

Planning for sustainable territorial development in Latin America and the Caribbean



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Foreword

The 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs) frame a route towards tackling the great development challenges that can only be attained by designing, implementing, following up and evaluating public policies that integrate the economic, social and environmental dimensions simultaneously.

Territory, at its various levels (global, regional, national and subnational) is a key piece in this new generation of consensus and policies, because it draws attention to the diversity of contexts and stakeholders and thus the variety of strategies needed to respond properly to the specifics of development situations and issues.

The past decade of thinking and policy recommendations in this respect by the Economic Commission for Latin America and the Caribbean (ECLAC) take on new meaning with the principle enshrined in the 2030 Agenda of leaving no one behind, because the territory is where inequality is expressed and where the concentration of population and production generates disparities between and within countries, affecting rural and urban populations differently. In this connection, part of the analysis carried over the past year by the Latin American and Caribbean Institute for Economic and Social Planning (ILPES), together with the Food and Agriculture Organization of the United Nations (FAO), indicates the benefits of development will leave behind some 17 million people living in lagging rural areas unless comprehensive policies are forged to address their real needs.

As part of this reflection, ILPES promotes intergovernmental technical and political dialogue on the challenges of planning and public management for development in its three spheres of action: training, applied research and technical assistance. It contributes to capacity-building in the region in these spheres, with an emphasis on creating methodological tools to support the countries in strengthening their national planning systems. Its most recent contributions include the Regional Observatory on Planning for Development in Latin America and the Caribbean and the PlanBarometer tool.

The Observatory has placed the planning-related efforts of the countries to implement the 2030 Agenda at the service of the entire regional community, it has deepened knowledge of strategies such as open government and SDG localization, and it has contributed to knowledge- and experience-sharing to accelerate institutional learning. PlanBarometer is a simple yet meaningful tool that enables countries to examine their planning systems, indulging their weaknesses and strengths, in order to improve them as they see fit.

In line with these purposes and contributions, this work —prepared at the request of the member countries of the Regional Council for Planning— offers three main contributions. The first is to give an account of the state of play in the countries of the region in relation to planning and territorial development policies, on the basis of a review, systematization and analysis of over 150 policies in 33 countries. The second is to identify and draw attention to the main challenges arising from that knowledge. And the third is to provide a tool, a model for the analysis of territorial development policies, known as Territorial PlanBarometer, which serves to identify challenges and lay the foundations for building an ecosystem of territorial development policies.

From these three contributions derive the most important conclusions of this work and the tasks that lie ahead. First, the state of the art regarding development plans and policies in the region shows extensive interest in territorial development issues, to the extent that territorial matters are played out across a much broader field than in territorial policies per se. Second, these policies form a cluster that has been termed a family of territorial development policies which, although not necessarily as coherent or integrated as they should be, nevertheless make up an organized and synergistic whole. From this arises the third conclusion

and the main challenges for the countries: to move from that cluster to a comprehensively managed whole, without sacrificing the specific treatment of each part. For this reason, the new totality to be built is termed a territorial development policy ecosystem.

This document—in its own right and in the model for analysis presented in chapter VI— should spark quests that will represent a step towards the implementation of the 2030 Agenda and the SDGs at the national level and regional levels.

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Introduction

Territorial development is linked to progress in the implementation of the 2030 Agenda for Sustainable Development at many levels. If a territory is understood to be a human community with both a symbolic and objective sense of belonging, in a specific physical area where a common future can be built, addressing the sustainability challenges posed by the 2030 Agenda will depend on humankind's commitment to one another and to its habitat: the planet Earth. In order to achieve this sense of belonging at the global level, humanity's relationship with the environment and natural resources should be modified and the most pressing problems of inequality and poverty characteristic of contemporary societies, nations and States should be resolved: therefore, the global level matters.

The regional level also matters. Territorial development in a regional context, as exemplified by the work of the Economic Commission for Latin America and the Caribbean (ECLAC), means understanding and creating conditions to promote those public goods, both tangible and intangible, which underpin the well-being of each of the countries of Latin America and the Caribbean and of the region as a whole. The challenges posed by climate change transcend national borders and test collective capacities to deal with natural risks; to build resilience; to ensure the sustainability of strategic regional ecosystems such as the Amazon; to overcome poverty traps and territorial pockets of poverty that extend beyond national boundaries; and to facilitate regional economic and social integration. For ECLAC, territorial development means facilitating the horizontal exchange of lessons learned at the local, subnational and national levels and to resolve the various challenges related to sustainable development.

The national level matters too. This document addresses territorial challenges specific to the national context, it seeks to establish an objective —to reduce territorial inequalities—, and discusses strategic elements of the design and implementation of territorial development policies in order to identify the critical areas that must be addressed and the management strategies that must be adopted.

Lastly, the local level matters. The fact that this document is analysed through a national filter does not diminish the role of local action or detract from its merit. The decision to focus on the national viewpoint was taken in accordance with the prominence given to the national context in the 2030 Agenda and many recent global agreements (the New Urban Agenda, adopted at the United Nations Conference on Housing and Sustainable Urban Development (Habitat III), the Montevideo Consensus on Population and Development and the Sendai Framework for Disaster Risk Reduction 2015–2030), the follow-up and attainment of which depends on progress in the area of sustainable development. A few years ago, ECLAC coined the phrase “place does matter”,¹ today it is understood that, in addition, a place comprises multiple layers with different and complementary meanings of human society.

In line with the work of ECLAC from 2010 to 2018, chapter I identifies equality and sustainability as the underlying principles of a territorial approach, a vision commensurate with the challenges of the 2030 Agenda. At the national level, territorial development should be understood as a commitment to reducing territorial inequalities and guaranteeing the exercise of citizens' rights and of individuals' right to development, regardless of where he or she was born or resides. It should also be understood as the provision of public goods that allow territories, understood as a community of individuals, to have similar conditions of access to connectivity, to a healthy environment, to knowledge, to public probity and to public safety. It also means recognizing the right to diversity, to preserving cultures, identities, languages and customs that enrich societies, their economies and democracies. With regard to environmental matters, it means recognizing the existence of strategic ecosystems (conservation, restoration, biodiversity), the reproduction of which is necessary for human life and natural systems.

Chapter II looks at these issues in the Caribbean subregion and provides an overview of territorial challenges there in the light of the subregion's realities, circumstances and aspirations. The subregion is a heterogeneous and diverse space, but one that does share similar challenges in terms of natural risks, vulnerabilities and the need to build capacities and increase resilience. Attention is drawn to the magnitude of the risks and the social, economic and institutional costs, as well as the need for a commitment to resilience planning that is commensurate with the challenges.

¹ ECLAC, *Time for equality: closing gaps, opening trails* (LC/G.2432(SES.33/3)), Santiago, 2010.

In the light of the findings outlined in chapter I, territorial development policy is defined in chapter III as State-driven actions aimed at reducing inequality and strengthening the capacities and assets of territories and stakeholders to meet development challenges. A comprehensive catalogue of more than 150 of these policies in the 33 countries of the region has been compiled and 27 development and government plans have been reviewed. This allows a valuable assessment to be carried out, forming the basis for an approach that is developed throughout this document. A great variety of territorial development policies are currently being implemented in the region, which underscores the importance that the region attaches to the issue. However, despite this wealth of policies, actions are not properly coordinated within this policy cluster, or “family”, which suggests that an ecosystem needs to be created for territorial development policies.

The “ecosystem” concept put forward in this document builds upon the existing family of territorial policies, with the aim of creating a coherent public policy approach. This ecosystem is a set of policies, plans and regulations that have an effect on the territory. Proper awareness and management of the ecosystem would promote coordination and synergy among its components, leading to and facilitating the design, implementation and evaluation of public actions that will help to further reduce territorial inequalities and build the capacities of territories and local stakeholders.

Chapters III to VI aim to do just that. Having taken stock of more than 150 territorial development policies from the countries of the region, they are categorized in chapter III to facilitate understanding of their common traits. As a result, it can be seen, for example, that, unlike at other times in the region’s history, no single, hegemonic approach has been adopted, instead these territory-related policies form a very diverse and broad group. Thus, territorial issues are not only addressed by territorial development policies. Likewise, the criteria and methodological considerations developed for the study of this policy cluster are particularly useful in the application of the Territorial PlanBarometer set out in chapter VI.

The status of information systems for territorial development in the countries of the region is outlined in chapter IV. Without timely, reliable and relevant information that can be integrated, the design, implementation, monitoring, evaluation of and social participation in territorial development policies cannot be carried out properly. This chapter identifies at least three development paths for these systems, organized around institutional processes that are sometimes very country-specific: those that are devised by planning ministries and secretariats in accordance with their mandates; those produced by geographical institutes to build capacities to gather georeferenced information; and those resulting from ad hoc architecture that some countries have constructed to follow up the Sustainable Development Goals (SDGs), including at the local level.

The types of systems are as numerous and varied as the catalogued territorial policies and face similar difficulties. A great variety of actions have been taken with notable progress made, although they have been integrated and coordinated to very different degrees. In general, more details are needed about the status of the information systems and strategies for their proper management must be identified. The challenges affect all aspects of the information systems, going beyond the technical difficulties of their interoperability. They affect the institutional architecture, how those institutions’ duties are distributed, their conflicts of power, and their capacity to address a very broad and diverse range of territorial development policies. Comprehensive management strategies are needed to bring together and harmonize these policies, which is no mean feat.

