo Domingo Este.



Figure 4. Local governments expenditures by function as a percent of total spending, major cities and

# Figure 5. Local governments expenditures by function as a percent of total spending, metro Santo Domingo, 2019



Source: Ministerio de Hacienda (2020a).

#### Box 1

# Central controls on the allocation of municipal expenditures are not enforced ...and shouldn't be

In principle, local autonomy over budgetary decisions is constrained by rules governing the allocation of revenues. Under Article 21 of the municipal law, personnel spending cannot exceed 25 percent of revenues; spending on "ordinary municipal services" cannot exceed 31 percent of revenues; and at least 40 percent of revenues must be spent on capital works. Four percent must be spent on social programs. These provisions may be waived in the case of emergencies. Otherwise, violations are subject to two to five years of imprisonment and a penalty of five to twenty minimum salaries.

These restrictions are apparently intended to limit local spending on personnel and "ordinary municipal services" in order to free up resources for capital investment. But the case for favoring capital investment over other economic categories of expenditure is not particularly compelling. The primary service that local governments provide is solid waste management, which even in the best run local governments should be largely a recurrent cost: salaries, fuel, vehicle maintenance, and the operation of landfills. Even expenditures on roads should be primarily recurrent: as a general rule, expenditures on maintaining the existing road network should take precedence over new works (this might differ on the initial condition and if there is important urban growth/ expansion).

The distinction between expenditures on personnel and expenditures on "ordinary municipal services" is also questionable. The largest input to "ordinary municipal services" is normally personnel.\* If the government's aim is to restrict spending on administrative personnel, then this would have to be specified. But the government's budget instructions for local governments only specify a definition of capital investments: the creation of physical assets that increase the productive capacity of a municipality: e.g., the construction of roads, hospitals, vocational schools, parks, and cemeteries. The instructions do not define personnel.

In practice, these provisions are consistently ignored. As described in a recent report on the costs of municipal services (Holguín and De León, 2015), both the Distrito Nacional and Santiago spend far more on ordinary public services than the ceiling. And it is a good thing that they do.

\* Except in cases (such as Santo Domingo) where services such as solid waste management are contracted out to private firms.

#### 1.3 Local revenues are largely derived from transfers

**Transfers from the central government are by far the largest source of municipal revenues.** The first chapter of Section 16 of the municipal law sets out the basic principles of revenue assignment. Under the rubric of "financial sufficiency," Article 254 states that ayuntamientos have the "right to sufficient resources to perform the functions assigned to them." The law does not, however, assign specific revenues sources



#### Figure 6. Sources of municipal revenue, 2015-2019

to the local level. In practice, as shown in Figure 6, transfers accounted for nearly seventy percent of the total in 2019.9

The overall level of central transfers to local government is specified in law—but not observed in practice. The legal framework for transfers is set out in Articles 296 and 297 of the municipal law. Article 296 states that ayuntamientos and distritos municipales shall share in the revenues of the state in the amounts and in accordance with the criteria established in law. Law 166 fixes the subnational share of central revenues at ten percent<sup>10</sup>. But this provision has been consistently honored in the breach (Martínez-Vázquez, Radics y Pérez Rincón, 2017). In 2015, such transfers were equal to only 2.9 percent of government revenues (Ministerio de Hacienda, 2014). Since then, the proportion has declined still further. As shown in Figure 6, by 2019, transfers were equal to only two percent of central government revenues.

**The distribution of transfers is based solely on population,** as determined by the most recent census. (Article 4 of Law 166). The law specifies that a minimum of RD\$ 500,000 (roughly US\$ 10,000) will be distributed to each municipio and RD\$ 250,000 (US\$ 5,000) to each distrito municipal, regardless of population. Article 10 restricts the use of these funds (reiterating the municipal law). Not more that 25 percent of the transferred amount is to be spent on personnel, not more than 35 percent on ordinary municipal functions, and at least 40 percent on capital works. As noted in Box 1, this stipulation is not enforced.

<sup>9</sup> Under Hacienda's financial reporting system, transfers covered by this legislation are divided into "current" and "capital". This distinction is reportedly meaningless, as the two are, in effect, fungible. See Box 1. The two are treated as a single transfer for purposes of determining the total amount of the transfers and its distribution among individual municipalities.

<sup>10</sup> Excluding certain revenues as specified in the Ley de Presupuesto de Ingresos y Gastos Públicos de la Nación, as well as external grants and loans.


#### Figure 7. Transfers as percentage of central government revenues, 2015-2019

Source: Dirección General de Presupuesto (DIGEPRES). Ejecución del Presupuesto de los Gobiernos Locales (2015-2019).

#### 1.4 Local governments have very little taxing authority

Local governments have very little power to increase revenues on their own. Although they are permitted to impose a wide range of minor fees and charges, they are not assigned a broad-based local tax. Under Article 255 of the municipal law, municipalities have the authority to establish taxes (impuestos) and fees (arbitrios) "in accordance with the Constitution and the laws." Article 279 authorizes ayuntamientos to establish charges (tasas) for municipal services and the use of municipal property, forbidding only charges for water from public fountains, public lighting, public security, and street cleaning. But local governments are not permitted to impose a recurrent tax on property—a common source of local revenues elsewhere in the region. This tax is instead imposed and retained by the central government.

The few taxes and fees that local governments are permitted to impose generate very little revenues. Typical local taxes and fees include taxes on commercial establishments such as hotels and pool halls, fees for permits to close streets, cut trees, and remodel houses and buildings, and fees for the collection and disposal of solid waste. Detailed data on the yield of specific taxes and fees in the Republic as a whole is not published by the Ministry. <sup>11</sup> Table 1 shows the major sources of such revenues in the country's two largest jurisdictions: the Distrito Nacional and Santiago. As shown, the largest single source of local tax revenue in the Distrito Nacional is a three percent surcharge on electric energy bills that power distribution companies are required to pay to the municipalities in which their customers are located.<sup>12</sup> The second largest is a fee for solid waste collection. Taxes on signs and billboards come in at a distant third.

<sup>11</sup> The Ministry's budget classification system provides a detailed list of the items to be included under each of these two headings. The Ministry's website, however, does not reveal amounts yielded by each source. See: https://www.digepres.gob.do/wp-content/uploads/2020/05/Clasificador-de-Ingres02.pdf

<sup>12</sup> According to the law, the tax applies throughout the country. See: https://www.cne.gob.do/wp-content/uploads/2015/05/Reglamento.Ley\_No\_125-01.pdf.

#### Table 1. Sources of revenues: Distrito Nacional and Santiago, 2019.

	Distrito	Distrito Nacional		Santiago	
	RD\$ mns.	% of Total	RD\$ mns.	% of Total	
Transfers	1,557.7	40%	982.6	65%	
Electricity Tax	790.0	20%	0.0	0%	
SWM Fee	747.2	19%	272.7	18%	
Sign Tax	160.0	4%	13.3	1%	
Building Permit Fee	88.8	2%	24.2	2%	
Credit Purchases*	85.9	2%	24.7	2%	
Construction Permits	35.6	1%	12.3	1%	
Civil Registrations	38.2	1%	15.4	1%	
Other Taxes and Fees	404.6	10%	173.8	11%	
Total	3,908.0	100%	1,519.0	100%	

\*Tax on Purchases of Furniture on Credit Source: Budget Execution Reports, 2019.

Source, budget Execution Reports, 2019.

Charges for building permits are fourth. A wide range of minor taxes and fees accounts for the remainder. The most important of these is a tax on the purchase of furniture on credit. With the exception of fees for construction and civil registration, none of them generated more than the equivalent of US\$ 0.33 per capita. Although the Distrito imposes a ten percent tax on hotels and motels, the revenues from this source are inconsequential.

**Santiago's local taxes and fees are even more diverse.** Santiago generates no revenues from the electricity tax due to an ongoing dispute with the national electricity company. Its largest single source of revenue was instead the fee for solid waste collection. Its second largest was a fee imposed on awnings extending over public sidewalks, followed by the tax on the purchase of furniture on credit. With these exceptions, and the exception of the other taxes and fees shown in Table 1, no single tax or fee amounted to more than US\$ 0.55 per capita.

Variations in per capita receipts among municipalities are surprisingly small—at least based on aggregates by province--despite variations in levels of poverty and economic development in different parts of the country. Figure 8 shows the average per capita municipal receipts in each province.<sup>13</sup> As shown, with the exception of the Distrito Nacional and a few provinces on the Haitian border, average per capita mu-

<sup>13</sup> Receipts include current and capital receipts, including proceeds, if any, from borrowing. No detailed breakdown by source is available.



Source: Ministerio de Hacienda (2020b).



#### Figure 9. Metro Santo Domingo: per capita revenues by municipality

nicipal revenues generally fall within a range of RD\$ 1,300 to RD\$ 1,800. This relative uniformity is due to the dominance of transfers in municipal revenues and their distribution solely on the basis of population. Such variations as exist are due to (1) the statutory minimum amount, which results in high levels of per capita transfers in jurisdictions with small populations, and (2) the contribution of own source revenues in big cities with robust economies. As noted above, for example, the Distrito Nacional's revenues were boosted by its tax on the electric energy bills of its residents.

There are, nevertheless, several notable variations. Within metropolitan Santo Domingo, there are fairly wide variations in the per capita revenues of municipalities. As shown in Figure 9, the per capita receipts of the national district and the two municipalities to the east and west of it are substantially higher than those of Santo Domingo Norte. These variations carry over into the more distant suburbs of the metropolitan area. While the per capita revenues of Los Alcarrazas are roughly comparable to those of Santo Domingo Oeste (RD\$ 1,227), the per capita revenues of Boca Chica and Pedro Brand are comparable to those of Santo Domingo Norte.

Despite the decline in municipalities' share of central revenues, the level of total municipal revenues has increased in recent years. As shown earlier in Figure 5, over the period 2015-2019, total local revenues increased by 21 percent in nominal terms. While revenues from transfers increased by only five percent, revenues from fees and charges more than doubled (albeit from a very low base). Revenues from local taxes increased by about 40 percent.

The COVID-19 pandemic is likely to have reduced local revenues in 2020. Due to their dependence on central government transfers, municipal revenues are strongly affected by changes in central government revenues. Data on central government revenues show a 5.5 percent decline in the first eleven months of 2020, compared to the same period a year earlier. This could have resulted in a corresponding reduction in local revenues from this source. But, as noted earlier, the Government routinely alters the percentage of government revenues that it transfers to the local level. If the Government responded to the COVID crisis by increasing the proportion of its revenues that it transfers to the local level, this could have offset the decline in revenues from this source.

The impact of COVID on other sources of local revenues is likely to have been mixed. Some sources, such as SWM fees, are imposed at a flat rate and may not have been affected by the economic downturn. But other sources, such as building permit fees, are likely to have declined in response to a slowdown in construction.

## 2. Performance

The level and structure of local government revenues is, of course, only one aspect of local performance. Below we conduct a brief review of local government's performance by looking at three functional areas: (1) Solid waste management, (2) urban planning, and (3) internal management.

# 2.1 There are important gaps in the collection of solid waste and its disposal is inadequate

While solid waste collection is adequate in middle- and higher-income areas, it is deficient in low-income neighborhoods. And solid waste disposal fails to meet minimum environmental standards. The principal functional responsibility of local government in the DR is the collection and disposal of solid waste. The available data suggest that local governments are generally successful in the collection of solid waste in formal (middle- and upper-class) neighborhoods. According to the most recent (2015) housing survey, 89 percent of the country's urban households had their garbage collected by their municipal governments. Another three percent of household cases were served by garbage carts (carretilleros). The remaining eight percent burned their garbage or threw it in the street or in a gulch or river (ONE, 2016). This pattern is consistent among the

#### Image 1. Collection of solid waste in informal settlements is poor

A. Solid waste clogs drainage channels in Santo Domingo



Source: University of Texas at Austin Strauss Center

B. Solid waste from the Ozama River pollutes the beaches



Source: https://woimacorporation.com/drowning-in-waste-case-santo-domingo-dominican-republic/

country's largest cities, including metropolitan Santo Domingo and Santiago, as well as in smaller towns. In rural areas, less than 60 percent of households reported to have municipal collection services, and over 30 percent of households burn their waste as their main way of disposal.

But collection in informal settlements is poor—particularly in Santo Domingo. As Santo Domingo's population has increased, poorer inhabitants have created housing in hazardous areas, often near rivers and tributaries, sometimes residing directly within a floodplain. In these informal settlements, steep slopes, deficient transportation infrastructure, irregular land use patterns, and citizen indifference all combine to inhibit conventional solid waste management techniques, such as the use of large compactor trucks for collection (Edelman, 2019). Without adequate solid waste management services, residents in informal settlements often resort to disposing of solid waste in empty lots and waterways, blocking drainage channels and serving as breeding grounds for disease-carrying vectors (see Image 1.a). In Santo Domingo, this practice leads to the disposal of garbage in the Ozama River, which flows into the ocean, polluting beaches (see Image 1.b).

**Solid waste disposal is also inadequate**. The nation has no sanitary landfills—i.e., landfills that are engineered with methane, leachate, and vector controls. As described in Note 1, local governments instead rely on open-air landfills. Greater Santo Domingo itself is serviced primarily by the notorious Duquesa landfill, which is the endpoint for 80 percent of the waste generated in the metropolitan area. (Unlike other landfills, Duquesa is owned and operated by the central government.) At Duquesa, informal waste pickers (known as buzos) search dumped waste for recyclable materials, methane gas is released into the atmosphere, and contaminated leachate enters water systems (see Image 2). The landfill is also subject to frequent fires, which pollute the air of the entire metropolitan region.



Image 2. Solid waste disposal does not meet minimum environmental standards

Source: https://woimacorporation.com/drowning-in-waste-case-santo-domingo-dominican-republic/

Problems in the solid waste management sector are extensively described in a 2014 report issued by the Ministry of Environment (JICA and MIMARENA, 2014). That report found that most municipalities "do not have the resources required to (adequately manage solid waste) due to multiple weaknesses of an institutional, legal, financial, technical-operational nature." An accompanying policy paper nevertheless argues that "the proper management of municipal solid waste is 'technically feasible, economically viable and environmentally sustainable'" and proposes a lengthy set of reforms (MIMARENA, 2014). These include measures to reduce the volume of solid waste generation,<sup>14</sup> encourage recycling, toughen regulation (e.g. setting minimum standards for frequency of service, the operation of transfer stations, and the design of garbage cans), and encourage the construction of sanitary landfills. The policy paper also proposes increases in fees for solid waste management and advocates tariff levels that reflect the full costs of solid waste collection and disposal.<sup>15</sup> A detailed analysis of the quality of individual municipal services is beyond the scope of this report. Nevertheless, the available evidence from Santo Domingo's performance in solid waste management suggests that there is room for improvement.

<sup>14</sup> Note that waste generation in the Dominican Republic is not particularly high by regional standards: 1.08 kg per capita per day, as opposed to the regional average of 0.99 kg/capita/day. (Source: Kaza, Silpa, et al. 2018.) For additional information on solid waste management in Santo Domingo, see: <u>https://repositories.lib.utexas.edu/bitstream/handle/2152/61756/PERDUE-THESIS-2017.pdf?sequence=1&isAllowed=y and https://bainesreport.org/2016/07/moving-towards-efficient-waste/</u>

<sup>15</sup> The existing level of fees seems to fall short of this standard, at least in Santo Domingo. According to the Distrito Nacional's budget execution report for 2018, the municipality generated RD\$ 525 million from solid waste charges in 2018 but spent nearly three times as much (RD\$ 1,468 million) on that service.

# 2.2 Most municipalities do not plan their territory and cannot coordinate major infrastructure investments within them

**Municipios also fall short in performing their land use management functions.** As described in Note 2, only eight of the 155 municipios have completed land use plans (planes de ordenamiento territorial) (MEPyD, 2020b). Most of the municipalities do not have Urban Planning Offices, and only ten report "significant progress" in Indicator 2.03 of the SISMAP, "Regulation and Territorial Ordering" (see below). In the cases where there are Urban Planning Offices, their functions are mainly focused on street signage, parking, minor road improvements, the administration of municipal fees, and the regulation of informal vendors.

As described in Note 2, a draft law (currently under consideration in Congress) would require all municipios to prepare land use plans within the next two years. Considering that, to date, only ten municipalities have such plans, this would be a tall order—and an expensive one, even if a more realistic timeframe were adopted. Central government (or donor) funding for the one-time costs of preparing the initial land use plans would presumably be required. The ongoing costs of administering the plans—monitoring compliance, enforcing penalties against violations, and periodically updating the plans to take into account future growth—are likely to be more modest and might be financed out of municipalities' normal recurrent revenues.

**Nevertheless, such plans will be difficult to implement.** As described above, local governments account for only a miniscule proportion of urban infrastructure investment in the DR. The majority of such investments are undertaken by ministries and agencies of the central government—each with its own priorities and investment plans. At the same time, the low level of local government resources prevents local governments from undertaking such investments on their own. Under these circumstances, local governments will have difficulty ensuring that infrastructure investments conform to local land use plans.

### 2.3 There are deficiencies in municipal internal management

**Information on other aspects of municipal management is limited.** The most comprehensive source is the Ministry of Public Administration's (MAP) municipal administration monitoring system (Sistema de Monitoreo de la Administración Pública Municipal, or SISMAP Municipal). It consists of eight "basic operational and management indicators" (IBOGs), each broken down into sub-indicators (SIVs), yielding a total of 23 indicators. These cover a wide range of subjects, including human resource management, development planning, budget formulation (including public participation in that process), budget execution, procurement, and public access to information. SISMAP includes a scoring system, which allows all participating local governments to be measured against specific targets for each indicator.<sup>16</sup> According to SISMAP's March 2020 report, the average scores of municipalities as a group varied from 32 percent (access to public information) to 52 percent (budget formulation). The scores of the distritos were slightly lower. See Figure 10.<sup>17</sup>

<sup>16</sup> According to MAP's March 2020 Informe SISMAP, 158 municipalities and 47 districts are currently participating in the program, yielding nearly 5,000 separate measurements of individual performance. As of June 2020, the reporting system was suspended in response to the Covid crisis.

<sup>17</sup> According to the March 2020 report, Bánica, a small municipality on the Haitian border, is the best-managed *municipio* in the country, scoring 96 percent of the maximum 2,300 points. Santiago ranks third. The Distrito Nacional ranks 26th. Pedro Brand, a suburb of Santo Domingo, ranks last. Of the 47 *distritos municipales* participating in the system, Chirino, a small, largely rural district in Monte Plata province northeast of Santo Domingo ranked highest; Palo Verde, a small district near the resort city of Monte Cristi, ranked lowest--with a score of zero.



Figure 10. Average SISMAP Scores: Municipios and Distritos, 2020

Source: SISMAP Municipal (2020).

Note: Average of 158 local governments, by function - March 15, 2020. SISMAP stands for Sistema de Monitoreo de la Administración Pública.

The significance of the SISMAP data is debatable, however. In general, the SISMAP indicators monitor a narrowly-defined action or document, rather than their ultimate results. Under IBOG1, Sabana Grande, for example, had evaluated 95 percent of its personnel. But the indicators do not reveal whether the personnel evaluation system was objective and relevant to the particular position that the employee was occupying. More importantly, the indicators do not reveal what action was taken as a result of the evaluations. Were performance bonuses granted? Were under-performing staff dismissed?

Detailed analysis of a subset of municipalities suggests severe management deficiencies. Further detail on the performance of local governments against the SISMAP criteria is provided in an in-depth review of certain jurisdictions that participated in the recently-closed World Bank municipal development project, PRODEM (Chévez, n.d.). It examined 16 participating local governments: six municipalities and ten distritos. Their scores on individual IBOGs varied widely.

In order to score the maximum number of points on the human resources IBOG (IBOG1), a local government had to have in place: (1) a municipal improvement plan,<sup>18</sup> (2) a municipal organization chart, (3) a formal system of personnel evaluation, and (4) an annual personnel training plan. It also had to have: (5) transmitted its personnel data to the central government's Public Servant Administration System (SASP), and (6) constituted a municipal employees association.

<sup>18</sup> According to the Ministry of Public Administration's 30-page Guidelines for the elaboration and implementation of municipal improvement plans, this is to consist of a set of actions that the municipality plans to take to address "anything that does not function in accordance within the parameters of excellence." See: https://www.sismap.gob.do/Municipal/uploads/Guia/09.%20Gu%C3%ADa%20Plan%20de%20Mejora%20Institucional.pdf

#### Performance, as measured by the first indicator, was generally poor.

- Only one of the 16 local governments—Sabana Grande—had an improvement plan under execution. (One other was in the process of preparing one.)
- Three had officially adopted organization charts in compliance with Ministry of Public Administration instructions. Five others had adopted organization charts that were not in compliance with MAP instructions.
- One had completed a formal system of personnel evaluation and applied it to the majority of its staff. One other had applied an evaluation system to 50 percent of its staff. The others had either had "chats" with staff, or had undertaken no personnel evaluations at all.
- One had reportedly trained 100 percent of its staff in conjunction with the relevant central government agency (National Institute of Public Administration [INAPO], National Institute for Technical-Professional Training [INFOTEP]); one other had trained at least 50 percent of its staff on this basis. The majority had not contacted INAPO, INFOTEP, or similar organizations at all.
- None had provided personnel data to SASP in the required format, although two had set up parallel personnel management databases. The others had merely signed agreements with SASP and attended SASP seminars.
- One had registered its association of public servants (ASP) with MAP, but had not transmitted information on the association's activities with the ministry. Another had taken steps in this direction. The other fourteen had done nothing at all.

#### Performance on the other IBOGs was mixed

- IBOG 2 (municipal development) requires a local government to have established a municipal development council and drafted a municipal development plan. According to the GIRSA report, all sixteen of the local government had complied with both requirements.
- IBOG 3 (budgeting) requires a local government to prepare its budget in accordance with the standards for budgeting issued by DIGEPRES and to post a list of proposed investment projects on the DIGEPRES website. Fifteen of the local governments had complied with the first of these requirements and all sixteen with the second.<sup>19</sup>
- IBOG4 (procurement) requires a local government to have completed an annual procurement plan linked to its budget, and to have adopted and implemented it. All sixteen local government had prepared an annual procurement plan (although only three had "formalized" it). Only five, however, were in the process of implementing it, and only one was reported to have carried out procurement in compliance with Ministry of Industries guidelines and the procurement law. The others were reported to have made "significant advances" in this direction.
- IBOG 5 (public information) sets out a list of information that is to be posted on the web. None of the 16 local governments had posted all six of the required sets of data. Two had posted five; the remainder had posted three or fewer.<sup>20</sup>
- IBOG 6 is intended to measure the quality of local expenditure. To this end, it measures: (1) whether the local

<sup>19</sup> Guidelines are issued by the Dirección General de Presupuesto (DIGEPRES), a unit of the Ministry of Finance

<sup>20</sup> The indicators are: payroll data, list of purchases made and approved, monthly budget execution, approved budget for the year, and the name of the person in charge of access to information.

budget was executed as planned, (2) whether it was executed in accordance with the rules governing the allocation of expenditure by economic category,<sup>21</sup> and (3) whether the local government's quarterly budget execution data had been provided to the Contraloría General de la Republic within the required period of time (15 days). Seven of the local governments managed to comply with the first of these requirements, ten with the second, but only three with the third. Five of the 16 local governments were at least three months behind in delivering their budget reports, and another two had not delivered them at all.

- IBOG 7 is intended to measure whether a local government has successfully implemented the guidelines for participatory budgeting (PPM—see Box 2). To this end, it measures: (1) whether the list of projects identified through the participatory process has been approved by the municipal council and submitted to the Dominican federation of local governments (FEDOMU), (2) whether the funding for these projects was actually spent by the end of the budget year (specifically, whether a report documenting the funding of these projects was submitted to the municipal council), and (3) whether the participatory process was followed. In ten of the local governments, a budget for PPM had been approved by the council, along with a list of projects, although only four had submitted the list to FEDOMU. Eight had submitted a report documenting the funding of these projects to their municipal councils (formally in some cases, informally in others); four were in the process of preparing such accounts; and the remaining four had "made no effort" to do so. Only four had complied with the full set of consultations required by the law.
- The eighth IBOG measures whether high-level local government officials have complied with the asset declaration law (Law 311/14). The officials covered by the legislation consist of the mayor, council members, the treasurer, the finance director, and the official responsible for procurement. The first sub-indicator measures whether the mayor, vice-mayor, and the members of the executive branch have complied; the second measures whether members of the municipal council have done so. Only one local government fully complied with both of these measures. The majority has failed to submit a declaration for more than twenty percent of the positions.

As a whole, the report suggests that most of the 16 local governments did have plans—annual budget plans, development plans, and procurement plans—but did not implement them. Whether these results are representative of all municipalities and distritos in the country is, of course, not clear. But, if anything, one might expect that the performance of the 16 jurisdictions is better than most. Those 16 were the beneficiaries of the PRODEM project. One might expect that their performance would be better than in local governments that did not participate.

<sup>21</sup> As noted in an earlier footnote, personnel spending cannot exceed 25 percent of revenues; spending on ordinary municipal services cannot exceed 31 percent of revenues; and at least 40 percent of revenues must be spent on capital works. Four percent must be spent on social programs.

#### Box 2

#### **Participatory budgeting**

Law 170-07 requires all local governments to establish a system of participatory budgeting, focused particularly on the allocation of capital spending. Under the law, each municipality and district is to determine, each year, the total amount of investment spending to be made in each part of its jurisdiction (secciones or bloques del municipio). Priorities for the allocation of funding are to be identified through a sequence of assemblies, beginning at the place level (paraje), then proceeding to neighborhood assemblies, and, ultimately, to the municipal council.

According to the Ministry of Finance, a total of RD\$ 977.46 million was spent on projects identified through the participatory process in 2019. The projects tend to be small. The average amount spent on such projects was RD\$ 345,000 or about US\$ 6,800.

Source: Ministerio de Hacienda (2020).

## 3. Directions for reform

#### 3.1 Defining the problem

In looking at directions for reform, it is important to begin by defining the problem. The structure, functions, and financing of local government in the Dominican Republic have been subject to a variety of critiques. These critiques are reflected in a number of reports, including a 2015 report on the costs of municipal services (Holguín, 2015), a 2017 report by a central government commission on local government reform (COPREM, 2017), a 2017 IDB report on the subject (Martínez-Vázquez et alli, 2017), and a Ministry Report on Municipal Policies (MEPyD, 2020b). These reports focus, in particular, on financing issues, including: (1) the underfunding of local government, (2) the low level of local revenue autonomy, and (3) the poor targeting of the transfer distribution formula. Several of them also question the limited functions of local governments and their fragmented structure. Some of these concerns are more valid than others. We consider them here.

#### 3.2 Local governments may need more funding

It is certainly true that local government revenues are small. The average level of local government revenues is RD\$ 1,800 (US \$35) per capita. Even so, the small proportion of local spending is not necessarily a problem, as long as it is consistent with the functions assigned to the local level. In a country where major spending responsibilities—such as paying teachers' salaries—are assigned to the local level, one would expect local governments to account for a relatively large proportion of total government spending. Such is the case in Colombia, and—to a lesser extent—in Brazil. The same is true of public utilities. In countries where the costs of providing water supply and sewerage are reflected in municipal budgets, one would expect the local share of total spending to be relatively large. But neither is the case in the Dominican Republic.

Although the responsibilities of municipalities are limited, it has been argued that they lack sufficient resources to perform even the few functions that have been assigned to them. This argument is examined in some detail in a recent study sponsored by the European Union (Holguín and De León, 2015) (see

Box 3). The study analyzes the level of spending on seven municipal services in 15 municipalities. In addition to solid waste management, the services include street cleaning/park maintenance, street lighting, fire-fighting, funeral and cemetery services, markets, and slaughterhouses. The study covered the Distrito Nacional and Santiago, three other large jurisdictions (Puerto Plata, San Francisco de Macorís, and San Pedro de Macorís), four medium sized municipalities (Moca, Baní, San Juan de La Maguana, and Boca Chica) and six smaller, rural municipalities: Monción, Comendador, Duvergé, Verón, Sabana de la Mar, and Boyá. The study acknowledges at the outset that it is unable calculate a "right" level of local government funding on the basis of service costs; i.e., on the basis of what it would cost to achieve a given standard of service in each municipality. The determinants of service costs vary, and data is insufficient to make such calculations. Instead, it measures revenue sufficiency by calculating what each municipality actually does spend on each service, and then determining whether that amount exceeds the 31 percent ceiling on ordinary services dictated by the municipal law (see Box 1). All 15 municipalities spend more than the required 31 percent of their revenues on municipal services, presumably failing to meet the minimum threshold for capital spending. On this basis, the study concludes that the level of municipal revenues is insufficient. This "shortfall" is greater in some jurisdictions than in others. The Distrito Nacional spent 67 percent of its revenues on municipal services. Santiago spent 48 percent. In the smaller jurisdictions the proportion of spending on municipal services ranged from 24 percent (Comendador) to 45 percent (Moca). This would imply that large cities are more underfunded than smaller, more rural, jurisdictions.

The reasoning behind the EU study's conclusion is questionable. As the level of revenues varies among local governments, 31 percent of revenues represents a greater amount, in absolute peso terms, in some local governments than in others. It is unlikely that the costs of municipal services varies accordingly: 31 percent of revenues might be more than sufficient in some places and grossly insufficient in others. (As noted earlier in Box 1, the notion that spending on "ordinary municipal services" should be capped at 31 percent is questionable.)

There are other ways to explore this question. One such way is to use international comparisons—to compare the level of local resources in the Dominican Republic with levels in other countries. Figure 1, and the beginning of this note, demonstrates that the Dominican Republic is highly centralized: local government spending accounts for only two percent of total government spending in the country. Moreover, the public sector as a whole is relatively small in the Dominican Republic, compared to other Latin American countries. As a result, local revenues, as a percent of GDP, are extremely low by regional standards. In 2019, they represented only 0.44 percent of GDP. This is far less than in other countries in the region with similar functional responsibilities. In Costa Rica, for example, the proportion is 1.3 percent. Of course, more funding for local governments implies either less funding for the central government (if the increase is financed through transfers) or less money in the pockets of Dominican taxpayers (if the increase is funded through local taxes and fees). The central government is facing its own fiscal constraints—as are Dominican taxpayers. Nevertheless, this comparison with similar countries suggests that local governments in the Dominican Republic have less to work with than their counterparts on the mainland. This suggests that local governments should have more money. The next question is: where should it come from?

#### Box 3

#### How much more is needed: the Holguin report estimates

The Holguin report found that municipalities only manage to provide the seven services by paying extremely low salaries and failing to replace vehicles whose useful life is exhausted. (At the time the report was written, the average salary of municipal workers was only US\$ 86 per month and the average garbage truck was over five years old.) On this basis, the study predicted that these services will eventually collapse. The study goes on to calculate the increase in revenues that would be required to: (1) increase salaries to the official minimum wage for public servants, and (2) replace all vehicles over the next four years. According to the study's calculations, rural municipalities would require a 15 percent increase in total revenues to achieve these goals; those classified as "small urban" would require an eleven percent increase. At the opposite end of the scale, Santiago would require an increase of only five percent, and the Distrito Nacional only four percent.

These arguments have to be taken with a grain of salt. While there may be a case for replacing vehicles before they collapse entirely, there is not necessarily a case for increasing the wages of municipal workers—as long as wages are high enough to attract and retain the caliber of staff needed. And while there may be a case for increasing revenues, there may also be a case for more efficient spending. The Holguin study reports that municipalities routinely distribute jobs particularly for street cleaning and parks—as an instrument of political patronage rather than in response to actual needs.

Source: authors, based on Holguín (2015).

#### 3.3 Local governments should have more taxing authority

It is certainly true that local governments in the Dominican Republic have very little taxing authority. Unlike most countries in the region, they are not permitted to impose a property tax. Nor are they permitted to impose broad based business taxes (such as a retail sales tax) or surcharges on the central government's personal income tax that would allow them to tax their constituents in other ways. As a result, local governments lack a ready means to respond to constituents' demands for service improvements, at least not in a way that would confront their constituents with the costs of doing so. Instead, local governments have only two choices: they can either appeal to the central government for ad hoc assistance—a practice that appears to be common in the case of capital works projects—or they can increase the rates on the narrow range of taxes and fees that they are allowed to impose; e.g., solid waste management fees, sign taxes, and taxes on the purchase of furniture on credit. To exaggerate only slightly, this means that the cost of extending street lights into poorer neighborhoods would be borne by the people who pay the minor taxes and fees that municipalities are allowed to impose—for example, the people who choose to buy furniture on the installment plan.

There is a second drawback to the current absence of a broad-based local tax. It leaves local governments vulnerable to the whims of Congress. It is Congress that decides on the level of local government transfers—presently the principal source of local revenues. As noted earlier, Congress has consistently failed



Figure 11. Revenues from recurrent property taxes, regional comparators (percent of GDP)

Source: authors, based on IMF data, Government Finance Statistics, https://data.imf.org/?sk=a0867067-d23c-4ebc-ad23-d3b015045405.

to provide the level of funding specified by law, and instead changes the level of funding every year on an ad hoc basis.

There are several options for introducing a broad-based local tax.<sup>22</sup> The most obvious is a property tax. As noted earlier, a property tax is already imposed—and retained—by the central government. The level of the tax is based on the cadastral value of the property as determined by the government. (This is reportedly much less than the actual market value.) Properties with cadastral values under RD\$ 7.7 million (US\$ 154,000) are exempt, as are properties owned by persons over 65, and rural/agricultural land (Dirección General de Impuestos Internos, n.d.). The tax rate is one percent of the value over RD\$ 7.7 million. As a result of these rather extensive exemptions, the yield of the property tax is fairly low. In 2018, the central government raised only RD\$ 2.527 million (US\$ 5.00 per capita) from this source, equivalent to 0.4 percent of its total recurrent revenues. Expressed as a percentage of GDP, this is the lowest yield of recurrent property taxes of any of the Latin American countries reported in the IMF Government Statistics website. See Figure 11.

If local governments were able to raise the amount that the central government is currently generating from a property tax, their aggregate revenues would increase by 13 percent. A reduction in the exemption level could increase the yield still further. In the absence of data on individual tax assessments, it is not possible to calculate the potential yield of the tax at the rates proposed by COPREM. If local governments were able to increase the yield of a property tax to the proportions achieved in Costa Rica, their revenues would increase by 80 percent.<sup>23</sup>

<sup>22</sup> For a comprehensive review of options for local taxation, see Cibils, Vicente and Ter-Minassian, Teresa. 2015. Decentralizing Revenue in Latin America: Why and How. Inter-American Development Bank.

<sup>23</sup> In Costa Rica, only owners of a single property with an assessed value of less than ¢20,259,000 (US\$ 34,900) are exempt (as of 2020). Agricultural property is taxed, but at a reduced rate.

A decentralization of the property tax does not necessarily imply that the administration of the tax would have to be immediately transferred to local authorities. In the short term, the Dirección General de Impuestos Internos could continue to administer the tax while transferring the revenues to the local jurisdictions where it was collected. But experience elsewhere has shown that central tax authorities tend not to prioritize taxes they collect on behalf of lower levels of government. Over the longer term, if the revenues of the property tax are decentralized, the administration of the tax should be decentralized as well.

**Expanding the yield of the property tax in the Dominican Republic may require major investments in mapping, valuation, and collection.** Since the tax is now limited to high value properties, the central tax authorities may not have information on lower-value properties. Such properties may not be on the tax rolls at all. But expanding the base to lower value properties may arouse political opposition. Before investing heavily in data gathering, the tax authorities should be sure that they are willing to adopt tax rates that are high enough—and enforcement policies that are tough enough—to generate sufficient revenues to justify the expense.