Chapter V examines the financing of territorial development policies. The importance and impact of long-term strategies, such as decentralization, and strategically relevant instruments, such as the development banks, are analysed. Analysis reveals the positive contribution of decentralization to reducing inequalities in the public spending capacities of subnational governments, and to reducing territorial inequalities in levels of well-being. They also demonstrate the destabilizing effect of transfers stemming from royalty payments for the exploitation of non-renewable natural resources. Development banks can create financing mechanisms commensurate with the challenges of climate change and improve territories’ access to long-term credit, especially the poorest.

This chapter also looks at whether the policies described in chapter III contain provisions for financing instruments and analyses the characteristics of those instruments. It identifies some weakness, such as the high percentage of policies that do not provide for such instruments and the failure to use different sources,

relying instead on the national budget and specific funds. Furthermore, a set of financing instrument criteria is put forward, tailored to the instrument's public policy aims. These criteria include the instrument's long-term time frames, the involvement of multiple actors at different levels, whether it can be adapted to territories' different situations, the balance between the creation of infrastructure and of support systems with management capacities, follow-up and monitoring systems and mechanisms for participation. It is hoped that these criteria will be piloted and their ability to improve the design and implementation of territorial development financing instruments will be recognized.

With regard to financing for territorial development, national governments should focus on coordinating, prioritizing and jointly managing efforts, as in most cases financing efforts are undertaken in a haphazard, fragmented and uncoordinated manner. In these instances, the construction of comprehensive national financing frameworks should be pursued. These frameworks are important not only for making better use of resources, but also for improving access to them. Without specific national strategies, it will be very difficult to take advantage of opportunities and mitigate risks.

A model for the processes of designing and implementing territorial development policies, the Territorial PlanBarometer, is set out in chapter VI. This builds on a model presented in 2017, which proved useful for designing development planning systems and identifying their strengths and weaknesses. It is suggested that inter-institutional (sectoral) teams should be put together, covering multiple levels of government and a range of actors, to apply a methodology based on an inventory of territorial development policies. The structure of this inventory and its terms of coordination are examined to identify possible inconsistencies and weaknesses. The aim is to generate the information needed to devise strategies that will help to move from this policy cluster or family towards an ecosystem of territorial development policies. Responsibility for this shift falls to the governments of the countries of the region, and the Territorial PlanBarometer provides a model that makes it easier to take stock of the situation. Lastly, the model sets out the levels and criteria that will allow territorial development policies to be developed in response to specific planning challenges, namely coordination among different sectors and across multiple levels of government and overlapping time frames, and the participation of social stakeholders.

Knowing about and identifying policies belonging to the territorial development family is a crucial step towards producing the information that will allow countries to design strategies to attain the desired goal: the ecosystem.



CHAPTER

I

Territorial development and policy challenges

Introduction

- A. Territorial development
- B. Equality and sustainability at the heart of the definition of territorial development in Latin America and the Caribbean
- C. Territorial inequalities and their costs
- D. The Caribbean and its particular territorial development challenges
- E. Territorial development plans and policies
- F. Conclusions

Bibliography

Introduction

The purpose of territorial development policies is a function of the issues they are intended to resolve. Each society, at different times in its history, identifies those issues and experience and scientific knowledge suggest the means to address and resolve them. The means take different forms: policies, plans, programmes and projects. The region has a long history regarding territorial development policies which, over time, have changed in nomenclature, approach and strategy of implementation.

This chapter proposes a definition of the issues that should guide territorial development policies in Latin America and the Caribbean at this point in its history.¹ These issues are defined in light of a concept of territorial development inspired both by the global development accords² and by the ECLAC approach of sustainable development with equality (ECLAC sessions from 2010 to 2018). This contemporary approach coexists with policies and strategies of earlier design; it complements some of them, intersects with others, and contradicts or repeats still others. Knowledge and characterization of the status of public policy on territorial development is an essential first step for building an ecosystem of territorial development policies.

Humanity is facing profound challenges, for which alternative solutions can be constructed only by concerted, collective action at multiple scales (global, regional, national and local). The 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs) offer a horizon that is achievable providing that the means of implementation are deployed, institutions are adopted, agreements are reached and the corresponding strategies —commensurate with the magnitude of the challenges— are designed and carried out (see box I.1).

Box I.1

Vision of sustainable development: the 2030 Agenda for Sustainable Development and the Sustainable Development Goals

Paragraph 3 of the 2030 Agenda for Sustainable Development summarizes the future ambition for humanity with sustainable development:

“We resolve, between now and 2030, to end poverty and hunger everywhere; to combat inequalities within and among countries; to build peaceful, just and inclusive societies; to protect human rights and promote gender equality and the empowerment of women and girls; and to ensure the lasting protection of the planet and its natural resources. We resolve also to create conditions for sustainable, inclusive and sustained economic growth, shared prosperity and decent work for all, taking into account different levels of national development and capacities.”

Source: United Nations, “Transforming our world: the 2030 Agenda for Sustainable Development” (A/RES/70/1), New York, 2015.

Territory is a key concept in this construct of a decent and sustainable development style. Although territory is a polysemic concept and the subject of broad discussion, in this document it will be understood as a human community with a sense of ownership and belonging to a specific natural and social space (see box I.2). Accordingly, “making territory” means building that sense of ownership and belonging, and implies harmonizing the expectations and needs of the individual with those of the human collective and the natural and social space in which it is constructed. It also means recognizing the plurality of territory, in terms of both scale (global, regional, national and subnational), and sense and meaning (cultural, ethnic and political diversity). On the basis of the recognition of these multiple options, this document works in a particular direction, focusing on the territorial at the national level in coordination with the subnational level.

¹ The aim here is not a comprehensive theoretical review of these issues, which will be referred to only for illustrative purposes.

² The global development accords include the 2030 Agenda for Sustainable Development, the New Urban Agenda, adopted at the United Nations Conference on Housing and Sustainable Urban Development (Habitat III), the Sendai Framework for Disaster Risk Reduction 2015–2030, and the Montevideo Consensus on Population and Development.

Box I.2

The polysemic nature of the concept of territory

The concept of territory is rooted in natural geography and etiology. The first refers to the geomorphological units of landscape, climate or ecosystems with characteristic features that distinguish identifiable —though not necessarily homogeneous— units. These are internally heterogeneous units with their own mix of diversity. The second refers to the relationships between living species and their natural environment and to the way they develop strategies of demarcation and (symbolic or real) ownership of spaces in the interests of reproduction and survival as a group and as a species. These demarcations are made through colourings of the water in the ocean or aromas and smells of the earth. They are, then, strategies for controlling portions of the natural space.

The human species develops its own strategies for defining territory by altering the natural space through infrastructure (the walled city may be one of the most emblematic early landmarks of this sort), through communication networks and buildings, through policy (institutions, rules, the State) and through culture (the assignation of values and meanings). In this regard, human action includes the existence of different definitions of territory (technical, institutional, cultural), and the diverse range of territorial definition strategies. The cultural approach offers the possibility of combining the different perspectives and of recognizing a dual identification of space as a builder of culture and culture as a shaper of territory.

Source: L. Cuervo, "Globalización y territorio", *Gestión Pública series*, No. 56 (LC/IP/L.2508-P; LC/IP/L.271), Santiago, Economic Commission for Latin America and the Caribbean (ECLAC), 2006.

In section A, it is argued that the concept of territorial development varies depending on the scale from which it is viewed and proposes a concept from a nation-State perspective. It is understood as a set of conditions that support the effectiveness of both the national unit and due respect for and exercise of the right to the territorial diversity of its components. Section B refers to equality and sustainability at the centre of the definition of territorial development in the region. Section C looks at the social, economic and environmental costs of territorial inequalities, while section D discusses in detail the situation and specific challenges of territorial development in the Caribbean. Section E considers the evolution of territorial policies in the region and provides the definitions to support the analysis of territorial plans and policies in the countries of the region at the current juncture. Lastly, section F concludes.

A. Territorial development

The nation-State is a relatively recent political reality, a construct of modernity and the necessary starting point for the reflection undertaken here. For the countries of Latin America, the reality and the challenge of the nation-State have a history stretching back over 200 years, something that is more recent for most of the Caribbean countries with a history of some 60 years.

The existence of the political community³ termed "State" is based, among other things, on its relationship with a given physical space: land, marine and air. Regardless of the material progress achieved by each society, this space is diverse by definition. Diversity is thus a pattern common to all nations, whatever their size or natural characteristics.

³ The word "political" as used here is understood as referring to the quest for the common good.

Building a political community in a diverse space thus has very varied implications depending on its scale and properties. For example, most of the Caribbean countries are islands with small surface areas: of the 11 island territories of the English-speaking Caribbean plus Haiti, 7 are no more than 750 km² in size, while the remaining 4 vary between 5,000 and 27,000 km².⁴ Conversely, most of the Latin American countries are continental, with surface areas ranging from 21,000 km² (El Salvador) to 8.5 million km² (Brazil).

However, amid these differences, building a political community (common-unity) in a diverse territory means resolving at least two major challenges: (i) forging a sense of ownership⁵ of the delimited natural space, and (ii) ensuring unity in diversity. Thus, each State, in its aspiration to build a political community, defines a basic algorithm⁶ to its own measure, a form of organization of the territory, which will pave the way for a particular normative and institutional architecture for territorial development (see box I.3).⁷

Box I.3

Latin America and the Caribbean: formulas of State organization

Today, the Latin American countries have adopted various formulas to define the State and its unity. Most of the countries are unitary republics with presidential regimes; some are federative (Argentina, Brazil and Mexico); and more recently plurinational (the Bolivarian Republic of Venezuela, Ecuador and the Plurinational State of Bolivia). Of the unitary States, some are defined as decentralized (Colombia).