Many Latin American countries also allow their local governments to impose taxes on business activities. In Argentina, most municipalities levy a tax on gross sales. Each municipality may decide on the base to use for the tax. Many use the same base as the provincial turnover tax, thus imposing it not only at the retail level but also at the wholesale and production levels. Other municipalities opt to base the tax on the number of employees or the size of the shop where the activity takes place (Cibils and Ter-Minassian, 2015). In Colombia, similarly, municipalities impose an industry and commerce tax (ICA). The Colombian municipal law (Law 14/1983) requires the tax to be levied on the gross revenue of all commercial, industrial, and service activities in municipal jurisdictions. Municipalities are permitted to fix the rate of the tax, within a range of 0.2 to 0.7 percent on industrial sales, and 0.2 to 1.0 percent on commercial and service activities. (Although the ICA accounts for nearly 40 percent of municipal own-source revenues, the ICA base is said to be under-reported, and evasion and avoidance are said to be high). In Brazil, municipalities are permitted to impose a tax on services (O Imposto Sobre Serviços de Qualquer Natureza, or ISS). The list of services subject to the tax is defined in federal legislation. Municipalities are permitted to choose the rate of the tax, subject to a minimum rate of two percent and a maximum of five (República Federativa do Brasil, 2003). In 2020, the ISS accounted for nearly 30 percent of municipal own source revenues, far more than the property tax (Tesouro Nacional, 2020).

It is not obvious that local governments in the Dominican Republic require both a property tax and a business tax, given their limited functional responsibilities. The principal attraction of a business tax is its relatively low profile: property taxes—particularly on residential property—tend to generate political opposition from homeowners and landlords, whereas taxes on sales (which can be largely passed on to consumers in the form of higher prices) are less incendiary. But business taxes on small informal enterprises can be dificult to administer: the costs of collecting a sales tax from a small informal trader can exceed the revenues thus produced.<sup>24</sup> As a result, a property tax is the more promising candidate.

If the property tax is decentralized or a local business tax is introduced, then there is a strong case for abolishing many of the small taxes and fees that local governments currently impose. According to its

<sup>24</sup> In principle, the Dominican Republic could get around this problem by allowing local governments to piggy-back onto the central government's existing VAT (Impuesto sobre Transferencias de Bienes Industrializados y Servicios), along the lines of Argentina. But there are drawbacks to this too, as much of the base of the VAT is presumably concentrated in Santo Domingo. Piggy-backing onto the VAT would do little for outlying jurisdictions.

2019 budget execution report, the Distrito Nacional has 36 small taxes and fees (not counting those that are subsumed in the category "other"). Taken individually, these generate very little money and may cost more to administer than they generate in revenues. The Distrito's tax on poolhalls, for instance, generated only RD\$ 44,000 (US\$ 880) in 2019.

#### 3.4 The formula for distributing transfers should remain as it is

The current formula for distributing central transfers is very simple: it is based entirely on population. This has many advantages. Among them, the fact that the criterion is objective and readily verifiable. It has been argued that it fails to take into account local variations in the unit costs of providing services, or in the ability of local governments to raise revenues from local sources. But there are good reasons not to do so. First, it can be very difficult to accurately measure variations in the unit costs of providing specific services-particularly the functions that local governments provide in the Dominican Republic. If local governments were providing primary education, it might make sense to distribute transfers on the basis of school enrollment, using a standard amount per pupil. But measuring variations in the unit costs of solid waste management would be complicated. Should the formula take into account the high unit costs of collecting garbage in remote villaaes and transporting it to a central landfill? Or the higher wages of garbage collectors in big cities? By the same token, it can be difficult to measure variations in local governments' ability to raise revenue from local sources. Using actual revenues, of course, runs the risk of discouraging local tax effort. If local governments know that their transfer revenues will fall if their own-source revenues increase, they will be reluctant to do so. In theory, this problem can be avoided by allocating transfers on the basis of potential tax revenues; i.e., on the basis of the relative strength of the local tax base rather than the actual yield of the tax. But this too can be difficult to measure. How does one measure the potential yield of the tax on the purchase of furniture on credit?

The report of the Presidential Commission (COPREM) recommended adding a different set of factors to the distribution formula, in order to favor: (1) areas with large numbers of disadvantaged people, (2) frontier areas (i.e., along the Haitian border), and (3) tourist areas, (see Box 4). The merits of introducing the first two of these factors are questionable. If local governments in the poorest parts of the country were providing social services, there would be a case for increasing their share of central government transfers. But they are not. They are largely providing administrative services and solid waste management. There is no case for providing additional central government funding for these functions. The case for providing additional funding for tourist areas is slightly stronger. The census population figures necessarily fail to capture the number of tourists visiting a given municipality. The costs these tourists impose on the local government are therefore not reflected in their share of the central government transfers. But these costs could just as well be captured through the hotel tax and channeled to these areas. Although local governments are permitted to tax hotels, motels, and similar accommodations, the revenues from this source are surprisingly small. Puerto Plata managed to generate only RD\$ 1 million (US\$ 20,000) from this source in 2019 (Ayuntamiento Municipal Puerto Plata, n.d.).

#### Box 4

#### The COPREM proposal

In 2015, a presidential commission for municipal reform (COPREM) was established, chaired by the Ministerio de la Presidencia with the participation of the Ministerio de Administración Pública (MAP), the Ministerio de Hacienda, the Ministerio de Economía, Planificación y Desarrollo (MEPyD), the Contraloría General, and the Liga Municipal Dominicana. The Federación Dominicana de Municipios (FEDOMU) and the Federación Dominicana de Distritos Municipales (FEDODIM) also participated.

Its proposal (as of 2017) is set out in a draft law: Borrador N<sup>o</sup> 1: Propuesta de ley orgánica de la administración local y el régimen territorial. The proposed law would make minor changes in the structure and functions of local governments. It would, however, radically increase their taxing authority.

(i) Changes in structure. The proposed law calls for classification of all 392 local jurisdictions (municipios and distritos) into at least six categories, with additional special regimes for the capital and 20 frontier jurisdictions. (Details are to be worked out by the Ministry of Economy, the Ministry of Public Administration, and a newly created municipal development institute, the IDM.) The classification would be primarily based on population, adjusted for population density. The law does not reveal the purpose of the classification system; i.e., how one category of municipalities would be treated differently than the others.

(ii) Changes in functions. The draft law also defines the functional responsibilities of the municipalities, organizing them into five groups: (1) Planning, including land use planning, environmental management, economic development, and risk management; (2) Management of public spaces, including roads and public transport; (3) Services to be coordinated with the central government: management of water supply and sewerage, public health, and education; (4) Obligatory municipal functions: solid waste management, street cleaning, parks, fire protection, and cemeteries and parks; and (5) Social services, including social assistance and social housing. These do not represent an expansion of the existing list of municipal functions, however. The list of obligatory municipal functions remains essentially unchanged. (According to the draft law, the precise role of municipalities in the performance of these functions (subcompetencias) is to be determined by the IDM and the Ministry of Public Administration.) For the time being, there is no indication that municipalities would take on a larger role, for instance, in the provision of water and sewer services or the construction of roads.

(iii) Changes in financing. The draft law does, however, make substantial changes in the revenues assigned to the municipal level. Most importantly, it assigns two new broad-based taxes to the municipalities. The first is the property tax (impuesto predial). This tax would be imposed on all private property, including houses, businesses, industries, farms, and non-productive land. In the case of houses, it would be imposed at rates ranging from 0.35 percent of market value (for properties valued at RD\$ 1 million-RD\$ 3 million) to one percent (for housing valued at over RD\$

5 million). It would replace the existing central property tax on same base, which would be abolished. The central government department that is now responsible for administering the tax at present would provide assistance to individual municipalities in taking over this role. The second is a tax on business (impuesto o patente por permiso de operación a las actividades productivas). This would be paid annually by commercial business, industries, and any other for-profit entities as a condition of operating within the municipality. In the case of businesses that keep organized financial records, it would be imposed at a rate of one percent of profits as reported in the financial statements they present to Hacienda. In the case of firms that do not keep such records, it would be imposed according to methods and rates to be determined by the municipality.

(iv) The proposed law would also make two significant changes to the existing system of transfers. First, it would add new variables to the distribution formula. In addition to population, the formula could make provisions for: (1) areas with large numbers of disadvantaged people (poblaciónes menos favorecidos), (2) frontier areas, and (3) areas with high population fluctuation (i.e., tourist areas). Factors could also be included to reward efficient tax collection and budget execution. The proposed law does not specify how these factors would be measured, or the weight that would be assigned to each of them. Second, the proposed law would reduce the level of earmarking, eliminating the minimum level of spending on capital works and "ordinary municipal functions" while retaining the existing ceiling on personnel spending and the minimum level of spending on social services. The law does not, however, address the persistent underfunding of the transfer system, making no reference to the percent of central government revenues that are to be transferred to the municipalities. While the proposal indicates the Government's thinking as of 2017, it has not been acted upon.

Source: COPREM (2017).

The recent Ministry of Economy diagnostic report (MEPyD, 2020b) proposes more fundamental changes in the transfer formula. The report notes that: (1) the current population-based distribution means that most of the transfer goes to densely-populated urban areas, while (2) poverty and service deficiencies tend to be concentrated in rural areas. To address this discrepancy, the report recommends a new formula, which would allocate funds on the basis of service deficiencies.<sup>25</sup> There are two drawbacks to this proposal. The first is technical. Measuring deficiencies in the services stipulated in Article 20 of Law 176-07—construction and maintenance of urban streets and rural roads, traffic management, management of solid waste, street cleaning, street lighting, firefighting, the maintenance of parks, and the operation of markets and cemeteries—is likely to be difficult. The second is conceptual. It is unlikely that increasing funding for these functions in rural areas would do much to alleviate poverty. As noted above, local governments are essentially in the

<sup>25</sup> The specific wording is: "a system that links the cadastre and the municipal services stipulated in Article 20, Section A of Law 176-07, wherein the minimum mandatory municipal services are established and identified so that the levels of local tax collections are strengthened." The term "cadastre" is not explained. Nor is the causal link between allocating transfers on the basis of service deficiencies and increasing local tax effort (*recaudaciones propias*). One would expect the opposite: i.e., that increasing transfers would discourage local tax effort.

business of providing administrative services and solid waste management. Increasing funding for solid waste management in rural areas is unlikely to increase rural incomes. For the moment, it would be best to leave the transfer distribution formula as it is, while ensuring that the data on which it is based—population—is updated as often as possible.<sup>26</sup>

## 3.5 The level of transfers should be stabilized

There is one aspect of the transfer system that should clearly be reformed, however—its vulnerability to the whims of Congress. Rather than repeatedly failing to observe the funding formula provided by law, Congress should reduce the percentage of central revenues that are to be shared with local government to a level that is consistent with local functional responsibilities (for example, four percent instead of ten percent), and then observe it in the course of annual budget preparation. To stabilize the level of transfers, some countries enshrine such percentages in their constitutions. In Brazil, for example, the shares of the income tax and the industrial products tax that are to be transferred to the states and municipios are set out explicitly in the constitution. But this is an extreme case: constitutions are intentionally designed to be difficult to amend. Enshrining the percentage there could limit the Government's ability to respond to changing macroeconomic conditions. Most Central American countries merely establish the percentage in ordinary law (Porto, Eguino and Rosales, 2017). The Dominican Republic should continue to do so. Congress should merely be more diligent in observing its own legislation.

# 3.6 While local governments should have more revenues, they need not have more service responsibilities

The highly centralized structure of government raises the question of whether the DR should be more decentralized. This involves two separate questions. The first is whether local government should have more revenues to perform the functions they already have. (This is addressed above.) The second is whether they should have more functions; i.e., whether functions that are now performed by the central government and its agencies and enterprises should be devolved to the local level. The IDB report and the COPREM report both consider fundamental changes in the functions of local governments. The IDB report argues that the principle of subsidiarity requires local governments to provide (in addition to their existing responsibilities) water, sewerage, and public transport. (The COPREM report takes up the issue of functional assignments but recommends no change.) But it is not immediately obvious that local governments should expand the range of services they provide. At present, urban water supply and sewerage are provided by regional companies, rather than by local governments. Judging from the data at hand, it is not clear that breaking up the regional companies and transferring their functions to the local level would be an improvement. By the same token, there is no obvious case for decentralizing responsibility for public education or health care.

In the short term, there is a case for expanding local governments' ability to deliver on the services they already perform—in particular, to finance the urban infrastructure investments that the central go-

<sup>26</sup> Because the population figure is taken from the census, it does not capture recent growth in the population in specific municipalities. The most recent census was conducted in 2010.

vernment is unlikely to finance. This would include investments in urban roads in the periphery of Santo Domingo and other major cities and in the secondary cities that are expected to grow rapidly in the near future(see Note 1). But there is not a strong case for devolving further functions onto the local level. What is critical is not an expansion of local functions but improving local governments' ability to coordinate services provided within their jurisdictions.

#### 3.7 Local governments should not be consolidated

It has been argued that local governments in the DR are too small. The IDB report argues that there is no need for so many local governments in the country, and that they should be consolidated. (The COPREM report proposes a classification of local governments by size but does not say how that classification system would be used (see Box 4).)

There is a considerable amount of literature on the optimal size of local government (Lago-Peñas and Martínez-Vázquez, 2013). Most of the literature is based around the argument that there are economies of scale in the production of services that local government provide. On this basis it is argued that consolidating two or more small local governments into a single entity will reduce the unit costs of municipal services, i.e., the costs per mile of road maintenance and the costs per ton of solid waste collection and disposal.

Some of this literature does find an inverse correlation between local government size and the unit costs of municipal services. But such studies tend to conflate population density with population size. Economies of scale arise when people live close to each other and can be served by common facilities. Thus, they are more likely to arise in larger cities than in rural areas. But consolidating local government does not cause people to move closer together. It merely expands the territory served by an individual jurisdiction.

In the Dominican case, the most relevant sector is solid waste management. In this sector, it is important to distinguish between the economies of scale that might exist in the collection of solid waste and those that might arise in its disposal. On the collection side, there is no evidence that consolidating two or more small jurisdictions will reduce unit costs. It is true that population density can reduce the unit costs of solid waste collection—it is cheaper to collect a ton of solid waste from a row of adjacent apartment buildings than it is to collect the same tonnage from several hundred isolated houses. But these costs are not affected by the size of the municipality responsible for collection. The same trucks have to serve the same customers regardless of whether the trucks are owned by a small municipality or a large one. It is conceivable that a very small municipality, say El Peñón (population 5000), could not make full use of a single truck, leaving it idle part of the time. In that case, there would be cost savings in sharing that truck with a neighboring municipality--say, Fundación (population 12,000). But those savings could just as well be captured by entering into an agreement—a mancomunidad—with Fundación, rather than merging with it. In fact, this is already the practice in the Dominican Republic's largest cities, where solid waste collection is largely contracted out to private firms which serve the entire metropolitan area(see Box 5).

There is some evidence for economies of scale in the disposal of solid waste. Empirical evidence from other countries shows that a few big disposal centers are cheaper to run, on a per ton basis, than many small ones. However, concentrating disposal at a few sites increases the need to transport waste from the from the point of collection to the disposal site. The optimal concentration of solid waste disposal sites, therefore, has to balance economies of scale in the operation of landfills with the costs of transporting solid waste from more remote locations (Callan and Thomas, 2001). Again, there is no reason to think that small municipalities must be merged in order to take advantage of such economies of scale. They could instead rely on manco-

munidades. The notorious Duquesa landfill itself serves the several municipalities that constitute metropolitan Santo Domingo. Smaller municipalities could (and may already) do the same.

#### Box 5

## Diseconomies of scale in solid waste management in the Dominican Republic

Contrary to international experience, there appear to be diseconomies of scale in solid waste management in the Dominican Republic. According to the Holguin report, the unit costs of SWM are much higher in the Distrito Nacional and Santiago than they are in the smaller municipalities surveyed by the study. The cost per ton of solid waste collection and disposal (in 2014) was RD\$ 1,700 in the Distrito Nacional and RD\$ 1,270 in Santiago, but ranged from RD\$ 417 in San Pedro de Macorís to RD\$ 490 in Comendador. It is not clear why this is. It may be that the service is more frequent in the big cities than it is in smaller jurisdictions. Or that labor costs are higher. Or that the distance to the landfill is longer.

Source: authors, based on Holguín (2015).

There are other arguments for consolidation. Larger local governments may be able to offer higher salaries or better opportunities for career advancement than smaller ones, allowing them to attract and retain more qualified staff (Suzuki, 2016). Consolidation might also allow for more efficient use of staff. A small municipality may need the services of a skilled engineer on a part time basis, but not have enough work to justify hiring one full time. But again, there are solutions to these problems, short of consolidation. Small municipalities can hire staff on a part-time basis. And central governments can improve the prospects for career advancement by setting up local government civil service cadres that facilitate the transfer of local staff from one jurisdiction to another.

In principle, consolidation could also lower administrative overheads. This is certainly true in the case of the mayor and his immediate entourage. Consolidating two local governments means one fewer mayor. But this benefit has a political cost, as people in remote areas would find themselves further distanced from their local representatives. It is not so clear that consolidation would reduce the need for other personnel in administrative functions: the lawyers, personnel managers, and procurement officers—whose workload would presumably be larger in a consolidated local government. The findings of a recent EU-financed study imply that local administrative staffing levels in the Dominican Republic are excessive.<sup>27</sup> This study assesses the staffing implications of national legislation governing local government administration; specifically, whether the legislation requires local governments to hire more administrative personnel than

<sup>27</sup> See Holguín (2015). The study reviewed the staffing implications implied by the Constitution, Municipal Law 176-07 and the Law on Youth (49-00). It also flags the importance of the La Ley Orgánica de la Administración Pública (Law 247-12), which sets out the guidelines and principles of public employment, and the Ley de Función Pública (Law 41-08) which establishes the Secretariat (now the Ministry of Public Administration) and sets out the job classification system for civil servants at both the central and local level.

#### Box 6

## Are Dominican local governments too small? regional comparisons

Local governments in the Dominican Republic are not particularly small by regional standards. The figure below compares the average population size of local governments in the Dominican Republic with those of other countries in the region. With respect to the Dominican Republic, the column labeled "muns only" shows the average population of the upper tier of local government, i.e., the municipalities. The column labeled "muns and distts" shows the average population of all local governments in the country, including both municipal governments and their subordinate distritos municipales. As shown, if the municipality is considered the sole unit of local government, then local governments in the DR are quite large by regional standards. Even if districts are considered local governments in their own right, local governments as a group are larger on average than those in El Salvador or Peru.



Figure B6.1 Average population of local governments, regional Comparisons

they need. While it does not come to any conclusions, it finds that a combination of laws requires each municipality to staff 29 different positions (regardless of the size of the municipality) and calls into question the number of councilors (regidores) that municipalities have on their payrolls.

**Overall, there does not appear to be a strong case for consolidation.** Any economies of scale in solid waste management that would result from consolidation could just as well be achieved through mancomu-

nidades. And while consolidation might enable small municipalities to attract more qualified staff, or reduce administrative overheads, there are other means to achieve these ends. In the case of solid waste collection, it might make sense for individual municipalities to evaluate staffing levels (given reported levels of overstaffing), as well regulatory arrangements, along the lines recommended by COPREM. In the case of solid waste disposal, it would make sense to evaluate the benefits of mancomunidades for the joint use of landfills. (It is also worth noting that Dominican municipios are not particularly small by regional standards. See Box 6.)

### 3.8 Local government management should be improved

The available evidence suggests that there is considerable room for management improvement at the local level. As described earlier in this note, solid waste disposal is a perennial problem. Local governments lack the ability to prepare or enforce land use plans. Judging from 16 PRODEM municipalities, there are severe problems in personnel management, procurement, and budget execution. Low scores on the asset declaration indicator suggest that corruption may also be a problem. These problems could not be investigated or addressed in this note. But they suggested that further investigation, followed by further reforms, would be warranted.

## **Summary and recommendations**

The Dominican Republic is one of the most centralized major countries in Latin America. The functional responsibilities of local government are largely confined to solid waste management. Responsibility for major urban transport infrastructure rests with the central government. Responsibility for water supply and sewerage rests with regional water companies, which report to the central government. Social services—education, health, and social assistance—are entirely central government responsibilities.

In the short term, the division of functional responsibilities between the central and local government should remain as it is. There is no strong case, for example, for breaking up the regional water companies or decentralizing responsibility for public education.

Local governments need more robust and stable sources of revenue to finance their existing responsibilities. To this end: (1) the existing plethora of minor taxes should be replaced by a broad-based tax, such as a property tax, and (2) the level of intergovernmental transfers should be stabilized at a realistic level.

**Coordinating urban infrastructure investment is a key challenge.** As described in Note 1, the quality and coverage of urban infrastructure in the DR is deficient. Streets are congested. Water supply is erratic. Sanitary solid waste disposal is non-existent. On top of this, rapid population growth is expected in the periphery of large cities and in smaller cities and towns in the near future. Taken together, this implies a need for major investment in urban infrastructure. Responsibility for extending urban infrastructure is currently fragmented among a wide range of central ministries and agencies, with local governments playing only a minor role. Under these circumstances, coordinating urban infrastructure investment is a key challenge.

In principle, the physical location of such investments could be coordinated through local land use and development plans. The timing of such investments would have to be coordinated in the annual budgeting process at the central and local levels. While local governments are charged with preparing such plans, few have done so. The central government should assist them in this effort. Specific recommendations on this issue are contained in other notes in this series.

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# 5. Enabling an inclusive housing sector

Catherine Lynch and Giuliana de Mendiola

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## Introduction

Housing is an essential element of household well-being and a key input to promoting more prosperous and inclusive urban and territorial development. Access to quality, well-located, and affordable housing allows the individual–and their family–to satisfy personal, biological, and social needs, as well as to improve health and educational outcomes. Additionally, access to housing that is well-connected to urban agglomerations provides positive externalities, which includes higher economic productivity by bringing people and jobs together. However, with rapid urbanization comes an increase in demand for land and housing, which, in most cases, the market is unable to meet. The problem is further intensified when there is poor territorial planning and regulation, lack of regulation enforcement, and insufficient public finance for infrastructure. As a result, new low-income households are pushed to the periphery of urban areas, contributing to sprawl and informality, and often occupying areas of high vulnerability to adverse natural events.

The Dominican Republic (DR) recognizes the importance of housing and has addressed it in a comprehensive way in Article 59 of the Constitution promulgated on January 26, 2010. However, several external and internal factors, including the rapid urbanization process described in Note 1 on urbanization in the Dominican Republic<sup>1</sup> have prevented the population as a whole from realizing the right to adequate housing. The DR has a housing deficit of 1.4 million, representing 51 percent of the total housing stock according to the 2010 National Population and Housing Census (CNPV, *Censo Nacional de Población y Vivienda*) (MEPyD and ONE, 2018). 74 percent of this housing deficit is qualitative, mainly consisting of houses requiring replacement due to their poor condition. Most of the housing needs are found in urban areas; however, proportionally rural areas suffer more from housing deficiencies. Furthermore, the sector is highly vulnerable to natural disasters. 18.5 percent of the total housing stock is considered structurally vulnerable to adverse natural events,<sup>2</sup> most of which are located in urban areas.

For several administrations, the Government of the Dominican Republic (GoDR) has strived to implement a number of housing policies and programs to address the population's housing needs. However, the magnitude of the deficit, coupled with an institutional dispersion that features disconnected, fragmented, and underfinanced policies and actions has resulted in limited impact. One of the major constraints is the absence of a comprehensive sectoral housing policy with budget allocation commensurate to the scale of the challenge, which, through a central body responsible for its implementation, could ensure standardized and collective interventions that are housing and habitat oriented.

Recognizing these shortcomings and the importance of housing as a vehicle for the social and economic development of the country, the government has prioritized the sector. The current administration has taken several steps to improve housing outcomes, including the approval of Law 160-21, which creates a Ministry of Housing, Habitat, and Buildings (*Ministerio de Vivienda, Habitat y Edificaciones*, or MIVHED) and the launch of new programs to address the housing deficit. Nevertheless, ensuring the effectiveness of these initiatives and improving access to housing in the DR will depend on the following: (i) coordinating the stake-

<sup>1</sup> World Bank, "Laying down the facts of urbanization", Urbanization and Territorial Development in the Dominican Republic, note 1.

<sup>2</sup> Unreinforced masonry construction, or reinforced masonry or concrete construction prior to 1979 (the year that the regulations concerning seismic analysis and structural design were put into effect), is considered structurally vulnerable.

holders, institutions, and resources of the sector; (ii) harmonizing the various programs offering new housing to guarantee the effective use of public funds; (iii) focusing more on qualitative deficits in order to address the needs of the most vulnerable; (iv) addressing constraints on the supply side of housing, including property registration and permitting; and (v) implementing measures to expand the mortgage market.

This Note provides an analysis of the status of the housing sector and its key challenges. Specifically, it aims to: (i) examine the housing situation in the DR; (ii) evaluate the sector's main bottlenecks along the value chain; and (iii) propose recommendations to develop a system that successfully meets the housing needs of Dominicans. This Note is based on a desk review, interviews with different sectoral stakeholders, an analysis of the housing deficit prepared by the authors, and technical assistance to the GoDR to develop the Happy Family National Housing Plan PNVFF, *Plan Nacional de Vivienda Familia Feliz*).

# **1.** The Dominican housing sector is characterized by a large housing deficit ,particularly in urban areas

While there are several estimates of the housing deficit, the official methodology estimates a housing deficit of 1.4 million units in 2010.<sup>3</sup> According to Torres et al. (2017), the measurement of housing deficits in the DR has been a subject of controversy due to the multiplicity of methodologies used by the public sector in making its calculations. This problem is not unique to the DR, as it is common in many countries due to long periods between censuses and the inability of sample surveys to accurately characterize housing conditions, especially in the most remote and in peri-urban areas. Figure 1 shows different housing deficit estimates employing the different methodologies with data from the 2010 CPNV.<sup>4</sup>

Housing needs vary depending on geography, with urban areas having higher quantitative needs and rural areas having higher qualitative needs. Specifically, 13 percent of urban households present a quantitative deficit compared to 10 percent of rural households. On the other hand, 35 percent of urban households present a qualitative deficit compared to 51 percent of rural households. The provinces with the highest concentration of quantitative deficit are the big urban agglomerations and tourism poles—Santo Domingo, Distrito Nacional, Santiago, and La Altagracia. These provinces are considered leading or transitional regions according to the classification presented in Note 2 of this report<sup>5</sup>, and are expected to continue to urbanize, which will in turn increase demand for housing. The provinces with the highest concentration of qualitative deficit are Elías Piña, Bahoruco, Monte Plata, and Samaná, all of which are considered lagging regions. These areas, which are rural and have high poverty levels, suffer mostly from lack of access to basic services—including water, sanitation, and electricity.

**Given the DR's risk profile, the housing sector is highly vulnerable to adverse natural events.** As described in Note 1 on urbanization in the Dominican Republic, a significant proportion of the new build-up sur-

<sup>3</sup> Estimates of the housing deficit in the DR range from 744,000 to 2.1 million units, depending on the methodology and data employed, which accounts for between 27 percent and 72 percent of the housing stock. The official methodology, which was developed and published by the Ministry of Economy, Planning, and Development (MEPyD, or *Ministerio de Economía, Planificación y Desarrollo*) and the National Statistics Office (ONE, or *Oficina Nacional de Estadísticas*) in 2018, estimated the housing deficit at approximately 1.4 million units (equivalent to 51 percent of the housing stock) (MEPyD and ONE, 2018).

In 2010, the National Statistics Office (ONE) in collaboration with the Latin American and Caribbean Demographic Center (CELADE) published the Methodology for Calculating the Housing Deficit in the Dominican Republic. Additionally, in 2007, the United Nations Development Program (PNUD) in collaboration with the Ministry of Economy, Planning, and Development (MEPyD) developed its own methodology.

<sup>5</sup> World Bank, "Addressing territorial disparities at different scales", Urbanization and Territorial Development in the Dominican Republic, note 2.



#### Figure 1. Estimates of the housing deficit using the different methodologies for 2010

face in large urban centers like Santo Domingo, the Distrito Nacional, and Santiago is in flood-prone areas. For example, it is estimated that 1,833,730 units were affected by some hydrological events between 2004 and 2009, of which 860,133 were located in hazardous locations (CNPV, 2010). Additionally, based on data from the 2010 CNPV, most of the units that need to be replaced either due to their poor condition or due to being structurally vulnerable are in coastal provinces. This represents a risk as multiple sources of coastal flooding risk threaten the DR's large coastline, including tropical storms, hurricanes, or tsunamigenic earthquakes.

# 1.1 In recent years, the total housing deficit appears to be decreasing marginally, but the trend suggests that the quantitative deficit is increasing

Based on the Continuous National Survey of Income and Expenditure (ENCFT), the housing deficit is projected at 776,488 dwellings for 2020, with a very similar distribution between the quantitative and qualitative deficit.<sup>6</sup> This does not indicate any reduction in the housing deficit in comparison to the 2010 CNPV figure. However, a series for the 2016-2020 period was constructed with the ENCFT to better understand the evolution of the housing deficit with the most recent information available (see Figure 2). During this period, a significant variation was observed in the qualitative housing deficit due principally to investments made by the GoDR to improve the provision of basic services, which resulted in a reduction of over 100,000 units.

<sup>6</sup> Although census data is the most suitable for calculating housing deficits, the government's official methodology is able to make use of the CNPV and the Continuous National Survey of Income and Expenditure (ENCFT), which permits a more continuous evaluation of public policy. However, one should not directly compare fluctuation in housing deficits derived from the census data with that derived from the surveys because the nature of the information is different and the results are not comparable. The two data sets must be analyzed separately.





On the other hand, the quantitative deficit rose by almost 35,000 units due to a lack of supply relative to the demand for housing.

# **1.2** The majority of the quantitative housing deficit consists of houses that need to be replaced due to their poor quality

Based on the official methodology, the quantitative deficit is estimated at 327,996 units, representing 26 percent of the total deficit. The quantitative deficit is constructed using three components: unrecoverable units resulting from estimating the qualitative deficit; cohabitation, that is, households sharing the same home; and overcrowding, resulting from the existence of family nuclei that should be living in independent spaces. The lack of housing to satisfy the demand of the population is mainly an urban problem since 78 percent of the quantitative deficit is in urban areas, mostly in the big urban agglomerations and tourism poles. Additionally, most of the quantitative deficit is represented by homes that must be replaced due to their poor condition—81 percent of the quantitative deficit corresponds to unrecoverable dwelling units, while of the remaining 19 percent, 3 percent corresponds to overcrowding and 16 percent to cohabitation.<sup>7</sup> The provinces with the highest percentage of unrecoverable units are La Altagracia, La Romana, and Pedernales, with the first two being important tourism poles. The province with the highest percentage of overcrowding and co-

<sup>7</sup> With regard to the ONE/CELADE methodology (which implements the best practices developed by CELADE for measuring housing deficits), it is important to note that the official methodology introduced elements that reduced the size of the deficit above all in the quantitative aspect, and specifically, in those cases involving cohabitation of households. The only cases counted toward the housing deficit were those where the existence of an internal family nucleus was accompanied by overcrowding and economic independence. This decision is understood to be wrong because it leaves approximately 400,000 houses with cohabiting households out of the equation, with the result that the quantitative deficit is possibly larger than what the official methodology measures.

Quantitative housing deficit	Very low	Low	Lower middle	Middle	Higher middle	Total
Overcrowding	2%	4%	5%	4%	1%	16%
Cohabitation	1%	1%	1%	0%	0%	3%
Unrepairable Houses	16%	29%	21%	13%	2%	81%
Total	19%	34%	26%	17%	3%	100%

#### Table 1. Quantitative housing deficit by socioeconomic status (by percentage)

Source: Developed by the authors, based on 2010 CNPV, through ECLAC/CELADE Redatam7.

Note: Socioeconomic status is a multivariate indicator calculated by the National Statistics Office (ONE) based on the following factors: housing, education, basic services, and level of employment.

habitation is Santo Domingo. This situation highlights the need for more housing in and around the country's key urban agglomerations, that is, areas that are well-connected to city centers, as well as in the country's tourism poles. Focusing new housing in these areas is critical as they are expected to continue to urbanize in the coming years.

Unrepairable homes are more prevalent among households in the very low- and low-income segments, while overcrowding is more prevalent in the lower-middle income segment. In terms of the distribution of the quantitative deficit in socioeconomic terms, 54 percent is concentrated in the very low- and low-income segments, 44 percent in the lower-middle- and middle-income segments, and only 3 percent in the upper-middle segment (see Table 1). As such, different types of housing solutions should be designed for households within diverse income levels.

# **1.3 The qualitative housing deficit is characterized by poor access to basic services**

The qualitative deficit is estimated to consist of 1,041,215 units, representing 74 percent of the total defi-

**cit.** Estimating the qualitative housing deficit includes the quality of construction materials (floors, walls, and roof cover) and access to basic services (water, sanitation, and electricity). The qualitative deficit is mainly due to the lack of access to basic services, which makes up 81 percent of the qualitative deficit. Of the remaining 19 percent, 12 percent corresponds to deficiencies in both construction materials and access to basic services, and 7 percent corresponds to deficiencies in construction materials. Elías Piña and Bahoruco are the provinces with the highest gaps in terms of access to basic services and quality of construction materials, and both lagging regions are close to the border with Haiti.

Proportionally, rural areas have a higher prevalence of qualitative housing deficit. However, both urban and rural areas suffer from gaps in access to services. 51 percent of all rural households suffer from a

qualitative housing deficit, compared to 35 percent of urban households. In both areas, though, the weight of deficiencies in basic services prevails. As described in Note 1 on urbanization in the Dominican Republic, while urban areas have higher access to services, coverage is not often translated into high quality. Furthermore, 80 percent of the qualitative housing deficit is clustered in the very low-, low-, and lower-middle-income segments (see Table 2). As a result, in order to promote more equitable territorial development, improvements in access to basic services are needed in both urban and rural areas, especially to improve the living conditions of the most vulnerable.

#### Table 2. Trend in qualitative housing deficit by socio-economic status (by percentage)

Qualitative deficit	Very low	Low	Lower middle	Middle	Higher middle	Total
Recoverable deficiencies in basic services	8%	29%	28%	12%	4%	81%
Recoverable deficiencies in structure and basic services	0%	1%	2%	3%	1%	7%
Recoverable deficiencies in structure	4%	5%	2%	1%	0%	12%
Total	12%	35%	32%	16%	5%	100%

Source: Developed by the authors, based on 2010 CNPV, through ECLAC/CELADE Redatam7.

Note: Socioeconomic status is a multivariate indicator calculated by the National Statistics Office based on the following factors: housing, education, basic services, and level of employment.

# **1.4** The housing deficit affects households residing in owned and rented housing in the same way

In the DR, 54.6 percent of households own their house, 36.6 percent rent, and 8.8 percent have some other form of tenure. Other tenure refers to houses either assigned or borrowed, or with another type of arrangement, and represents households with the greatest vulnerabilities due to the lack of a status that provides them with some legal security. The housing deficit equally impacts households residing in their own house (53 percent) or households that rent (52 percent). In the case of assigned or borrowed houses, 69 percent have some degree of housing deficit.
# **1.5 Informal settlements in Greater Santo Domingo are characterized by their high vulnerability to natural disasters**

The last 50 years have seen an expansion of informal settlements, or slums,8 fueled by migration flows from rural to urban areas, as well as by population growth in cities. Although there is no national headcount of people currently residing in these areas, it is estimated that 41 percent of the population in the Distrito Nacional is living in informal settlements. As described in Spotlight 1: Territorial Development, the greatest concentrations of informal settlements in the Distrito Nacional are found in the west and nor-thwest areas.

Some of the major issues in informal settlements in the DR include informal land tenure, lack of access to basic services, and high vulnerability to natural disasters. Studies conducted by TECHO, an international nongovernmental organization (NGO), in different informal settlements show that approximately 70 percent of households have no land title. For example, in El Progreso, 80 percent of houses do not have title deeds, while in Villa Hortensia 76 percent do not (TECHO, 2016). Moreover, many of these houses are located in high-risk areas, such as hillsides and riverbanks, and have been built informally so they fail to observe seismic-resistant codes (National Emergency Commission, 2014). Nationally, 32.48 percent of houses are located on the banks of a watercourse or canal, while in the Distrito Nacional and the Province of Santo Domingo, houses in similar areas account for 26 percent and 36 percent, respectively (ONE, 2016).