In the case of the Caribbean countries, only one is federative (Saint Kitts and Nevis), while the rest are unitary. Nine have bicameral parliaments and a governor appointed by the monarch of the United Kingdom: Antigua and Barbuda, Bahamas, Barbados, Belize, Grenada, Jamaica, Saint Kitts and Nevis, Saint Lucia and Saint Vincent and the Grenadines. The remaining five also have bicameral or multicameral parliaments and elect their most senior authority: Dominica, Guyana, Haiti, Suriname and Trinidad and Tobago.^a Three countries —Guyana, Haiti and Suriname— have several levels of government established constitutionally.

Source: Latin American and Caribbean Institute for Economic and Social Planning (ILPES), on the basis of the respective constitutions of the countries.

^a Guyana and Suriname have a people's assembly or congress that convenes not only national chambers, but also intermediate and local ones.

The territorial algorithm mentioned above is defined in each country in a large variety of sources, such as the political Constitution, the law, institutions and the administrative and spatial delimitation of the territorial levels of government, and their distribution of competences and terms of reference. The aim of unity in diversity refers in some constitutions to higher purposes or values such as equilibrium, harmony, equality, equity and even competitiveness (see table I.1).

In this context, territorial development may be understood as a state —and a process— in which social ownership of the space, unity of its parts, and due respect for and exercise of the right to diversity of the components of a State are all fulfilled.

⁴ The seven countries not exceeding 750 km² in size are: Antigua and Barbuda, Barbados, Dominica, Grenada, Saint Kitts and Nevis, Saint Lucia and Saint Vincent and the Grenadines. The other four are: Bahamas, Haiti, Jamaica and Trinidad and Tobago.

⁵ "Sense of ownership" means perceiving something as one's own (knowing, respecting, conferring meaning), feeling part of it, building a social identity present in the reference space.

⁶ The term "algorithm" is given to a finite group of operations organized in a rational and orderly manner to solve a given problem.

⁷ It is no coincidence that much of the first phase of the independent history of the region's countries unfolded amid heated —and in most cases violent— disputes over this question (which generally translated into disputes between federalism and centralism), and the establishment of a political capital and its functions. In the case of the Caribbean, whose independence is more recent, these questions played out around the construction of a regional federation, and the type of political relationship established with —in particular— the British Crown.

Table I.1

Latin America and the Caribbean: constitutional conceptions of national territorial unity

Belize	(WHEREAS the People of Belize- (...) e. require policies of state which protect and safeguard the unity, freedom, sovereignty and territorial integrity of Belize.
Brazil	Art. 3 The following constitute fundamental objectives of the Federative Republic of Brazil: III – eradicate poverty and marginalization and reduce social and regional inequalities. <i>(Art. 3º Constituem objetivos fundamentais da República Federativa do Brasil: III - erradicar a pobreza e a marginalização e reduzir as desigualdades sociais e regionais.)</i>
Chile	Article 3. The State of Chile is unitary. The administration of the State shall be functionally and territorially decentralized, or deconcentrated as the case may be, in conformity with the law. State bodies will promote the strengthening of regionalization and equitable and solidary development among regions, provinces and local districts of the national territory. Article 115. For the government and internal administration of the State referred to in this chapter, the basic principle to be observed will be the pursuit of harmonious and equitable territorial development.
Colombia	Article 334. (...) The State, in particular, will act to give full employment to human resources and ensure, progressively, that all people, in particular those with fewer resources, have effective access to basic goods and services. Also to promote productivity and competitiveness, and the harmonious development of the regions.
Dominican Republic	Article 193.- Principles of territorial organization. The Dominican Republic is a unitary State whose territorial organization is aimed at fostering the comprehensive and balanced development of its inhabitants, compatible with their needs and with the preservation of its natural resources, its national identity and cultural values. Territorial organization will be according to the principles of unity, identity, political, administrative, social and economic rationality. Article 194.- Territorial organization plan. It is a priority for the State to formulate and execute, by law, a territorial organizational plan to ensure the efficient and sustainable use of the national resources of the Nation, in accordance with the need to adapt to climate change.
Ecuador	Art. 3.- The primordial duties of the State are: 6. To promote the equitable and solidary development of the whole territory, by strengthening the process of autonomies and decentralization. Art. 275.- The development regime is the organized, sustainable and dynamic combination of economic, political, sociocultural and environmental systems that ensure the realization of good living, <i>sumak kawsay</i> . (...) Good living requires that individuals, communities, peoples and nationalities effectively enjoy their rights and exercise responsibilities in the framework of interculturality, respect for diversity, and harmonious coexistence with nature. Art. 276.- The development regime will have the following objectives: [...] 6. To promote balanced and equitable territorial organization that integrates and links sociocultural, administrative, economic and management activities, and furthers the unity of the State. Art. 284.- Economic policy will have the following objectives: [...] 5. To achieve a balanced development of the national territory, integration between regions, in the rural areas, and between rural areas and cities in the economic, social and cultural spheres.
Mexico	Article 27. (...) The nation will have at all times the right to impose on private property modalities as dictated by the public interest, and to regulate, for the social good, the use of natural elements that can be appropriated, in order to distribute public wealth in an equitable manner, ensure its conservation, achieve the balanced development of the country and improve the living conditions of the rural and urban population (...).
Suriname	Article 6. The social objectives of the State shall aim at: a. The identification of the potentialities for development of the own natural environment and the enlarging of the capacities to ever more expand those potentialities; [...] e. Regional spreading of public utilities and economic activities; g. Creating and improving the conditions necessary for the protection of nature and for the preservation of the ecological balance.
Venezuela (Bolivarian Republic of)	Article 15. The State has the responsibility to establish a comprehensive policy in land, island and maritime border areas, preserving territorial integrity, sovereignty, security, defence, national identity, diversity and the environment, in accordance with cultural, economic and social development and integration. An organization act for borders will determine the obligations and objectives of this responsibility, in accordance with the nature of each border region through special economic assignments. Article 185. [...] The Federal Government Council will have a Secretariat, comprising the Executive Vice President, two Ministers, three governors and three mayors. To the Federal Government Council will report the Interterritorial Compensation Council, whose purpose is financing public investment aimed at promoting balanced development of the regions, cooperation and complementing policies and initiatives for development of the different territorial public entities, and in particular supporting the provision of essential works and services in less developed regions and communities. The Federal Government Council, on the basis of regional disequilibria, will annually discuss and approve the resources to be allocated to the Interterritorial Compensation Council and the priority investment areas to which these resources will be directed.

Source: Latin American and Caribbean Institute for Economic and Social Planning (ILPES), on the basis of the respective constitutions of the countries.

B. Equality and sustainability at the heart of the definition of territorial development in Latin America and the Caribbean

On the basis of the approach proposed by ECLAC, equality⁸ and sustainability form the criteria and general conditions on the basis of which territorial development can be ensured. Equality is understood and defined as the fair distribution of income and wealth, access to skills, knowledge and capabilities, and equality of means, opportunities and recognition (ECLAC, 2018).⁹ Sustainability underscores the importance of processes that last over time and offer broad coverage of the dimensions involved: “To what extent, in the framework of the current pattern of development and the existing relationships between structures and institutions, can the region make real strides towards deeper and broader equality, in its various dimensions? The question of the future of development is also fundamentally a question about the sustainability of development in various areas: economic sustainability, sustainability of social progress and environmental sustainability (...)” (ECLAC, 2014, p.38).

In its territorial dimensions, equality is worked out in various complementary spheres, whose absence shapes the various types of territorial inequality.

1. Equality of individuals within the territory

All persons, regardless of where they are born or reside, should have living conditions and a level of well-being that fulfil their universal rights and thereby ensure their dignity, full realization and the real and effective exercise of citizenship. If these conditions are not met, people’s advantages or disadvantages in terms of access to living conditions and development opportunities will be determined by place of residence.

2. Equality of territories

Some conditions and factors —such as the environment, the public space, infrastructure or security— affect the people forming part of a human group or territory in equal measure. In all cases, these are common-use goods and services that benefit or disadvantage the collectivity as a whole, enhancing or weakening the bases on which it may use opportunities and improve its members’ living conditions.

⁸ “Equality stands at the centre of development for two reasons. First, because it endows policies with a rights-based approach at their very foundation, along with a vocation of humanism that embodies the most treasured legacy of modernity. Second, because equality is also a prerequisite for progress with a development model that focuses on innovation and learning that have a positive effect on productivity, economic and environmental sustainability, the dissemination of the knowledge society and the strengthening of democracy and full citizenship.” (ECLAC, 2018, p. 19).

⁹ “Equality encompasses equality of means, opportunities, capacities and recognition” (ECLAC, 2014). “Equality of means translates into a fairer distribution of income and wealth and into a wage bill that accounts for a greater share of domestic output. Equality of opportunities entails the absence of all forms of discrimination in access to social, economic and political positions. Equality of access to capacities covers the skills, knowledge and capabilities that individuals acquire and that enable them to embark on life plans they consider worthwhile. It involves equality in the fields of quality education, health, digital access, nutrition and better living conditions through reduced overcrowding and greater access to consumer goods. At the same time, equality as mutual recognition is expressed in different actors’ shares of caregiving, work and power, in the distribution of costs and benefits among present and future generations and in the visibility and affirmation of collective identities. Understood as relational equality, it refers to how people perceive the equality and inequality of the collective order in which they live, as well as to various forms of social interaction, such as coexistence in cities or in schools. Thus, as will be seen below, the culture of privilege operates as an obstacle to equality in all its dimensions” (ECLAC, 2018, p. 19).

3. Equality as recognition of the right to different and sustainability

(a) Difference

Social and cultural diversity within the territories of the same country is manifested in the existence of different world views, different future aspirations or different cultures, languages and patterns of behaviour. Preservation of the unity and integrity of the territory may often depend on due recognition and respect for these differences. As argued in ECLAC (2010, p. 42) “the equality agenda needs to be supplemented by an agenda of difference [...] Age-old differences between groups defined by gender, ethnicity, territory and age are becoming increasingly prominent in the political debate and on the public agenda. Membership of such groups is an increasingly valued source of diversity. Over and above demands for equality before the law, it is present in struggles for identity and for recognition of collective problems and aspirations, whether based on gender, ethnicity, age or other specific conditions. However, a history of discrimination and exclusion means that groups defined by these categories now experience the highest levels of vulnerability and exclusion precisely because of that belonging. That is the paradox.” (ECLAC, 2010, p. 42).

(b) Sustainability

Recognition of difference can sometimes be a condition for the survival of a national territorial system as a whole, rather akin to strategic or fragile ecosystems, where the stewardship and preservation of diversity depends on the general conditions of water production or the reproduction of strategic animal or plant species. In some cases, this diversity may even be a condition for the survival of an economic system, because it is a store of particular knowledge and singular economic activities, and can form a sociocultural reserve that facilitates adaptation to change. In this case, the appropriate term is territorial diversity for sustainability.

This set of principles and rights forms the foundation for what has been termed “territorial ethics” (Cuervo, 2015), based on equality and sustainability. As well as enhancing and understanding this, it is necessary to go a step further and examine the conditions for bringing it to fruition.

C. Territorial inequalities and their costs

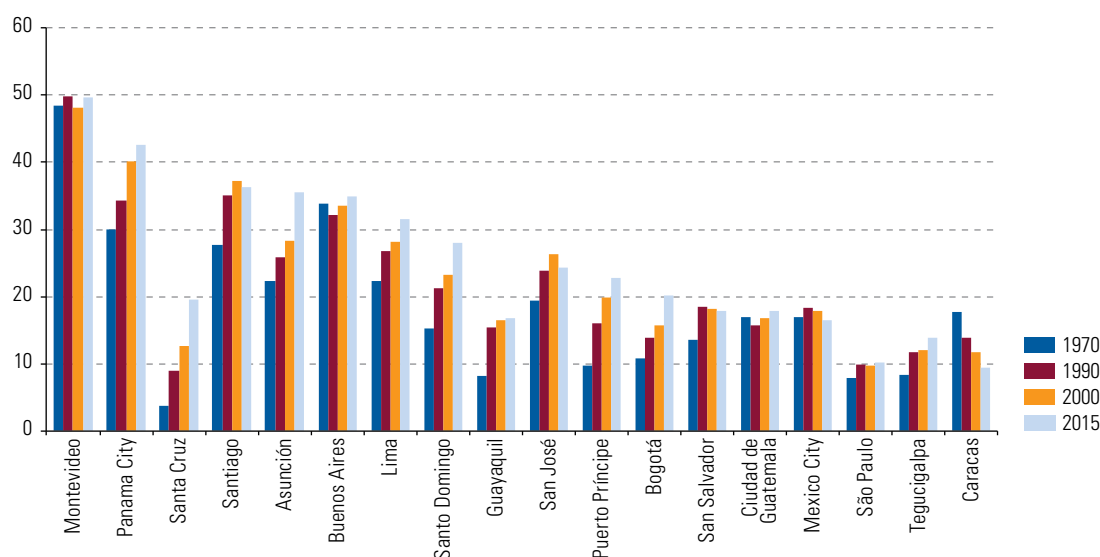
The absence of equality and sustainability compromise the fulfilment of basic and implicit social aspirations and carry many kinds of costs. The territorial inequalities in Latin America and the Caribbean are not only large and persistent, but also have adverse repercussions on countries’ general development. ECLAC (see chapter V) has tracked two of these: (i) the geographical concentration of the population and economic activity in a small number of places within each country (usually the main metropolitan areas), and (ii) the wide gaps in the general living conditions of the populations of different areas (ECLAC, 2016a, pp. 131–132).

1. Concentration and its costs

Territorial systems in Latin America and the Caribbean are characterized by concentration of the population (see figure I.1 and table I.2) and of power in only a few areas of the national territory. This situation has been described in terms of urban and economic primacy (Cuervo and Cuervo, 2013) and macrocephaly.

Figure I.1

Latin America and the Caribbean (18 countries): relative weight of the population in the main urban agglomerations, 1970–2015 (Percentages)



Source: Latin American and Caribbean Institute for Economic and Social Planning (ILPES), on the basis of Economic Commission for Latin America and the Caribbean (ECLAC), “Panorama del desarrollo territorial en América Latina y el Caribe, 2017: agendas globales de desarrollo y planificación multinivel”, *Project Documents* (LC/TS.2017/120), Santiago, 2017.

Table I.2

Latin America and the Caribbean (18 countries): relative weight of the population in the main urban agglomerations, 1970–2015 (Percentages)

Country	Urban agglomeration	1970	1990	2000	2015
Uruguay	Montevideo	48.5	49.8	48.2	49.7
Panama	Panama City	30.0	34.3	40.1	42.6
Bolivia (Plurinational State of)	Santa Cruz	3.7	9.0	12.6	19.6
Chile	Santiago	27.7	35.1	37.3	36.3
Paraguay	Asunción	22.3	25.9	28.3	35.5
Argentina	Buenos Aires	33.8	32.1	33.5	35.0
Peru	Lima	22.3	26.7	28.1	31.5
Dominican Republic	Santo Domingo	15.2	21.2	23.3	28.0
Ecuador	Guayaquil	8.3	15.4	16.4	16.8
Costa Rica	San José	19.4	23.9	26.3	24.3
Haiti	Puerto Príncipe	9.8	16.0	19.8	22.8
Colombia	Bogotá	10.8	13.8	15.7	20.2
El Salvador	San Salvador	13.6	18.5	18.3	17.9
Guatemala	Ciudad de Guatemala	16.9	15.8	16.9	17.9
Mexico	Mexico City	17.0	18.3	18.0	16.5
Brazil	São Paulo	7.9	9.8	9.7	10.1
Honduras	Tegucigalpa	8.3	11.7	12.0	13.9
Venezuela (Bolivarian Republic of)	Caracas	17.8	13.9	11.7	9.4

Source: Latin American and Caribbean Institute for Economic and Social Planning (ILPES), on the basis of Economic Commission for Latin America and the Caribbean (ECLAC), “Panorama del desarrollo territorial en América Latina y el Caribe, 2017: agendas globales de desarrollo y planificación multinivel”, *Project Documents* (LC/TS.2017/120), Santiago, 2017.

The magnitude and duration of this concentration imply costs in very different dimensions, as outlined below.

(a) Economic dimension

Geographical concentration of population and economic activity is not necessarily a problem in itself. It becomes complex only under certain conditions which, unfortunately, are those that obtain in the region. City size theory (Richardson, 1977) identifies the factors that account for the advantages of concentration and its cycles of increase and decrease. Among the benefits, concentration lowers the cost of providing services and basic infrastructure and expedites the exchange of knowledge between individuals, businesses and institutions, which aids learning and innovation. On the cost side, concentration can cause congestion in services and infrastructure, higher pollution and deterioration in living conditions. When concentration takes the form of major agglomerations, the operating costs of the urban unit grow disproportionately because they require the deployment of increasingly complex and sophisticated systems of transport, communications and service delivery.

A number of econometric estimates identify thresholds of concentration beyond which an economic cost is involved: the most obvious expression of territorial inequality is urban concentration. Henderson (2000) estimates that the economic cost of excessive (or too little) urban concentration above (or below) historical patterns may cause losses of up to 1.5 per capita GDP percentage points over the medium term. ECLAC (2009, p. 24) shows that most Latin American countries have exceeded these thresholds: of a total of 14, only 3 (Colombia, Ecuador and Plurinational State of Bolivia) have a satisfactory level of urban concentration; 11 (Argentina, Chile, Costa Rica, Dominican Republic, El Salvador, Guatemala, Nicaragua, Panama, Paraguay, Peru and Uruguay) have reached overconcentration and none show too little concentration in urban areas (Henderson, 2000, p. 36).

(b) Political dimension

When the cupula of a political and economic decision-making system lacks diversity of territorial composition, it risks being run in a centrist manner and perpetuating power imbalances between the various units. This is because decisions are made from a more limited range of perspectives and approaches and territorial disparities thus tend to be reproduced and heightened.¹⁰

ECLAC has referred to these phenomena by coining the idea of the normalization of difference as inequality, which imbues systems of behaviour of these societies with a culture of privilege. “The culture of privilege is a key element in the pursuit of development with equality because it normalizes the relationship between a person’s place on the social ladder and his or her greater or lesser access to education, health, work, security and comfortable living conditions. This dynamic permeates multiple areas where structural and institutional factors come together to perpetuate or recreate an unequal order: taxation, the appropriation of income from natural resources or financialization, the blocking of political and policy regulations by de facto powers, territorial segregation and the provision of infrastructure, segmentation in the quality of urban life, the costs that populations pay for environmental degradation and climate change, rigidities in intergenerational social mobility, or the segregation of capacities and access to well-being according to ascriptive factors or considerations of origin.” (ECLAC, 2018, p. 28).