To address the issue of informal settlements in the Distrito Nacional, in 2014 the Executing Unit for the Rehabilitation of the Barquita Neighborhood and Surroundings (URBE, Unidad Ejecutora para la Readecuación de la Barquita y Entornos)<sup>®</sup> was created as an entity under the Ministry of the Presidency (MINPRE). When it was created, URBE's purpose was to implement comprehensive urban projects tailored to the socio-economic and environmental reality of the high-risk, precarious, informal settlements in the Distrito Nacional. It has worked on specific projects such as La Nueva Barquita (see Box 1), Nuevo Domingo Savio, and the Teleférico de Santo Domingo (aerial cable car). Nevertheless, URBE's mission was modified in 2021 to have a national reach.

#### Box 1

## La Nueva Barquita Project

La Barquita is a neighborhood on the banks of the Ozama River in Santo Domingo Este. Historically, it has been one of the most vulnerable and socially disadvantaged informal settlements in the nation. The non-existence of land use regulations and the absence of cadastral and territorial regulations have resulted in informality and vulnerability, overcrowding conditions, and lack of access to basic

<sup>8</sup> Informal settlements or slums are defined as housing that lacks basic infrastructure or access to basic services.

<sup>9</sup> The name and the scope of changed in 2021. The new name is Unidad Ejecutora para la Readecuación de la Barrios y Entornos (Executing Unit for the Rehabilitation of Neighborhoods and Surroundings).

services and infrastructure. Uncontrolled construction on the river's edge has also led to a process of environmental degradation and a high-risk profile for the communities located there.

For decades ,different administrations have undertaken initiatives to address the social ,environmental ,and economic issues of the neighborhood. However, it was not until 2013, by means of Decree 16-13, that the GoDR declared that upgrading the La Barquita settlement to be a high priority. Subsequently, URBE was established to implement these interventions.

La Nueva Barquita, the project launched by URBE to address the issues of the La Barquita neighborhood, has the following objectives: (i) resettle 5,500 people living in the La Barquita neighborhood; (ii) improve the quality of life of these people through new housing with access to basic services and infrastructure; and (iii) integrate more than 30 hectares of undevelopable land under the project into Santo Domingo's Green Belt .The overall goal is to provide this population with decent housing in La Nueva Barquita ,a new housing development located in Santo Domingo Norte .As of December 1,741 ,2020 apartments have been handed over ,achieving98 percent of the goal.

Source: URBE, 2020.

# 2. The current regulatory and institutional framework of the housing sector is weakly interconnected and lacks coordination

The DR does not have a comprehensive housing policy, which historically has resulted in disjointed interventions that have had little impact on the sector. Recognizing this challenge, the GoDR has recently taken important actions to harmonize the sector.

# **2.1 There is no integrated housing policy within the current regulatory framework**

The first actions in the housing sector in the DR started in the mid-20th century (Torres et. al, 2017). In 1945, Decree 1047 was approved, which established the construction of 25,000 housing units by the Executive Branch. In the next decades, a series of institutions were created, including the National Housing Institute (INVI, or Instituto Nacional de la Vivienda), which, until recently, had the mandate to implement housing policies and programs. Appendix 1 summarizes the most important housing laws and decrees. However, one of the major constraints faced by the sector is the lack of an integrated housing policy that establishes the sector's priorities and strategies, coordinates the different stakeholders, and considers land-use and urban planning policies for well-planned development of the territory and the sector in a multidimensional way.

In addition to recently approved Law 160-21, three important laws and decrees have shaped the evolution of the housing sector over the last decades: (i) the Organic Law on the National Development

Strategy (Law 1-12); (ii) the Implementation Decree on the National Multi-Year Public Sector Plan (PNPSP, or *Plan Nacional Plurianual del Sector Público*) (Decree 493-07); and (iii) the Development of Mortgage and Fiduciary Market Act (Law 189-11).

**Organic Law on the National Development Strategy (2012)** – Access to decent housing is one of the primary subjects of the National Development Strategy (END, or Estrategia Nacional de Desarrollo).<sup>10</sup> Organic Law 1-12 approves the END, which is a long-term planning framework effective until 2030. Access to decent housing is one of the central themes under Strategic Area 2 of the END, which is oriented towards a society with equal rights and opportunities. One of the general objectives under this Area is "to create decent housing in healthy environments. "Within this overarching objective, two specific objectives are set out: (i) to facilitate the population's access to affordable, safe, and decent housing with legal security and in sustainable, socially-integrated human settlements that meet the criteria of adequate risk management and universal accessibility for people with physical-motor disabilities (specific objective 12); and (ii) to guarantee universal access to safe drinking water and sanitation services provided with quality and efficiency (specific objective 13).<sup>11</sup> Although the END has guided the sector's actions over the last decade, one of the major shortcomings is a lack of indicators linked to the objective of decent housing and sustainable human settlements. Indicators were only defined for access to safe drinking water (Torres et. al, 2017). As a result, the government lacks clear baselines to measure the sector's progress over the long term.

**National Multi-Year Public Sector Plan (2007)** – For the years 2017-2020, the goals of the PNPSP with respect to housing were focused on replacing dirt floors with cement. The PNPSP seeks to set priorities, targets, goals, and resource requirements in the medium and short term for the key plans, programs, and projects for each government administration. It is formulated every four years and is updated annually. The most recently available PNSPS is from the previous government's administration from 2017-2020. With regard to Specific Objective 12 of the END, safe and decent human settlements, the 2017-2020 PNPSP establishes new policy measures focused mainly on increasing access to the mortgage and fiduciary market by encouraging subsidies, investments, and financing instruments. The various actions include the creation of a national housing financing facility and the enactment of a bill for the promotion of decent housing and human settlements (MEPyD, 2020). The housing goals outlined in the PNPSP for this period are summarized in Table 3. Notably, INVI is the only entity responsible for meeting the goals, although at least seven other agencies also received public funds for developing housing projects during this period (Torres et. al, 2017).

During this period, the targets reached by INVI are well below those set out in the PNPSP, even though the targets were scaled down in the PNPSP's annual progress reviews. As Figure 3 shows, none of the targets were fully met. In terms of new housing, 1,410 housing units were built between 2017-2019, while the target for the same period was 5,106 units. In terms of home improvement, 8,129 houses were improved out of the 39,472 planned. Finally, regarding upgrading dirt floors, only 9,795 dirt floors were upgraded out of the

<sup>10</sup> The END is made up of 4 strategic axes, 19 general objectives, 58 specific objectives, 460 courses of action, 7 intersecting policies, and a series of development goals and measurement indicators.

For each specific objective, courses of action are defined which have guided the policies of the housing sector in recent years. Among these are: (i) the creation and development of the legal and institutional framework for the definition of a public housing policy; (ii) raising environmental standards and access to basic services and community infrastructure; (iii) the relocation of settlements at risk of natural disaster; (iv) the promotion of mechanisms consistent with the regulatory framework that facilitate and promote household savings; (v) the promotion of new financing options for builders and developers who offer low-cost housing with adequate standards; and (vi) the promotion of reforms and regulations designed to ensure the security of the legal framework and the investment climate in the housing sector, among other courses of action.

#### Table 3. PNSP housing goals 2017-2020

Intervention	Entity	2017	2018	2019	2020
Housing construction	INVI	1,450	2,148	1,508	3,570
Home Improvement and/or construction	INVI	9,472	15,000	15,000	15,000
Dirt floor upgraded to concrete floor	INVI	2,500	25,000	25,000	16,000

Source: MEPyD, 2020.





52,500 called for in the plan. The only program that INVI fully achieved, even exceeding the targets, was the replacement of charcoal and firewood for cooking. However, this program was not within the ambit of the PNPSP and fails to address the housing deficit (INVI, 2020).

The PNPSP also set goals for water and sanitation, both of which are vital for the reduction of the housing deficit. With regard to Specific Objective 13, universal access to water supply and sanitation, the 2017-2020 PNPSP sets out strategic lines focused on: (i) developing a legal and institutional framework for the water and sanitation sectoral agencies; (ii) transforming the water and sanitation service management model; and (iii) developing new network infrastructure to scale up drinking water, sanitation, and storm

#### Table 4. Water supply and sanitation coverage targets

Indicator	2015 Baseline	2020 Target
Percentage of population with household connections to piped water	80.1%	83%
Percentage of wastewater being collected in the sewerage system	25.1%	30%
Diagnostic estimate of sewage treated	10%	20%
Source: MEPyD, 2020.		

water sewerage, sewage treatment, and subsoil protection service coverage. The 2017-2020 PNPSP targets under Specific Objective 13 are described in Table 4. However, their level of compliance is not available in the PNPSP updates.

**The current 2021-2024 PNPSP is being prepared.** The strategic guidelines of the 2021-2024 PNPSP, which were published in September 2020, identify decent and adequate housing as one of the key policy areas of the current administration. Housing interventions are divided into four pillars: (i) reduce housing deficit; (ii) promote land-use planning; (iii) implement housing plans; and (iv) implement a land titling program.

**Development of Mortgage and Fiduciary Market Act (2011)** – The Development of Mortgage and Fiduciary Market Act (Law 189-11) has been an influential milestone for the development of low-cost housing over the last decade. The law intends to foster the private sector-led production of low-cost housing through a fiduciary legal structure and incentive-based mortgage market development scheme. Moreover, it provides the legal framework for setting up Public-Private Partnerships (PPPs) for housing construction. The Law states that "low-cost housing projects may benefit from the development and implementation of legal, financial, and fiscal instruments [...] in order to leverage resources available to finance them and their infrastructure, as well as to lower housing costs."

The GoDR provides incentives to both the developers and the buyers of low-cost housing. The Law defines low-cost housing projects as housing solutions involving the public and/or private sector that, in addition to having specific characteristics such as location, size, and quality of materials, among others, have a current selling price equal to or less than RD\$ 4.5 million<sup>12</sup> (annual inflation-adjusted figure). To apply for the benefits provided by the Law, the housing project must be certified by INVI as a Low-Cost Housing Project (VBC, or *Vivienda de Bajo Costo*). The government grants incentives to both developers and homebuyers (or beneficiaries) to encourage VBC development. Some of the key incentives for developers or builders include

<sup>12</sup> Decree 359-12 defined the characteristics of low-cost housing and set the maximum price of a low-cost home at RD\$ 2 million. This amount is adjusted annually for inflation. As of July 2021, the ceiling is set at RD\$ 4.5 million (equivalent to approximately US\$ 79,000). In the current mortgage market, a household would need an income of almost 11 minimum wages in order to afford a home costing RD\$ 4.5 million.

a "one-stop window" to process construction permits more expeditiously, receive property tax exemptions, and benefit from flexibility in complying with certain construction laws and regulations. On the other hand, homebuyers, through the Dominican Internal Revenue Service (DGII, or Dirección General de Impuestos Internos), also receive a first-time homebuyer grant equivalent to the tax on the transfer of industrialized goods and services (ITBIS, or *Impuesto a la Transferencia de Bienes y Servicios Industrializados*), which is known as Bono ITBIS. This grant accounts for approximately 7 percent to 9 percent of the total home value and can be used to complete the down payment or be applied against the loan principal if the homebuyer has already paid the down payment.<sup>13</sup>

The Law fosters a Savings-Subsidy–Mortgage model (ABC, or Ahorro-Bono-Crédito), whereby the beneficiaries are subject to comply with scheduled savings that, jointly with the ITBIS grant, cover the loan down payment. Furthermore, the beneficiaries apply for a loan from a lender to finance the house purchase,<sup>14</sup> with a mortgage as loan collateral. Under this law, important housing projects have been developed, such as Ciudad Juan Bosch, which is described in Box 2 below. Between 2013 and 2021, 21,445 ITBIS grants have been awarded—an important investment by the government that amounts to RD\$ 3,148 million.<sup>15</sup> Specifically, in the last few years, a significant jump in ITBIS grants has been observed, which means the development of low-cost housing is on the rise (see Figure 4). However, although the fiduciary structure has played a critical role in facilitating the increased supply of low-cost housing, it has not been used on a scale sufficient to significantly reduce the housing deficit.



#### Figure 4. ITBIS grants, 2013-2021

Source: DGII Report, through the Ministry of the Presidency.

<sup>13</sup> https://dgii.gov.do/contribuyentesRegistrados/personasJuridicas/fiduciaria/Paginas/bonoVivienda.aspx.

<sup>14</sup> Approval of mortgage credit depends on a risk assessment of the applicant and the applicant's income.

<sup>15</sup> Data provided by the Ministry of the Presidency, June 2021.

### Box 2

## **Ciudad Juan Bosch project**

Ciudad Juan Bosch Project emerged as an initiative to alleviate the country's quantitative housing deficit ,especially among low -and lower-middle-income families .The GoDR built partnerships with private sector companies and banks to develop integrated housing projects, with the local government of Santo Domingo Este participating in the pilot fiduciary model project. This initiative was coordinated by MINPRE and implemented through the *Fideicomiso Público Matriz para la Construcción de Viviendas de Bajo Costo - Fideicomiso* (VBC). The project's goal was to build 25,000 units.

The public sector contributed the land and developed the infrastructure such as roads, drinking water, sanitation, and electricity, and also provided social and institutional facilities such as schools, health centers, police and fire stations, parks, among others. The private sector provided housing construction and sales, including commercial areas. Home prices ranged between RD\$ 1 million and RD\$ 4.5 million (approximately US\$ 17,500 to US\$ 78,000). The GoDR provided homebuyers with benefits including two grants towards the down payment (Bono ITBIS and *Bono Tierra*) which represented between 7 percent and 11 percent of the home's value.

Ciudad Juan Bosch has had an important role in the development of low-cost housing and in attracting private sector financing to these types of projects. Additionally, many of the units (25 percent) have been sold to the diaspora. However, the project has run into a number of setbacks, including delays in house construction along with the basic services and infrastructure that were considered to be part of the development. Part of the problem is that only a small percentage of the Dominican population earns enough to be able to afford a home in Ciudad Juan Bosch (and so the diaspora has bought a significant percentage of the units). Additionally, the development is located on the outskirts of the city ,which makes it inaccessible for some prospective homebuyers .To address this issue ,the GoDR has built a highway) *Avenida Ecológica* (to connect the housing project with the city .A mass transit system is also contemplated as part of the infrastructure.

Source: MEPyD, 2017 and Ciudad Alternativa, 2017.

# 2.2 The institutional framework is characterized by considerable institutional dispersion

The institutional framework of the housing sector has been characterized by a multiplicity of stakeholders, which is expected to change with the creation of the MIVHED. Until recently, there was no governing body leading the coordination of sector-wide policies. As a result, there has been an overlap of functions. By mandate, INVI was tasked with the formulation and implementation of housing programs and projects. In the PNPSP, it was considered the sole entity accountable for the achievement of the proposed targets. However, historically, several entities have developed and implemented housing plans and projects. In particular, the Executive Branch has played a significant role in the sector through MINPRE—promoting important housing projects under the fiduciary model, as well as housing upgrading projects and land titling programs. In 2021, the PNVFF was launched. It is an ambitious plan to slash the quantitative housing deficit nationally under the leadership of the MINPRE. Box 3 lists the key government stakeholders in housing.

#### Box 3

### Major government actors in affordable housing

- Ministry of Economy, Planning, and Development (MEPyD): MEPyD has among its main duties the formulation, management, monitoring, and evaluation of macroeconomic and sustainable development policies, as well as the formulation of the END and the PNSP. As such, it is responsible for developing housing strategies and policies.
- National Housing Institute (INVI): The National Housing Institute, established by Law 5892-62, as amended from time to time, is an autonomous institution with its own legal status, its own assets, and indefinite duration. Its mission is to improve the living conditions of low-income Dominican families through the construction, improvement, reconstruction, or expansion of their dwellings. It is also responsible for formulating housing plans and projects in coordination with the private sector and other social sector groups.
- **Ministry of the Presidency (MINPRE):** The Ministry of the Presidency, although it lacks a specific function in the housing sector, is the entity entrusted with the implementation of prioritized public policies. As such, it has played a fundamental role in the sector over the past decade. A number of key sectoral entities operate within the Ministry, including:
- Executing Unit for the Rehabilitation of Neighborhoods and Environments (URBE): Established in 2014 with administrative and financial autonomy and with the objective of designing and implementing projects to improve conditions in informal settlement and substandard housing sectors with high environmental and human vulnerability. Decree 192-21 changes the name of the entity and gives it a national scope.
- **Commission for Mortgage Market Development**: created in 2015, its objective is to manage housing projects under the trust fund regime as established in Law 189-11.
- State Land Titling Commission (CPT TE): Created in 2012, it aims to formulate, coordinate, support, and advocate policies and strategies to promote and materialize a definitive solution to the absence of land titling or an updated real estate registry.
- National Housing Fund (FONVIVENDA): Established by Decree 191-21, FONVIENDA is an entity within MINPRE that executes and manages resources aimed at providing subsidies for social housing solutions, which are defined by the decree as houses with a ceiling selling price of RD\$ 2,250,000.
- Ministry of Public Works and Communications (MOPC, or *Ministerio de Obras Públicas y Comunicaciones*): MOPC, through two of its departments, the General Directorate of Buildings and the General Directorate of Supervision and Inspection of Works, is responsible for regulating the

domestic civil and road construction sector. Its duties include: (i) processing reviews building plans in general and issuing the corresponding construction licenses or permits; (ii) directing, controlling and centralizing the construction design, supervision, and calculation of volumes or materials and structural calculations pertaining to public works; (iii) reviewing and approving urban development projects and plans, including landscaping elements; and (iv) overseeing compliance with all building laws, provisions, regulations, and ordinances, carrying out inspections and supervisions of public works, and investigating compliants for violations of building construction standards. In specific cases, MOPC also implements housing construction and improvement projects for vulnerable households.

- Inter-Institutional Coordination Council for Housing (CIVIVIENDA, or Consejo Interinstitucional para Coordinación Viviendas): Committee established in the aftermath of Hurricanes David and Frederick in 1979.
- Social Policy Cabinet (GPS, or Gabinete de Política Social): GPS formulates, executes, monitors, and evaluates the programs in the Social Protection System. It has implemented a program to replace dirt floors with concrete floors for vulnerable families.a
- Real Estate Jurisdiction (JI, or Jurisdicción Inmobiliaria): JI has exclusive jurisdiction to hear ownership rights and their registration in the DR, from the authorization of survey request throughout the life cycle of the property, with the exceptions provided for in the legal framework. It is formed by the Superior Court of Lands, the Courts of Original Jurisdiction, the National Directorate of Title Registry, and the National Directorate of Cadastral Surveys.
- National Bureau of Seismic Evaluation and Vulnerability of Infrastructure and Buildings (ONESVIE, or Oficina Nacional de Evaluación Sísmica y Vulnerabilidad de Infraestructura y Edificaciones): ONESVIE was created by Decree 715-01 in response to the International Conference on Seismic Risk Reduction in the Caribbean Region. It seeks to diagnose and assess the seismic resistance capacity and vulnerability of the country's public buildings, and to establish remedial actions in those cases where needed. As such, one of its duties is to identify dwellings in risk areas and support post-disaster reconstruction processes.
- Institute of Aid and Housing (INAVI, or Instituto de Auxilios y Vivienda): INAVI is an autonomous agency, created by Law 5574-61 to perform social improvement works and services around the country. Its mission is to contribute to raising the standard of living of public servants and low-in-come individuals through social services and welfare programs. With respect to housing, it has provided assistance to vulnerable people in very specific cases, either by granting property titles or by assisting in home rebuilding.

<sup>&</sup>lt;sup>a</sup> The program to replace dirt floors with concrete floors was supported by the World Bank. Source: Developed by the authors.

In the DR, local governments have historically played a minimal role in housing supply, but they influence the sector through the urban planning framework. Local governments influence the development of housing markets, as they are responsible for urban planning and zoning, land-use planning, and land management. Also, local governments issue permits for the use of land and buildings. However, as indicated in Note 4 of this report,<sup>16</sup> with the exception of those that are part of Greater Santo Domingo and Santiago, local governments in the DR have limited financial resources and technical capacities to formulate and implement territorial planning and land-use plans and instruments. As a result, urban expansion is occurring in

Various public institutions receive public funds for social housing, resulting in poor use of limited resources. Institutional fragmentation is evident in the allocation of public funds for housing. During the 2017-2020 period, more than 5 institutions received government funding to implement housing sector projects, including MINPRE, MOPC INVI, ONESVIE, and INAVI (DIGEPRES, 2020). Furthermore, there is little accountability and transparency on how the resources are used, which strongly influences the poor sector-wide performance.

## 2.3 Public investment in housing is far below what is needed, although the last year has seen a significant increase

Historically, public investment in housing has been extremely poor, especially when considering housing needs nationwide. In terms of investment in social housing as a share of GDP, social housing investment between 2014 and 2020 stood at 0.065 percent of GDP (DIGEPRES, 2021).<sup>17</sup> This figure is far below the regional average (0.67 percent).<sup>18</sup> Bearing in mind the magnitude of the housing deficit in the DR, it is estimated that the GoDR should invest at least 1 percent of GDP for at least 10 years in order to build enough dwelling units to absorb the formation of new households and lower the housing deficit (Ciudad Alternativa, 2017).

As seen in Figure 5, public investment in housing has been characterized by significant fluctuations, which hinders medium- and long-term project planning. Additionally, government spending on housing has been disconnected from the country's economic growth. For example, in 2018 and 2019, the DR saw economic growth rates close to 7 percent and 5 percent, respectively, which makes it one of the fastest growing economies in the region. However, during those years, public investment in housing declined considerably (Ciudad Alternativa, 2020). In 2020, when the new administration took office, public investment in housing grew considerably, almost doubling the 2015 figures (which had been the highest ones in recent years). This action reflects the current administration's commitment to the housing sector.

In addition, the sector's budget performance is highly inefficient. As seen in Figure 6, during the 2017-2021 period there is a constant disparity between the amount initially approved, the reformulation, and the actual implementation for social housing. In particular, there is a large disparity between reformulated and implemented amounts, making it very difficult to project the consistent investment required by housing policy. Over the last decade, only 49.8 percent of the funding allocated for social housing was implemented (Ciudad Alternativa, 2020).

a disorganized and unplanned manner.

<sup>16</sup> World Bank, "Empowering local governments", Urbanization and Territorial Development in the Dominican Republic, note 4.

<sup>17</sup> This figure does not take into account the GoDR expense on the Bono ITBIS, which amounted to RD\$ 3.147 billion between 2013 and April 2021.

<sup>18</sup> https://observatoriaocial.cepal.org/inversion/es/grafico/america-latina-17-paises-gasto-vivienda-servicios-comunitarios-gobierno-central-2000-2018a. This figure is for 2018 and takes the following 17 countries into account: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, the Dominican Republic, and Uruguay.



### Figure 5. Public investment in social housing as a share of GDP (RD\$ Million)

Source: Developed by the authors.

#### Figure 6. Budget formulation and execution in social housing (RD\$ million)



Source: Developed by the authors.

**Finally, there is no accountability system in place, nor are there any clear objectives, to evaluate the efficiency of public spending in housing**. As a result, the incentive to improve budget implementation and to determine whether implemented programs have been successful or not is reduced. According to an analysis by the Housing and Habitat Commission of the *Foro Ciudadano*, only 16 percent of the spending allocated for housing by 2020 is aligned with the goals of the END 2030.<sup>19</sup>

# 2.4 Recently approved Law 160-21 aims to strengthen housing policy and bring in sector-wide coordination

The creation of the MIVHED is expected to improve housing sector performance. Several public and private organizations including the Dominican Association of Home Builders and Developers (ACOPROVIA, or Asociación Dominicana de Constructores y Promotores de la Vivienda)<sup>20</sup> and Popular Urban Network (RUP, or Red Urbano Popular) have attempted to advance the establishment of a Ministry of Housing for over 15 years (through several bills).<sup>21</sup> In August 2021, Law 160-21, which created the MIVHED, was approved. Its mandate is to develop and implement government policies on housing. Appendix 2 contains a summary of the key aspects of the Law. INVI, which has historically been the housing policy making and implementation agency (mainly focused on home improvement and reconstruction programs), will become part of the MIVHED. Among other things, the bill states that reducing the housing deficit is a national priority. It defines the criteria for decent housing in alignment with UN-HABITAT (2019), creates the Institute for Housing Development, Access, and Guarantee (INFAMICASA, or Instituto para el Fomento, Acceso y Garantía de Mi Casa),<sup>22</sup> creates the National Land Survey Registry, and establishes several land surveys held by beneficiaries, organizations, and professionals linked to the housing sector.

<sup>19</sup> As reported in the press on October 16, 2020.

<sup>20</sup> ACOPROVI is a consortium made up of approximately 250 construction and housing companies. The association has a national scope, but most of the companies are based in Santo Domingo.

<sup>21</sup> In 2006, ACOPROVI introduced its bill called "Law of Housing, Human Settlements, and Buildings" and in 2008, RUP introduced its bill called "Law of Housing, Habitat, and Human Settlements." In 2021, the Executive Branch submitted the Bill to create the Ministry of Housing, which is currently being reviewed by the Senate.

<sup>22</sup> An autonomous and decentralized public agency of the State that is vested with legal personality, its own assets, and jurisdictional, financial, and technical autonomy attached to the Ministry.

# 3. Obstacles to the development of an efficient, resilient, and sustainable housing market are found all along the value chain

The new housing market value chain refers to the process whereby a plot of land is identified, titled, licensed, connected to infrastructure, built, and sold (see Figure 7). On the supply side, there must be access to developable land, planning and building standards, basic services and infrastructure, affordable building materials, and a market of developers who have the technical skills and resources to handle the demand. On the demand side, there must exist homebuyer purchasing power, a developed, accessible, and robust mortgage market, and a secure and transparent rental housing market. Ensuring smooth coordination between the public and private sectors dealing with land, infrastructure, design, and construction processes (on the supply side) and a set of demand-side inputs relating to housing financing and macroeconomic conditions that guarantee long-term funding at affordable rates is key to achieving this balance.



Source: Adapted from the World Bank, 2020.

This section focuses on five obstacles, both on the supply and demand sides, that are key to improving the performance of the housing sector: (i) land tenure; (ii) permitting and licensing processes; (iii) construction costs; (iv) the mortgage market; and (v) buyer housing financing. Note that better access to basic services and infrastructure, as well as better urban and land-use planning, are key themes for improved provision of housing in the DR. However, these subjects are addressed in Note 1 on urbanization in the Dominican Republic and Note 2 on a new territorial order in the Dominican Republic, respectively.

# 3.1 Land tenure is highly informal

A high degree of informality and irregularity in property registration are major obstacles to the development of an effective housing market in the DR. This informality hampers access to land, the implementation of building regulations, and access to the mortgage market. In the DR, there is no accurate information available on land tenure informality. However, a study prepared by the Institute for Liberty and Democracy in 2006 estimated that around 1.8 million urban properties can be considered as extralegal, which accounts for 85 percent of the total number of urban properties in the country. Furthermore, it was estimated that 1.1 million hectares of rural properties did not have a property title, which represents 56 percent of the total area of the DR. Also, a 2019 study by the Ministry of Finance, with support from the Inter-American Development Bank (IDB) and the Global Land Alliance estimated that only one out of every four properties is registered with the DGII (Jacquet and Zaltsman, 2020). In terms of informality in social units built by the GoDR, it is believed that 95 percent of them have been handed over to their beneficiaries over time without a title deed.<sup>23</sup>

In the DR, two parallel real estate registration systems coexist: The Title Register, also known as the Dominican Torrens Title System, and the Mortgage Conservatorship, also known as the Ministerial System. The Title Register offers greater security of tenure, but covers only 13 percent of the total number of properties nationwide. The Mortgage Conservatorship has far wider coverage, but offers a much lower degree of legal security than the Title Register.

Land administration is institutionally and procedurally complex. The General Directorate of the National Cadaster (DGCN, or *Dirección General de Catastro Nacional*), under the Ministry of Finance, is the entity responsible for the inventory of all real estate in the country, including all physical, economic, and legal aspects. Informational deficiencies in the land registry constrain local governments' ability to exert land-use authority. Most local governments do not have municipal registers in place. Additionally, institutional fragmentation of geographic, legal, and fiscal information management, as well as inherent procedural complexities, hinders inter-agency collaboration and information sharing. As such, it is necessary to simplify and de-bureaucratize access to land titling, and also to develop digital channels or interoperability arrangements between the information systems held by different entities relating to legal, fiscal, and geographic land administration. Additionally, it is necessary to integrate land management systems with land-use planning processes in order to promote more adequate territorial development.

The DR has embarked upon a process for reforming the land administration system. This process began in 2005 with the enactment of the Real Estate Registration Act (Law 108-05), which endeavors to clear property titles and to digitalize and decentralize the system. Major strides have been made towards the transformation and modernization of the Real Estate Authority (JI),<sup>24</sup> a unit attached to the Judiciary that has exclusive jurisdiction to recognize property rights and their registration in the DR. Additionally, in 2012, the State Land Titling Commission (CPTTE, or *Comisión Permanente de Titulación de Terrenos del Estado*) was formed under MINPRE to facilitate the public land and social housing titling process.

However, the system still is plagued by a number of issues that have prevented more comprehensive reduction of land tenure informality. For example, many laws and regulations lead to interpretation and enforcement problems. Also, there is an overlap of agencies involved in land registration, resulting in poor consistency and coordination. Finally, many of the services are neither digitalized nor automated, and in most cases the local offices have insufficient capacities. As a result, obtaining a property title is a time-consuming and costly process, affecting mainly the poorest and most vulnerable groups, as well as creating major disparities in property rights between men and women.

### 3.2 The building permit process is cumbersome and inconsistent

**Building licensing and permitting processes are bureaucratic, lengthy, and inconsistent, which adds significant cost to housing development.** There is a large discrepancy between the theoretical timeline estimated for obtaining permits and licenses and the actual turnaround time. According to the World Bank's latest

<sup>23</sup> Interview with the State Land Titling Commission, May 2021.

<sup>24</sup> JI consists of the Superior Court of Lands, the Courts of Original Jurisdiction, the National Directorate of Title Registry, and the National Directorate of Cadastral Surveys.



#### Figure 8. Building licenses issued for private sector construction

<u>Doing Business 2020</u> report, obtaining the necessary building permits for a standard warehouse in the DR requires 15 procedures and takes about 214 days (the regional average is 191.2 days). Turnaround times are even longer when it comes to housing, as permitting a single-family housing development takes approximately a year and a half.<sup>25</sup> These indirect costs reduce the likelihood that developers will generate supply for the most vulnerable sectors, since the bureaucracy to obtain work permits is transferred to the final unit cost.

Between 1997 and 2019, approximately 500 building licenses were issued each year for apartments or buildings and 450 for houses (see Figure 8). During the 2010-2017 period, the average number of licenses granted decreased significantly, reaching its lowest point in 2017. However, by 2018, the number of licenses issued almost doubled, totaling 1,087 in 2019.

Various entities are involved in the permitting process. The bodies responsible for issuing permits and licenses are: (i) local governments, which verify and approve matters pertaining to boundaries, land use, residential density, heights, property title, and cadastral surveying; (ii) the Ministry of Public Works and Communications (MOPC, or Ministerio de Obras Públicas y Comunicaciones), which approves technical aspects of the works such as architecture, plumbing and electrical, and structural systems; and (iii) the Ministry of Environment and Natural Resources (MMARIN, or Ministerio de Medio Ambiente y Recursos Naturales), which issues the environmental authorization. In some cases, these entities do not have the resources to perform their functions efficiently and appropriately. For example, as detailed in Note 3 on this report,<sup>26</sup> in many cases, local governments are granting permits without any guidance, as they do not have land-use plans (POTs) or even a detailed definition of land use that could guide the private and public sectors in housing development. Box 4 details the building permitting and licensing process.

<sup>25</sup> Interview with residential developers and the Ministry of Public Works and Communications, June 2021.

<sup>26</sup> World Bank, "Adopting a new territorial planning framework", Urbanization and Territorial Development in the Dominican Republic, note 3.

### Box 4

### **Building permitting and licensing process**

The process for obtaining residential construction permits and licenses is characteristically lengthy and unpredictable. The first step is to request the land-use certification (location of the property). This permit is issued by the local government. Once the housing designer has the floor plans, it goes back to the local government for project-level approval. Many of the local governments have limited resources to perform this duty. Very few local governments have polygon maps and detailed information to adequately inform this permit (only Santo Domingo and Santiago have this type of information). The rest of the local governments only use general regulations. When the local government takes on projects associated with environmentally protected areas, for example, MMARN is consulted to approve the project's location. The local governments are also responsible for determining which areas are not developable due to risk of natural disaster. If the proposed project is to be located in a cultural/preserved area, then the Ministry of Culture (MC) is consulted, and if it is a tourist area, the Ministry of Tourism (MiTur) is asked. If the relevant local government does not have the necessary capacity to evaluate the appropriateness of the location, only MMARN and MC are consulted, and if no objection is raised, approval is given.

As part of the land-use certification, the following documentation is submitted to MMARN: (i) land-use and land-cover map, and (ii) wastewater management plan (estimations and technical report). With these two documents, the environmental license is approved. MMARN grants the environmental license on a national level. A compendium of environmental permitting regulations governs the process and steps for granting environmental licenses. To issue the environmental license, MMARN reviews the documents, conducts a field visit, assesses matters such as proximity to bodies of water, and then drafts a report. The turnaround time for an environmental license (for projects outside of Law 189-11) ranges from 30 to 45 working days.

Once approval is obtained from the local government and MMARN, MOPC reviews all technical aspects of the project (mainly technical and non-urban criteria) and issues the building permit. Depending on the type of project, the One-Stop Shop for Building Permits (VU) may be used, as is the case for projects under Law 189-11, or else the ordinary process is followed. When MOPC accepts the project, it is forwarded to the relevant technical areas for approval (water and sanitation, electrical, architectural, and structural). If all the plans are in order, then the license is issued. If there are any details to be addressed, corrections are issued. Once it enters MOPC, project approval should take 90 working days (for ordinary projects) or 45 days via the one-stop shop (VU). However, in practice, these processes usually take more time.

Upon approval of the relevant licenses and permits and the commencement of works, the project is transferred to the Inspection of Private Works Department (within MOPC), which carries out an inspection of the elements and verifies the progress of the construction.

Source: Interviews with MOPC and Ministry of Environment and Natural Resources.

In 2018, a one-stop window (VU, or Ventanilla Unica) was created in order to streamline these processes, especially for low-cost housing. Delays in the permitting and licensing process are attributable to the lack of capacity and resources in some local governments, changes of government locally or nationally, inconsistent evaluation criteria among different entities, and duplicity of processes. In response to these issues, in 2018 the VU was created within MOPC to centralize procedures and coordinate processes. However, the VU has not been able to streamline processes or significantly reduce lead times.

# 3.3 A low-cost housing market is growing ,but construction costs have escalated significantly

The DR has a robust domestic construction industry. Most of the basic construction materials such as cement, concrete, tiles, mosaics, paint, and reinforcing steel bars are manufactured locally. As a result, compared to other Caribbean countries, construction costs are lower. In fact, cement retail prices have remained 18 percent lower compared to the average price in other countries, which means that the Dominican cement industry is one of the most competitive in Latin America (Dominican Today, n.d.). Moreover, the construction sector is one of the major drivers of the country's economy and, due to its role as a generator of employment, has been key to the post-COVID-19 economic recovery. In 2021, it has been one of the fastest growing sectors, contributing 15 percent of GDP (Central Bank).

Since 2018, there has been a significant increase in housing construction, mainly in Santo Domingo. Most of the new housing units are multi-family. As of 2019, ONE has been disaggregating the number of units that are considered CBV (18 percent of the total) (see Figure 9).