(c) Environmental dimension

Increasing city sizes—both geographical and demographic—imply new, increasingly complex challenges in terms of delivering basic infrastructure services such as water, sanitation, energy, mobility and housing. The complexity of these challenges does not increase gradually, but by leaps. If the infrastructure fails to progress or gain complexity at a pace commensurate with the city’s growth, living conditions will deteriorate, with much of the loss taking the form of environmental costs for both the population in the respective city, and the territorial system overall (water and air pollution, solid and toxic waste). The final impact will depend on the capacity of ecosystems to respond to the environmental pressure exerted by cities. In some cases,

¹⁰ Political and fiscal decentralization, as well as territorial transfer systems, seek to neutralize this trend; however, the achievements and gaps in this regard require evaluation (see chapter V).

these costs are more than offset by the productivity and innovation capacity benefits provided by the city, but in others the reverse may be true, yielding a net adverse balance. The costs may or may not be financed on the basis of principles of territorial equity and fairness. One scenario is that the population of a large city may defray these costs through rates, taxes and land prices, all of which slows the population growth of the city or even turns it negative. Another scenario —common in the region— is that much of the national wealth (primary rents conveyed into public revenues through royalties or taxes) is channelled to financing and subsidizing these services. In this case, there is no incentive for deconcentration and the country overall bears the operating costs of the city, which continues to grow. Lastly, a third scenario —also common the region— is that the challenges of growth do not prompt the development of more costly and more complex urban services, but instead lead to a worsening of the population’s living conditions: increasingly lengthy daily commutes, worse pollution causing lung and skin conditions, and growing insecurity and violence.

Thus, “the worst of all worlds” can be generated: “The production and consumption pattern in the region’s cities is fossil-fuel-intensive (...) Transportation is the main source of pollution, both directly and indirectly by loosening and stirring up dust (...) Fixed sources, or industrial emissions, are the second largest source of emissions, although most of the cities affected have put in place and enforce rules and standards (...) Thus, the region’s urban population is up against a double environmental burden: the relatively recent and growing risks of air pollution and congestion have joined with the traditional threats associated with lack of access to safe drinking water and inadequate waste disposal” (ECLAC, 2014, p. 57).

2. Disparities and their costs: individual well-being and the exercise of citizenship

A second hallmark of Latin America’s territorial systems is the great geographical imbalance in wealth and well-being of the inhabitants in each country. These imbalances affect not only the chances of individuals residing in lagging regions of leading a healthy and productive life, but also, by extension, the capacities of the territory overall. For example, it is known that some public services, such as education, not only affect individuals’ possibilities of progress, but also have indirect effects or externalities on their family, work or social settings, Chapter V presents the results of a measurement of these inequalities carried out by ECLAC since 2015 (ECLAC, 2015 and 2017a).

3. Disparities and their costs: obstacles to territorial development

Imbalances in living conditions and in the means available for the development of individuals and organizations carry a cost that is not only personal but also collective. They weaken the basic conditions for territorial development and undermine individual commitment to common causes and, thus, the sense of belonging to a human grouping. If territory, as affirmed earlier, is a human community with a sense of future and of the common good within a defined physical space, then territorial inequalities jeopardize the possibilities of building that community and, thus, its sense of commitment to a place, a future and a common aim: “Gaps in achievement and learning reinforce societal fragmentation in the region’s countries and make it harder to build consensus around shared development projects. Not only do they raise red flags about the sustainability of the progress made in reducing inequality and building capacity for the transition to more productive societies, but also they lead to gaps in autonomy, understood here as different margins of liberty for individuals to embark on life projects that hold genuine value for them” (ECLAC, 2014, p. 50). Although it is difficult to draw comparisons between these costs in quantitative terms, the last one is especially important because it conspires against sustainability and constitutes a source of reproduction of territorial inequalities by eroding a community’s basic ability to define its aims and work towards achieving them.

D. The Caribbean and its particular territorial development challenges

These basic concepts of development and territorial equality require contextualization and special treatment for Caribbean, because it is a region with very particular characteristics given by its history, geography and culture. This section examines these particularities with a view to a better understanding of the singularity of the region's territorial challenges, the conformation of its nation-States, the characteristics of its territorial administration and the specificities of its geography. With all this in mind, the special characteristics of these countries' territorial challenges will then be outlined. The issues of territorial development in the Caribbean are also examined at length in chapter II.

1. National unity and territory in the constitutional charters of the Caribbean countries

The treatment of national unity, diversity and territorial rights in the Constitutions of the Caribbean countries is a reflection of political tradition (including geopolitical status), geography and history.

It must first be considered that the region has a shared history and tradition shaped by not one but multiple countries. Before independence, the British Caribbean Federation Act, enacted in 1956, authorized 10 islands to form the West Indies Federation (Minto-Coy, 2016, p. 42). However, this political configuration did not last as a vehicle to support the transition to independence,¹¹ which ultimately took the form of a large number of demographically and physically small national States.

Secondly, despite this dispersion and the related political differences, most of the countries took the United Kingdom as a reference for the construction of their political systems and maintained a formal nexus with the British Crown. Thus, in nine of these countries (see box I.3), the governor-general, formally the Head of State, is appointed by the British monarch and has powers over the appointment of the Prime Minister and senators.

Thirdly, unlike the situation in Latin America, Constitutions in the Caribbean do not explicitly proclaim certain territorial rights, such as plurinationalism, multilingualism, special forms of government in indigenous and Afroamerican territories, or particular considerations regarding rural territories or the right to the city (Cuervo, 2015). Caribbean Constitutions are focused on individual rights, freedoms and mobility, and the right to justice and non-discrimination. The Constitutions of nine of the countries centre on the affirmation of these rights: Bahamas (chapter III), Barbados (chapter III), Belize (articles 3–22), Dominica (articles 1–17), Grenada (chapter I), Saint Kitts and Nevis (articles 3–15), Saint Vincent and the Grenadines (chapter 1), Saint Lucia (chapter 1), and Trinidad and Tobago (chapter 1). However, three of them make reference to collective rights: in Jamaica, apart from individual rights, there is also mention of public education and a healthy environment (article 1, paragraphs j-iii and L), and in Haiti and Suriname, in addition to individual rights (chapter 2, section B/articles 8–21) there is also reference to the right to health (articles 24 and 36.1). Suriname's Constitution diverges further from the pattern, in that it signals as social objectives of the State: guaranteeing national unity (article 4.f), regional spreading of public utilities and economic activities (article 6.e), protecting nature and preserving the ecological balance (article 6.g), and promoting the right to culture (article 47).

¹¹ Minto-Coy (2016, p. 42) proposes three explanations for the failure of this regional project: (i) lack of support from the stakeholders involved (the United Kingdom and Caribbean leaders and citizenry), (ii) lack of commitment on the part of Jamaica to bear the financial burden of the smaller territories, and (iii) the physical distance between islands, including the geographical position of Jamaica, isolated from the centre.

2. The government and administration of the territory

Apart from the roles already mentioned, geography is significant in explaining the forms of organization and administration of the territory. As noted, the Caribbean is a cluster of geographically and demographically small islands. They are also independent States, most of which gained autonomy by means of political negotiation with the British Crown, and as such tend to preserve the centrist structure of governmental and territorial organization (Minto-Coy, 2016, p. 43). This explains why the majority of the region's Constitutions do not refer to different levels of government or administration and, therefore, do not define the figure of local government.

According to Ragoonath (2001), the existence or not of local governments in the Caribbean may be described using the typology summarized in table I.3.

Table I.3

The Caribbean: local governments

Typology	Cases
No local governments as such	Barbados, Grenada and Saint Kitts
Non-elected local governments	Antigua, Saint Lucia, Saint Vincent and the Grenadines
Constitutional/legal local government system	-Entire island as a local government system: Barbuda, Nevis and Tobago -Territories divided into numerous local authorities: Bahamas, Belize, Dominica, Guyana, Jamaica and Trinidad

Source: Latin American and Caribbean Institute for Economic and Social Planning (ILPES), on the basis of B. Ragoonath, "A perspective on Caribbean local government", paper presented at the seminar on the strategic role of the Caribbean Association of Local Government Authorities (CALGA) in the Caribbean, Port of Spain, 24–26 October 2001.

At the same time, the political organization of these countries takes as a reference the British parliamentary model, in which the parliament is very prominent in the Constitution and in the functioning of the State. As such, the way the Constitutions define constituencies is important, as are the criteria for their delimitation and for the establishment and review of constituency bodies.

3. Caribbean geography and territorial challenges

The geophysical foundations of the region, combined with its location and the particular characteristics of the climate, play a crucial role in defining some of the major territorial challenges. The Caribbean is facing profound challenges in relation to climate change, with increasingly frequent occurrence of extreme weather events, and thus urgently needs to build stronger socioterritorial resilience. Here, in the equality-sustainability binomial—a hallmark of the development proposal of ECLAC—the second of these is especially significant. For that reason, the society-nature relationship and the role played by ownerships of the natural environment in building territorial development are central to the territorial challenge of the Caribbean countries. This notion is not new, but it resituates the territorial development challenges that are so much a hallmark of Latin America in a very special context. Accordingly, chapter II, which is devoted to the Caribbean, takes as its subject planning for resilience.

E. Territorial development plans and policies

The importance of territorial development has been recognized in the region since the 1930s, and it has figured as a public policy aim in a variety of ways (see box I.4). Chapter III gives an overview of the current situation and proposes the objective of forming an ecosystem of territorial development policies. Such an ecosystem should include all those policies that, whether or not identified as territory-related, aim to reduce one or more of the territorial inequalities identified in this chapter. Territorial development policies will thus be understood as actions undertaken by the State to reduce inequality, and to strengthen the capacities and assets of territories and their stakeholders to face development challenges.

Box I.4

Latin America and the Caribbean: three landmarks in the development of territorial development policies

A first landmark. The idea and practice of regional planning arose in the mid-twentieth century, understood as a policy by which central government entities fostered development in territories that were considered backward or somehow excluded and marginalized. In some cases, this was combined with a broader aim of reducing inequalities or development gaps between territories. The first of these institutional practices prevailed between the 1950s and the late 1970s, with timespans and trajectories that were very specific from one country to another, under the rubric of “regional policy”.

A second landmark. In the 1980s, as a result of the adjustment and State retrenchment policies, regional policies and its institutions were dismantled and their tools retired. However, in response to the discoordination of public apparatuses, unemployment and economic recession of that decade, the ideas of local development and local, urban and territorial development began to emerge in the 1980s and 1990s. These filled the vacuum left by the former regional policies. These new approaches and initiatives sought to activate the particular resources of each territory (tangible and intangible, social, economic and institutional), stimulating initiative and placing special emphasis on linkages with external markets and the establishment of more diverse types of social and public-private partnerships in the design and execution of these processes.

A third landmark. From the late 1990s and at the start of the new century, national governments gained fresh interest in spatializing more diverse sorts of policies and in tackling wealth and development gaps in the different aspects of the territory. ECLAC illustrated this process of change and proposed the concept of territorial policies to refer to new challenges in multiscale development planning (ECLAC, 2009). Territorial policies were understood as the institutional response to the need to link up local development policies with the new regional policies and these were jointly referred to as a territorial policy family. At that point it became evident how much dispersion and discoordination there was between the various strategies for territorializing national policies (in relation to poverty, competitiveness, science and technology, the environment and natural resources, among others), as well as how divorced local efforts (bottom up) were from regional efforts (top down) to foster territorial development.

Source: J. Máttar and L. Cuervo, *Planificación para el desarrollo en América Latina y el Caribe: enfoques, experiencias y perspectivas*, ECLAC Books, No. 148 (LC/PUB.2017/16-P), Santiago, Economic Commission for Latin America and the Caribbean (ECLAC), 2017; ECLAC, *Economía y territorio: desigualdades y políticas*, ECLAC Books, No. 99 (LC/G.2385-P), Santiago, 2009.

Lastly, and as a preamble to chapter III, it is worth establishing certain definitions that will be useful for the analysis and taxonomy presented therein. The executive power, through ministries, secretariats and government entities of the countries of the region, established policies, strategies, plans, programmes and so on for planning and public management processes. If the use of these instruments is not fully consistent within a single country, it is even less so when viewed across the 33 countries of the region. Another difficulty lies in the fact that the hierarchy of these instruments is not standard from one country to another; some countries talk about strategies and others about plans; in some plans or strategies are located at a higher level of the hierarchy than policies and in others at a lower level; and in some cases, specialized or sectoral policies lodge within more overarching policies.

Despite the lack of semantic harmony, for the purposes of comparative analysis some basic concepts are needed for reference (see table I.4), as well as a definition of their hierarchy.

Table I.4
Basic definitions of planning and public management tools

Policies	Courses of State action or inaction in response to public issues. Policies seek to create the conditions and establish the guidelines for the proposed objectives to be accomplished. Public policies may have different denominations —sectoral, intersectoral or cross-sectoral— depending on their content and approach.
Strategies	Analysis and enumeration of future purposes, integrating the economic and the sociopolitical spheres, building an abstract model that channels action to meet particular objectives, considering the technical, political and economic viability of these actions (Matus, 1981).
Plans	Tools for channelling general guidelines, objectives, strategies and targets, that may also identify mechanisms for achieving the objectives established.
Programmes	Joined-up sets of interventions organized into projects which, once implemented, will achieve the objectives established. Some countries define programmes as those linked to current spending, as opposed to investment.
Laws	Legal edicts issued by a legislative body, i.e. precepts established by the competent authority that command or forbid, in accordance with justice, and whose contravention leads to a sanction.

Source: Latin American and Caribbean Institute for Economic and Social Planning (ILPES), on the basis of C. Matus, *Estrategia y plan*, Madrid, Siglo XXI, 1981.

With respect to basic concepts, some common denominators may be identified within the diversity of definitions: all these tools (policies, plans, programmes and projects) are courses of action with one of more established objectives to achieve determined results, although they differ in their levels of operationalization (see table I.5). Generally speaking, policies state intention and set forth guiding principles and what is to be achieved, and plans and programmes tend to establish modes of operation and include the means of implementation.

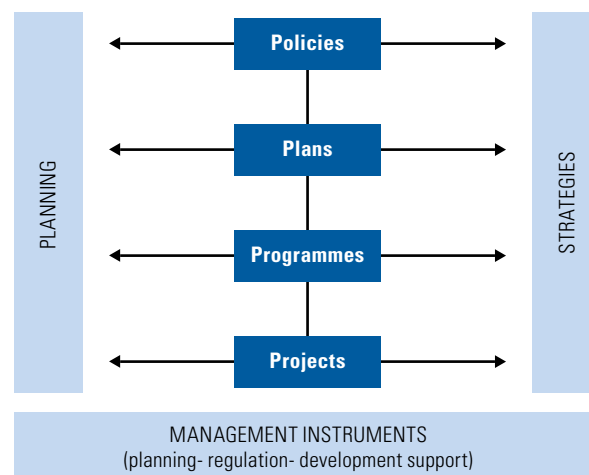
Table I.5
Policies, strategies, plans and programmes: common denominators particularities

	Courses of action	Established aims	Results
Policies	Course of State action or inaction	Respond to public issues	Meet proposed objectives
Strategies	Building an abstract model	Analyse and enumerate future aims	Meet established objectives
Plans	Instruments	Channel general guidelines, objectives, strategies and targets	Meet established objectives
Programmes	Linked-up set of interventions	Organize interventions into projects	Meet proposed objectives

Source: Latin American and Caribbean Institute for Economic and Social Planning (ILPES).

With respect to hierarchy, diagram I.1 illustrates the hierarchical relationship used as a reference for the analysis carried out in this work.

Diagram I.1
Planning and public management tools and their hierarchy



Source: Latin American and Caribbean Institute for Economic and Social Planning (ILPES), on the basis of Economic Commission for Latin America and the Caribbean (ECLAC), *Horizons 2030: Equality at the Centre of Sustainable Development* (LC/G.2660/ Rev.1), Santiago, 2016.

F. Conclusions

Territorial development policies are defined and characterized as a function of the way their aims are established and the means of action for achieving them are designed. Territorial development in the region has taken a long road from regional policy, through local development policy, to reach the current approach to territorial policy. These distinctions will be useful for understanding the characterization of territorial policies in the region today, given in chapter III, which will also provide elements to facilitate understanding of the variety of approaches that coexist, not only in the comparison between countries but within each of them.

Territorial development is understood as the state or process through which social ownership of space is realized, as well as the unity of its parts, with due respect for and exercise of the right to diversity of the components of a State. Equality and sustainability are identified as the most important conditions or factors conditioning the possibilities of territorial development in the region today.

Development is subject to tensions that are expressed in the form of inequalities between individuals in the territory, between territories and in the recognition of the right to diversity and guarantee of sustainability. These inequalities bring with them social, economic and environmental costs that justify the existence of territorial development policies.

The Caribbean, owing to its particular geography, history and form of political organization, presents very singular characteristics that place the challenges of resilience-building and natural-risk management squarely at the heart of its territorial development question.

Lastly, territorial development policies are proposed as State-driven actions aimed at reducing inequality, and at strengthening the capacities and assets of territories and their stakeholders to face the challenges of development.

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An abstract painting featuring three large, overlapping circles. The left circle is primarily blue and purple. The middle circle is a mix of yellow, orange, and red. The right circle is blue and green. The background is a warm, textured yellow and orange.

CHAPTER



Resilience planning in the Caribbean

Introduction

- A. Vulnerability of Caribbean countries
- B. Case studies in territorial inequality and coastal vulnerability:
the Bahamas and Belize
- C. Planning and resilience
- D. Conclusions

Bibliography

Annex II.A1

Introduction

As mentioned in the introduction to this document and in chapter I, this review of territorial development policies in the region focuses on the distinctive features of the Caribbean. The current chapter also takes a very specific approach to the subregion's territorial issues arising from its vulnerability to extreme natural phenomena and the transformations caused by climate change. For this reason, it focuses on planning for resilience.