The increasing issuance of Bono ITBIS shows that the supply of low-cost housing has substantially increased over the last decade. It is estimated that since 2012, the supply of houses has grown tenfold and the number of developers working in this market nationwide rose from 5 to over 200. In Ciudad Juan Bosch alone, over 20 developers are working in affordable housing.<sup>27</sup> Based on *Bono* ITBIS information, in 2020 the lowest-priced unit offered at market value went for RD\$ 1,236,900 (US\$ 21,800).<sup>28</sup>

According to ACOPROVI, access to financing is affordable for housing developers. Generally, in a housing project, capital inflow is broken down as follows: 30 percent developer's equity, 20 percent pre-sale, and 50 percent construction loan, the latter of which is widely available in the market. However, a hurdle that developers must deal with is the growing price of construction materials. It is estimated that, in the last year, a square meter of residential construction rose around 30 percent (ACOPROVI, 2021). These increases affect the selling prices of houses. However, low-cost housing is the most affected by these increases, as demand is not very elastic.

From the developers' point of view, there are several challenges affecting the supply of low-cost housing. First, the increase in the price of building materials during the construction process. This price surge is absorbed by the developer since the selling price has been fixed before the works are completed. Second, obtaining building permits can take more than a year, resulting in delays and extra costs. The investment

<sup>27</sup> Interview ACOPROVI, June 2021.

<sup>28</sup> Summary of Low-Cost Housing Grant Beneficiaries, January-December 2020 (DIIG). The smallest grant issued was RD\$ 86,583. Assuming that it is 7 percent of the purchase price, the total purchase price is RD\$ 1,236,900. However, it is unclear if this price includes the cost of public land or other development inputs including infrastructure.



cost for electricity connection is also a challenge. Under current law,<sup>29</sup> the residential electricity connection investment lies in the hands of the Dominican Corporation of State-Owned Electric Companies (CDEEE, or Corporación Dominicana de Empresas Eléctricas Estatales). However, in practice, urban developers are the ones who make this investment, but they do not receive any reimbursement from the CDEEE for their electricity investments. Finally, the invasion of private lands, mainly in Santo Domingo, restricts the number of parcels available for residential construction.

# **3.4 Although the mortgage market has been growing over the past few years, it is still small**

The DR mortgage debt-to-GDP ratio is behind that of developed countries and the regional average. The country's mortgage portfolio has increased consistently over the last 15 years. The debt-to-GDP ratio went from 2.9 percent in 2006 to 5 percent in December 2020 (from 51,000 mortgages registered in 2006 to 108,000 in 2021). In fact, the mortgage portfolio between 2007 and 2020 multiplied by 4.2 and exhibited an average annual growth rate of 11.7 percent (see Figure 10). Despite this important growth, mortgage debt as a percentage of GDP continues to be below the regional average (8.2 percent) and below other countries, such as Chile (17.5 percent) and Colombia (8.8 percent).<sup>30</sup>

<sup>29</sup> Law 125-01, Article 103 specifies that Electric Companies should provide reimbursement to clients for residential electricity connection. However, in practice, this does not happen often.

<sup>30</sup> Calculations by Economía Urbana SAS using data from the Central Bank and statistical agencies in each country.



Specifically, between 2016 and 2020, around 15,500 loans were granted each year—with an average loan amount of RD\$ 2.6 million (see Table 5).<sup>31</sup> Over the last five years, the 20-year average mortgage interest rate hovered around 10 percent (although most mortgages have an average term of 8 years). Between 2006 and 2021, interest rates fell by about 7 percentage points. Interest rates in the housing sector have always been below those in the rest of the country's financial sector. During the same period, the average inflation rate was 4.4 percent per year. Since 2014, the annual average has been below 3 percent. According to these financing parameters, the average portfolio mortgage loan requires a monthly household income close to 7.8 minimum wages.<sup>32</sup>

Banks and savings and credit associations are the key players in the Dominican mortgage market. 63 percent of mortgages are held by banking institutions. *BanReservas* and *Banco Popular* hold 63 percent of banking mortgages, while 36 percent are in the hands of savings and credit associations, specifically La Asociación Cibao, La Asociación Popular, and La Asociación La Nacional. The remaining 1 percent are spread among other institutions. The market distribution has changed significantly in recent years: in 2006 half of all mortgage loans were with savings and credit associations. A sustainable expansion of the mortgage market in the DR will depend on the financial institutions' ability to enhance credit access for low-income households with informal or irregular income by using innovative credit risk assessment approaches or flexible financial schemes.

<sup>31</sup> Interview with the Central Bank, June 2021.

<sup>32</sup> The estimate assumes an average loan size of RD\$ 2.6 million, 80 percent LTV, 10 percent interest rate, 20-year term, and 30 percent of household income allocated to installments. Resulting monthly installment is RD\$ 25,090 and monthly income is RD\$ 83,635.

#### Table 5. Mortgage market development 2016-2021

Year	Number of Loans	Amount disbursed (in RD\$ million)	Average loan amounts (in RD\$ million)
2016	13,545	33,751.3	2.5
2017	15,537	38,865.1	2.5
2018	16,376	41,105.5	2.5
2019	19.446	49,921.4	2.6
2020	13,876	38,204.6	2.8
2021°	7,301	22,857.9	3.1

Source: Superintendency of Banks.

<sup>a</sup> Up to March 2021.

## 3.5 Remittances are a source of housing finance for many Dominicans

Dominican workers' wages are low while informality is high. As a result, many households depend on family remittances and social welfare to meet their housing needs. Table 6 shows household income by quintile associated with labor market paid work, rental income, or dividends from domestic and international financial products.<sup>33</sup> The first three quintiles have very low household income, with a maximum of 1.9 minimum wages. The maximum income seen in quintile 3 is RD\$ 25,800, an amount which is below the average household food basket.<sup>34</sup> In terms of housing costs, quintiles 1 and 2 spend over 30 percent of their income on housing rental. Specifically, quintile 1 spends 123 percent of its income on housing rental, which means that without social assistance or remittances these households would not have access to housing. An interesting fact is that across all quintiles there is a high percentage of renting households (between 34 percent and 43 percent).

**Remittances have an important impact on the income of Dominican households.** Table 7 considers all types of household income, including remittances, social assistance payments, and private assistance payments. One of the major variations is the expenditure weight on rental with respect to income in Quintile 1. When considering remittances, social assistance payments, and private assistance payments, this percentage goes down from 123 percent to 62 percent. However, Quintiles 1 and 2 continue allocating over

<sup>33</sup> Excluding household income from social programs, remittances, or private assistance payments.

<sup>34</sup> The Central Bank estimates the cost of household food basket for Household Income Quintile 3 at RD\$ 36,936.17 on December 2020 (while for Quintile 1 it is RD\$ 21,791.97).

#### Table 6. Characteristics of households by quintile, based on labor income and dividends

	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5
Population	2,108,014	2,067,188	2,090,168	2,084,415	2,086,993
Households	895,926	741,440	651,015	587,930	551,544
Percentage of renting households	34.27%	35.93%	42.87%	40.69%	34.11%
Percentage of rental income **	123.09%	34.56%	23.17%	16.76%	12.33%
Percentage of imputed rental as a share of total household income **	26.40%	7.77%	4.08%	2.83%	2.16%
Average monthly income*	DOP 2,829.78	DOP 12,624.90	DOP 21,013.76	DOP 33,207.67	DOP 79,703.09
Median monthly income	-	DOP 12,779.62	DOP 20,916.67	DOP 32,500.96	DOP 62,500
Minimum monthly income	-	DOP 8,666.92	DOP 16,643.97	DOP 25,801.74	DOP 42,619.81
Maximum monthly income	DOP 8,666.67	DOP 16,636.67	DOP 25,800	DOP 42,613.71	DOP 559,293.87
Minimum wages (range)***	< 0.81	0.81-1.55	1.55-2.40	2.40-3.97	3.97

Source: Developed by the authors, based on ENCT 2020 (Quarters 1, 2 & 3).

Notes: \*Income used to calculate the segments has been constructed based on the amounts perceived by both primary and secondary labor occupation in cash and in kind in addition to income associated with rental income or dividends. Income from remittances, public or private assistance payments, and imputed rent are excluded. The quintiles have been constructed on the basis of family income. \*\* The percentage of rental income in Quintile 1 shows values over 100 percent given that income from assistance or remittances is not considered in this table. \*\*\* The minimum contributable salary is RD\$ 10,730. The Annex shows the methodology for creating the variables presented in Tables 6 and 7.

# Table 7. Characteristics of households by quintile, based on total household income 2020, based on labor income and dividends

	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5
Population	2,087,952	2,087,068	2,087,341	2,087,649	2,086,767
Households	897,840	728,669	651,930	600,082	549,336
Percentage of renting households	49.85%	39.22%	36.28%	34.71%	27.79%
Percentage of rental income	61.71%	34.64%	23.53%	18.99%	13.61%
Percentage of imputed rental as a share of total household income	11.43%	9.50%	6.70%	4.50%	3.16%
Average monthly income	DOP 12,013.10	DOP 20,995.59	DOP 29,419.42	DOP 42,167.68	DOP 90,485.95
Median monthly income	DOP 12,761.93	21,015.78	DOP 29,167.12	DOP 41,665.94	DOP 72,008.83
Minimum monthly income	-	DOP 17,134.36	DOP 24,864.62	DOP 34,595.13	DOP 52,560
Maximum monthly income	DOP 17,132.60	DOP 24,864.04	DOP 34,590.83	DOP 52,547.05	DOP 579,268.65
Remittance as percentage of household income	21.37%	12.25%	10.26%	7.73%	3.86%
Social assistance as percentage of household income	11.09%	10.45%	8.70%	6.21%	2.65%
Minimum wages (range)	<1.60	1.60 a 2.32	2.32 a -3.22	3.22 a -4.90	>4.90

Source: Developed by the authors, based on ENCT 2020 (Quarters 1, 2 & 3).

Notes: Income used to calculate household income quintiles in this table includes all income components as shown in Box 1. Quintiles have been constructed based on household income.

30 percent of their income to housing rental. Moreover, remittances and social program assistance have an important impact on income across all quintiles. For Quintile 1, remittances account for over 20 percent of household income.

**Remittances also play an important role in the economy of the DR.** By the end of 2020, remittances accounted for 10.4 percent of GDP, and despite the COVID-19 economic crisis, during that year remittances had the highest growth over the last decade (Banco Central de la República Dominicana, 2020). Given the importance of remittances in household income, in May 2021, *BanReservas* launched the Remittance Mort-gage Loan, enabling remittance-receiving households to apply for a mortgage loan to purchase a low-cost home (Diario Libre, 2021).

# 3.6 Formal housing is not affordable for a substantial percentage of the population

**Formal housing is unaffordable for households earning less than three minimum wages.** To better understand housing affordability in the DR, this section presents data on supply, demand, and household income. Based on this analysis, it is concluded that there is a significant gap between supply and affordability, especially for households that earn less than three minimum wages.

Historically, the housing market has focused on supplying housing for the upper-middle- and upper-income segments, but this trend is changing. The Mortgage and Trust Market Development Law has increased the supply of low-cost housing. However, a significant percentage of the population still must turn to the informal housing sector or to rental housing to fulfil their housing needs. According to a study by ACOPROVI (2013), in 2012, 58 percent of the national housing supply was priced above RD\$

Purchase Price (RD\$)	Units	% of Total	Total M <sup>2</sup>	M²/Unit
Less than 1 million	944	9%	52,412 m <sup>2</sup>	55.5
1 - 2 million	3.614	36%	253,992 m <sup>2</sup>	70.3
2 - 4 millions	2.347	23%	208, 962 m <sup>2</sup>	89.0
More than 4 million	3.258	32%	494,326 m <sup>2</sup>	151.7
Total	10.163	100%	1,009,692 m²	

#### Table 8. Distribution of housing for sale by sales price in 2019 (Santo Domingo Metropolitan Region)

Source: ONE, 2020.

8,600,000—well beyond the purchasing power of most households.<sup>35</sup> However, according to a survey conducted by ONE, the landscape has changed significantly in recent years (ONE, 2020). Table 8 shows the distribution of units for sale in 2019 by sales price in Greater Santo Domingo. Table 9 presents an analysis of affordability by sale price.

#### Table 9. Analysis of affordability by sale price

Sale Price (RD\$)	1,000,000	2,000,000	4,000,000
LTV (Percentage)	80%	80%	80%
Loan	800,000	1,600,000	3,200,000
Interest rate (percentage)	10%	10%	10%
Term (years)	20	20	20
Monthly payment	DOP 7,720	DOP 15,440	DOP 30,881
Payment as % of income	30%	30%	30%
Required monthly income	DOP 25,734	DOP 51,468	DOP 102,936
Income in minimum wages	2.4	4.8	9.6
Quintile of income*	Quintile 3	Quintile 4	Quintile 5

Source: Developed by the authors. \* See Table 7.

**Effective demand for new housing is concentrated on the lowest priced units.** The most recent study by ACOPROVI (2017)<sup>36</sup> shows that there is an effective demand for 351,000 units. It defines effective demand as those households willing and able to purchase a home. Out of this effective demand, about 70 percent is for units with a sales price less than RD\$ 2 million and 90 percent falls within the low-cost housing segment, the cost of which is up to RD\$ 4.5 million (see Table 10).

**Most Dominicans cannot afford the cheapest formal housing on the market.** Based on the issuance of the Bono ITBIS, the cost of the cheapest unit sold on the private market in 2020 was approximately RD\$ 1,236,900 (see Section 4.3). With the mortgage terms of the Dominican market, a household income of at

<sup>35</sup> Housing Market Supply and Demand in Urban Areas of the Dominican Republic.

<sup>36</sup> The study covers the local governments of Greater Santo Domingo, Santiago, La Vega, Puerto Plata, Higüey, Punta Cana-Bávaro, and San Francisco de Macorís.

#### Table 10. Effective demand for houses by price (RD\$)

Effective demand	Percentage
124,683	35.5%
120,515	34.3%
70,211	20%
26,703	7.8%
8,984	2.4%
351,096	100%
	124,683         120,515         70,211         26,703         8,984

Source: ACOPROVI, 2017.

least RD\$ 31,830 (3 times the minimum wage) would be needed to purchase this home. This is out of reach for 62 percent of Dominican households.<sup>37</sup> When considering the housing deficit, the barriers along the value chain, and the concentration of effective housing demand on low-cost units, the gap between supply and house affordability becomes evident. A rough estimate of real supply, effective demand, and the population's ability to pay highlights the gap between the lowest and highest end of the housing market (see Figure 11).

Housing affordability is highly dependent on access to long-term financing, and the mortgage market in the DR primarily serves the needs of the highest quintile of the income distribution. The average amount of a loan in the mortgage portfolio in 2020 was RD\$ 2.8 million. With an LTV of 80 percent, the average price of a home is RD\$ 3.5 million. Using market terms of credit, a family group would need an income of RD\$ 90,069 (8.4 times the minimum wage) in order to buy this home.<sup>38</sup>

<sup>37</sup> The estimate assumes an LTV of 80 percent, an interest rate of 10 percent, a term of 20 years, and a housing payment of 30 percent of the family's monthly income.

<sup>38</sup> The estimate assumes an LTV of 80 percent, an interest rate of 10 percent, a term of 20 years, and a housing payment of 30 percent of the family's monthly income.



Figure 11. Estimate of the distribution of effective supply and demand of housing and capacity to pay of dominican households

Source: Developed by the authors.

# 4. New government programs addressing the housing deficit

Housing is one of the priorities of the current administration. In recent months, programs have been launched to address the qualitative and quantitative housing deficit, leveraging public funds amounting to some RD\$ 29.1 billion over 4 years.<sup>39</sup>

## 4.1 Dominicana se Reconstruye

**In September 2020, the GoDR launched** Dominicana se Reconstruye. This plan aims to build and renovate over 30,000 housing units nationwide for low-income households who live in vulnerable areas (INVI, 2021). The plan also envisages improving and building water pipelines. The implementing agency is INVI and the program's budget is RD\$ 1.95 billion. The project is expected to directly create approximately 6,800 jobs. The beneficiary targeting and housing distribution process is being carried out jointly with social organizations and local communities. However, eligibility requirements are not publicly available.<sup>40</sup> INVI is developing an application form (Formularios de Mejoramiento) for potential beneficiaries. So far, works have commenced in all provinces nation-wide, with over 9,000 units already completed.

<sup>&</sup>lt;sup>39</sup> This is comprised of RD\$ 1.95 billion allocated to Dominicana se Reconstruye, RD\$ 11.35 billion to the PNVFF, and RD\$ 15.8 billion to Plan Mi Vivienda. Assuming equal spending each year and a constant GDP for 2020, this investment would represent 0.2 percent of GDP.

<sup>40</sup> These organizations include: Arquitectura Sin Frontera, Asociación Promoción Mujer del Sur, Bayaguana Vivienda Digna, Caritas Diocesana – La Vega, Caritas Dominicanas, Ciudad Alternativa, Federación Junta de Vecinos Puerto Plata, Hábitat para la Humanidad, Instituto Dominicano de Desarrollo Integral, and Santiago Solidario.

## 4.2 Plan Nacional de Vivienda Familia Feliz

**In January 2021, the GoDR launched the PNVFF to support the 4-year development of 62,000 housing units.** MINPRE is the implementing agency and its program budget amounts to approximately RD\$ 11.35 billion. In the first year, 11,000 low-cost houses are expected to be delivered, with a public contribution of RD\$ 1.8 billion.

The PNVFF uses the ABC model advocated by the Development of Mortgage and Fiduciary Market Act. To buy his/her new home, the beneficiary covers the mortgage down payment using his/her own savings (between 2.5-10 percent of the home price), receives an initial government subsidy (between 18-33 percent of the purchase price), and takes out a 20-year mortgage loan from a participating financial institution to cover the difference in the purchase price. The initial government subsidy is made up of Bono ITBIS, Bono Inicial Familiar, and Bono Mujer. Additionally, beneficiaries also receive a 7-year subsidized interest rate. Program beneficiaries may purchase a home in selected urban developments under public-private partnerships built on state or private lands.

The PNVFF offers four types of housing depending on household income. Table 11 summarizes the different types of houses offered by the PNVFF. PNVFF eligibility requirements are: (i) Dominican citizenship; (ii)

#### Table 11. PNVFF summary table

	Subsidized housing (VS)	Priority interest hou- sing (VIP)	Social interest housing (VIS)	Low-cost houses (VBC)
N° of dwelling units	7,000	14,000	23,000	18,000
House size	Starting from 25 m <sup>2</sup>	Starting from 35 m <sup>2</sup>	Starting from 40 m <sup>2</sup>	N/A
Purchase price	RD\$ 850,000	Less than RD\$ 1,400,000	Up to RD\$ 2,250,000	Less than RD\$ 4,500,000
Initial subsidy (percentage)*	37%	27%	20%	7% <sup>b</sup>
Down payment (percentage)	2,5%	7%	10%	12%-13%
LTV (percentage)	60,5%	66%	70%	70%
Subsidy rate	5 percent subsidy at market interest rate for 7 years	5 percent subsidy at market interest rate for 7 years	4 percent subsidy at market interest rate for 7 years	N/A
Loan term	20 years	20 years	20 years	20 years
Minimum wages	Up to 1.5	Up to 2.5	Up to 4.5	Up to 8.5
Fuente: ONE (2020).				

18 years of age; (iii) possession of a national ID and electoral ID card; (iv) DGII- and National Directorate of Cadastral Surveys-certified first-time buyer status; and (v) income commensurate with the cost of the selected housing, which is segmented according to consolidated family salary levels. Dominicans residing abroad may apply.

**For housing development purposes, the PNVFF utilizes the trust legal structure,** whereby the public and private sectors establish specific trusts for developing low-cost housing projects.<sup>41</sup> Under this model, the public and private sectors share the risks, making low-cost housing investments more profitable. MINPRE is the program's implementing body. The following are under MINPRE jurisdiction: (i) FONVIVIENDA, which manages, administers, and regulates the PNVFF, and also pays the various subsidies to the beneficiaries of the program (FONVIVIENDA is responsible for defining and executing the contracts with the selected housing developers and the specific trust funds for each project—the contract defines the number of housing units to be financed in each project and the characteristics of the housing projects); (ii) URBE, which evaluates the housing projects submitted by the developers to verify compliance with the PNVFF's urban feasibility requirements, as well as technical, legal, and financial feasibility; and (iii) the Mortgage Development and Trust Commission, which is in charge of the technical supervision and progress of projects and submits progress and implementation reports on each housing project to FONVIVIENDA on a regular basis upon which partial disbursements of the initial subsidy will be authorized. Progressing with Solidarity (PROSOSLI, or Progresando con Solidaridad), an entity under the Office of the President of the Republic, receives and reviews the beneficiaries' applications to confirm their eligibility, in addition to overseeing beneficiary selection.

The PNVFF's design reflects a number of international best practices for scaling up access to affordable housing for low-income families. These include: the ABC model, market segmentation by income level, progressive subsidies, utilization of vacant public land, private sector engagement, and expansion of private financial markets. It is important to note that to the extent that the PNVFF might consider the ABC model, it excludes lower-income households that have neither savings nor access to a mortgage loan from commercial banks.

### 4.3 Plan Mi Vivienda

In April 2021, the GoDR launched the *Mi Vivienda* program with the goal of building more than 7,500 houses that will benefit approximately 25,000 people. INVI is the implementing agency and the program budget is estimated at RD\$ 15.8 billion.<sup>42</sup> INVI-run Mi Vivienda also utilizes the trust legal structure—BanReservas will finance housing project developers and beneficiaries.

Similarly to the PNVFF, *Mi Vivienda* is based on the ABC model. To access a house, the beneficiary covers the down payment using his/her own savings (5-7.5 percent of the purchase price), is granted a package of subsidies (totaling 50-60 percent of the purchase price), and takes a 20-year mortgage loan from BanReservas (35-42.5 percent of the purchase price). The bundle of subsidies is comprised of a Mi Vivienda "grant," the Bono ITBIS, and a reduction in the sales prices through the subsidies infrastructure. Table 12 summarizes the characteristics of the program. A beneficiary's eligibility requirements include: (i) Dominican citizenship,

<sup>41</sup> This is similar to the development model used in Ciudad Juan Bosch.

<sup>42</sup> Speech by President Abinader at the start of the first *Mi Vivienda* construction project on April 27, 2021.

(ii) being of legal age, (iii) not being a homeowner, and (iv) a fixed income in excess of three minimum wages per household. Applications are received through the Mi Vivienda website and eligibility is confirmed through the Unique System for Beneficiaries (SIUBEN, or *Sistema Único de Beneficiarios*).

#### Table 12. Mi Vivienda summary table

	2 bedrooms	3 bedrooms
House size	52.30 m <sup>2</sup>	72.60 m <sup>2</sup>
Purchase price	1,500,000.00	2,000,000.00
Total subsidy package	60 percent (900,000.00)	50 percent (1,000,000.00)
Down payment*	5 percent (75,000.00)	7.5 percent (150,000.00)
Loan mortgage	35 percent (525,000.00)	42.5 percent (850,000.00)
Installment payment	5,947.00	9,173.00
Annual interest rate	8 percent fixed rate for the first 6 years	8 percent fixed rate for the first 6 years
Loan term	20 years	20 years
Monthly income	No more than RD\$ 40,446.00	From RD\$ 40,447.00 through RD\$ 67,410.00
Minimum wages	Up to 3	Up to 5
Source: https://www.mivivienda.gob.do/.		

\* To be paid off in 10 months.

**There are 5 residential developments under construction.** These are located in Hato Nuevo, Ciudad Modelo, San Luis, Los Salados, and La Barranquita, totaling some 7,544 units with 2 and 3 bedrooms ranging from 52 to 72 square meters. Sales prices are projected at RD\$ 1.5 million and RD\$ 2 million, respectively. In contrast to the PNVFF, which uses a PPP Model, the development of these residential complexes is being ca-

rried out via public procurement. <sup>43</sup> The residential developer is responsible, among other tasks, for all design and construction works relating to the project, including internal and external infrastructure.<sup>44</sup> In addition to other tasks,<sup>45</sup> the Mi Vivienda Trust Fund is responsible for awarding Mi Vivienda subsidies to homebuyers.

# **5. The Way Forward: Strategic Priorities**

The Dominican housing sector is evolving, and the government is making great strides in improving its performance and reducing the housing deficit. The Bono ITBIS has sparked a new, albeit small, low-cost housing market developed by the private sector, and it has increased the scale of solutions needed to meet the growing demand for housing. However, it is not a model of housing supply that can reach the poorest segment of the population. The new law establishing MIVHED has the potential to enact institutional coordination and define the country's housing policy in a comprehensive way. In addition, sector-wide public investment has grown significantly with the introduction of new housing programs—which can be very valuable if it can be maintained over time. Recommendations are outlined below to make sure the current momentum to improve the housing sector's performance is successful.

## 5.1 Rationalize sector-wide stakeholders, agencies, and resources

Despite the progress made, it is necessary to continue working towards a simplified institutional framework which maintains channels of communication between the private and public sectors. The bill to establish MIVHED may be a significant stride in streamlining and organizing the housing sector. However, there is a risk that the new ministry may further exacerbate institutional complexity if the existing stakeholders are not fully integrated in its structure. On one hand, INVI, the institution intended to become part of MIVHED, is proposing the Mi Vivienda program, and on the other, MINPRE is proposing the PNVFF. It is expected that MIVHED's financial arm will be INFAMICASA, with a director appointed by the President, while MINPRE's financial arm for housing matters is FONVIVIENDA. As a result, it appears that there are overlapping mandates, different hierarchies in policy-making, and competition over resource allocation between two large institutions.

For MIVHED to perform its duties effectively, including "directing and coordinating the formulation, monitoring, and evaluation process of decent housing, human settlements, and building policies," it is recommended that an institutional framework be developed that leads to future consolidation of agencies and programs. That said, any alternative option should involve the harmonization of programs and mandates in which one entity focuses on housing production through the ABC model and another focuses on programs that serve the base of the pyramid.

<sup>43</sup> Fideicomiso Mi Vivienda, Pliego De Condiciones, Procedimiento de Selección para la Contratación de Desarrolladores de Proyectos Inmobiliarios para la Construcción de Soluciones Habitacionales de Bajo Costo del Programa "Mi Vivienda." Reference Number FMV-PS-2021-001. April 26, 2021.

<sup>44</sup> Additionally, the developer is responsible for (i) ensuring correct titling of the houses; (ii) processing all permits and licenses as needed; (iii) obtaining the low-cost housing project status from INVI; (iv) registering the project with DGII and carrying out all the necessary steps to enable homebuyers to apply for the *Bono* ITBIS they may be eligible to receive; (v) assisting in processing the *Bono* ITBIS for each homebuyer; (vi) formalizing the promise to sell and home purchase agreements with homebuyers (to be selected exclusively by INVI); (vii) conducting mortgage payment procedures (homebuyers are required to make monthly payments into dedicated bank accounts); and (viii) delivering houses to new homebuyers.

<sup>(</sup>i) Entering the land sales agreement with the developer; (ii) screening and selecting potential homebuyers; (iii) determining home purchase prices; (iv) making advance payments and providing measurements to the developer; and (v) collaborating with agencies to help obtain licenses, permits, authorizations, and subsidies.

Additionally, as part of the ecosystem of institutions involved in the housing sector, it is recommended that a formal channel be established for the private sector and the public to be involved in the development of policy. This is something that the GoDR has done in the case of the PNVFF, as local NGOs including Ciudad Alternativa and Habitat for Humanity, as well as the financial sector, have been part of the program's development.

# 5.2 Create solutions to tackle the qualitative deficit

Although there is debate about how to estimate the housing deficit, some overall characteristics are clear. For example: most of the housing deficit is qualitative (deficiencies in basic services and substandard quality of building materials), the stock of low-cost housing produced by the market fails to meet demand, and the challenge of reducing the housing deficit is largely an urban problem.

The new government-driven housing programs primarily address the quantitative deficit. However, it will be vital to pay more attention to the qualitative deficit. The programs focusing on new housing construction are important since the DR suffers from a significant quantitative housing deficit and new housing construction has an important impact on the economy and job creation. However, the government should also pay more attention to the qualitative housing deficit and push for a stronger agenda for slum upgrading and home improvement. These types of programs are key to improving the housing sector's resilience to natural disasters and improving the quality of life of the most vulnerable households. The same fiduciary structures created for the PNVFF could also be used to finance investment in the social infrastructure that these neighborhoods need in order to become urbanized. Also, given that the qualitative deficit is characterized by remediable deficiencies in basic services, there is a window of opportunity to strengthen water and sanitation services. As part of the rationalization and consolidation of housing institutions and programs, it is recommended that programs to expand basic services for informal neighborhoods be considered. As a result, the construction of housing would be a response to the urbanization and urban integration of these neighborhoods.

# 5.3 Harmonize new housing programs to maximize their scope and optimize public resources

The government's new housing programs are ambitious, but a major harmonization is required in order to address the significant housing deficit. These programs range from the traditional government-funded provision of dwellings and home improvements to public-private partnerships expanding access to new affor-dable houses for lower-income households. Nevertheless, are these programs addressing the needs of households with housing deficits? Are scarce public resources being allocated in the most efficient and effective manner to bridge the housing gap? To answer these questions, an assessment of existing and new housing programs is encouraged to identify gaps and overlapping areas. Table 13 provides a brief comparison of new housing programs announced in the last year.

As part of the housing program evaluation, it is also advisable to analyze the overall government subsidy for each program. It is important to keep track of "hidden" subsidies, such as free or low-cost public lands, the provision of infrastructure and services to new communities, and reduced interest rates offered through public banks. Once the total subsidy per program is determined, it is possible to ascertain the actual

### Table 13. Comparing new housing programs

	Dominicana se Reconstruye	PNVFF	Mi Vivienda
Legal Entity	N/A	Trust Fund	Trust Fund
Management	INVI	MINPRE	INVI
Budget	RD\$ 1.95 billion	RS\$ 11.35 billion	RD\$ 15.8 billion
Number of Beneficiary Households	30,000	62,000	7,500
Type of Housing Solution	Home Improvements & New Houses	New Houses	New Houses
Beneficiary Income Level	Undisclosed	1.5-4.5 Min. Wages	3-5 Min. Wages
Purchase Price Per Unit	RD\$ 0	RD\$ 850,000 – 2,250,000	RD\$ 1,500,000 – 2,000,000
Type of Subsidy	Grant	Bono ITBIS, Bono Inicial Familiar, Bono Mujer, Bono Tasa	Bono Mi Vivienda, Bono ITBIS, Plot of Land, Infrastructure, (+ reduced interest rate through BanReservas)
Subsidy to Beneficiary (Demand Side)*	-	RD\$ 296,000 – 450,000	Unpublished
Subsidy to Supply of Unit**	RD\$ 65,000	-	Unpublished
Total Subsidy	RD\$ 65,000	RD\$ 296,000 – 450,000	RD\$ 900,000 - 1,000,000***
Subsidy as Percent of Purchase Price	100 percent	18-33 percent	50-60 percent
LTV	0 percent	60-70 percent	35-42.5 percent
Loan Interest Rate	N/A	4-5 percent subsidy at market interest rate for 7 years	8 percent fixed for the first 6 years
Buyer Financing Source	N/A	Participating Financial Institutions	BanReservas
Provision of Lands	Public	Public and Private	Public
Urban Development Approach	Contractors	Public–Private Partnerships	Contractors

Source: Developed by the authors.

\* Demand-side subsidies are those provided to buyers to enable the purchase of a housing unit at market price. \*\* Supply-side subsidies reduce the price at which housing is delivered (below market price). \*\*\* This does not include a quantification of the below-market rate loan provided by BanReservas.

subsidy per beneficiary and then lay out a more efficient segmentation of these beneficiaries by the different income levels found across the housing deficit. For example, based on data in Table 12, the public subsidy per housing solution runs between RD\$ 65,000 and RD\$ 1,000,000.<sup>46</sup> While both the PNVFF and Mi Vivienda employ the ABC model, there appears to be a 2-3 times difference in public subsidy per unit between these two programs.

## 5.4 Overcome obstacles in property registration and building permits

Land tenure security is critical to develop an effective housing market and to ensure decent housing. The benefits associated with legal security in land tenure include easier access to credit, greater household willingness to invest in home improvements, and greater capacity to demand basic services. It also contributes to the social stability and economic growth of the country (De Soto, 2000; Habitat for Humanity, 2006). Thus, the success of the PNVFF and Mi Vivienda depends largely on the Government's ability to grant property titles for these new houses and to improve the property registrwation and construction permit systems. Specifically, for the PNVFF, MINPRE has made a collaboration agreement with the JI to expeditiously work on the titling of public land and the titling of PNVFF projects.

The DR has made great strides to improve and modernize its cadastral and land registry system. However, the challenges concerning land tenure insecurity are still daunting. Therefore, it is necessary to continue strengthening the system so that it works in a coordinated manner, with clear roles for the agencies involved. It is vital to continue the work of digitalizing, automating, and simplifying the processes for access to land titling. Additionally, the modernization of cadastral and land registry systems should be carried out in close coordination with the modernization of spatial and land-use planning tools discussed in Note 2 on a new territorial order in the Dominican Republic. On the other hand, in terms of construction permitting, it is necessary to standardize the developed processes and standards, as well as to build local governments' capacities with respect to urban planning and the generation of land-use documentation that can guide the construction of housing.

Immediate actions to ensure the success of the PNVFF and *Mi Vivienda* include:

- Ensure that new housing units have valid title deeds at the time of delivery to beneficiaries—which is required to obtain a mortgage loan) this is already a requirement for the PNVFF .(A policy of *prehorizontalidad* could help reach that goal.
- Enhance VU capacity for more efficient processing of licenses and permits.
- Establish agreements between the national government and local governments, especially those with lower capacity, to guarantee more expeditious processes and ensure local approvals are technically supported—especially in PNVFF projects that are executed with contributions from the GoDR.
- Standardize and strengthen the environmental assessments required to obtain an environmental license, including uniform construction standards that provide greater thermal efficiency for the houses to be built.

<sup>46</sup> Note that there is a mismatch between the budget per beneficiary (as publicly announced) and the program-defined subsidy per beneficiary. For example, the *Mi Vivien-da* budget of RD\$ 15.8 billion divided by the planned 7,500 beneficiaries implies a per beneficiary benefit of RD\$ 2,100,000 rather than the RD\$ 900,000–1,000,000 subsidy defined by the program.

• Create incentives to adopt energy optimization and water efficiency technologies in housing projects in such a way that sustainability provides savings for future maintenance costs.

### 5.5 Bring housing finance down-market

Based on the affordability analysis discussed in Section 5, an ABC subsidy program has the potential to further expand access to housing in the DR. The PNVFF and Mi Vivienda present the opportunity to efficiently use public funds by leveraging private sector capital. It is a model that has had positive results regionally (e.g., Chile, Mexico, and Colombia) as well as globally (e.g., Indonesia and Egypt). These types of programs have succeeded in expanding the long-term housing finance market down to lower income segments beyond those traditionally served by private banks.

Given the degree of informality seen in the Dominican labor market, it is recommended that approaches to bringing informal income households into ABC programs be evaluated. Assessing informal employees poses challenges for financial institutions as income may be irregular and unpredictable, potential clients may lack documented credit history, and the loan size requested may be lower than the portfolio average—which is costly for the bank. However, a variety of financial technologies can offer solutions for collecting data on income, expenses, and savings needed to build the client's credit history. Additionally, they can be accompanied by insurance and/or state guarantees that allow a better credit rating to banking entities. A notable experience in using technology to facilitate the assessment of informal income households has occurred in India (for example, India Shelter).

Remittances are a significant inflow of resources for the DR economy and for low-income families. However, based on the available literature, the impact of remittances on housing investment is unclear. On one hand, a 2008 World Bank analysis concluded that remittances to the DR have no significant impact on the household expenses of the home (Fajnzylber and Lopez, 2008). On the other, according to meetings with various financial entities in the DR, the diaspora plays a very important role in the sale of houses, and financial entities have developed programs specifically to support them. An updated evaluation of the use of remittances in the DR and the opportunity they can offer to the goal of eradicating the housing deficit is recommended—and could better calibrate the destination of the remittances in accordance with the different income levels of the population. That said, in concept, remittance-based loans usually come in two forms: (i) the loan is given to a remittance recipient and included as part of their bank's income assessment, or (ii) the loan is given to a person working abroad, i.e., the diaspora. There are interesting experiences in Mexico (Tu Vivienda en México; Sociedad Hipotecaria Federal), Peru (Fondo Mi Vivienda), Ecuador (Banco Solidario), and India (programs for non-resident Indians, i.e., the diaspora).

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### Annex

Structure of Income for Measurement of the Monetary Poverty Line

#### 1. Monetary Income From Labor

a. Monetary income from primary occupations, both for salaried persons and the self-employed. This information is obtained from section 4 of the survey.

It consists of three components:

• Monthly monetary income from primary salaried occupations (B.4.2)

This is declared income, or, if it hasn't been reported, imputed income. Here, the salary reported by the respondent is used. If the information hasn't been provided, it is imputed. If the salary is paid in a currency other than the local one, it is converted using variables created with the exchange rate for each currency against historically recorded currencies (at the time of this publication, income was recorded in US Dollars, Canadian Dollars, Swiss Francs, Euros, and Argentine Pesos).

Because the reported pay-periods vary, the amounts are standardized as monthly. The questionnaire recognizes four pay-periods: daily, weekly, biweekly, and monthly. In order to standardize the responses for a monthly period, the number of days (question B.3.1) and hours (question B.3.2) are taken into account.

- Declared or imputed (in the case of missing information) monthly income from primary occupations (B.5.2) of independent agricultural/livestock workers and contractors
  Independent agricultural/livestock workers are asked about their total income for the last six months. The monthly amount is computed by dividing by six. If the figures have been given in a foreign currency, they are first standardized as monthly and then converted into Dominican Pesos
- Monthly monetary income from the primary occupations of the employed and self-employed (B.5.3) For the self-employed, monthly income is requested. If the information is given in a foreign currency, it is converted to the local currency. The survey requests that income from commissions, tips, overtime pay, and other sources be given in monthly amounts.
- b. Monthly monetary income from commissions in primary occupations (B.4.3)

at the exchange rate for each of the six months preceding the survey.

- c. Monthly monetary income from tips in primary occupations (B.4.3)
- d. Monthly monetary income from overtime in primary occupations (B.4.3)

Income from vacations, allowances, year-end bonuses, dividends, fringe benefits, and profits are standardized to a monthly period by dividing by 12.

- e. Monthly monetary income from paid vacations in primary occupations (B.4.4)
- f. Monthly monetary income from allowances in primary occupations (B.4.4)
- g. Monthly monetary income from year-end bonuses in primary occupations (B.4.4)
- h. Monthly monetary income from dividends in primary occupations (B.4.4)
- i. Monthly monetary income from fringe benefits in primary occupations (B.4.4)
- j. Monthly monetary income from business profits in primary occupations (B.4.4)

#### 2. In-Kind Income From All Labor Occupations

For in-kind income, respondents are asked to provide the cash equivalent per month.

- a. In-kind income of additional monthly food from primary occupations (B.4.5)
- b. In-kind income of additional monthly housing payments from primary occupations (B.4.5)
- c. In-kind income of transportation costs and additional monthly fuel from primary occupations (B.4.5)
- d. In-kind income of additional monthly cell phone payments from primary occupations (B.4.5)
- e. In-kind income of other additional monthly payments from primary occupations (B.4.5)
- f. Monthly monetary income from monthly in-kind income from salaried secondary occupations (B.7.4)
- g. In-kind labor income for primary self-employed occupations (B.5.5)
- h. In-kind income for workers by SECONDARY self-employed occupations (B.8.5)
- i. Monthly income for independent farmers' and contractors' own consumption and supply (B.8.4)

#### 3. Income From Secondary Employment

The procedure used in this section is similar to the one used for income earned in primary occupations.

- a. Monthly monetary income from secondary employment that is salaried (B.7.1)
- b. Monthly monetary income consisting of other monthly monetary income from salaried secondary employment (B.7.2)
- c. Monthly monetary income from annual fringe benefits in salaried secondary employment (B.7.3)

These revenues are all deflated in the middle of the quarter (the base year for the algorithm used in this publication was 2010). In other words, for the period 2016-01, the base CPI for February 2010 / 2016-02 is used, since it is the first quarter. In the second quarter it is deflated to May, the third to August and the fourth to November.

#### 4. Non-Labor Income (Section 4-D, Part 4-D.1 National Incomes Part D.1.1)

- a. Non-labor monetary income from pension or retirement
- b. Non-labor monetary income from interest or dividends
- c. Non-working monetary income from rentals or rental properties
- d. Non-labor monetary income from national remittances
- e. Non-labor monetary income from government aid, without PAE

The amounts received are calculated as follows: food is primary, followed by school attendance, electricity vouchers, gas vouchers for drivers, household gas vouchers, old-age protection, bonuses for student progress, incentives for higher education, incentives for preventive policing, and programs for the enlisted.

#### 5. Additional Income (Section 4-D, Part 4-D.1 National Incomes Part D.1.1)

The following represent additional income from any of the preceding categories and are collected in an annualized format. In order to standardize them on a monthly basis, these amounts are divided by 12.

- a. Pension payments
- b. National interest
- c. National rent
- d. National remittances
- e. Additional government
- f. Non-labor in-kind income for the help of relatives, non-relatives, and institutions

Non-labor income and additional income, once standardized to a monthly amount, is deflated to the month that corresponds to the half of the applicable quarter.

#### 6. Income From Abroad (4-D.2. Income From Abroad)

To calculate income from abroad, the relevant currencies must be determined and then the given amounts converted to in Dominican Pesos. As above, these are deflated to the middle of the quarter from which the data was obtained.

- a. Monthly pension income from abroad
- b. Monthly income from interest, dividends, and property rental from abroad
- c. Gift income from abroad

Data for remittances is collected for the six months prior to the survey, on a monthly rather than a total basis. We then convert these monthly amounts to Dominican Pesos from the applicable currency. These monthly amounts are then totaled and divided by 6 to derive a standard monthly amount. This must be done for each month in the quarter.

d. Monthly monetary income / remittances from abroad

#### 7. Imputed Rent

a. Probable amount of rental housing that is not rented. (Section 2: Characteristics of the Home, Question 6).

The amount given by the person surveyed is imputed, unless it is a rented home. The amount is deflated as in the previous cases.

# 6. Enhancing the integration of tourism with territorial development

Diana Tello Medina and Alex Pio

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### Introduction

Tourism has been the driving de-facto territorial development tool for the Dominican Republic (DR) since the late 1960s, starting with a state-led, enclave resort model in Puerto Plata. This model was rapidly embraced by the private sector, who then took the lead on developing the all-inclusive enclave of Bávaro-Punta Cana. As a result of these policy priorities, its coastal assets, market forces, and private sector dynamism, the DR has since grown into the Caribbean's leading tourism destination.

However, basic services and infrastructure, particularly in communities surrounding tourism destinations, have not kept up with the sector's growth, threatening the quality of life of the local population, environmental sustainability, and sector competitiveness. Tourism in the DR is largely undiversified, concentrated in a few product types (all-inclusive resorts), source markets (USA), and destinations, with growth continuing to cluster around the same areas.

The Government of the DR (GoDR) has recognized the above sustainability and inclusivity challenges since the early 2000s, and in 2008 developed a sustainable and inclusive tourism policy approach aimed at dispersing the benefits of tourism and diversifying its core products. However, despite a shift in policy priorities and improved planning, the implementation of initiatives has lagged.

In the interest of both territorial development and the tourism sector's competitiveness, these structural and implementation challenges should be addressed in a strategic manner to ensure sustainable, resilient, and inclusive development. This type of development can democratize decision-making and support the tourism sector while addressing local needs and promoting a sustainable ecosystem. To do so will require a context-specific approach, utilizing different tools in different areas of the Dominican Republic. Tourism development approaches should be customized based on a destination's unique context and development stage, and supported by more effective local and national institutions.

This note analyzes the tourism sector from a territorial development standpoint in the Dominican Republic, assessing its development trajectory and approaches to support local economic development, while informing the next generation of territorial and tourism development policies and tools. It reviews national-level frameworks for place-based tourism development, with a focus on the four provinces of Samaná, Santo Domingo, La Altagracia, and Puerto Plata as examples of destinations at the emerging/involvement, development, consolidation, and rejuvenation stages.

# **1. Tourism policies have been used as territorial development tools in the Dominican Republic since the late 1960s**

Tourism policies have been dependably used as a territorial development tool in the Dominican Republic (DR) since the late 1960s. Tourism in the Dominican Republic began in the 1940s with the construction of state-owned hotels, mainly around Santo Domingo. An unstable political and social context led to stagnation in the emerging sector for two decades. In 1966, tourism regained prominence and was catalyzed by an ambitious infrastructure program predicated on a polycentric territorial development approach, effectively focusing sectoral development outside of the capital region, which, by then, was the main driver of national economic growth. In 1971, a law establishing tourism poles was passed, and five tourism growth poles were



#### Figure 1. As of 2020, the DR has tourism poles in nine of the ten administrative regions

Source: MEPyD Diagnóstico Política Turismo 2020.

targeted for development—with Puerto Plata being the first in 1972. As of 2020, there are 10 tourism poles in the DR, according to Law 158-01 (see Figure 1). They are located in nine of the ten administrative regions in the country.<sup>1</sup> During the subsequent decades, the DR has followed different approaches to promoting tourism (see Annex 2 summarizing key tourism milestones in the DR since 1978).

The first in a series of evolving tourism development approaches occurred in Puerto Plata. It was state-driven—a tourist enclave approach with heavy public sector intervention. Its development was facilitated through planning and public investment in access infrastructure, namely the national roads network and the establishment of international airports. First was a new road and airport in Puerto Plata to encourage tourism development in the *Playa Dorada* area, which was anchored by the 290-room Jack Tar Village Hotel. Box 1 explains the case of Puerto Plata in greater detail.

<sup>1</sup> There is no tourism pole in the El Valle region, which hosts the provinces of Elías Piña and San Juan.

#### Box 1

#### A deep dive into the public-sector-led tourism pole of Puerto Plata

In 1972, Puerto Plata was designated as the first tourism pole in the country. Decree No. 2126 allowed the government to purchase land parcels in the *Playa Dorada* area through eminent domain for public utility (tourism development) and build the destination's infrastructure, which included the airport that opened in 1979, the Jack Tar Village Hotel (1980), the Puerto Plata-Santiago highway, the *Malecón*, and street, aqueduct, port jetty, cable car, and public housing developments.

Puerto Plata quickly became the DR's preeminent tourism destination. It kept this title until Punta Cana's development eclipsed it in the early 1990s. Private sector interest, government prioritization, human resources, and capital turned to this new destination, and Puerto Plata's tourism and economic activity decline began, which included the closure of a number of mills, a slowdown in its free zone, and a reduction in port activity. During this period, investment in tourism facilities and infrastructure lagged in Puerto Plata, further reducing the destination's competitiveness.

**The 2010s brought a second wind to the destination, driven by public sector investments.** These investments were led by a desire to promote a different tourism activity, cruise tourism. The government invested in new cruise facilities, an improved Navarrete-Puerto Plata highway, urban core upgrades, and a new marketing strategy (Ballester, 2019). Public sector investments were coupled by reinvestment from the private sector to rehabilitate hotels. Puerto Plata has fueled the nation's cruise arrival growth in the past 5 years, increasing from 58,912 arrivals in 2015 to 518,121 in 2018, after years of decline prior to its cruise port being rehabilitated by the Ministry of Tourism (*MiTur*)—specifically by the Infrastructure Implementing Committee in Tourism Zones (*CEIZTUR*, the *Comité Ejecutor de Infraestructuras de Zonas Turísticas* in Spanish). (*APORDOM*, 2020).

Puerto Plata still suffers from aging infrastructure and facilities, as well as pollution problems and subpar gastronomy, entertainment, and beachesa. However, its wholesale decline has been reversed, or at least slowed for the time being, thanks to the recent focus on cruises. Puerto Plata remains a budget destination, sustained by package discounting and spillovers from neighboring destinations, with a more price-sensitive clientele than other areas (Padilla & McElroy, 2005), and lower than average occupancy rates (56.4 percent compared to a national average of 68.3 percent in 2019) (Dominican Republic Ministry of Tourism, 2019).

Source: Authors

<sup>°63.5%</sup> of visitors rate tourist services in Puerto Plata as either excellent or very good, compared to the national average of 73.6%. The biggest issues are in food, entertainment, lodging, and beaches. Source: Ministry of Tourism International Visitor Survey, 2018.

The development of Punta Cana marked a diverging development approach led and financed by private investors. The PuntaCana Group, the initial developer of the destination and its leading tourism company, introduced the still-prevailing all-inclusive resort model to the country. The Group financed and owns the Punta Cana International Airport, which opened in 1987, and operates much of the infrastructure and services in the area. Box 2 provides more details on the case of La Altagracia.

#### Box 2

### A deep dive into the private-sector-led tourism pole of La Altagracia (Bávaro-Punta Cana)

The Bávaro-Punta Cana area developed differently from other destinations, as it was a private sector-led initiative. A group of American investors bought 30 square miles of undeveloped land in the late 1960s. They partnered with a Dominican entrepreneur to build its first hotel (consisting of 10 cabins) and a privately-owned airstrip in 1971. Club Med, a French travel and all-inclusive tourism operator headquartered in Paris, built a 350-room resort in 1978. Road connections to other regions came in the late 1970s, and were privately funded by Colgate. The airstrip was upgraded to an international airport by 1984 and soon began welcoming even larger and longer-haul flights (Roessingh and Duijnhoven, 2005). Within decades, Punta Cana went from being a sparsely populated rural area to one of the largest tourism destinations in the Caribbean, its coastline filled with over 60 all-inclusive resorts. It accounted for 57 percent of all hotels in the country and 55 percent of all visitor arrivals in 2019. The PuntaCana Group and its subsidiaries still develop and manage access roads, water provision, electricity, garbage disposal, wastewater, and schools in the area.

This rapid, largely unplanned, private-led development led to inefficient and uncontrolled urban expansion, which has resulted in social and environmental degradation. Between 1996 and 2003, Punta Cana experienced the largest amount of urban leapfrogging nationally. Unplanned urban expansion has resulted in increasing rising coastal flood risks (see Note 1 of the Urbanization and Territorial Development Review on Urbanization), putting at risk not only the sustainability of the sector in the region, but also the livelihood of citizens.

To address the above, in 2008, MiTur carried out the region's first land-use plan (PSOTT, Planes Sectoriales de Ordenamiento Territorial Turístico in Spanish). The PSOTT encompassed 40km of coastline from Macao to Cap Cana. The plan's objectives were "to utilize natural resources and environmental sustainability as the basis of future development," particularly in relation to water scarcity, soil stability, carrying capacity of beaches, mangrove re-growth, and road connectivity (*IPC. Revista de Inversiones Punta Cana*, 2008). Specifically, it identified a list of investments needed in the region, such as: (i) new road connectivity and traffic management; (ii) an aqueduct; (iii) better management of well-water drilling and operations permits; (iv) the building of a landfill; (v) a transfer station (proposed by the Regional Association of Local Administrations of the Eas-

tern Region); (vi) a recycling plant; (vii) the relocation and improvement of public housing; (viii) the regulation of billboards and advertising signs; (ix) the upgrading of crafts plazas; and (x) the protection of coral reefs, mangroves, and coastal and marine ecosystems.

However, despite an ambitious and exhaustive plan, the implementation of the identified infrastructure has lagged. For example, the much-needed aqueduct has yet to be built, despite years of planning and commitments. Landfills and sewage plants in other regions have similar stories, with the organization of national utility and service agencies leading to mis-aligned incentives and a disconnect between central plans and local actions.

Despite this situation, the region remains the country's (and the Caribbean's) leading tourism destination, with the highest number of visitors (3.5m), hotels (57 percent), and rooms (49 percent, or 40,383 units) nationwide in 2019, and the second-highest occupancy levels (71.3 percent) in 2018 (*MiTur* 2019, 2020). Large-scale tourism investments continue given the favorable (pre-pandemic) returns, the strong Punta Cana brand, and continued enclave-supporting private investment in tourism infrastructure, thereby widening the gap between tourism zones and surrounding communities due to a lack of territorial planning and effective public investment.

Source: Authors

As tourism in the DR evolved, so did the GoDR's destination development approaches. In the late 1970s, tourism began to take off and the number of hotel rooms grew by 529 percent, from 8,500 in the 1980s to 45,000 in the 90s. By 1992, tourism became the country's largest export earner, and the next two decades saw the introduction of a wider toolkit to develop tourism destinations. This tool kit was largely a mix of tax incentives, land-use planning, infrastructure investments, and marketing (see page 11).

The GoDR has been aware of the limitations of the all-inclusive model, and for more than a decade has planned to diversify from its core of sand & sun tourism. The all-inclusive tourism model brings some limitations to the territory, such as resource strains, low in-destination expenditure, as well as seasonality, which has led to social, economic, and environmental challenges. Since 2008, *MiTur* has tried to adopt a sustainable tourism development approach based on the four principles of (Ministry of Tourism Strategic Plan n.d.): (i) sustainable growth—prioritizing responsible growth through strategic planning of the sector and territorial planning of tourism zones while respecting the carrying capacity of the tourism poles and prioritizing quality over quantity; (ii) integrated tourism planning—ensuring the sector is planned in a holistic manner that takes into account broader economic and social plans; (iii) maximizing linkages with the broader economy; and (iv) improving community well-being. However, these four principles have not been fully implemented (see the sections on limitations and challenges). Box 3 shows the current effort by the GoDR to develop a new tourism pole.

#### Box 3

# Planning of Pedernales as a sustainable destination based on resource limits

In the 2010s, the government's master planning of Pedernales, a virgin destination in the southwest, signifies a further evolution in the GoDR's tourism development approach by including prior land-use planning while still focusing on the greenfield enclave resort model (albeit in a way that is better linked with surrounding assets).

**Pedernales is planned as an upscale, sustainable destination**. Pedernales is a rural destination spanning four provinces, including two national parks, and anchored by the homonymous fishing town of 28,000 residents. The plan includes a focus on ecotourism experiences, as well the promotion of green energy, rainwater harvesting, sustainable certifications, inclusionary principles, and community infrastructure improvement.



Source: Authors, using data from Pedernales Tourism Master Plan.

With water availability as a key limiting factor, the plan allows for the initial development of 5,000 rooms (with no more than 20,000 total rooms) to ensure water availability for the destination. The main resort area is set to be in Cabo Rojo, an area with an industrial heritage from bauxite mining and an airstrip that will require upgrading. This master-planned destination is still in the early stages of development. The new administration is championing it as a key flagship project for the current term.

Source: Authors, using data from Pedernales Tourism Master Plan

**In 2016, the GoDR proposed moving towards a whole-of-country approach.** The country was categorized into three regions (plus the capital), each with a thematic route under which their destinations are encouraged to develop related products in order to better operationalize the DR's goals of product diversification and geographic dispersal of tourism and its benefits. The regions are the North and Northwest for community





Source: MiTur, 2020

tourism circuits, the East for sun and sand tourism, the Southwest for nature tourism, and the capital region for Meetings, Incentives, Conventions & Events (MICE) and cultural tourism (see Figure 2).

Following the 2020 elections, the new administration's policy platform continues to prioritize the need to diversify tourism and improve local economic linkages. Under the platform's second pillar, it "prioritizes the sectors that generate jobs and foreign exchange and are dispersed throughout its territories." It recognizes tourism as one of the most effective means to accomplish these goals. It calls for diversification from all-inclusive beach tourism to cultural, ecological, health, education, and business tourism, as well as other types of tourism, and to strengthen economic linkages with communities and other industries, while prioritizing sustainability and improvements in urban infrastructure and basic services surrounding destinations.

The new administration is also making strides in improving tourism's enabling and operating environment. They have acknowledged the need for a "whole of government" approach to developing the sector and its territories, including building local-level capacities for planning and destination management, refocusing *CEIZTUR* on tourism-specific projects, and using real-time market intelligence platforms for monitoring as well as marketing. A high priority is being placed on sustainable coastal zone management to ensure the DR's beaches are safeguarded from climate change, adverse use, and pollution.

# 2. Tourism has been and continues to be a key driving sector for the country's economy

Tourism has grown at a higher rate than the DR's GDP since at least 1994 (see Figure 3a), representing 11.6 percent of GDP by 2019. Tourism is the largest contributor to exports in the DR, with 40 percent of total exports, and the DR's highest foreign exchange earner at 31 percent, bringing in US\$ 7.56bn in 2018 (Atlas of Economic Complexity; Dominican Republic Central Bank). Since 2015, tourism has received around one-third of the DR's total Foreign Direct Investment (FDI). The sector has been successful in creating jobs and revenues (see Figure 3b). Tourism directly employs 7.5 percent of the workforce, with around one in four net new jobs nationally having been created by the travel & tourism sector since 1995 (WTTC, 2020). This includes 180,000 direct employees in hotels and 350,000 direct employees in restaurants<sup>2</sup>. Visitor arrivals have mirrored this trend, growing steadily and peaking at 6.5 million in 2018. They are generally highly satisfied with their experience, with 98.5 percent of visitors saying they would return to the DR (*MiTur* Visitor Survey, 2018). Average daily expenditures for nonresident foreign visitors have been steadily increasing from \$88.15 in 1993 to \$136 in 2019 (*MiTur*, 2020).

Tourism has also fostered other sectors' economic activities by building value chain linkages, with most hotels' food and beverage supplies produced within the DR (Ashley, Goodwin and McNab, 2005). Combining direct and indirect impacts, the tourism sector contributes to 16.3 percent of the total economy (WTTC, 2020). A recent survey of mostly micro and small tourism enterprises in the DR found that 85 percent of firms' main food supplier is located within 50km of their establishment (see Figure 4), and 80.7 percent of firms get all or almost all (over 75 percent) of their supplies nationally (with 71.6 percent getting 100 percent of their supplies nationally).<sup>3</sup> Tourism's multiplier effect means that for every dollar spent directly on the sector, around two additional dollars are generated indirectly in the economy (WTTC 2020; Dominican Republic Central Bank).

<sup>2</sup> Asociación de Hoteles y Turismo de la República Dominicana (AONAHORES) interview. July 2020.

<sup>3</sup> Dominican Republic Tourism Firm Survey. World Bank. 2020.

#### Figure 3. Tourism is key in the DR's economic dynamism Tourism has grown at a higher rate than the DR's GDP since at least 1994 3,100 -GDP growth % 2.350 -1,600 -850 1994 1996 2018 1998 2004 2006 2008 2010 2014 2016

GDP growth

B. Tourism has been successful in creating jobs and revenues (Tourism receipts and jobs, 1980-2018)

Tourism contribution to the indexed GDP (1994 = 100)



Source: DR Central Bank n.d.

Figure 4. Tourism sector has enabled local value chain linkages



#### How far from your firm's premises is your main food supplier located? (% of firms; km)

Source: Dominican Republic Tourism Firm Survey. World Bank. 2020.

# Table 1. Samaná, La Altagracia, Puerto Plata, and the Distrito Nacional play a key role in the tourism sector in the Dominican Republic

Province	Establishments	Hotels	Rooms (2018)	Visitor Arrivals (2019)
Distrito Nacional	21%	10%	10% (8169)	24% (1.521.174)
Puerto Plata	20%	17%	12% (9610)	6% (413.884)
La Altagracia	15%	57%	49% (40.383)	55% (3.524.435)
Samaná	9%	4%	4% (3349)	1% (82.550)
Total	64%	88%	75% (61.511)	86% (5.542.043)

Source: MiTur, 2019; 2020

The sector's dynamism and growth are spatially concentrated in a few destinations. The Bávaro-Punta Cana destination alone accounts for 55 percent of all visitor arrivals, welcoming 3.5 million arrivals in 2019 (Dominican Republic Central Bank, 2020) (see Table 1). The region also has 49 percent of all hotel rooms in the country, with 40,383 units in 2018, which is four times more than the next largest destination (Puerto Plata). Four provinces make up 65 percent of all tourism establishments, 88 percent of all hotels, and 86

percent of all visitor arrivals (Dominican Republic Central Bank, 2020). The proportion of hotel rooms within the four provinces of Samaná, Santo Domingo, La Altagracia, and Puerto Plata have remained relatively constant in the last 20 years. However, Puerto Plata and La Altagracia, the two traditional mass tourism destinations, have seen the greatest absolute growth, doubling their room availability since 2004 (Dominican Republic Ministry of Tourism, 2020) (see Figure 5).



### 3. The DR has recognized the need to move towards a new tourism agenda in order to tackle current challenges

MiTur and the private sector are keenly aware of the economic and sustainability advantages of diversifying products and markets. MiTur has taken diversification as a key approach in its 2018-2021 strategic plan. Its focus is on growing emerging markets (such as Brazil, India, and China) and building diversified offers (such as MICE, golf, cultural, health, and adventure tourism). Product and diversification strategies vary by destination and are based on the destination's specific attributes. For example, Santo Domingo is focusing on MICE tourism, while Samaná targets adventure and ecotourism.

The private sector shares these priorities, with close to 30 percent of tourism firms in the DR (and a higher share in Punta Cana and Puerto Plata) believing that diversifying their products is the most important action for tourism sector growth in their territories (see Figure 6). Product diversification has been developed in a grassroots manner by local entrepreneurs and tourism clusters throughout the nation, as well as by subnational governments. Ecotourism laws have been passed in a number of provinces, as well as laws supporting private protected areas. Thematic routes have been developed, as well as sustainable and rural tourism associations (frequently with donor support), with almost 200 participating ecotourism projects.

However, the DR's approach to diversifying the tourism sector has had limited impact, with tourism remaining highly undiversified, from both supply and demand perspectives. Grassroots initiatives have not been formalized or institutionalized into MiTur's tourism development toolkit. Most new developments con-



Figure 6. What is the most important action for the growth of tourism in your city/province?

Source: Dominican Republic Tourism Firm Survey. World Bank. 2020

Note: The results from Samaná do not constitute a representative sample of tourism firms.

tinue to be large-scale, all-inclusive resort types of establishments, while sea, sand & sun tourism remains almost exclusively the key reason for tourism visits. *MiTur* carried out a visitor survey in 2018 which showed that most international visitors chose the DR due primarily to the quality of its beaches, followed by its hospitality and climate (*MiTur* Visitor Survey, 2018). History, nature, nightlife, ecotourism, casinos, and golf rank at or near zero percent interest (see Figure 7). With the exception of Santo Domingo, which has corporate and business travelers, the findings remain relatively constant throughout the DR's territories. These findings signify a highly undiversified product despite decades of diversification planning. The impact within tourism destinations, in terms of seasonality, local economic development, sustainability, and resilience is manifold.

Strong variances in seasonality put pressure on jobs, local economic development, and the productive use of assets. Seasonality swings for coastal destinations such as La Altagracia, Puerto Plata, and Samaná are similar, with visitation peaking between December and April and falling for the subsequent 6 months (see Figure 8). In La Altagracia, one of the least diversified destinations, visitation drops by two-thirds between peak season and off season. This can lead to oversubscribed infrastructure and facility use followed by severe underuse, the requirement for many temporary seasonal jobs, and difficulty for SMEs without large cash reserves for year-round operation. Santo Domingo's seasonality differs, with less variance and an increase rather than a decrease in the May-July period—most likely due to its more diversified, non-leisure-related visitors.

The DR's reliance on its core product of all-inclusive resorts has created enclaves of economic opportunities, which has excluded certain territories and groups of people from the benefits of tourism. As a result, it is more difficult for smaller players and communities to be directly integrated into the tourism value chain (Cole and Morgan, 2010). A reliance on lower-spend, high-visitor volumes necessitates more





Source: MiTur Visitor Survey, 2018.



infrastructure and public services investments per visitor-dollar spent and can strain a region's resources, particularly water and power, while producing solid and liquid waste at levels that cause environmental damage if not adequately planned for. Research results remain mixed on the impacts of the DR's resort tourism in terms of poverty reduction and inclusive development. Some studies, such as Sasidharan and Hall (2013), found that the resort tourism model of Punta Cana was satisfactory in improving three of the four Millennium Development Goals (MDGs) it studied: extreme poverty, environmental sustainability, and partnerships for development, while León (2007) found a positive correlation between tourism and poverty reduction, with younger, more-educated workers catering to domestic and day-trip tourism showing the greatest impact.<sup>4</sup> Others have shown the opposite, that tourism income has not alleviated poverty or reduced inequality in the Dominican Republic. In fact, Oviedo-García et al. (2019) found that in all-inclusive resort areas, a 1 percent increase in tourism income saw a 0.72 percent increase in poverty and a 0.40 percent increase in the poverty gap, effectively increasing the incidence and intensity of poverty and increasing income inequality by 0.10 percent on the Gini Index.

The tourism sector in the DR is highly vulnerable to global and local shocks. This vulnerability can depend on numerous elements: internally, the strength of its institutions, public-private coordination mechanisms, health and safety apparatus, sector prioritization, and crisis planning, mitigation, and preparedness approaches are key. The rapid urbanization of coastal areas has increased flood risk, which is already the most common disaster type in the DR. Between 1996 and 2015, 25 percent of built-up surface construction in the DR was within 3km of coastlines—reaching as much as 40 percent in Higüey (where Punta Cana is located), which is also the region with the greatest coastal flooding risk.<sup>5</sup> When surveyed, micro and small tourism firms in Punta Cana perceived more risk than other regions, with fewer firms than the average rating the risk at no or low risk (22.1 percent compared to 34.5 percent nationally). They are also more prepared, with 59.6 percent rating their preparedness to cope with such hazards as "a lot or very much" compared to 45.3 percent nationally.<sup>6</sup> Overall, though, firms in the focus regions ranked their risk to natural hazards similarly, with a national average of 35 percent rating natural hazard risks as high or very high, which is less than the Caribbean regional average of 41.8 percent (see Figure 9).

**Diversification is a critical component of the sector's resilience.** By diversifying its markets, products, and destinations, the DR can be less susceptible to shocks in a specific source market, product category, or destination. This has been particularly relevant during the COVID-19 crisis, which has hit the DR hard, with 96.7 percent of tourism firms reporting decreased demand,<sup>7</sup> and 80 percent of firms reporting a decrease of over 75 percent. The DR is the 33rd-most tourism-dependent country in the world, and though it is still too early to know the full impact of COVID-19 on the sector and the Dominican economy, the IDB has estimated that tourism income losses could reach US\$ 26.8bn (10 percent of GDP) counting direct, indirect, and induced impacts (IDB, 2020). In 2020, visitor numbers are estimated to have been reduced by 62.7% compared to 2019 (UNWTO, 2019) and are not expected to return to pre-2020 numbers until between 2022 and 2024 (CEPAL, 2020).

The UNDP estimates between 59,000 and 112,000 job losses in 2020, an 18.4 to 35 percent contraction (UNDP, 2020). Close to 80 percent of the tourism firms in the country believe their opportunity for growth is limited or, at best, moderate (this share holds for Santo Domingo and Puerto Plata, with Punta Cana being more optimistic) (see Figure 10 below). COVID-19 may be the tourism sector's most acute crisis, but it

<sup>4</sup> MDG 1 (Eradicate extreme poverty & hunger); MDG 7 (Ensure environmental sustainability); MDG 7 (Develop a global partnership for development). MDG 3 (Promote gender equality and empower women) was not found to be satisfactory. (Sasidharan and Hall, 2013).

<sup>5</sup> Note 1 of the Urbanization and Territorial Development Review. World Bank. 2021.

<sup>6</sup> Dominican Republic Tourism Firm Survey. World Bank. 2020.

<sup>7</sup> Dominican Republic Tourism Firm Survey. World Bank. 2020.



#### Figure 9. How do you rate the risk of natural hazard affecting the premises of your firm?

Source: Dominican Republic Tourism Firm Survey. The World Bank. 2020.

Note: The results from Samaná do not constitute a representative sample of tourism firms.



#### Figure 10. How would you describe the opportunity for growth of your business in the current environment?

Source: Dominican Republic Tourism Firm Survey. The World Bank. 2020.

Note: The results from Samaná do not constitute a representative sample of tourism firms.

is certainly not its first crisis. In 2019 visitation dropped by 1.9 percent (the first reduction in decades) due to a handful of unexplained deaths of tourists from the United States in 2018. Hotel occupancies in La Romana-Bayahíbe and Bávaro-Punta Cana, relatively undiversified beach destinations, dropped by 15.2 percent and 13.5 percent, respectively, between 2018 and 2019, while visitation to Samaná, a more diversified destination, only dropped by 4.3 percent.<sup>8</sup>

Nevertheless, the DR has built up some resilience to crises due to its strong coordination and advocacy bodies. In 2005, the committee on health and tourism (*COSATUR*) was formed in partnership with the Ministry of Public Health to monitor and respond to infectious diseases in tourism zones. *CESTUR*, the Dominican Republic's specialized tourism police, guarantees security in tourism zones. After the 2018 deaths, *MiTur* responded by improving security and undertaking a public-relations campaign touting the safety of its destinations. Hotel hygiene and safety certifications have been developed in response to COVID-19. At the national and provincial levels, tourism security round tables are regularly held with key sector stakeholders, and protocols and plans are reviewed.

# 4. Main challenges: institutions, infrastructure & interventions

When choosing the best tools to promote tourism while supporting sustainable territorial development, the first step is to understand key structural bottlenecks. This section utilizes the 3-I policy framework of the *World Development Report 2009: Reshaping Economic Geography* (World Bank, 2009) to organize both challenges and recommendations. *Institutions, Infrastructure*, and *Interventions*. The way in which policies and programs based on the 3-I framework of Institutions, Infrastructure, and Interventions roll out within a country depends on different factors: (i) the level of fiscal and administrative decentralization within a country; (ii) the stage of tourism development of the country and destination; (iii) the level of homogeneity of the country's tourism assets, products, and markets (within a destination and in comparison to other destinations); (iv) the capacity levels of the subnational government; and (v) the scope and scale of a destination and its relation to administrative boundaries. The 3-I framework refers to:

- i. **Institutions and Regulatory Frameworks**: including laws, regulations, plans, strategies, and agencies, as well as licenses and standards that apply to the entirety of the country's territory.
- ii. **Infrastructure:** including connectivity (roads and airports), basic services (water, electricity, energy, and sewage), and tourist infrastructure (streetscapes, attractions, trails, and museums).
- iii. **Interventions:** location-specific initiatives targeted for destinations and segments, marketing for destinations, training & capacity building, site and destination management, monitoring & evaluation, fiscal investment incentives, and investment promotion.

The following subsections will bring forward the main bottlenecks in the DR for enabling a sustainable tourism sector in the country. The challenges are classified as per the 3-I framework.

Average rate of hotel occupancies by areas (ASONAHORES, 2020)

# **4.1 Institutions are not well equipped to maximize the benefits of the tourism sector**

**4.1.1 Unclear institutional setup for addressing the main challenges and new strategies of the tourism sector** 

**Given tourism's cross-sectoral nature, numerous sectors and levels of government are involved in planning and development.** *MiTur* is in charge of coordinating the planning, marketing, and infrastructure financing and regulation of national and subnational destinations in consultation with destination stakeholders (see Box 4 below for key tourism institutions in the Dominican Republic). In principle, the sector's orientations should be set in national 10-year tourism development plans led by *MiTur* and based on alignment with the National Development Strategy. Given tourism's cross-sectoral nature, numerous levels of government and sectors can be involved in planning and development. Tourism elements also fall within sector plans for the Ministries of Public Works & Communications, Environment & Natural Resources, and Economy, Planning & Development. On paper, subnational destinations could be covered by local and destination-level plans that can come from the provinces or municipalities that include tourism development, urbanization, transport, or other related sectors (Ministry of Tourism Strategic Plan n.d.).