Territorial vulnerability to climate change is multidimensional and stems from a combination of factors associated with the location of human settlements and their relative fragility, together with related production activities, in areas prone to natural hazards. The recurrence of natural hazards and the fact that its population is concentrated at the coast makes the Caribbean¹ one of the regions of the world where the impact of disasters is heaviest. Between 1990 and 2017, there were 408 disasters in the subregion, 90.4% of which were caused by hydro-climatic events, such as floods, storms and tropical cyclones.² One of the distinctive features of the Caribbean is that disasters can be nationwide and have a relative magnitude greater than any other region. For example, during the 2017 hurricane season, the total cost of Hurricanes Irma and Maria in the British Virgin Islands and Sint Maarten exceeded 100% of their respective gross domestic product (GDP). A disaster of this magnitude is bound to have consequences lasting several years.

As an estimated 84% of the total Caribbean population lives in coastal areas, an increasing amount of critical infrastructure is sited close to the sea. In addition, in most Caribbean small island developing States (SIDS), economic activities such as tourism, fish exports and maritime trade account for a significant share of GDP and are also carried out near the coast (Mycoo and Donovan, 2017).³ As this dynamic of recurrent disasters and population concentration in low-lying coastal areas is taking place in a context of climate change, there is every indication that the situation will worsen over the coming years (IPCC, 2018). SIDS are already suffering the impacts of climate change and will experience higher costs if the projected scenarios of sea-level rise become a reality. For these countries, it is vitally important that the stipulations of the Paris Agreement are complied with.

Furthermore, the rate of urbanization in the Caribbean is expected to grow faster than in Latin America, rising from 70% in 2015 to 82.5% in 2050. If rapid urban growth is not accompanied by planning measures, it could pose additional risks to the subregion.

In addition to these vulnerabilities, Caribbean countries face major structural constraints, such as dependence on external financing, limited capacity to mobilize domestic resources and, critically, high levels of public debt. ECLAC has argued that the accumulation of debt stems from a number of factors apart from fiscal excesses. They include the impacts of adverse external shocks, the effects of climate change and the occurrence of natural disasters. High public debt, accompanied by a period of fiscal consolidation, has limited the ability of governments to sustain social spending and invest in building the resilience of their infrastructure. At the same time, the economic situation has been made worse by a secular decline in foreign direct investment in the subregion.

¹ The definition of Caribbean countries used in this chapter includes those that are member and associate member countries of the Caribbean Development and Cooperation Committee (CCDC): Anguilla, Antigua and Barbuda, Aruba, Bahamas, Barbados, Belize, Bermuda, British Virgin Islands, Cayman Islands, Cuba, Curaçao, Dominica, Dominican Republic, Grenada, Guadeloupe, Guyana, Haiti, Jamaica, Martinique, Montserrat, Puerto Rico, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Sint Maarten (Netherlands part), Suriname, Trinidad and Tobago, Turks and Caicos Islands and United States Virgin Islands.

² Taking a broader geographical perspective, that of Latin America and the Caribbean, more than 60% of countries in the region have a medium to very high disaster risk, according to data from the World Risk Index, which assesses the exposure and vulnerability of territories to natural hazards. More than half these countries have high and very high risk levels. The concept of the World Risk Index focuses on the understanding of natural hazard-related risk, where disaster risk is defined as the interaction of physical hazards and the vulnerability of exposed elements.

³ The original definition of small island developing State (SIDS), used at the United Nations Conference on Environment and Development in Rio de Janeiro (Brazil) in 1992, describes SIDS as low-lying coastal countries that share similar sustainable development challenges, including small populations, limited resources, susceptibility to natural disasters, vulnerability to external shocks and excessive dependence on international trade. However, as the United Nations has never established criteria to determine an official list of SIDS, the unofficial list is used here for the purposes of analysis. Theoretically, for a country to be considered a SIDS, it must meet four criteria. It must be: (i) small in size; (ii) independent; (iii) a developing country; (iv) low-lying. Even if it meets these criteria, it is not ensured SIDS status and exceptions to the rules are not clearly defined. For example, the World Bank and International Monetary Fund consider a State to be small if it has a population of 1.5 million or fewer. However, Jamaica has a population of 2.7 million and is classed as a small country.

Taken together, these structural constraints create conditions that prevent environmentally vulnerable developing countries from making adequate investment in climate change adaptation and mitigation. This puts them in a position where large-scale natural disasters, such as those that occurred during the 2017 Atlantic hurricane season, threaten their long-term environmental, economic and social viability. The vulnerability of the Caribbean needs to be taken into account in any discussion about the subregion's economic performance. In a context of high debt and fiscal stress, indebted Caribbean SIDS will find it difficult to address key aspects of the 2030 Agenda for Sustainable Development.

This entire context should be taken into consideration when Caribbean SIDS draw up their national and development plans. Disaster risk management is an important part of that process.⁴ One of the objectives should be to manage risk in order to ensure that society's progress is resilient. Resilience is defined as "the capacity of a system, community or society potentially exposed to hazards to adapt, by resisting or changing in order to reach and maintain an acceptable level of functioning and structure."⁵ Achieving resilience involves identifying the risk of disasters and developing measures to reduce this risk, such as enhancing infrastructure and land-use planning and financial protection. Reducing social, economic and environmental vulnerability and increasing resilience and the general welfare of the population by taking a rights-based approach are the ultimate goals of integrated risk management. When a country integrates policy instruments for disaster risk management with national policy frameworks, it facilitates the allocation of human, technical and financial resources for achieving these goals. The capacity for future recovery then automatically becomes a *sine qua non* for sustainable development.

This chapter is divided into three sections. The first discusses vulnerabilities in the Caribbean: exposure to natural disasters, structural vulnerabilities and the challenges of climate change for the subregion. The second analyses two case studies: the Bahamas and Belize. It describes the main geophysical characteristics of both countries and examines the urban development process to determine its specific challenges and the vulnerabilities described in the preceding sections. The Bahamas, like many other SIDS, is a multi-island State where spatial inequalities between the main island and other islands in the archipelago can heighten the impact on livelihoods of natural hazards and climate change. In the case of Belize, a continental country, section two analyses the challenges posed by its extreme vulnerability to flooding and sea-level rise as a result of its topographic characteristics. The third and final section of this chapter discusses mainstreaming resilience into development planning processes in the region and lists achievements and areas for improvement.

A. Vulnerability of Caribbean countries

This section identifies the vulnerabilities of Caribbean countries with respect to the issues affecting and characterizing their territorial and social development process. These vulnerabilities are defined by two key factors: (i) location in an area prone to natural hazards, chiefly storms and tropical cyclones; and (ii) a highly exposed population, due to its concentration in cities sited in low-lying coastal areas, marked by territorial inequalities and structural weaknesses.

1. Characteristics of human settlements in the Caribbean

In 2018, roughly 80% of the population of Latin America and the Caribbean lived in urban areas. The figure was 70% in the Caribbean, where some 33 million people lived in urban settlements in 2018 (see table II.1). This figure is broken down into: 7.6 million people in Cuba and the Dominican Republic; 6.1 million in Haiti; 3.4 million in Puerto Rico; and 5.3 million in the remaining Dutch-, English- and French-speaking Caribbean countries.

⁴ Until the 1990s, public disaster policies focused on preparedness and response. However, owing to the effects and impacts of hurricanes and other major disasters, the end of the decade marked a new understanding of disasters and the way in which they could affect development, especially in the poorest countries. As a result, the public policy approach has evolved from a reactive stance towards a more holistic concept of disaster risk management.

⁵ See Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters [online] <https://undocs.org/A/CONF.206/6>.

Table II.1

The Caribbean: urban and rural population, capital city and percentage urban, 2018

(Thousands of people and percentages)

Region or country	Urban population ^a (thousands of people)	Rural population (thousands of people)	Total (thousands of people)	Urban population ^a (percentage of the total)	Capital city	Population living in the capital (thousands of people)	Population living in the capital (percentage of the total)	Urban population living in the capital ^a (percentage of the total)
Latin America and the Caribbean	526 057	125 955	652 012	80.7		100 786	15.5	19.2
The Caribbean ^b	32 540	13 673	46 213	70.4		12 942	28.0	39.8
Anguilla	15	0	15	100.0	The Valley	1	9.3	9.3
Antigua and Barbuda	25	78	103	24.6	Saint John	21	20.1	81.9
Aruba	46	60	106	43.4	Oranjestad	30	28.3	65.1
Bahamas	332	68	399	83.0	Nassau	280	70.0	84.4
Barbados	89	197	286	31.1	Bridgetown	89	31.1	100.0
Belize	175	208	382	45.7	Belmopán	23	6.0	13.1
Bermuda	61	0	61	100.0	Hamilton	10	16.5	16.5
British Virgin Islands	15	17	32	47.7	Road Town	15	47.7	100.0
Cayman Islands	62	0	62	100.0	Georgetown	35	55.9	55.9
Cuba	8 851	2 638	11 489	77.0	Havana	2 136	18.6	24.1
Curaçao	144	18	162	89.1	Willemstad	144	89.1	100.0
Dominica	52	22	74	70.5	Roseau	15	20.1	28.5
Dominican Republic	8 823	2 060	10 883	81.1	Santo Domingo	3 172	29.1	36.0
French Guiana	247	43	290	85.3	Cayena	58	19.8	23.3
Grenada	39	69	108	36.3	Saint George's	39	36.3	100.0
Guadeloupe	442	7	449	98.5	Basse-Terre	58	13.0	13.2
Guyana	208	574	782	26.6	Georgetown	110	14.1	52.8
Haiti	6 143	4 970	11 113	55.3	Port-au-Prince	2 637	23.7	42.9
Jamaica	1 614	1 285	2 899	55.7	Kingston	589	20.3	36.5
Martinique	343	42	385	89.0	Fort-de-France	79	20.6	23.1
Montserrat	0	5	5	9.1	Brades	0	9.1	100.0
Puerto Rico	3 424	235	3 659	93.6	San Juan	2 454	67.1	71.7
Saint Kitts and Nevis	17	39	56	30.8	Basseterre	14	25.8	84.0
Saint Lucia	34	146	180	18.7	Castries	22	12.4	66.3
Saint Vincent and the Grenadines	58	53	110	52.2	Kingstown	27	24.2	46.3
Sint Maarten	41	0	41	100.0	Philipsburg	41	100.0	100.0
Suriname	375	193	568	66.1	Paramaribo	239	42.1	63.8
Trinidad and Tobago	730	643	1 373	53.2	Port of Spain	544	39.7	74.6
Turks and Caicos Islands	33	2	36	93.1	Cockburn Town	5	15.1	16.3
United States Virgin Islands	100	4	105	95.7	Charlotte Amalie	52	49.9	52.1

Source: United Nations, *World Urbanization Prospects: The 2018 Revision*, Population Division, New York, 2018 [online] <https://esa.un.org/unpd/wup/Publications/Files/WUP2018-KeyFacts.pdf>.