There is lack of clear, institutionalized coordination for planning and investments. Although 10-year national tourism plans have been drafted, none have been validated within the past decade, and there is no overarching guidance on the strategic or systematic development of different plans—how they interface with one another, or which takes precedence at the destination—except for an acknowledgement that destinations should be developed based on the existence of these different strategies and plans. *MiTur* is currently beginning a new planning exercise to produce a National Tourism Plan.

#### Box 4

#### Key tourism institutions in the Dominican Republic

The key public institutions in the Dominican Republic are:

- The Ministry of Tourism (*MiTur*) is the lead entity for planning, regulation, marketing, and development of tourism in the DR. The Ministry of Tourism (*MiTur*), first created in 1969 as the National Tourism Directorate and elevated to a Ministry in 2010, is the institution tasked with the regulation and development of the sector.
- The Infrastructure Implementing Committee in Tourism Zones (*CEIZTUR*) is the implementing arm of *MiTur* for infrastructure and destination development actions.
- The Tourism Development Council (*CONFOTUR*), chaired by *MiTur* and made up of 7 Ministries and Agencies, is the council charged with implementing the tourism incentives law in tourism zones.

- The Specialized Corps for Tourism Security (CESTUR) is a tourism police force specifically for tourism zones.
- The Committee on Health and Tourism (*COSATUR*) is an inter-ministerial committee formed to respond to health crises in the tourism sector.
- The National Institute of Professional Technical Training (*INFOTEP*) provides technical and vocational training to MSMEs and entrepreneurs in a variety of sectors, including tourism.
- The Ministries of the Environment, Public Works, Health, Culture, and *INAPA* (National Institute of Potable Water) are closely involved in matters regarding their domains. For example, they are represented on the *CEIZTUR* committee and the *CONFOTUR* council.
- Local government units have narrow roles in the tourism sector. They are responsible for solid waste collection, electricity, and approving land-use permits for tourism businesses within their jurisdictions. The few municipalities with the capacity and funding to do so invest in improving tourism infrastructure and products.

Source: Authors

**4.1.2** Sectoral, enclave-based planning has led to inefficient and unsustainable tourism growth

The lack of broader municipal or territorial land-use plans, coupled with land-use planning focused merely on tourism needs in enclave areas has led to inefficient, problematic growth. At the destination level, *MiTur* works with local stakeholders to develop tourism development (land-use) plans called PSOTTs, eight of which have been developed so far for Sousa, San Felipe de Puerto Plata, Las Terrenas (Samaná Norte), Cabarete, Miches-El Seibo-Hato Mayor, Punta Cana-Bávaro-Macao, Environmental Unit 2 Macao, and Pedernales, and which cover "Development of infrastructure, development of economic and complementary projects, conformation of a park system, reordering of land use and its density of occupation, scheme of ordering of urban centers, and plan management" (Ministry of Tourism Strategic Plan n.d.). All 8 PSOTTs that have been completed are in need of updating, and the Ministry of Tourism's Projects and Planning Division (*DPP*) are looking to complete a further 15 in the next three years. Seventeen destinations have Strategic Tourism Plans, with a goal of converting them into PSOTTs (see Annex for full listing).

**PSOTTs have many deficiencies, which if left unaddressed, can further exacerbate structural problems.** PSOTTs don't necessarily relate to municipal jurisdictions. They often have their own boundaries as they mainly intend to regulate tourism enclaves— which in many cases also include parts of municipalities<sup>9</sup>. Further, their legal enforcement is disputed and they leave excessive room for discretion. Despite their narrow function, they have become the leading land-use planning instrument on the national level due to the lack of implementation of other spatial plans (see Note 2 of the Urbanization and Territorial Development Review

<sup>9</sup> The... can be seen on the Dominican Republic Ministry of Tourism website http://www.dpp-mitur.gob.do/ci/index.php/pages/mapas

on territorial regulation and planning). As such, communities surrounding tourism zones, which are not included in PSOTTs, often remain inadequately planned and funded, which results in negative impacts for tourism zones (see Box 2 on Punta Cana). Additionally, PSOTTs are carried out with the objective of developing an area for the benefit of visitors and tourism businesses, and do not necessarily take into account the needs or priorities of residents and municipalities. In these plans, urban developments are evaluated in relation to their possible impact on strategic natural elements for tourist activity. As such, they are perceived more as a threat to tourism and the environment than as a complement and support.

Most PSOTTs are often developed reactively in an effort to regulate unplanned growth already occurring in a destination. Much tourism development has been overly rapid and unplanned, particularly with regard to support services, facilities, and urban growth that service the larger resorts (Padilla and McElroy, 2005). Two advances have been made to this process. First, Samaná, positioned as an ecotourism destination, was not planned as an enclave model, despite it being designated a tourism zone (see Box 5 on Samaná). Second, Pedernales, a new, undeveloped destination in the DR's Southwest, is being planned based on strict sustainability and carrying capacity principles *prior* to its development (Ministry of Tourism Strategic Plan n.d.) (see Box 3 on Pedernales).

#### Box 5

#### Samaná

**Samaná is the least visited region served by an international airport**, with 82,550 visitor arrivals in 2019 (1 percent of total arrivals to the country). It is a lush, verdant peninsula known for its nature and adventure tourism, while also boasting idyllic beaches.

The region, historically remote and difficult to reach, has been welcoming small-scale tourism since the early 1990s. In 1994, the province was designated a tourism pole, but its rugged terrain and poor road and air connectivity inhibited its initial growth as a destination.

**Connecting Samaná was key to kick-off the region as a tourism destination.** The opening of its international airport (*Aeropuerto Internacional Presidente Juan Bosch*) in 2006, and improved road connectivity through the *Autopista del Noreste*, spurred an increase in tourism development by connecting the destination to the rest of the country and the world. The pole's early unplanned development has, at times, led to the displacement of local communities, removal of public access to beaches and fishing areas, and unfulfilled expectations of tourism employment (Sambrook, Kermath and Thomas, 1994).

Given its late development and diverse natural assets, Samaná has been championed by the GoDR as an opportunity to eschew the country's traditional focus on all-inclusive resorts and support a smaller-scale and more integrated approach. Development along Samaná's north coast has been regulated since 2007 by *MiTur's* Planning and Projects Department (*DPP*) with regard to building heights, setbacks, and densities (Diario Libre, 2012). In 2018, a special plan to grow Samaná as a green destination was developed by *MiTur* and the office of the president (Ballester, 2018). Infrastructure investments were subsequently made in the form of two modern aqueducts, a promenade, and a road circuit that connects ecotourism sites. Current investments remain in-line with product diversification objectives, including an amphitheater, sports and recreation zones, and a marine center. In 2018, Samaná had 468 tourism-related businesses, including 125 tourism services and recreation and catering establishments, and 116 real estate companies. Tourism currently employs 32 percent of the region's workforce, or 9,525 out of 29,766 jobs (Guillén, 2019).

This strategy has worked, for the most part, with the all-inclusive model not yet picking up widespread traction in the region. The area boasts a diversified product offering, including whale watching, horse trekking, mangrove kayaking, 4x4 safaris, waterfall hikes, coffee, cave tours, museums, and festivals. Whale watching in the Bay of Samaná receives more than 40,000 visitors, generating US\$ 2.3m in park fees, boat transport, and hospitality services (Raschke, 2018) . Samaná has the highest visitor satisfaction of DR's destinations, with 79.5 percent of visitors rating services as excellent (*MiTur* International Visitor Survey, 2018). Concurrently, large-scale developments have continued, aided by the DR's investment incentives. For example, the Rincon Bay development, which was launched in 2019, includes 7 hotel complexes, 4,572 rooms, a golf course, and residential real estate developments. (Rey, 2019)

Source: Authors

4.1.3 Earlier efforts to decentralize were reversed due to poor results, leaving structural gaps

The sector's governance, planning, and development remains relatively centralized, with poorly implemented and partially reversed decentralization from 2008-2013 creating resistance for new efforts. *MiTur* proactively supported decentralization in tourism planning for the 2008-13 period, in-line with the nationwide push. It established several Vice Ministers based in the regions and charged them with developing those destinations. It also created Tourism Promotion Offices (*OPTs*), both overseas and in each tourism region, as well as three regional *DPP* offices in Bávaro, Samaná, and Puerto Plata, along with regional directorates with offices in all provinces (which were mainly charged with issuing tourism business licenses). Decentralizing planning activities to subnational organisms was not successful, mainly due to negative experiences with low capacities at the destinations and the lack of a phased approach for capacity transfers in addition to the fiscal decentralization required to fund these responsibilities. The 2016 designation of the entire country as a tourism development zone in order to focus on multi-destination route development requires a more complex, integrated, and multi-jurisdictional approach not well suited to devolution by traditional administrative boundaries. In a 2016 restructuring, *MiTur* changed the Vice Minister roles from geographic to functional, while still basing them in the regions. However, in practice, these roles remain ill-defined, and Vice Ministers remain key, albeit informal, focal points for their region's day-to-day priorities.

Destination marketing is also centralized within MiTur, which has blunted efforts to produce differentiated place-based initiatives. *MiTur* develops and implements the DR's national branding and promotion initiatives, which are supported by a network of 50 regional and international *OPTs*. The international



#### Figure 11. What is the most important action for the growth of tourism in the Dominican Republic?

Source: Dominican Republic Tourism Firm Survey. World Bank. 2020.

Note: The results from Samaná do not constitute a representative sample of tourism firms.

*OPTs* implement promotional campaigns targeted at key source markets and serve as travel trade liaisons. Each destination has its own state-run tourism promotion website, as well as an OPT. In practice, subnational destination marketing is inefficient. Half of the tourism firms believe that marketing better local offers would promote growth of the sector in the DR, with the share increasing in places like Punta Cana and Puerto Plata to 55 percent and 64 percent, respectively (see Figure 11). The operationalization of subnational *OPTs* is inconsistent and incomplete, without enough input from local-level stakeholders on positioning and promotional campaigns. Promotional budgets, particularly for emerging and pivoting destinations, such as Santo Domingo, are insufficient, and destination stakeholders want to provide more input to localized campaigns. Granular, subnational-level tourism data is scarce, complicating the market intelligence process of crafting and measuring impacts of marketing campaigns, as well as limiting potential investors from making data-based decisions.

**4.1.4** Municipalities have weak capacities and financing in order to actively participate in addressing local challenges

**Municipalities tend to have limited resources, short-term planning horizons, limited technical capacities, and a lack of strategic tourism vision.** Currently, the main touchpoint between local government and the tourism private sector occurs at the issuance of land-use permits—a cumbersome multi-institutional process whereby entities must apply to local government, but if it is within a tourism pole (regardless of whether the applicant is a tourism business), permitting decisions must be guided by PSOTTs and not objected by *MiTur* (and in the case of construction projects, by the Ministry of Public Works, which issues the construction per-

mit). Generally, local governments lack enough resources or capacities to carry out their already narrow roles of basic service provision, given the centralized fiscal resource allocation system (see Note 4 of the Urbanization and Territorial Development Review on Local Governments). Often, tourism initiatives and plans are divorced from infrastructure planning and service delivery for residents and non-tourism areas surrounding or abutting tourism zones. Local governments tend to prioritize resident needs in their investments. However, where capacity and financing exists, they have invested in improving tourism infrastructure. One example is in Santo Domingo, where the mayor has been active in implementing infrastructure upgrades and tourism-related projects, including the 2019 rehabilitation of the capital's waterfront (*Malecón*), and improving public electricity and waste management (see Box 6 on Santo Domingo).

#### Box 6

#### Santo Domingo

Despite being the economic and political heart of the country, Santo Domingo (SD) has traditionally not been a destination for leisure tourism. In fact, international tourism in the DR only took off once gateways circumventing Santo Domingo were opened.

In the past decade, the central government, the Santo Domingo Municipality, and the private sector have been investing heavily in improving tourism infrastructure and facilities. The colonial zone was designated a tourism pole, and since 2012 a US\$ 90m multi-phase Inter-American Development Bank (IDB)-financed project has been implemented to transform SD's historic core with public space and tourism upgrades. Separately, the Municipality has recently completed a multimillion-dollar investment in upgrading the SD *Malecón*. Plans to improve MICE offerings are underway through the establishment of the Santo Domingo Conventions Bureau, as well as greater promotion of SD's vibrant cultural and culinary scene.

Recent highway improvements have also cut travel time to and from key destinations such as Punta Cana, enabling the capital to be packaged as a cultural add-on to traditional tourist itineraries. A bypass road is under construction, with the aim of reducing congestion in the city and better linking tourism regions to each other (East-West). This strategy is finding success, as 2019 saw the highest visitation ever achieved by Santo Domingo, with a strong pipeline of hotel investment (over \$150m invested in the past 3 years to build or renovate properties) and a high-quality, diverse rooms offering.

Source: Authors

As destinations develop and become more sophisticated and differentiated, a gap is emerging in terms of a subnational destination's management function once plans are developed and infrastructure is built. Many destinations, including Santo Domingo, Puerto Plata, and Samaná have *Tourism Clusters* as public-private coordinating and consultative mechanisms, albeit without resources or mandates for implementation. Their effectiveness varies by destination, and their mandate stops at coordination. The lack of a local-level implementing entity has led to issues with beach management, unregulated "*ambulantes*," trash, and a lack of destination dynamism. These issues have only been addressed partially by *MiTur*, *CEIZTUR*, municipalities, and Tourism Clusters—none of which have the purview, incentives, or resources to serve as an effective Destination Management Organization (DMO).

Informality in the sector has increased. Most "comedores" and artisans are informal, and small-scale transport providers and beach sellers (*ambulantes*) are growing. Additionally, there has been an influx of migration to tourism destinations (both internally and from neighboring Haiti) which has also resulted in a growth of informal settlements and coastal encroachment of communities, particularly on sensitive mangrove ecosystems.

### 4.2 Infrastructure is not responding to local needs in tourism regions

**4.2.1** Basic infrastructure has not kept up with tourism growth, which is impacting citizens, firms, and the environment

Despite significant progress, access to services remains a critical challenge across all destinations and extends to other sectors and territories. Inadequate access to water, electricity, and sanitation has improved dramatically in the past twenty years, however access remains unreliable and insufficient, with frequent disruptions (see Figure 12). Disparities in access to services persist between urban and rural areas, as well as across income groups. Nationally, only 28.8 percent of rural households report having 20-24 hours access to electricity versus 67.7 percent in large cities (ONE, 2018). Electricity supply is also more erratic in lower-income households, with 76 percent of high-income households reporting minimal disruptions compared to 37 percent of low-income households.<sup>10</sup> Sanitation services face a similar situation, where only 20 percent of households nationally are connected to sewerage systems.<sup>11</sup>

Public service and basic infrastructure provision have not kept up with the growth in tourism destinations and the surrounding communities. The tourism destinations of Samaná and La Altagracia report lower proportions of households than average connected to public sewerage at 15 percent and 9 percent respectively (see Figures 13 and 14). For more details, see Note 1 of the Urbanization and Territorial Development Review on urbanization. This disparity suggests a failure within national-level frameworks and approaches throughout the basic services provision process, from prioritization to planning, implementation, and management. In solid waste management, for example, there are 350 landfills either facing closures or with precariously poor conditions,<sup>12</sup> many in coastal municipalities or near sensitive waterways, while the DR's Solid Waste Management Law and National Sanitation Strategy have been awaiting approval for years (World Bank Group, 2021).

The inadequacy of utilities and basic services is impacting tourism businesses, reducing their competitiveness. For tourism businesses, the most critical deficiencies are in telecommunications, water provision,

<sup>10</sup> The socioeconomic groups in ENHOGAR are quintile groups built on the valuation of available goods in the household, weighted by current market prices minus a standard depreciation percentage (ONE, 2012).

<sup>11</sup> WHO-UNICEF, Joint Monitoring Programme for Water Supply and Sanitation.

<sup>12</sup> Many municipalities continue to utilize open municipal landfills without impervious materials or the tools to manage lixiviate or dry organic material or to monitor leachates.



#### Figure 12. Household access to basic services (2002-2017)

ource: Note 1 of the Urbanization and Territorial Development Review, with data from Morillo (2019). Original data sources include the 2002 Census, 2010 Census, and 2016 and 2017 ENCFT surveys.





Source: Note 1 of the Urbanization and Territorial Development Review on Urbanization, with data from ENHOGAR 2018.



Figure 14. Percentage of households with garbage service, connection to sewerage and piped water inside the house in Puerto Plata, Santiago, Samaná, and La Altagracia.

Source: Note 1 of the Urbanization and Territorial Development Review on Urbanization, with data from ENHOGAR 2018



#### Figure 15. What is your firm's main source of water for general use? (%)

and sewage and solid waste management. In water provision, for example, only 56.5 percent of surveyed tourism businesses nationally use central distribution as their main source of water, with 19.3 percent relying on water vendors. The rate is particularly high in Punta Cana, with 29.8 percent of firms using water vendors (see Figure 15), as La Altagracia province receives water for 4 hours a day on average, which is far below the 11 hours averaged in other regions (ONE, 2018). Nationally, 42.2 percent of surveyed tourism firms say they would lose 50 percent or more of their daily revenue if water services were shut down for a day, with Puerto Plata being more vulnerable to water disruptions than the other focus regions (46.6 percent).<sup>13</sup> This issue ties into institutional shortcomings, as the DR has experienced a substantial decline in funding for potable water as a percentage of GDP. The territorial water provision system is highly centralized, with over 90 percent of national water and sanitation resources going to *INAPA* and the Santo Domingo Water and Drainage Corporation, leaving only 8 percent for all other local semi-autonomous water corporations, many of which operate in tourism poles. The DR's draft General Water Law, which is expected to improve water governance and stewardship, also continues its years-long wait for approval (World Bank Group, 2021).

**Environmental degradation is threatening the sector's core assets**. Sewage runoff and solid waste are contaminating natural areas and water bodies, leading to algae blooms and damaging coral (Karasz, 2018). Coastal erosion and mangrove depletion have also increased. Although recent data is scarce, a 2010 report estimated that the disappearance of live corals could increase beach erosion by more than 100 percent on eastern beaches by 2020,<sup>14</sup> and that mangrove areas halved between 1980 and 2005.<sup>15</sup> National-level efforts are being made to integrate sustainability and climate resilience. However, they have not made their way into local-level implementation, and a lack of enforcement of environmental norms have blunted these instruments (see the case study from China's Meishe River Greenway in Box 7).

Box 7

#### Investing in resilient, multipurpose green infrastructure

**Resilient, multipurpose green infrastructure needs to be prioritized. It is key for disaster risk reduction (particularly flooding), as well as recreation and tourism purposes.** Regenerating wetlands and engineering bioswales and stormwater wetlands as opposed to grey infrastructure such as sea walls can increase resilience and create tourism and leisure opportunities for wildlife viewing, walking, and biking trails. This is particularly important given that flooding is the main natural disaster risk in the DR, and much of tourism is carried out around water features (coastal areas, rivers, and lakes). See the case study from <u>China's Meishe River Greenway</u> that could be relevant for transforming Santo Domingo's Ozama River.

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<sup>13</sup> Dominican Republic Tourism Firm Survey. World Bank. 2020.

<sup>14</sup> Wielgus et al, 2010 in Note 1 of the Urbanization and Territorial Development Review. World Bank. 2021.

<sup>15</sup> FAO, 2007 in Note 1 of the Urbanization and Territorial Development Review. World Bank. 2021.



Source: Holmes (2020) Source: Authors

4.2.2 The tourism sector's infrastructure provision setup is not designed for a strategic realignment from an enclave- and poles-based approach to a whole-of-country approach

Tourism infrastructure provision remains highly centralized, and thus less responsive to local needs. The DR is one of the most centralized major countries in Central America. Unlike many comparators, the provision of key infrastructure (major transport infrastructure and urban water supply and sewerage) is directly or indirectly under the central government's purview. With rapid urbanization and a growing infrastructure backlog, this model is no longer effective. Tourism follows the same pattern. CEIZTUR is the specialized agency under MiTur that funds and executes tourism and infrastructure projects. On paper, infrastructure needs are fed in from *MiTur's* strategic plans, the National Development Strategy, Agenda 2030, and local government priorities, as well as CEIZTUR's own plans, and are prioritized based on impact and the potential to facilitate private investment (for example, an access road to a resort). CEIZTUR's board comprises five institutions: MiTur, the Ministry of Public Works, INAPA (National Institute of Potable Water), one representative from the President's office, and ASONAHORES. The board meets annually to prioritize and validate the projects for CEIZTUR's directorate to implement. In practice, this highly centralized, sector-specific model means that destinations and their municipalities are not able to effectively coordinate and prioritize developments in an integrated manner between tourism and urban growth. Furthermore, stakeholders have discussed a lack of transparency and consistency in the way projects are evaluated, prioritized, and selected. Regional investments are linked to their budgetary source, meaning that the most developed destinations, such as La Altagracia, are prioritized since they provide the largest proportion of CEIZTUR's budget. This provides incentives to prioritize interventions that increase visitor volume over other policy priorities, such as diversification or expenditure.

As the sector has developed, the type of infrastructure that CEIZTUR provides has evolved from large-scale engineering solutions to a mix of hard and soft smaller-scale interventions that are less well suited to this top-down approach. *CEIZTUR* implements an average of 50 projects a year. It has traditionally implemented access infrastructure investments, such as roads, airports, and cruise terminals, which still make up around 60 percent of its projects. Currently, environmental initiatives such as sewage treatment plants, beach management initiatives, and coastal zone (erosion) management projects make up around 15 percent of its investments. *CEIZTUR* has broadened its role from mostly connectivity infrastructure to reducing

negative externalities of tourism development, and more recently, product diversification and destination management through an increasingly complex suite of works and technical assistance. For example, in a project to improve beach management in Punta Cana, *CEIZTUR* is building market stalls and paths along the beach in addition to organizing sellers and their associations and setting up community mangrove cleaning campaigns. Once set up, it is difficult to ensure management of such initiatives given the centralized, implementing-entity nature of *CEIZTUR* and the low capacities of subnational governments. The institution remains over-stretched with a diffused mandate. Its core competencies have grown to fill a need which should be filled by other dedicated institutions, such as transport, public works, water agencies, and others.

With increasing infrastructure needs in tourism sites, CEIZTUR's role has broadened, but capacities and financing have not matched those new responsibilities. The *CEIZTUR* model is effective in rapidly developing greenfield tourist resort enclaves in rural areas. However, as global best practices have shifted away from resort enclaves, and as the Dominican Republic's tourism sector is becoming more integrated with its communities (and the urban agglomerations that have grown to support it), this centralized model is becoming increasingly inefficient. Furthermore, its funding remains limited. It is funded by the centralized pooling of aviation taxes (\$10 per entry, \$3 of which funds *CEIZTUR*),<sup>16</sup> and given the drop in visitors during the CO-VID-19 crisis, the GoDR has had to lend money to *CEIZTUR* to complete ongoing projects.

# 4.3 Interventions are not supporting the tourism diversification strategy or stronger linkages with the local private sector

4.3.1 Incentives are not aligned with diversification strategy and are not promoting local economic development

Evidence suggests that the investment incentives law has not had a sufficiently causal influence on private sector investment. This is consistent with international experiences, which show that investment incentives have a checkered track record, without clear positive links to investment generation (Ahmad et al., 2019). The Dominican Republic's experience with incentives can be divided into three distinct periods. The first incentives law was introduced in 1971, along with the tourism poles law, with a dual goal of economic growth and improved living standards for the poor. Once an area is designated a tourism pole, the private sector can access a number of incentives and benefits (tax holidays and import tax exoneration) to encourage investment. Incentives differ based on type of business, but they generally include exoneration of national and municipal taxes, including revenues, sale and transfer of real estate, construction, and import (machinery, equipment, materials, and personal property for constructing and opening a tourism establishment) taxes for a period of 10 years. These measures apply equally throughout all designated tourism poles (which now extends to the entirety of the country), and beneficiaries of incentives are required to undergo environmental impact assessments and cost-benefit analyses to ensure net-positive impacts. In this period, tourism investment experienced exponential growth, peaking at 4,000 new units in 1988 (see Figure 16). The second period began in 1992, when incentives were repealed as part of a national tax overhaul. Nonetheless, investment increased,

<sup>16</sup> A tourism promotion fund was established in 2011 which set aside 50% of aviation arrival and departure taxes for tourism development and promotion efforts. In 2019, this brought in US\$ 191m.


#### Figure 17. Tourism investment projects by region (2019)



with almost as many units being built in the short non-incentive period as both incentive periods combined (up to 2011). Incentives were re-introduced in 2002 under Law 158-01. They continue to be in place, and have been expanded to qualify tourism investments in the entirety of the national territory.

The incentives law has resulted in the prioritization of large-scale FDI and beach resort projects over the GoDR's policy priorities of diversified products and local economic development. In 2019, CON-FOTUR—the body charged with applying the incentives law—approved 85 private sector tourism develop-

ments with an investment value of US\$ 5bn, bringing 28,285 new rooms within the next 5 years (*MiTur*, Tourism Barometer 2019). These projects are spread throughout 10 regions, with the vast majority in La Altagracia (74 percent) (see Figure 17). Three quarters of investors are foreign, and 42.5 percent of new projects are hotel complexes. Of the 23 projects approved in the first trimester of 2020, 52 percent are all-inclusive hotels (Info-Tur Dominicano, 2020). As such, despite years of policies to diversify the product/market mix, the majority of private investment and future stock remains geared towards this market.

However, SMEs have not directly benefited from the incentives law, nor has it met its goal of "improved living standards for the poor." (Ministry of Tourism Strategic Plan n.d.). A 2018 World Bank study on corporate income tax exemptions in the industrial sector in the Dominican Republic found uneven tax treatment across firms, which distorted competition and negatively affected wider economic productivity (Amendola et al, 2018). A 2014 OECD study found the benefits granted to be overly generous, accounting for 84 percent of the value of the firm in tourism, compared to 50 percent and 65 percent for the Free Zone and Border schemes, respectively (Daude, Gutierrez and Melguizo, 2014). Additionally, the incentives law has resulted in a substantial loss in potential tax revenues. These revenues could have been reinvested in basic service provision, which is a priority of the large-scale developers that have benefitted from those incentives.

4.3.2 The greatest labor-related bottlenecks for micro and small tourism firms are labor regulations and taxes, but their intensity varies at the subnational level

The Dominican Republic Government has invested heavily in technical and entrepreneurial skills development in the tourism sector. Initiatives have been led by the National Institute of Professional Technical Training (*INFOTEP*) and steered by the National Consultative Committee with the goal of strengthening the links between continuing education and tourism in order to ensure qualified labor for the sector. *INFOTEP* implements both training programs for individuals as well as tailored technical support for entrepreneurs and SMEs. It provides training and support nationwide which is scaled-up and derived from pilots undertaken in the Eastern Directorate, where, give tourism's prominence in the region, they have ongoing tourism training programs in Bávaro, Punta Cana, Uvero Alto, Macao, Higüey, Bayahíbe, La Romana, San Pedro de Macorís, Miches, and Juan Dolio. In the North, tourism programs are administered in Puerto Plata, Imbert, Maimón, Constanza, Jarabacoa, Samaná, Las Terrenas, and Montecristi (INFOTEP, 2020). *INFOTEP* is funded by a nationwide payroll levy of 1 percent.

Nationwide, regulatory and tax-related issues are rated as the most problematic labor factors in operating and growing a business, with 23 percent of (mostly micro and small) tourism firms surveyed listing employment protection legislation/labor code laws as the most problematic, followed by payroll taxes and social security contributions (13 percent), TVET for workers and finding experienced workers were tied third (12 percent), and "general education" was fifth (10 percent)<sup>17</sup> (see Figure 18).

Skills deficiencies are expectedly greater in more rural and emerging tourism areas with micro and small entrepreneurs, and, specifically, in the informal sector. Capacity is strongest in Bávaro-Punta Cana,

<sup>17</sup> Dominican Republic Tourism Firm Survey. World Bank. 2020.

where many workers migrate, given its competitive compensation and booming sector.<sup>18</sup> In smaller destinations and rural areas, the supply of qualified workers has not been able to keep up with the sector's growth, and access to courses can be a challenge for underserved populations, particularly due to lengthy and costly transport to training centers and the digital literacy required for some online modules.



#### Figure 18. Which is the most problematic labor factor for the operation and growth of your business?

**4.4 Challenges vary across different contexts and tourism development stages** 

Many of the sector's structural challenges are similar across destinations. However, when it comes to implementation, important differences exist in each region due to their unique contexts and development stages. As such, it is important to employ a place-based approach to understanding key issues for a customized application of development tools and approaches (see Box 8). Table 2 displays a summary of the key destination development tools utilized in each focus destination.

<sup>18</sup> Dominican Republic Tourism Firm Survey. World Bank. 2020.

#### Table 2. Summary table: tourism development tools applied by destination

	Destination Development Tools	Samaná	Santo Domingo	La Altagracia	Puerto Plata
Institutions	Tourism Poles	✓	✓	$\checkmark$	✓
	PSOTTs	$\checkmark$		$\checkmark$	✓
	Territorial-Level Tourism Plans	Samaná Norte		Bávaro-Macao - Punta Cana	
	Province- Specific Building Regulations				✓ City Center
	Regional Institutions	Tourism Cluster, Regional Associations, Strong Community Advocacy	✓ Tourism Cluster, Regional Associations, Strong Local Government	✓ Tourism Cluster, Regional Associations	✓ Tourism Cluster, Regional Associations
Infrastructure	Infrastructure	✓ Connectivity, Tourism Infrastructure	✔ Historic Core, Highways, Malecón	✓ Led by Private Sector	✓ Cruise Ship Port, Historic Core
	Special Projects		✓ Colonial City Upgrading (IADB)	✓ UNAM & IADB Coastal Zone Management Projects	✓ JICA & DPP Sustainable CBT Project in the Northern Region
	Incentives	✓ Uniform Across Region	✓ Uniform Across Region	✓ Uniform Across Region	✓ Uniform Across Region
Interventions	Skills Development	-√	-√	+✔ Tourism Skills Focus on Eastern Region	-√
	Marketing	-√	- CVB To Be Established	✓	-√

Source: Compilation by Author

Note: Signs and symbols used in this table have the following meaning: - = some presence = presence + = biggest presence. IDB stands for Inter-American Development Bank; UNAM stands for Universidad Nacional Autónoma de México; JICA stands for Japan's International Cooperation Agency; and DPP stands for Dirección de Planificación de Proyectos del Ministerio de Turismo.

#### Box 8

## Tourism business survey: subnational priorities and bottlenecks by destination

A recent survey was carried out by the World Bank on tourism businesses in the Dominican Republic that were mainly micro and small enterprises. Nationwide, the top three problematic factors that were rated as "significant to severe problems" were (1) price competitiveness, (2) telecommunications, and (3) business environment.

Top 3 Problematic factors ranked "significant to severe"	First factor	Second factor	Third factor
Puerto Plata	Telecommunications	Electricity Quality	Price Competitiveness
Punta Cana	Price Competitiveness	Telecommunications	Business Environment
Santo Domingo	Price Competitiveness	Crime, Theft, and Disorder	Cost of Financing / Access to Credit
Samaná	Price Competitiveness	Corruption	Informal Practices
Dominican Republic	Price Competitiveness	Telecommunications	Business Environment

#### Table B8.1. Summary table: tourism development tools applied by destination

Comparing most problematic factors between destinations reveals regional differences:

- **Puerto Plata's** infrastructure and services are more problematic than in other regions, ranking higher enabling environment factors, with electricity quality, telecommunications, water quality, and transport infrastructure receiving particularly low scores. Enabling environmental factors (crime, corruption, informal practices, and access to finance) perform better than national averages.
- **Santo Domingo** is almost the inverse of Puerto Plata: ranking higher in infrastructure (with the exception of solid waste and wastewater collection) and lower in enabling environmental factors, particularly in crime, theft, and disorder, as well as corruption, labor factors, informal practices, and access to finance.
- **Punta Cana's** problematic factors adhere closely to national averages, with slightly better performance in electricity, telecommunications, and solid waste & wastewater collection, and slightly worse in environmental sustainability.





These findings are somewhat in line with the World Economic Forum's Travel & Tourism Competitiveness Rankings, where the Dominican Republic ranked 73rd out of 140 economies on tourism competitiveness in 2019. The Dominican Republic's lowest score, and greatest drop since 2017, is in cultural resources & business travel, while the factors where it ranked lowest related to competitors are safety & security, business environment, ICT readiness, and price competitiveness, in order of severity (see the figure below). The three last items mirror the top problems identified in the survey.

TTCI Performance Overview (2019)

Source: WEF TTCI, 2019

#### 4.4.1 Subnational destinations

This section outlines the key challenges and opportunities faced by four types of destinations at the involvement, development, consolidation, and stagnation/rejuvenation stages, as categorized by the Butler Tourism Area Life Cycle Model (see Figure 19). Annex 4 includes SWOT analysis of each destination.



Source: Own elaboration based on the life cycle of tourist destinations (Butler, 1989).

Samaná is moving up to the involvement stage, having received structuring investments in connectivity and tourism infrastructure. Its product types are varied, and tourism is dispersed throughout the peninsula. However, its local economic development impacts, in absolute terms, remain below the GoDR's objectives, and the capacity of its basic services is strained, which is leading to environmental damage. Anecdotal evidence suggests that its value chain is less integrated and developed than the other focus destinations, with a much higher proportion of tourism establishments' food coming from over 100km away, and a higher overall number of supplies being imported from abroad.<sup>19</sup>

Samaná's key short-term challenges are a lack of water treatment and solid waste management facilities, particularly for urban settlements surrounding tourism areas. Related to this issue is coastal encroachment resulting from unplanned development and weak, as well as fragmented, local government. In the medium-term, its challenges will be to scale-up inclusive growth in jobs and revenues without sacrificing its ecotourism positioning.

#### Santo Domingo: development stage

Santo Domingo has highly developed infrastructure and support services to facilitate tourism given its status as the country's political and economic hub. This has enabled the growth of the tourism sector without the growing pains of underdeveloped suppliers, healthcare, training establishments, and urban and connectivity infrastructure associated with other less-developed areas. It does, however, come with its own set of challenges. Most of them are short-term, including the perception of Santo Domingo as a city without tourism potential, hence the need to rebrand the capital as a tourism destination, as well as the lack of a shared, strategic vision and plan for development of the destination. Medium-term challenges include environmental, climate change, suburbanization, and congestion issues tied to the growth of the Distrito Nacional region, including water provision and solid and liquid waste management.

#### La Altagracia: consolidation stage

La Altagracia is the largest tourism draw in the country, with continued strong growth that has progressed faster than its ability to provide basic infrastructure and services to the area. Its most critical short-term need is water provision, which has been a key bottleneck in the province for decades and has yet to be resolved. Most water provision is done through individual wells, many of which are becoming brackish. Over five years ago, the private sector was willing to fund water provision, but approval was never granted by the Dominican Republic Government. Subsequently, the government committed to financing a system, but it has been lagging without a clear completion date. Its long-term challenges will be its ability to maintain the competitiveness of its undiversified tourism offer and its high reliance on a limited number of source markets, such as the United States.

<sup>19</sup> Dominican Republic Tourism Firm Survey. World Bank. 2020.

Puerto Plata: mature stagnation/rejuvenation stage

Puerto Plata is the Dominican Republic's legacy destination. It has gone through the maturity and decline stages, which have been partially reversed through new investments in cruise facilities and tourism infrastructure. Its key short-term challenges are basic services-related, including the need for a landfill, water supply, and a water treatment plant, as well as inadequate and costly electricity. A recent survey of mostly micro and small tourism businesses found that tourism businesses in Puerto Plata found electricity quality almost twice as problematic as the rest of the country, with 45.6 percent of respondents rating it as a "significant to severe" problem, compared to 22.9 percent nationally.<sup>20</sup> Long-term challenges to its competitiveness include aging infrastructure and facilities, as well as its positioning as a budget resort destination, which is a comparative advantage that can be difficult to sustain as the destination can be easily substituted by other, newer beachside destinations.

## 5. The next stage: strategic priorities for aligning tourism and territorial development

In the Dominican Republic, tourism has been a key driver in developing the country's regions. However, the current sector-driven, piecemeal, and centralized approach has led to unsustainable environmental, social, resilience, and economic consequences which impact both living standards of citizens and the competitiveness of the sector. It is in the interest of both territorial development and the tourism sector's competitiveness that these structural and implementation challenges be addressed in a strategic manner. Improving the sector's *governance arrangements* can democratize decision-making, more efficiently develop tourism in its destinations, and effectively address local needs; the *diversification* of the sector can increase its resilience to shocks and spread the economic benefits of tourism to lagging areas and local communities. Together, these initiatives can lead to more and better local jobs, better safeguarded assets, and more effectively developed territories for improved quality of life.

First, national-level reforms are needed to (i) situate tourism within the country's broader territorial development, (ii) ensure tourism frameworks and institutions can effectively develop and manage the sector and its destinations, and (iii) align systems to support product diversification and inclusion (see Figure 22). Secondly, a number of specific investments have been identified in the focus destinations within the 3-I framework (institutions, infrastructure, and initiatives) that would render them more sustainable, resilient, inclusive, and competitive (see Figure 20).

<sup>20</sup> Dominican Republic Tourism Firm Survey. World Bank. 2020.

Better situate tourism's role in	Reassign land-use planning outside of sectoral remits.
territorial development	Shift the responsability of infrastructure and basic service provision from tourism to the appropriate entities.
Clarify and descentralize	Develop and adopt a National Tourism Strategy.
tourism governance	Decentralize tourism sector governance and develop subnational tourism toolkit.
	Improve subnational tourism statistics.
Align tourism policies and	Further align marketing campaigns with product
interventions to support product	diversification policies through digital tools.
diversification & inclusion	Phase out the investment incentives law.
	Priorize Micro, Small y Medium Enterprises.
	Broaden skills development activities.

## 5.1 Better situate tourism's role in the Dominican Republic's territorial development

The DR's tourism sector has historically been developed based on greenfield tourist resort enclaves in rural areas where the planning, institutions, and infrastructure did not exist to support development. At the time, it made sense for *MiTur* to take on those functions to ensure the development of these zones. Two aspects have since changed. First, these tourism enclaves have spurred spatial growth around them to support the workers and suppliers of the sector, and this agglomeration is increasingly becoming more intertwined and integrated with the enclaves. Second, best practices have moved away from the development of single-zoned resort enclaves to acknowledging that tourism that is better integrated with local communities and diverse land-uses is both more inclusive and competitive. This evolution in tourism development models requires a realignment of institutions and responsibilities along two lines, land-use planning and infrastructure/basic services provision.

#### 5.1.1. Reassign land-use planning outside of sectoral remits.

Instead of tourism leading the land-use planning of tourism zones (which can encompass parts or the entirety of municipalities), it should be led by local plans, such as the Municipal Land-Use Plans (PMOTs), for which tourism should be an important element but not the overarching factor. The planning of new destinations such as Pedernales and the growth of existing ones should be integrated with that of their surrounding communities. These territories should have land-use and development plans that ensure adequate infrastructure, public space, and housing provision that is in line with the projected growth of employment, supply chains,

and related agglomeration, rather than just for enclave resort areas. These principles should be reflected in the *Ley de Ordenamiento Territorial, Uso de Suelo y Asentamientos Humanos* (Law on Territorial Planning, Land-Use, and Settlements), which clarifies planning responsibilities and formalizes needs, and this long-pending law should be passed (for more information on planning reforms, see Note 3 of the Urbanization and Territorial Development Review on territorial regulation and planning). Additionally, land-use guidelines need to be clarified, aligned with sustainability and climate-resilient best practices, and actively enforced.

## 5.1.2 Shift the responsibility for infrastructure and basic service provision from tourism to the appropriate entities.

The private sector has made it clear that it wants to locate in regions that are well planned, regulated, and supplied with adequate infrastructure and public services. Water provision, sewage treatment plants, solid waste management (especially regional landfills), and road access present particularly critical deficiencies across destinations. Within this area, the sector's current greatest limitations are in *implementation* and *management* of these basic services. This shift requires two elements: First, the appropriate entities need to have a clear mandate, capacity, and funding to take on this provision, and second, *CEIZTUR's* role in infrastructure and basic services provision needs to be phased out.

#### 5.1.2.1 Reinforce the legal frameworks for basic service provision.

The passing of a series of laws and strategies with drafts already in existence is key to ensuring effective institutions that are able to provide water, sanitation, and solid waste management to both tourism and non-tourism areas. They are: (i) the General Water Law, which provides institutional mechanisms, regulations, and policies to consolidate water and sanitation services and monitor water quality, and which will improve governance and stewardship and institutionalize water use and recharge incentives; (ii) the Solid Waste Management Law, which updates the legal framework on solid waste management and promotes a circular economy; and (iii) the updated National Sanitation Strategy, which ensures the integration and management of solid waste, sanitation, and potable water.

#### 5.1.2.2 Phase out infrastructure and basic service provision from CEIZTUR's role.

*CEIZTUR* is essentially still structured as an entity to develop enclave resort destinations. The responsibilities for public service provision should be transferred from *CEIZTUR* to other sector-appropriate agencies (for example, regional water and sewer companies). *CEIZTUR* can then be restructured, so that the roles of product development, regional destination development, and marketing can be transferred from *MiTur* to *CEIZTUR*, transforming *CEIZTUR* into a more responsive and diversified tourism development agency while keeping *MiTur* as the nation's tourism policy, planning, and regulatory entity. Examples include *FonTur* in *Colombia*, a specialized public agency (with a majority private board representation) in charge of receiving applications and implementing projects from the central government, the Ministry in charge of tourism infrastructure, competitiveness (training and product development), and marketing initiatives, the themes of which are guided by the 4-year National Tourism Strategy. It is financed by a mix of general treasury funds and parafiscal tourism taxes paid by 21 subsectors. It provides extensive technical support to local applicants in formulating project proposals and assisting in the planning of maintenance and management once a project is imple-

mented. Another similar model is <u>Atout-France</u>, France's public-private tourism agency in charge of marketing, products, and destination development.

Regardless of the restructuring options selected, CEIZTUR should improve its investment prioritization and selection process and increase its board representation. The prioritization and selection of investments should be better codified and formalized so as to be aligned with sustainability, local economic development, and product diversification priorities. Lastly, transparency in decision-making and formal stakeholder inputs should be broadened. This includes widening board representation to include a tourism SME association and a representative for local governments.

#### 5.2 Clarify and decentralize tourism governance

#### 5.2.1 Develop and adopt a long-range (10-15 year) National Tourism Strategy.

This strategy should outline sector objectives and implementation mechanisms, while also clarifying its institutional frameworks, planning hierarchies, and coordinative mechanisms between sectors and government levels. Policy priorities consistent with *MiTur's* 2008 Sustainable Tourism Development approach of diversification, sustainability, and local economic development (LED) should be maintained. Continuity in laws, plans, and policy priorities has been flagged as one of the top priorities for the Dominican Republic's private sector, which is consistent with global findings. With continuity in place, the private sector can plan and carry out investments accordingly, which reduces risk.

#### 5.2.2. Decentralize tourism sector governance and develop a subnational tourism toolkit.

Each destination has a unique mix of assets, stakeholders, products, and shortcomings, which should be dealt with differently based on their development stage and trajectories. As such, tourism development tools should be customizable for different destinations, which will enable increased local empowerment. Table 3 below recommends the priority type of institutions, infrastructure, and initiatives that should be present at each development stage of a destination (Involvement, Developing, Consolidating, and Mature/Rejuvenated). Subnational governments should have more autonomy in developing certain aspects of their destinations, which will allow for increased participation of the local population on the planning and development of tourism in their communities, and be subject to robust technical and regulatory oversight from *MiTur*. *MiTur* should decentralize sector governance and formalize subnational tourism planning frameworks (see examples from England and Australia). It should outline how the National Tourism Strategy is used to inform subnational destination plans focused on the development of tourism ecosystems (products and destination management) rather than land-use planning. These plans should in turn inform local level land-use, infrastructure, and urbanization plans outside of *MiTur's* remit.

#### Table 3. Recommendations based on tourism development stage

	Pre-Emerging (Pedernales) & Emerging Destinations (Samaná)	Developing Destinations (Santo Domingo)	Consolidating Destinations (La Altagracia)	Mature/Rejuvenated Destinations (Puerto Plata)
Strategic Focus	Development planning, lodging provision, and stimulating demand (promotion & access).	Core market growth and product development.	Management of visitors and ensuring sustainable, inclusive growth.	Repositioning and upgrading aging infrastructure and facilities.
Institutions	Strategic tourism and master planning. DMO for positioning and marketing.	Land-use planning DMO for growing core markets and products. Promote trade & community associations.	Detailed urban development & expansion planning. DMO for destination management initiatives. Increased local government capacity.	DMO for destination management, repositioning & diversification.
Infrastructure	Connectivity and access infrastructure. Programs to support anchor accommodation providers and quality rooms.	Basic services: solid and liquid waste management.	Congestion management, urban upgrading, public spaces & secondary destinations.	Upgrading urban infrastructure and visitor facilities.
Initiatives	Entrepreneurship training.	Technical workforce skills. Programs supporting activities, excursions & food & beverage offer.	Visitor management. MSME support services. and linkages. Tourism dispersal.	Up-skilling and re- skilling. Programs supporting renovation of lodging, leisure & entertainment venues. Product diversification.

Source: Authors.

Note: DMO stands for destinations' marketing organization.

Apart from the decentralization of tourism planning, destination management and product development roles should be devolved to the subnational level. Subnational *OPTs* should be restructured into Public-Private DMOs with coordinative and functional roles. They should have dedicated funding tied to a percentage of local tourism tax and levy earnings, with a portion allocated from *MiTur's* central funds. Responsibilities should include promoting the subnational destination, coordinating its events and festivals (and where appropriate, MICE), and developing small-scale tourism products (see <u>Handbook and Example of Subnational DMOs</u> from

Romania). DMOs can also be created to organize stakeholders and to develop and market thematic routes, such as the Franciacorta Wine Route in Italy, which is a membership-funded DMO comprising 90 stakeholders from the wine tourism value chain and its related municipalities tasked with creating a branded wine route, setting quality standards, and packaging experiences. A supportive legal enabling environment, technical assistance, and grant funding should be provided from the central level to foster this ecosystem. A planned, multi-phased approach to ensure legal, jurisdictional, fiscal, and capacity transfers are adequate should be implemented.

**Tourism zones can consider more widespread use of the <u>Tourism Improvement District (TID)</u> concept to supplement destination management. Similarly to the way resort areas in Playa Dorada and Punta Cana are being managed by a private association, other tourism zones can use TIDs to enhance trash collection, landscaping, vendor management, and upkeep of** *Malecones***, promenades, plazas, and beaches. Local governments, DMOs, and TIDs each have a role to play and can coexist in a well-developed destination in order to ensure that infrastructure, community needs, marketing and product development, and tourism facilities are developed and upgraded.** 

Increase private sector involvement in planning for new destinations and products through advisory councils. The development of new products and destinations needs to be in line with demand potential and private sector appetite. Not all territories have assets suited for tourism, nor are they all prepared to be developed. Prioritizing a destination or product-type without clear demand potential can waste valuable resources. A demand-driven approach must be taken for tourism development, balancing territorial development needs with demand potential, private sector appetite, and sector-focused strategies. As such, feasibility studies and demand assessments should be mandated and systematically undertaken as part of the strategic planning process when developing new products or circuits, particularly in new tourism poles and megaprojects.

## 5.2.3 Improve subnational statistics to provide data and market intelligence for tourism planning and development decisions.

Systems to analyze and distribute regional-level impact data, including data on jobs, economic multipliers, and linkages, are crucial in understanding trends and designing appropriate place-based policies and programs. The use of big data, open data portals, and market intelligence platforms should be integrated into *MiTur's* planning, monitoring, and evaluation tools. It is particularly important to gather market intelligence in order to understand how visitors diversify their beach vacations to secondary destinations and other products. By compiling user-generated content (see the <u>World Bank's leveraging user-generated content for</u> <u>tourism development</u>), surveys, and focus groups, product developers can understand (i) the type of visitor most likely to diversify their experience, and (ii) the blockers to diversification for these visitors. Then, marketing campaigns can be retargeted towards the types of visitors most likely to opt for diversified experiences, and product developers can reduce blockers—for example, a lack of information, car rental options, multilingual signage, observation towers, inclusion in packages, perceived safety, etc.

## 5.3 Align tourism policies and interventions to support product diversification and inclusion

The GoDR needs to systematically prioritize and act upon product diversification and improve the national framework to provide customizable solutions to destinations. Diversification should focus on product types (cultural tourism, events, adventure, MICE, agritourism, and community-based tourism), geographic locations (satellite sites and routes), and source markets (South America and East Asia) in order to reduce reliance on the current narrow set of products and markets, thereby reducing vulnerability to internal and external shocks. Diversifying products with local input, and taking into account a destination's unique assets can help integrate local communities and SMEs into the value chain. Box 9 below gives some examples on product diversification strategies.

#### Box 9

#### **Product diversification strategies**

The types of product diversification strategies undertaken depend heavily on the structure of the tourism sector and its visitor characteristics. The development of thematic routes and trails has been a successful approach in Europe and the United States due to the importance of independent, car-centric domestic tourism. In a destination with predominantly packaged all-inclusive tourism, one can work to increase independent travelers (parallel diversification) and also integrate ancillary destinations into existing packages (integrative diversification).

The latter has found success in the Mediterranean, where cultural tourism has enhanced the coastal resort tourism experience by offering the possibility of added excursions and cultural performances. Malta, a Mediterranean island traditionally dependent on sea & resort tourism, has prioritized rural and ecotourism in its current tourism policy. The MaltaGoesRural project operationalized this policy by using an integrated approach of (i) market research to understand their target market's ancillary product needs; (ii) investing in rural heritage by setting up walking trails to connect existing tourism zones with natural areas, village cores, and heritage sites (which led to historic and public spaces being upgraded, along with the signage along the trails-benefitting residents and users alike); and (iii) launching a marketing campaign and an App that allows users to follow their progress on the geolocated trails, learn additional information from points of interest, and rate the walks. A similar example from the Caribbean is the development of the Waitukubuli National Trail (WNT) in Dominica, the first long-distance hiking trail in the Caribbean, which runs 114km along the length of the island. The Great Ocean Road is a good example of a road-based thematic route that disperses tourism from the hub of Melbourne to rural coastal areas. See additional resources on developing gastronomy tourism and the UNWTO's Handbook on Tourism Product Development

Source: Authors

5.3.1 Prioritize micro, small, and medium enterprises.

To better link local firms to the tourism sector's dynamism, the GoDR needs to prioritize skills development and entrepreneurship for tourism MSME's. *INFOTEP's* MSME support program should be scaled up and further decentralized in order to provide improved localized access to MSME upgrading services. These services should focus on demand-driven product development, digital distribution, and marketing, as often the greatest challenges for MSMEs are linking with international visitors and ensuring products meet their needs. Detailed value-chain analyses of tourism sub-sectors should guide MSME program targeting. See <u>The Gambia Value</u> <u>Chain Analysis</u>, and guidance on <u>Linking the Crafts Sector to Tourism Markets</u>. See Box 10 for more details on how governments can boost the local economic impacts of the tourism sector.

#### **Box 10**

#### How can governments boost the local economic impacts of tourism?

Successful inclusive tourism development programs combine supply-side (training and financing) with demand actions (marketing and distribution linkages). Increasing the share of tourist expenditures that enter the local economy is, to a certain extent, a function of increasing visitor volumes and expenditures (through longer stays and more, better goods and services). It also is highly dependent on the type of tourist, the product offered, and the operating conditions of large and small businesses. Programs engage and incentivize large players to become involved, and provide support on non-financial (social and cultural) aspects. Strategies can include: (i) increasing local inputs into the hotel supply chain; (ii) stimulating micro and small tourism enterprises; (iii) boosting local craft and tourist shopping; (iv) enhancing the employment opportunities of local communities; (v) facilitating destination-level partnerships; (vi) diversifying the destination, including by offering local products; (vii) using government roles to influence private sector behavior; (viii) facilitating joint venture partnerships with the private sector and community; (ix) channeling financial flows to communities; and (x) addressing cultural, social, and physical impacts. See practical approaches to each strategy in the report Making Tourism Count for the Local Economy in Dominican Republic (Pro-Poor Tourism Partnership & ASONAHORES). The report's recommendations remain relevant and underutilized.

In addition to increasing local supply chain linkages, increasing out of pocket visitor expenditures is a key strategy to stimulate local economic development. This strategy requires technical assistance to improve the quality and consistency of products and services, as well as the creation of welcoming physical spaces and environments. A range of quality unique goods and services that are well promoted, easy to reach with minimal barriers (shade, an organized market, security, currency exchange, information, etc.), and complimentary activities (music, entertainment, dining, etc.), within a compact and preferably walkable area, will stimulate more frequent and longer excursions, greater spending, and increased satisfaction. The design of these shared public spaces depends on local assets and is best developed with communities. Their design should be based on historical, cultural, social, and natural factors that make them unique and interesting, while prioritizing a specific sense of place and a variety of activities and uses. Such vibrant public spaces can include *Malecones*, beachfronts, public plazas, historic cores, and heritage corridors, as well as smaller venues such as entrance areas to tourist attractions and the immediate surroundings of resorts. Creating shared public spaces, developing their services, and ensuring their management and maintenance is an important function of destination-level product development and management.

Source: Ashley (2005)

The above support to MSMEs needs to integrate the local small-scale and informal sectors in tourism areas, which includes credit facilities or investment capital for small scale ventures, education (particularly in foreign languages), product development for community entrepreneurs, networking opportunities, and capacity building through skills training (Oviedo-Garcia, González-Rodríguez y Vega-Vázquez, 2019). Many of these initiatives are reflected in GoDR planning and policy priorities. The GoDR's 20-year national plan includes actions to integrate communities into tourism activities through tourism education and MSME development, as well as road networks to integrate tourism centers with surrounding areas. *INFOTEP* also has a robust free-to-access SME support program that supports both formal and informal tourism enterprises. Implementation, however, should be improved.

#### 5.3.2 Phase out the investment incentives law.

In the medium-term, the GoDR can increase fiscal space to improve infrastructure and basic services in destinations by phasing out the investment incentives law, which would free up tax revenues. Data on past performance of incentives and private sector interviews suggests that the DR's tourism sector is sufficiently competitive and attractive as to not require additional incentives to promote large-scale resort investments. Furthermore, these incentives are not aligned with the GoDR's policy priorities, as they favor large-scale FDI over local economic development (Ministry of Tourism Strategic Plan n.d.). In fact, they have served against these policy priorities by enabling the growth and spread of all-inclusive tourism. Instead, tax gains can be reinvested in basic services and infrastructure—which is a priority for both the private sector and local government.

#### 5.3.3 Further align marketing campaigns with product diversification policies—with a

**stronger focus on digital marketing and next generation, big data market intelligence tools.** Marketing campaigns should prioritize the diversification of markets, destinations, and products in order to both improve sector resilience and reflect *MiTur's* strategic priorities. This includes decentralizing subnational destination marketing activities, as well as further showcasing alternative products and destinations. One example is to adapt the European Capitals of Culture program, which is a program that selects different destinations each year as European Capitals of Culture in order to boost the prominence of secondary destinations with a marketing spotlight and by organizing diverse arts and culture programming throughout the year. A rotating focus on different Dominican destinations could help increase the prominence of lesser-known destinations and products. See Box 11 below for more ideas.

#### Box 11

#### Using marketing and big data to encourage product diversification

Amsterdam has used a mix of marketing and big data to "push" and "pull" visitors to less visited destinations. Amsterdam receives 7.8 visitors per resident per day. It has been trying to diversity its tourism and disperse visitation from low-value, short city-breaks to more upscale and responsible tourism. The city's DMO has started packaging outlying districts as stand-alone destinations by: (i) extending the range of free public transport provided with its packaged attractions City Card, (ii) removing and redirecting all promotional funding and campaigns for Amsterdam to nearby destinations, (iii) developing an App that highlights alternative day trips, and (iv) placing webcams in crow-ded attractions and alternative sites to allow users to preview and self-select less crowded areas. Research shows that 50 percent of tourists chose a less crowded time to visit, and 20 percent visited a different site altogether. The city also developed an Al-powered chatbot on Facebook Messenger that, with consent, scrapes a user's profile and suggests customized off-the-beaten-path activities. Similarly, it mined the City Card's RFID chip for data on visitor flows and began recommending (from their website, App, and Facebook chatbot) taking canal cruises at less crowded times of day, for example. See additional examples from the <u>UNWTO E-Marketing Handbook</u>.

The private sector, which wishes to be more involved in destination marketing, can supplement MiTur's tourism marketing budget through a private sector-managed promotion fund. One example of this is in South Africa, where the budget of South Africa Tourism (SAT), the agency charged with national tourism marketing, is supplemented by a private sector initiative governed by the Tourism Business Council of South Africa (TBCSA). The TBCSA, a nonprofit private sector association, administers a voluntary additional tourism levy on bed nights that generates US\$ 600,000 per year. These funds are then used to supplement SAT's marketing budget, and the TBCSA has considerable influence over the use of these funds. This practice ensures increased resources, private sector input, and demand-driven targeting of marketing initiatives.

5.3.4 Broaden skills development activities to focus on the entry-level and upper management skills while increasing the volume of technical hospitality skills generated.

The DR has effective technical skills programs. However, the demand for labor outnumbers skilled graduates. Thus, the technical skills program requires scaling-up. Similarly, more local talent is required at the upper management level of the sector, as many senior managers continue to come from abroad. Programs to integrate local communities, the poor, and the disadvantaged into the tourism sector should be scaled-up to provide the basic skills required to access sector jobs.<sup>21</sup>

### 5.4 Strategic priorities by destination

#### The above recommendations would enable initiatives to be customized to a destination's unique context

**and needs.** Table 4 below includes a summary of specific interventions (purple), infrastructure investments (green), and initiatives (blue) by focus destination, as identified by reports and consultants with national and local sector stakeholders from *MiTur*, municipalities, tourism clusters, associations, and private sector operators. See Annex 5 for a summary of destination-level actions by time frame and urgency.

<sup>21</sup> See additional resources on <u>Policy Approaches to Skills Development in Tourism (OECD)</u>.

#### Table 4. Summary of investments and activities by focus destination

Samaná	Santo Domingo	Altagracia	Puerto Plata
<ul> <li>Build capacity of local authorities in the organization and management of public spaces and beachfronts</li> <li>Waterfront upgrading in Las Terrenas, including pedestrianization</li> <li>Improve access to Rincon beach (Highway crossing), and provide beach facilities, toilets; organize informal beach sellers</li> <li>Halt the contamination of the Las Terrenas river from commercial runoff and residential sewage</li> <li>Improve maintenance of the INAPA water plant on the way to Las Galeras</li> <li>Improve solid waste transfer system from Cavo Levantado island to Santa Barbara de Samaná landfill</li> <li>Manage and enforce beachfront encroachment of settlements and construction</li> <li>Regulation of motor vehicles on beaches</li> <li>Improved parking and traffic management</li> </ul>	<ul> <li>Produce a tourism Master Plan for the SD region, including a detailed destination marketing plan</li> <li>Restrict heavy freight vehicles from the tourism zone and the Malecon</li> <li>Develop the Parque Mirador Sur &amp; Norte for tourism and leisure use</li> <li>Construct landfill</li> <li>Implement a wastewater treatment plant and system for Greater SD</li> <li>Improve the quantity and quality of public spaces</li> <li>Revitalize the Ozama river into a recreation and leisure corridor</li> <li>Implement phase 2 of the Malecon's upgrading by creating cycle lanes and traffic calming infrastructure</li> <li>Facilitate the rehabilitation of heritage buildings along the Malecon</li> <li>Facilitate the development of a Santo Domingo Conventions Center</li> <li>Develop a program to recover the Santo Domingo beach for leisure use</li> </ul>	<ul> <li>Build local public sector capacities</li> <li>Develop water supply system</li> <li>Promote multi-destination packages</li> <li>Support upgrading and formalization of micro and small enterprises</li> <li>Initiatives to reduce seasonality (targeting MICE, festivals, diversification)</li> <li>Improve mangrove protection and enforcement</li> </ul>	<ul> <li>Restructure water provision systems</li> <li>Completion of the Cabarete sewage and solid waste treatment plant</li> <li>Relocate and upgrade Sousa's landfill</li> <li>Improve the planning, infrastructure and management of public beaches</li> <li>Complete the Gregorio Luperon tourist highway (Gran Parada-Santiago section)</li> <li>Improve urban infrastructure and public spaces in downtown Cabarete, including the burying of electrical cables and centralized parking</li> <li>Rehabilitation of Historic Isabela</li> <li>Construction of a hospital for Sousa</li> <li>Improved protection and management of the Cabarete lagoon</li> </ul>

Source: Tourism sector cluster, associations, and local government interviews (2020) and documents. Due to COVID-19 related travel restrictions, fieldwork was unable to be carried out to verify and rank priorities.

Note: Violet = Institutions; Green = Infrastructure; Blue = Interventions.

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List of Interviewees

Table A1.1 List of people interviewed for this note				
Name	Position			
Shaney Peña Gómez	Director, DPP, MiTur			
Maribel Villalona	DPP, MiTur			
Arq. Kirsis de los Santos	Director, CEIZTUR			
Yarín Casquero	Director, Empresas y Servicios (Business & Services), Ministry of Tourism			
Carmen Paula	Assistant Director, Empresas y Servicios, Ministry of Tourism			
Paula Rainieri	President, ASONAHORES			
Andrés Marranzini	Vice President, ASONAHORES			
Amín Serulle	Coordinator, Component 3, Santo Domingo Historic Core Rehabilitation Project			
Mónica Infante	Santo Domingo Tourism Cluster			
Carla Mejía	Santo Domingo Tourism Cluster			
Tamara Mera	Santo Domingo Tourism Cluster / Santo Domingo Historic Core Rehabilitation Project Coordinator			
Silvanh Rivel	Santo Domingo Tourism Cluster			
Rafael Blanco	Samoná Tourism Cluster			
Elisa Acosta	Director, Escuela de Hotelería, Gastronomía y Pastelería (School of Hospitality, Gastronomy, and Confectionery), INFOTEP			
Fabeth Martínez	Director, ASONAHORES Santo Domingo Chapter			
Yudit García	Vice President, ASONAHORES Santo Domingo Chapter			
Aura Domínguez	ASONAHORES Santo Domingo Chapter			
Arq. Williana Núñez	Director of Urban Planning, Puerto Plata			
Lic. Ramón Antonio Ramírez	Mayor, Distrito Municipal of Verón-Punta Cana			
Lic. Juan Antonio Adames	Mayor, La Romana			
Jakaira Cid	Director, Puerto Plata Region (OPT, MiTur)			
Romeo Ramlakhan	Advisor to the Mayor, City of Santo Domingo			
Jesús Suazo Paradis	Director, Urban Planning, City of Santo Domingo			
Jesus D'Alessandro	Director, Strategic Plan, City of Santo Domingo			
Jenny Vásquez	Finance Department, City of Santo Domingo			



**Key Tourism Development Milestones** 

Planed areas for Planes Sectoriales de Ordenamiento Territorial Turístico

#### Table A3.1: Planes Sectoriales de Ordenamiento Territorial Turístico status (2020)

Existing Strategic Plans (To Be Converted Into PSOTTS)	Existing Approved PSOTTSs	Lacking PSOTTS
Puerto Plata	Sosúa	Samaná (Zona Sur)
Península de Samaná	San Felipe Puerto Plata	Monte Cristi
Santiago	Las Terrenas (Samaná Norte)	Espaillat
María Trinidad Sánchez	Cabarete	María Trinidad Sánchez
Dajabón	Miches-Seibo-Hato Mayor	Playa Dorada
La Vega	Punta Cana-Bávaro-Macao	Montellano-Punta Bergantín
Valverde	Unidad Ambiental 2 Macao	Bayahibe-Isla Saona
Monte Cristi	Pedernales	Boca Chica
San José de las Matas		Circunvalación Verón
Jarabacoa		Hato Mayor
Miches		La Romana
Punta Cana - Bávaro - Macao		La Vacama hasta Miches
Bayahibe		San Pedro
Boca Chica		Boca de Yuma
Higüey		Baní
San Pedro de Macorís		Azua
Barahona		Barahona
		Municipio Pedernales

Source: Dominican Republic Ministry of Tourism (2020).

#### Focus Destination SWOT analyses

Table A4.1. Samaná SWOT analysis			
Strengths	Weaknesses		
Road networks and connectivity infrastructure.	Poor beach management.		
Airport access.	Unplanned urban development.		
Active cluster with good relationships to MiTur, CEIZTUR. Empowered community with strong advocacy role.	Coastal encroachment (mangrove destruction from informal settlements.		
Ecotourism positioning.	Inadequate and costly electricity.		
	Low capacity of subnational government.		
	Lack of adequate water treatment plants (black water).		
	No landfills.		
	Tourism skills gap.		
	Visual pollution from unregulated signage and lack of uniformity in regulations		
Opportunities	Threats		
Varied cultural and natural assets, including rainforest, wind	Coastal erosion.		
and water conditions for watersports, hilly landscape, and secluded beaches.	Fragmented governance: the peninsula consists of 6 different local governments.		
	High seasonality.		
	Marine pollution (sewage runoff), specifically the contamination of the Las Terrenas River from landfills, slaughterhouses, heavy machinery shops, and residential blackwater.		
	Illegal construction and operation without environmental permits.		
	Illegal fishing around Cayo Levantado Island and non- compliance with lobster and conch regulations.		

Source: Authors

Strengths	Weaknesses
<ul> <li>Excellent human capital given all main universities and tourism schools are headquartered in SD.</li> <li>Strong pipeline of qualified personnel.</li> <li>High capacity of SD local government, which is proactive on tourism.</li> <li>Single government jurisdiction facilitates planning, coordination, and implementation.</li> <li>Wide global flight route connections.</li> <li>Main port of entry.</li> <li>Favorable business operating environment.</li> <li>Prominent medical tourism destination for Caribbean markets.</li> <li>Well-developed health services.</li> <li>Strong gastronomic offer (over 500 restaurants listed in the official restaurant guide).</li> <li>Diverse shopping offer.</li> <li>Heavy presence of international brands.</li> <li>Strong hotel investment—updated, modern room inventory, and variety.</li> <li>Extensive road network connecting SD to the rest of the country within 2 hours, on average.</li> <li>Competitive salaries attract top talent.</li> <li>Increased prioritization for investment given the location as seat of government.</li> </ul>	Lack of promotion of SD's diversified tourism offer. Lack of a convention center. Solid waste management deficiencies. Lack of strategic tourism development plan. Poor coordination between local government and MiTur. Unsuited for beach tourism. Unreliable electricity.
Opportunities	Threats
The dispersal of tourism to lagging neighborhoods with tourism assets. Historic heritage core.	Visitor perception that SD is not a tourist destination. Traffic congestion. Safety and security in certain parts of SD. Pollution and contamination from trash burning at Duquesa landfill. Waterbody and city beach contamination from trash and sewage runoff, including the Ozama River. Aging water supply system unable to cater for demographic growth.

### Table A4.3. La Altagracia SWOT analysis

Strengths	Weaknesses
Quality lodging establishments.	Plastic waste on beaches.
Air connectivity.	Lack of centralized water supply.
Global brand recognition.	Undiversified offer.
Dynamic private sector.	Implementation capacity of basic service investments
Opportunities	Threats
<b>Opportunities</b> Private sector prioritization of sustainability.	Threats Water scarcity.
Private sector prioritization of sustainability.	Water scarcity.
Private sector prioritization of sustainability.	Water scarcity. Growing informal settlements.

Sensitive mangrove encroachment.

Source: Authors

#### Table A4.4. Puerto Plata SWOT analysis

Strengths	Weaknesses
Strong brand recognition.	Inadequate water supply.
Major cruise destination.	Unregulated development.
Good air and road connectivity.	Informal settlements and mangrove encroachment.
Extensive lodging capacity.	Solid waste pollution.
High government prioritization.	Sewage runoff.
Long history of tourism	Growing amount of informal sellers and businesses.
	Tourist harassment.
	Prostitution.
	Inadequate and costly electricity.
	Low satisfaction for beaches and gastronomy.
Opportunities	Threats
Potentially attractive historical center.	Aging tourism infrastructure and facilities.
Improved connectivity as base and gateway to the	Positioning and perception as a budget destination.
underdeveloped Northwest.	Undiversified tourism product.

Source: Authors.

#### Table A5.1 Summary of destination-specific actions by time frame and urgency

Activity	Timeline (Immediate / Short / Medium-term)	Urgency (Low / Moderate / High)
Destination-Specific		
Samaná		
Improve maintenance of the INAPAINAPA water plant on the way to Las Galeras	Immediate	High
Build capacity of local authorities to organize and manage public spaces and beachfronts	Immediate	Moderate
Improve solid waste transfer system from Cayo Levantado island to Santa Bárbara de Samaná landfill	Short-Term	High
Waterfront upgrading in Las Terrenas, including pedestrianization	Short-Term	Moderate
Improve access to Playa Rincón (highway crossing) and provide beach facilities & toilets; organize informal beach sellers	Short-Term	Moderate
Regulate motor vehicles on beaches	Short-Term	Moderate
Halt the contamination of the Las Terrenas rRiver from commercial runoff and residential sewage	Medium-Term	High
Manage and enforce beachfront encroachment of settlements and construction	Medium-Term	High
Improve parking and traffic management	Medium-Term	Moderate
Santo Domingo		
Produce a tourism Master Plan for the Distrito Nacional region, including a detailed destination marketing plan	Immediate	High
Implement phase 2 of the Malecón upgrading by creating bicycle lanes and adding traffic calming infrastructure	Immediate	Moderate
Construct landfill	Short-Term	High
Implement a wastewater treatment plant and system for Greater SD	Short-Term	High
Restrict heavy freight vehicles from the tourism zone and the Malecón	Short-Term	Moderate
Develop the Parque Mirador Sur & Norte for tourism and leisure use	Short-Term	Moderate
Improve the quantity and quality of public spaces	Medium-Term	Moderate
Facilitate the rehabilitation of heritage buildings along the Malecón	Medium-Term	Moderate
Facilitate the development of a Santo Domingo Convention Center	Medium-Term	Moderate
Develop a program to recover the Santo Domingo beach for leisure use	Medium-Term	Moderate
Revitalize the Ozama River into a recreation and leisure corridor	Medium-Term	Low

La Altagracia		
Develop water supply system	Immediate	High
Support the rescue, upgrading, and formalization of micro and small enterprises	Immediate	High
Build local public sector capacities	Immediate	Moderate
Promote multi-destination packages	Short-Term	Moderate
Implement initiatives to reduce seasonality (targeting MICE, festivals & diversification)	Medium-Term	High
Improve mangrove protection and enforcement	Medium-Term	High
Puerto Plata		
Complete the Cabarete sewage and solid waste treatment plant	Short-Term	High
Improve urban infrastructure and public spaces in downtown Cabarete, including burying electrical cables and creating centralized parking	Short-Term	Moderate
Rehabilitate Historic Isabela	Short-Term	Moderate
Restructure water provision systems	Medium-Term	High
Relocate and upgrade Sousa's landfill	Medium-Term	High
Build a hospital for Sousa	Medium-Term	High
Improve protection and management of the Cabarete lagoon	Medium-Term	High
Improve the planning, infrastructure, and management of public beaches	Medium-Term	Moderate
Complete the Gregorio Luperón tourist highway (Gran Parada-Santiago section)	Medium-Term	Moderate

# Spotlight: Tailoring territorial development instruments: Zonas Francas

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# Introduction

Zonas Francas (ZFs) is an instrument that has been used in the Dominican Republic (DR) and across the world to support territorial development. However, it has had mixed results. The effectiveness of ZFs when it comes to supporting the territories where they are located depends on the *spillovers* they generate. Spill-overs to local economies can be defined and measured by static and dynamic economic outcomes, as well as socioeconomic outcomes (Farole, 2011). In other words, ZFs are expected to benefit their territories by attracting new businesses, creating linkages with local firms, generating jobs, upgrading local productive fabric, etc. These spillovers are transmitted to local economies through different channels and are dependent on different factors—from the characteristics of the firms locating in the ZF to the interaction between ZF-based firms and non-ZF-based firms to the labe based on a combination of desk review, survey of firms in ZFs, and meetings with experts and government stakeholders. The survey of firms was conducted between August – October 2020,<sup>1</sup> with the goal of better understanding (i) their main drivers to locate in the DR and in that *Zona Franca* (or specific territory), and (ii) their linkages with the territory in terms of local value chains, partnerships with local stakeholders, human capital, and the provision of other services<sup>2</sup> (see Annex 1 for descriptive statistics).

# 1. Zonas Francas in the world – What do we know?

Zonas Francas, which are also called Special Economic Zones, are a policy tool used across the world with the aim of creating better-serviced productive "enclaves" as well as promoting opportunities inside and outside the Zones to support broader development objectives. They are often seen as a solution to broader issues, such as dysfunctional land or labor markets, poor public services, etc., which can be bottlenecks for attracting workers and firms to a given location *despite* local advantages. When tackling these challenges on a regional/national scale is difficult, ZFs can provide a more limited physical area to address such issues and incentivize firms to cluster together. Some of the challenges can be overcome without *independence from national regulations* (typically, customs regulations, but sometimes other regulations like land registration, labor laws, or other taxes). This may include, for example, providing advanced factory units to firms to overcome sunk costs; overcoming frictions resulting from gaps in *information* regarding opportunities in a locality (such as online job postings or branding the location); and making registration and all types of bureaucratic processes easier through "one stop shops." Others require *regulatory independence* or high-level coordination and backing from the national government or provincial authorities, which may include, for example, amending land acquisition and construction permitting regulations, labor and migration regulations, or business registration procedures.

When the objectives of ZFs include regional development, ZFs can support local economic development when they generate economic and socioeconomic spillovers in the territory that surrounds them. Existing evidence suggests that their impact is limited (Frick, S.A. and Rodríguez-Pose, A., 2019). Spillovers to local territories can include economic and socioeconomic outcomes, either in a specific period of time (e.g.

We interviewed 68 firms. Results are indicative and not representative

<sup>2</sup> Services refer to transport to/from ZFs from/to urban or rural areas, as well as welfare programs (e.g., health, housing, etc.).

exports, foreign direct investment (FDI), or regional employment) or through long-term structural impact in the territory (e.g. upgrading local technologies, economic diversification, or improving employment quality) (Farole, 2011). A recent quantitative study of ZFs in emerging economies shows that ZFs do contribute to the development of their surrounding territories, confirming the existence of spillovers. However, it also revealed that spillovers are usually experienced in a limited radius (within a 50 km radius) around the ZF (Frick, S.A. and Rodríguez-Pose, A., 2019). While the immediate surroundings of ZFs do benefit from spillovers, the impact becomes weaker further away from ZFs.

How can ZFs spillovers be promoted? As it is known, one of the main goals of ZFs is to attract FDI (through the location of multinational firms). FDI is an important factor to diffuse knowledge and technology across borders (Bajo-Rubio and López-Pueyo, 2002; Ernst and Kim, 2002). Multinational firms in ZFs represent new sources of technology to the host economy (Ernst and Kim, 2002), which can boost productivity, create new domestic employment (Ernst and Kim, 2002), and promote economic growth and development (Crescenzi, 2005) in the host economy. However, spillovers are transmitted to local economies through different channels, and are dependent on three main factors: (i) the absorptive capacity of the territory and its endowments; (ii) the interaction between ZF-based firms and non-ZF-based firms to upgrade local production standards and labor skills; and (iii) the characteristics of firms located in ZFs to learn how well they would *connect* with local firms (Frick, S.A. and Rodríguez-Pose, A., 2019). When a ZF experiences limited spillovers, it is usually linked to poor location choices, inadequate complementary policies (e.g. connective infrastructure), and/or poor institutional quality (Frick, S.A. and Rodríguez-Pose, A., 2019).

First, the territory's absorptive capacity and local endowments need to be considered when deciding where to locate a ZF in order to maximize spillovers. When ZFs are created in isolation, without taking into considerations firms' needs within the territory, or with the application of complementary policies, they usually fail to create spillovers. ZFs can better connect with their surroundings when there is an appropriate institutional and policy framework coupled with the right mix of *incentives* (not necessarily fiscal) (Akinci and Crittle, 2008). The effective transfer of knowledge requires local skills (or absorptive capacity) to identify, interpret, and incorporate acquired knowledge into local production processes (Agrawal, 2002 and Feldman, 2004; Boschma, 2005). Moreover, access and quality in infrastructure and services (e.g. water, electricity, business environment, security, and cleaning), access to a large market through efficient connectivity or proximity, and access to a labor market in the territory are all needed to enhance local spillovers. For example, an analysis of ZFs spillovers in emerging economies performed by Frick and Rodríguez-Pose (2019)—which included 10 ZFs from the Dominican Republic (DR)—revealed that spillovers were more likely to occur when the ZF is located close to a large city (300,000 inhabitants), thereby enabling access to a larger pool of human capital and connections to a broader number of local firms.<sup>3</sup>

When local territorial endowments are scarce, a common temporal solution used worldwide is to attract firms by offering tax incentives. However, this solution is costly and usually ineffective since public resources could be invested in supporting spillovers instead. For example, twelve ZFs were built in Eastern Indonesia to attract high-tech firms to revive a lagging area. However, only three of the ZFs received any investment at all, 80 percent of which was in a single ZF in the more developed West. In total, just 17 percent

<sup>3</sup> The research relied on a data set sourced from Frick et al. (2019) covering data on SEZ characteristics and performance across 346 zones in 22 emerging countries, including the Dominican Republic.

of the planned investment was actually mobilized (Temenggung, D. 2013). While tax incentives were the main instrument used to attract firms, high-tech firms actually needed different complements to be productive (such as strong external agglomeration economies for business services, a diverse skilled labor pool, energy, and institutions), all of which were lacking in the isolated East. Thus, the plan was not aligned with either pre-existing locational advantages or advantages that could be developed on a medium-run time horizon. Complements that were planned were poorly designed and executed<sup>4</sup> and with so many ZFs in relatively "greenfield" locations limited firms' coordination with citizens and firms in the territory. Ultimately, the effort was costly for the country and for the local governments involved. Budgets were scarce and needed to address the *underlying* bottlenecks of the territory, such as low human capital, weak connectivity to the national economy, and uncoordinated urban management (World Bank, 2020).

Second, the stronger the linkages between ZF-based firms and non-ZF-based firms, the greater the spillovers. Both the quality and quantity of these linkages matter when promoting local employment, upgrading local economic activities, and ultimately, promoting growth and development (Farole, 2011; Zeng, 2016). Goods produced in ZFs, as well as their processes, can pull local practices and quality of products to higher standards. This will also incentivize local firms (and sometimes governments) to train their labor force to meet the needed expectations (Duarte et al., 2014; Farole and Winkler, 2014).

Third, the characteristics of the firms locating in ZFs matter for generating knowledge spillovers. Beyond the absorptive capacity and local characteristics of the host economy, the characteristics of the firms locating in ZFs (such as the country of origin of these firms, their sectors, etc.), influence the location decision of the firms and, consequently, their *connecting* interests with the host economy (Marin and Giuliani,2011; Crescenzi et al.,2016; lammarino et al., 2008). Their technological level, global production chains, and growth strategies guide their motivation (and the possibility) to create linkages with the local economy and promote spillovers (Farole and Winkler, 2014).

There is extensive literature analyzing different aspects of ZFs in the DR. Some studies focus on measuring and tracking the internal success of the zones in terms of exports, jobs, and investment (including the annual reports from the CNZFE). Others, such as a study conducted by the World Bank in 2017 (World Bank, 2017), are aimed at assessing the implications of regulatory reforms on export performance and ZFs' linkages with domestic suppliers. The 2017 World Bank study finds that the gains associated with the generation of higher added value in the DR do not correlate with the development of greater linkages with domestic companies outside the ZFs. The paper recommends thinking about policies that could strengthen these linkages. Also, another study published by the World Bank in 2017 (World Bank, 2017) analyzed both the factors driving ZFs' performance in emerging market economies, including the 10 biggest ZFs in the DR, and the extent to which ZFs' performance drives economic growth in surrounding areas.

In the following sections, this spotlight will delve deeper into the mechanisms for transmitting spillovers in the DR and will consider whether DR territories are providing fertile ground for ZFs.

<sup>4</sup> Some "complementary" investments were implemented, such as up-skilling for workers and MSMEs, infrastructure, and institutions such as "one stop shops" for registration, but they did not reflect a sophisticated diagnosis of firm needs.

# 2. Zonas Francas in the Dominican Republic

The Dominican Republic started to implement Zonas Francas in the 1960s to promote economic growth and with the aim of supporting the development of lagging territories. The first Zona Franca in the DR was established in 1969. La Romana was created and developed by the Gulf and Western América Corporation.<sup>5</sup> Law 8-90 indicated that the objectives of ZFs were to attract local and foreign investment, provide training, and promote the transfer of technology and *know-how* for the purpose of creating jobs—particularly in economically disadvantaged areas, such as the border area with Haiti. To achieve these objectives, the law granted a generous set of tax incentives for companies located in *Zonas Francas*. Currently, ZFs are also integrating into their objectives the impact they have in the surrounding territories/provinces.<sup>6</sup>

Many ZFs have been established in the country since then. At the beginning of 2020, the DR had 75 *Parques de Zonas Francas* (or Special Economic Zone Parks) hosting 551 firms.<sup>7</sup> The Dominican Republic also hosts *Zonas Francas Especiales* (ZFEs) or *Zonas Francas de Servicios* (ZFSs). These comprise 158 individual firms across the country, located outside the designated *Parques*, which receive the same benefits as those firms located inside the parks. For instance, firms inside the *Parques* may choose to establish a subsidiary in a different territory in the DR that benefits their production. This subsidiary will be called ZFE/ZFS and will have the same benefits as the firm located inside the park. When we talk about ZFs in the DR, we are referring to the *Parques de Zonas Francas*. The National Council of Free Export Zones (*CNZFE*<sup>®</sup> in Spanish) is the entity that regulates and supervises the operations of free zones in the DR, while the *Dominican Association of Zonas Francas* (*Adozona*) is the association representing the private parks and firms.<sup>9</sup>

## 2.1 Where are Zonas Francas located in the DR?

As of 2020, most *Parques de Zonas Franca* in the DR are located in the provinces of Santiago and Santo Domingo, which favors connectivity and agglomeration benefits. Santiago hosts 27 out of the 75 parks, while the province of Santo Domingo hosts 18 (see Figure 1). If we consider the neighboring provinces to these two provinces, 63 out of the 75 ZFs are located in or around Santiago and Santo Domingo, with 7 ZFs in the provinces surrounding Santiago (1 in Valverde, 3 in Puerto Plata, 1 in Espaillat, and 2 in La Vega), and 11 ZFs in the provinces surrounding Santo Domingo (8 in San Cristobal and 3 in San Pedro de Macorís).

<sup>5</sup> In 1969, the Law 299 was issued on April 23 which authorized the location of ZFs in DR.

<sup>6</sup> Interview with José Manuel Torres, Executive Vice-President of Adozona.

<sup>7</sup> Updated data from CNZFE as of July 16, 2020: Departamento Estadístico de Zonas Francas.

<sup>8</sup> The CNZFE was created by Law 8-90 in 1990, representing both public and private sectors.

<sup>9</sup> Adozona was formed on Aug 8, 1988, and recognized by Decree 579-88 of Dec 18, 1988. Retrieved from: https://adozona.org/sobre-adozona/.



Figure 1. Location of Zonas Francas in the Dominican Republic

Source: Author's elaboration using data from CNZFE Note: ZFs are in blue. ZFEs and ZFSs are in red.

## 2.2 ZFs in the DR play an important role in exports and formal employment in certain areas but their territorial spillovers appear to be limited

ZFs represent more than half of the DR's exports for primary and secondary sectors. In 2019, Zonas Francas exported US\$ 6.264 billion, and represented 56 percent of the exports of mineral, agricultural, and industrial products. That same year, Zonas Francas contributed to 3.2 percent of the GDP in the Dominican Republic. ZFs make up the 5<sup>th</sup> largest sector in the economy with regard to receiving Foreign Direct Investment, as measured by accumulated FDI between 2010-2017 (after Commerce/Industry, Mining, Tourism, and Real Estate).

Also, in some provinces, Zonas Francas are responsible for a high share of private formal employment. Zonas Francas provided 176,555 direct jobs in 2019, which was an increase of 2.8 percent from 2018 (CNZFE, 2019). The importance of ZFs across provinces varies, though. They play a key role in private formal employment in the provinces of San Cristobal, Barahona, Santiago, and San Pedro de Macorís. For instance, 42 percent of private formal Employment in San Cristóbal is in Zonas Francas, followed by 28 percent in Barahona, and 26 percent in Santiago and San Pedro de Macoris (see Figure 2).



Source: Presentation from Adozona, April 2019. "Impacto de las Zonas Francas a la Economía Dominicana: Analytica – Inteligencia Económica y Estrategia," using data from ENCFT 2018 and CNZFE 2017 Report.

Note: Provinces without a zona (and Pedernales, which was excluded due to lack of data representation even though it does have one ZF) are in grey.

However, there is evidence that ZFs' spillovers in the surrounding territory is extremely localized in the Dominican Republic. Although ZFs contribute to economic growth and job creation in the areas where they locate, territorial spillovers in neighboring areas appear to decline steeply with distance and also appear to be influenced by other territorial endowments.<sup>10</sup> Evidence from a study of 346 ZFs in 22 emerging economies, including the 10 largest ZFs in the Dominican Republic, suggests that the further away from Santo Domingo and Santiago a ZF is located, the lower the territorial spillovers from that ZF. In fact, when considering regional characteristics, there is no evidence that ZFs have an influence on the economic growth of areas located more than 50 km away from the zone (World Bank, 2017; Frick, S.A. and Rodríguez-Pose, A., 2019). One would expect a wider range of impacts to extend beyond 50 km due to supply chain links, spending multipliers, etc.

# 2.3 How are the different transmission channels working in the Dominican Republic?

As mentioned, spillovers are transmitted to local economies through different channels, and are dependent on three main factors: (i) the absorptive capacity of the territory and its endowments; (ii) the interaction between ZF-based firms and non-ZF-based firms to upgrade local production standards and labor skills; and

<sup>10</sup> The analysis uses night light data as a proxy for ZF performance as well as the economic performance of the surrounding area in order to overcome the lack of reliable economic indicators when measuring ZF performance.

(iii) the characteristics of firms located in ZFs to learn how well would they *connect* with local firms. *How are these channels working in the DR?* 

## 2.3.1 Absorptive capacity and local endowments are stronger in Santo Domingo and Santiago

The impact of ZFs is constrained by local conditions, giving way to greater territorial inequalities if active plans to upgrade lagging territories are not in place. The impact decay with distance may be related to the size and characteristics of the zones. However, it is more likely to be related to the *absorptive capacity* of many of the areas in which the zones are located. The combination of successful low-tech zones based in low-cost regions with poor skills, infrastructure, and institutions outside the zones is likely to limit the capacity of ZFs to maximize their impacts in the surrounding areas (Frick, S. A., & Rodríguez-Pose, A. 2019). Overall, firms locating in ZFs in emerging countries still (i) seek low-cost locations in less developed areas of the countries, (ii) are in close proximity to the main city, and (iii) have easy access to North American and European markets (World Bank, 2017). In the DR, we see that most ZFs are locating in or close to provinces with higher absorptive capacity (see Figures 3 and 4), as proxied by their social filter index—which considers the educational achievement, the productive employment of human resources, and the demographic structure and dynamism of provinces.<sup>11</sup> ZFs locating in these provinces, hence, is expected, and, sometimes, desirable when trying to build linkages with the territory.





Note: The variables used are % of the population with tertiary education (Census, 2010); % of the labor force employed in agriculture (ENFT, 2015); % of working age population (ONE Estimation, 2015)

Social Filter Index focuses on three main aspects of social structure: educational achievement (Lundvall 1992; Malecki 1997); the productive employment of human resources (Gordon 2001); and demographic structure and dynamism (Rodríguez-Pose 1999). Principal Component Analysis is used to transform the correlated variables into a set of uncorrelated variables (principal components) that explain the total variance.

## Figure 4. Absorptive capacity and location of Zonas Francas, by province



Fuente: Elaboración propia

Nota: Las provincias están ordenadas según su índice de capacidad de absorción, de mayor (Santo Domingo) a menor (Elías Peña). Los rectángulos verdes identifican los provincias aledañas a Santo Domingo y Santiago que albergan zonas francas.

Current location of ZFs mostly around Santo Domingo and Santiago belies one of its objectives, which was to promote economic development in the less developed parts of the country (e.g., the border with Haiti). As of 2020, there is only 1 *Parque de Zona Franca* (out of 75) and 3 ZFEs (out of 158) located in provinces bordering Haiti (1 ZF in Pedernales, 2 ZFEs in Monte Cristi, and 1 ZFE in Independencia).

#### Figure 5. Main reasons to locate in this Zona Franca



Source: World Bank Survey (2020) conducted among firms located in Zonas Francas in the DR.

This is likely a reflection of firms' preference for locating in places with better territorial endowments. According to the survey conducted, firms prefer to have better accessibility to northern ports and the American market (near Santiago), as well as the human capital offered by the main economic agglomeration of the country (Santo Domingo). Connectivity, human capital, and the previous location of firms of the same sector are the main reasons for firms to locate in ZFs in the DR.<sup>12</sup>

Among territorial endowments, access to markets/connectivity is the most important factor attracting firms into ZFs in the DR. Fiscal incentives are not even in the top five. The DR has put in place different tax incentives to attract firms into ZFS, such as 100 percent tax exemptions linked to importing raw materials, rent, patents, importing cargo vehicles, and importing vehicles to transport workers to firms. <sup>13</sup> However, as mentioned, these are not necessarily the main attractors. The 2020 World Bank survey indicated that the most important factor for firms to locate in ZFs in the DR is good connectivity, both, internationally and between key hubs in the country (see Figure 5). Infrastructure and services for electricity, water and sanitation, and digital connectivity are among the top ten. These territorial endowments are concentrated in and around Santiago and Santo Domingo.

Human capital availability is the second most important factor for firms to consider when locating in a ZF (see Figure 5). Thirty-seven percent of the firms interviewed mentioned that they do find the quality of human capital they need. However, it is only for low-skilled labor (24 percent) or only for high-skilled labor (13 percent). Fifteen percent of the firms interviewed mentioned that it is indeed difficult to find the adequate

<sup>12</sup> The World Bank team conducted a survey of 68 firms located in ZFs in the DR from Aug. 2020 to Nov. 2020.

<sup>13</sup> Consejo Nacional de Zonas Francas de Exportación. July 2020. Retrieved from: http://www.cnzfe.gob.do/index.php/es/

labor market for the jobs they offer (see Figure 6). Projects to strengthen the local context should therefore be included in the planning of ZFs. When deciding on the strategic focus of ZFs and identifying what business sectors will be targeted, it is important to work with the private sector to identify the skills that will be needed in companies inside and outside the zones. In some cases, private investors in ZFs can be involved in either the financing of such a project or in training. In turn, mechanisms will be able to be identified that ensure a qualified labor force. Additionally, key linkages with local research centers, universities, and vocational training bodies, as well as with other local partners, will also be able to be identified. For instance, Santo Domingo hosts better universities and skilled labor, meaning that higher-technological sectors are attracted by the endowments and positive externalities of the capital city, while other parts of the country could attract sectors better linked to the local fabric. Labor market/local economy needs to absorb innovation.

# Yes, only for high-skilled labor Yes, in both cases, for high-skilled and low-skilled labor Yes, in both cases, for high-skilled and low-skilled labor No, it is diffult to find the required labor

## Figure 6. Do you believe the firm manages to find the labor required to carry out its activities?

Source: World Bank Survey (2020) conducted among firms located in Zonas Francas in the DR.

**Finding skilled human capital is a bigger challenge in lagging regions. Current training programs can help alleviate this constraint, but they could be better utilized.** There are indeed programs linking professional education with the needs of ZFs. *Adozona*, for instance, identifies needs and then the *Instituto Nacional de Formación Técnico Profesional (INFOTEP* in Spanish),<sup>14</sup> tailors education programs to suit those needs. Since 1992, 35 percent of the funds collected by *INFOTEP* is dedicated to employees in ZFs. *Adozona* also coordinates with the Ministry of Superior Education for these types of programs. However, only half of the firms interviewed in the 2020 World Bank survey mentioned that they coordinate with INFOTEP for training, thereby leaving space for further engagement (see Figure 7).

14 INFOTEP is funded by 1 percent of all salaries in DR.



### Figure 7. Zonas Francas in the Dominican Republic interact with these institutions

Source: World Bank Survey (2020) conducted among firms located in Zonas Francas in the DR.

The stronger absorptive capacity and local endowments in the provinces of Santo Domingo and Santiago reinforces the desire of firms to locate in these two provinces. Since greater spillovers occur in these already stronger territories, greater territorial inequalities develop, which leaves other regions with few benefits.

# 2.3.2 Interaction between ZF-based firms and non-ZF-based firms is weak

Linkages between ZFs and the rest of the economy appear to be weak in the DR due to the quality of products (World Bank, 2017). Backward linkages are weak, as 81 percent of ZF's inputs are provided by firms outside the DR, which suggests a disconnect between ZFs and local firms.<sup>15</sup> Furthermore, although recent reforms allow companies operating in ZFs to sell products in the domestic market, very few do and most linkages happen within ZFs. For the most part, firms engage in exports, and only sell in the domestic market on very rare occasions—usually to satisfy small orders or to sell surplus export orders that do not meet international standards. Moreover, firms in ZFs mostly buy professional services or office equipment from the local market instead of production inputs due to the poor quality of products and services. The resulting business environment when accessing the local market is cumbersome, which is compounded by the lack of matching mechanisms to find firms in the local market to fulfill their needs.<sup>16</sup>

<sup>15</sup> Dominican Republic Central Bank – Census 2014 (World Bank. 2017. Zonas Francas en República Dominicana: Consideraciones de política para un sector más competitivo e incluyente. World Bank: Dominican Republic, using information from Laws 8-90, 56-07 & 139-11.).

<sup>16</sup> World Bank survey, 2020.



## Figure 8. Zonas Francas help overcome these challenges

Source: World Bank Survey (2020) conducted among firms located in Zonas Francas in the DR.

## Figure 9. Main bottlenecks for the private sector in the Dominican Republic



Source: World Bank Survey (2020) conducted among firms located in Zonas Francas in the DR.

After quality of products, current tax regulation (high taxes) and business environment (bureaucracy/customs) are the main aspects firms in ZFs would like to improve in order to buy products from non-ZF based firms.<sup>17</sup> The DR has put in place a quick process for firms locating in *Zonas Francas*. The process to establish a firm within *Zonas Francas* lasts approximately 30 days from the date the required documents are received. This process can take up to one year in the United States (Administración de Comercio Internacional. n.d.).The operating permit is granted by *CNZFE*.<sup>18</sup> Through the Dominican Association of Free Zones (*Adozona*), the private sector actively participates in policy discussion and encourages a number of initiatives. To that end, it has aided the creation of a fund for the promotion of exports and investment. But even if the business environment is alleviated by *Zona Francas* (Figure 8), it is still the main barrier for firms when locating in the DR (Figure 9). Many firms mention that the bureaucratic processes with customs was the main challenge to operating in the DR.

There is lack of information on how to connect to firms in ZFs, and vice versa. Despite current efforts, lack of information on what is needed to connect to firms in ZFs is one of the key bottlenecks in the DR. Local firms don't know what steps to take to connect to firms in ZFs. For instance, the level of production quality by firms located outside ZFs needs to comply with exporting standards, which is not currently the case. There are no guidelines for export production. As of now, local firms are focused on supplying only the local market, which has lower requirements than other economies.

Responding to this challenge, the government and public and private organizations are implementing new initiatives to promote production linkages between ZFs and the local economy. More needs to be done, though. The government began to facilitate roundtables between local companies and free zone companies. Also, public and private associates are coordinating among themselves with the objective of supporting productive chains. Their main objectives are to promote business meetings, develop an information center where free zone companies can easily identify local suppliers, and execute joint initiatives to increase the chains (World Bank, 2017). An example is explained in Annex 2.

Even in places with higher absorptive capacity and local endowments (such as the provinces of Santo Domingo and Santiago), ZF-based firms have poor linkages with non-ZF-based firms, which limits long-term structural and developmental impact in the provinces.

## 2.3.3 Are ZF-based firms interested in connecting with local firms?

The Dominican Republic lacks an official, well-developed national strategy to attract FDI into ZFs that can target firms motivated to integrate with the local economies. There are some resources allocated to attract global potential investors: *CNZFE*, *Adozona*, the Ministry of Foreign Affairs, and the *Centro de Exportación e Inversión de la República Dominicana (CEI-RD*, or Investment and Export Center of the Dominican Republic) usually work together on marketing efforts. However, there is no unified strategy or measurement of results. As of now, the most effective way to attract investments is by targeting "flagship firms," i.e., firms that would bring with them either suppliers or competitors. For instance, 8 out of the 30 most important firms in the international medical sector are in the DR's ZFs. Investment attraction usually occurs at the national level,

<sup>17</sup> World Bank survey, 2020.

<sup>18</sup> Consejo Nacional de Zonas Francas de Exportación. July 2020. Retrieved from: <u>http://www.cnzfe.gob.do/index.php/es/</u>

through *CNZFE* and *Adozona*. Each *Parque* has also some capacities to do so, but these are limited. However, there are no coordinated efforts to link the absorptive capacity of local territories with the firms and sectors attracted to ZFs.

Ideally, ZF-based firms would build on existing comparative advantages and increase diversity and complexity in sectors that are related to those already in place. ZFs should not aim for big technology jumps, as these often turn out to be high-tech fantasies<sup>19</sup>. Nor should they get stuck on low-tech manufacturing based on low wages, which creates a low development trap for these regions. ZFs first need to understand local contextual factors. The sector to be pursued should be related to the type of firms and sectors already in place, with a goal of increasing the technological capacity of existing firms and sectors while avoiding excessive technological mismatches—which often end up with high-tech firms in the ZFs completely disconnected from the local production fabric. Such a gradual approach will lead to greater diversity based on related variety and technological progress, and will contribute to improving the competitiveness of local firms (e.g., people, technology, quality, information, etc.) if the mechanisms to connect local firms with the firms in ZFs are set up. ZFs that have failed in emerging countries have often been too ambitious in their technological goals in areas that are frequently far away from the technological frontier. Therefore, more incremental changes aimed at diversifying from existing sectors and increasing complexity provide far more viable paths for the development of a ZF and the establishment of links with the local and national economies.

This may mean attracting different types of sectors to different territories based on local characteristics. Public intervention should neither apply "one-size-fits-all" approaches nor adopt "picking-the-winner" strategies. It should aim at connecting complementary sectors and inducing knowledge transfer between them to enable diversification and upgrading of local production value chains (Boschma, R., 2009). International agreements have shaped the economic activities of the DR's *Zonas Francas*, pushing them to transition from textiles to higher-tech activities. There is a diversified basket of products in the DR's ZFs (see Figure 3). However, it is still in the lower-technological complexity spectrum. Out of the 709 firms in ZFs, 23 percent focus on Services (such as call centers and logistics), 15 percent on textiles, 13 percent on tobacco and its derivatives, and the rest on different products.<sup>20</sup>

Beyond the absorptive capacity and the local endowments attracting firms to a territory, it is key to understand and influence the type of firms the DR is attracting in order to incentivize long-term economic and socioeconomic spillovers.

# 3. Conclusion

Zonas Francas have been implemented across the world as an instrument to promote local economic development, supporting the transmission of spillovers to create jobs, promote exports, and upgrade local skills and technologies. However, the results have been mixed. How successful ZFs have been frequently depends on the absorptive capacity of the territories where they are located, in addition to their local endowments (such as local institutions and policies, public infrastructure, and skills), the level of interaction between ZFbased firms and non-ZF-based firms, and the characteristics of the firms locating in the host economies.

<sup>19</sup> Castells and Hall, 1994.

<sup>20</sup> Updated data from CNZFE as of July 16, 2020: Departamento Estadístico de Zonas Francas.

*Zonas Francas* in the DR could improve their economic impact if they can promote better spillovers in the surrounding territory by strengthening the mechanisms through which these spillovers are transmitted. In the DR, most ZFs are located close to the two main urban agglomerations in the country (Santo Domingo and Santiago), thereby favoring access to markets/connectivity (local absorptive capacity and endowments) over fiscal incentives. Fiscal costs have not been minimal (though they still need to be calculated), while benefits are usually localized and not extended to the greater parts of the surrounding territory. Only a few *Zonas Francas* have ended up in lagging and/or border regions of the country. This is potentially due to the lack of local endowments needed by firms in ZFs. Fiscal incentives alone are not enough to overcome location deficits. Moreover, even in the areas of the DR where ZFs concentrate, interaction between firms in ZFs and local firms is weak. The relatively low quality of local products together with institutional barriers limits network creation and knowledge spillover generation even in zones close to Santo Domingo and Santiago. Furthermore, the DR does not have a strategy targeting specific types of firms that could better connect to local characteristics, thereby losing potential spillovers.

If the DR wants to use ZFs as an instrument for territorial development, as has been done in many other countries in the world, a clear strategy that considers complementary policies needs to be in place. This strategy needs to integrate what firms need with an understanding of the territory, its assets, human capital, and local firms, and how can these be linked to ZFs in order to benefit and upgrade the local economic fabric. When deciding to use ZFs as a development instrument, complementary policies need to accompany the tool. The complementary policies must target the main bottlenecks related to absorptive capacity and local endowments, interaction between ZF-based firms and local firms, and the appropriate targeting of FDI. Lastly, *Zonas Francas* can be considered as one of the many policy tools available to promote territorial development (see some examples <u>here</u>). To choose the right tool, a tool that brings the most spillovers to the territory, a clear understanding of the main local bottlenecks is needed first (see an example of a spatial diagnostic <u>here</u>).

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# Annex 1



Survey of firms located in Zonas Francas: descriptive statistics

Note: Manufacturing and construction include: Food production industries; Preparation of beverages and tobacco products; Preparation of textiles, clothing, leather goods, and shoes; Manufacture of rubber products and plastics; Other manufacturing industries; and Construction. Services include: Business; Telecommunications; Health; and Other Services.

## Figure A1.2. Size and origin of interviewed firms



# Firms interviewed are of different sizes (number of employees)

## Most firms interviewed are foreign

# Annex 2

Business categorization tool for MSMEs to enable production linkages with the Medical Devices subsector.

In recent years, the Medical Devices and Pharmaceuticals Subsector (*SDMF*) in the Dominican Republic has been characterized by growth and the incorporation of increasingly sophisticated processes that add value to production. This subsector in ZFs has become one of the engines of the country's economic development, positioning itself as the main manufacturing export item (25% of exports), one of the largest job generators (4<sup>th</sup> in line after Textiles, Tobacco and its derivatives, and Services), and the subsector with the highest accumulated investment to date (it received 27.3% of 2018 investments in ZFs, and was followed by Tobacco and its derivatives and Textiles, in that order). The development and consolidation of effective local and global supply chains is essential for this subsector in order to improve operational efficiencies and promote higher levels of growth in DR.

In 2015, the Free Zones Medical and Pharmaceutical Devices Cluster (*Clúster de Dispositivos Médicos y Farmacéuticos de Zonas Francas* in Spanish) was established. It operates in the Dominican Free Zones Association (*Adozona*) with the support of *CNZFE*. *Adozona* and *CNZFE* have consistently worked in conjunction with the sector's firms to identify and promote initiatives that improve the competitiveness of this important productive activity.

Currently, firms in ZFs make local purchases that exceed 60 billion Dominican Pesos annually. There are significant opportunities to increase this amount if collaborative efforts continue to be joined with the various private entities and government institutions that, until now, have served as promoters of activities in support of productive chains.

In order to promote and make these chains more efficient, the Cluster has designed the development of a digital tool to enable linkages between firms in ZFs and the local economy. In 2018, *Adozona* presented the *Herramienta de Categorización de Empresas para Encadenamiento Productivo con el Subsector de Dispositivos Médicos* (or Business Categorization Tools for Productive Chains with the Medical Devices Subsector) project, which was evaluated and approved by the Evaluation Committee. This project was the result of an initiative for the execution of the Digital Productive Chain Program (*PEPD*) launched by the Vice Ministry of Promotion for *MSMEs* of the Ministry of Industry, Commerce, and *MSMEs* (*MICM*) and coordinated by the Association of Industries of the Dominican Republic (*AIRD*).<sup>21</sup>

It has the objective of evaluating and categorizing each potential supplier based on the requirements established by the SDMF (which is highly regulated). With this assessment, each potential supplier identifies the category in which it is located based on the requirements of the companies in that SDMF. The firms identify their strengths and weaknesses, which allows them to increase the quality of their products or services, thereby empowering themselves to become a supplier in the industry, both locally and internationally. This tool enables potential suppliers to access information such as: (i) sector requirements for each product category, (ii) an online self-assessment tool, (iii) a clear diagnosis to potential suppliers, (iv) a list of current suppliers by category, and (v) information on the improvement opportunities for companies that wish to be suppliers. Firms that need improvements would receive technical assistance from the Cluster.

Source: Project document shared by Adozona.

# Annex 3

Qualitative assessment of ZFs in the DR – Electricity subpower and proximity to Santo Domingo or Santiago seem relevant

Table A3.1. Qualitative evaluation of Zonas Francas in the Dominican Republic												
Zona franca		Dynamism based on nightlights		Number of green grades to the right	Basic zone characteristics			I	Zone Infrostructure		Distance to Santo Domingo or Santiago	
Name	Location	Absolute growth 2007-2012	Compared to national growth		Years operating	Size (Ha)	Operator	High-tech	Electricity subpower station	One-stop shop onsite	Santo Domingo (Largest City)	Closest city 300k pop
Bella Vista	Santo Domingo	Growing	Faster	4: Few years operating, large, electricity subpower station, 44 km away from SD	3	227	Private	No	1	0	44	44
De Santiago	Santiago (Norte)	Stable	Equal	1: 4 km away from Santiago	33	125	РРР	No	0	0	162	4
De Las Américas	Santo Domingo	Growing	Equal	3: Electricity subpower station, One-stop shop 23 km away from SD,	18	117	Private	No	1	1	23	23
De La Romana I	La Romana (Este)	Stable	Equal	1: One-stop shop	38	114	Private	No	0	1	122	122
San Pedro De Macorís	San Pedro de Macoris (Este)	Stable	Equal	0 / No information	34	110	Public*	No		0	74	74
De Baní	Peravia (Sur)	Growing	Equal	0 / No information	21	100	Private	No		0	72	72
De La Romana II	La Romana (Este)	Growing	Equal	1: One-stop shop	20	100	Private	No	0	1	118	118
De San Isidro	Santo Domingo	Growing	Equal	2: Electricity subpower station, 13 km away from SD	18	86	Private	No	1	0	13	13
Pisano	Santiago (Norte)	Growing	Faster	2: Electricity subpower station, 10 km away from Santiago	14	60	Private	No	1	0	181	10
De Villa Mella	Santo Domingo	Stable	Slower	1: 8 km away from SD	19	57	Private	No		0	8	8

Source: Author's elaboration, based on World Bank, 2017.