^a The definition of the term "urban" is that used by each respective country.

^b Includes all 30 Member and Associate Member Countries of the Caribbean Development and Cooperation Committee (CDCC).

The rate of urbanization in the Caribbean exhibits a high degree of variability as a result of recognized challenges in the statistical definition of urban areas (ECLAC/UN-Habitat/MINURVI, p. 17), coupled with geographical and socioeconomic constraints. The rate of urbanization ranges from 9% in Montserrat to 100% in the Cayman Islands and Sint Maarten. The evolution of the rate of urbanization in the subregion between 2005 and 2015 was rather uneven. While Haiti and the Dominican Republic experienced growth in the rate of urbanization of 23% and 17%, respectively, the rate decreased in 12 countries.⁶ The biggest fall occurred in Saint Lucia (20%) and Antigua and Barbuda (14%) (see table II.2).

⁶ This phenomenon of apparent urban shrinkage, rather than pointing to a loss of population in cities, could be the result of rapid urbanization in the outskirts, not accompanied by measures to reclassify rural land as urban. A more detailed study is required to provide a definitive explanation for the data.

Table II.2The Caribbean: population living in urban areas^a, estimates and projections, 2005–2050*(Percentages)*

Region or country	2005	2010	2015	2050
Latin America and the Caribbean	77.1	78.6	79.9	87.8
The Caribbean ^b	65.4	67.8	70.0	82.5
Anguilla	100.0	100.0	100.0	100.0
Antigua and Barbuda	29.2	26.2	25.0	31.0
Aruba	44.9	43.1	43.1	54.6
Bahamas	82.2	82.4	82.7	88.4
Barbados	32.8	31.9	31.2	40.8
Belize	45.3	45.2	45.4	57.1
Bermuda	100.0	100.0	100.0	100.0
British Virgin Islands	43.2	44.8	46.6	61.4
Cayman Islands	100.0	100.0	100.0	100.0
Cuba	76.1	76.6	76.9	84.1
Curaçao	90.5	89.9	89.4	91.9
Dominica	66.6	68.1	69.6	80.0
Dominican Republic	67.4	73.8	78.6	92.0
French Guiana	81.1	82.9	84.5	91.0
Grenada	35.9	35.9	36.0	47.3
Guadeloupe	98.4	98.4	98.4	99.0
Guyana	27.8	26.6	26.4	36.0
Haiti	42.6	47.5	52.4	74.9
Jamaica	52.8	53.7	54.8	70.4
Martinique	89.3	89.1	89.0	92.6
Montserrat	9.3	9.2	9.0	13.5
Puerto Rico	94.1	93.8	93.6	95.7
Saint Kitts and Nevis	32.0	31.3	30.8	40.3
Saint Lucia	23.1	18.5	18.5	26.6
Saint Vincent and the Grenadines	47.0	49.0	51.0	65.5
Sint Maarten	100.0	100.0	100.0	100.0
Suriname	66.7	66.3	66.1	74.0
Trinidad and Tobago	55.0	54.0	53.3	62.7
Turks and Caicos Islands	87.7	90.2	92.2	96.7
United States Virgin Islands	93.7	94.6	95.4	97.6

Source: United Nations, *World Urbanization Prospects: The 2018 Revision*, Population Division, New York, 2018 [online] <https://esa.un.org/unpd/wup/Publications/Files/WUP2018-KeyFacts.pdf>.

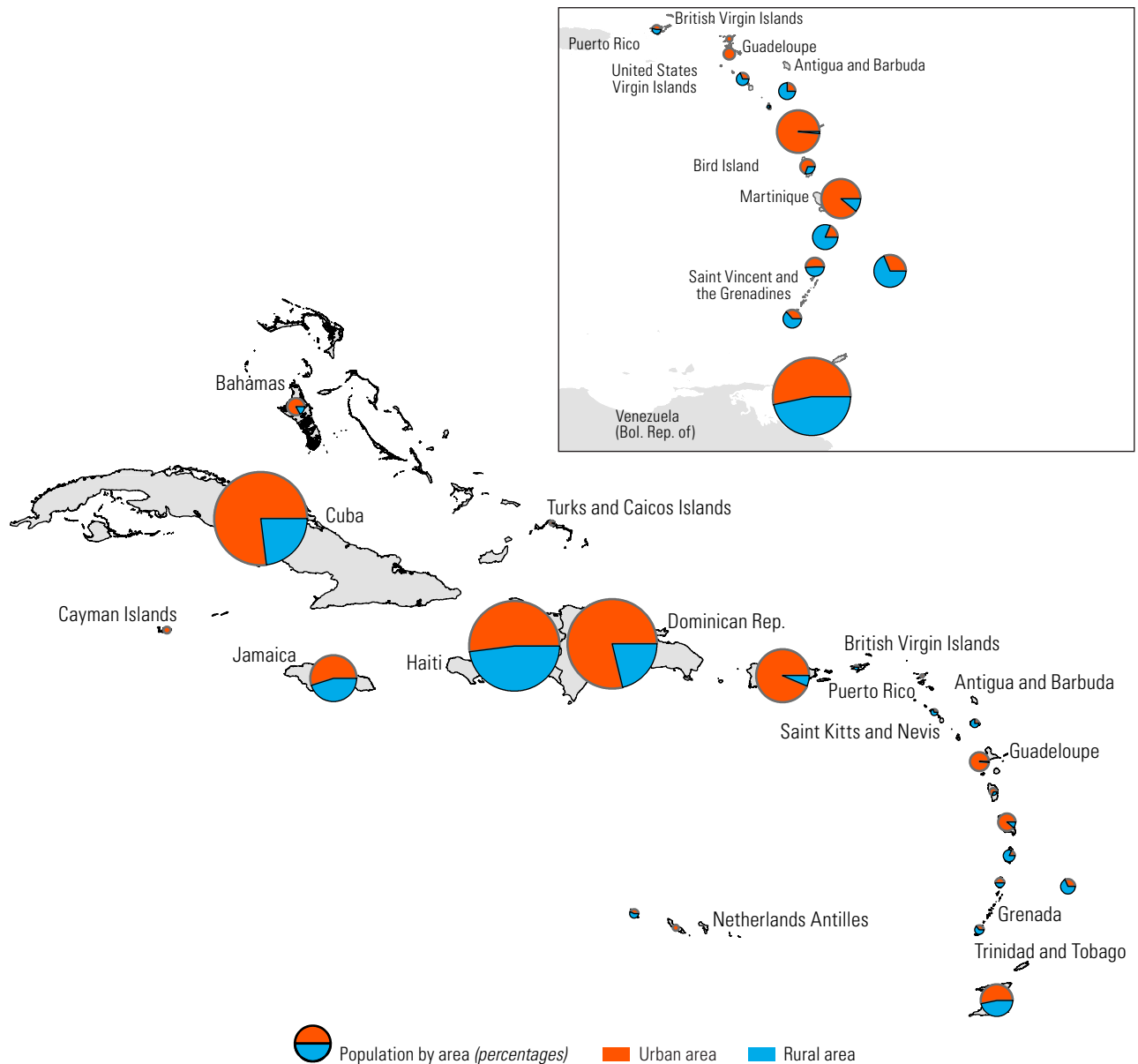
^a The definition of the term “urban” is that used by each respective country.

^b Includes 30 countries, in line with the composition of the geographical region used by the United Nations Statistics Division in its publications and databases.

Eighteen of the 30 capital cities of the Caribbean are home to more than half the urban population of the respective country or territory, which may be a sign of urban compaction. Seven of these capital cities are home to the entire urban population of the country or territory: Saint John, Bridgetown, Road Town, Willemstad, Saint George’s, Brades and Philipsburg. Furthermore, only 6 of the 30 capital cities are home to more than half the country’s or territory’s total population. The entire population of Sint Maarten lives in its capital city, Philipsburg; 89% of Curaçao’s population lives in Willemstad; in the Bahamas, 70% of the country’s population lives in Nassau; and 67% of Puerto Rico’s population lives in San Juan. In two Caribbean territories (Cayman Islands and United States Virgin Islands), around half the total population lives in the capital city (see table II.2).

Map II.1

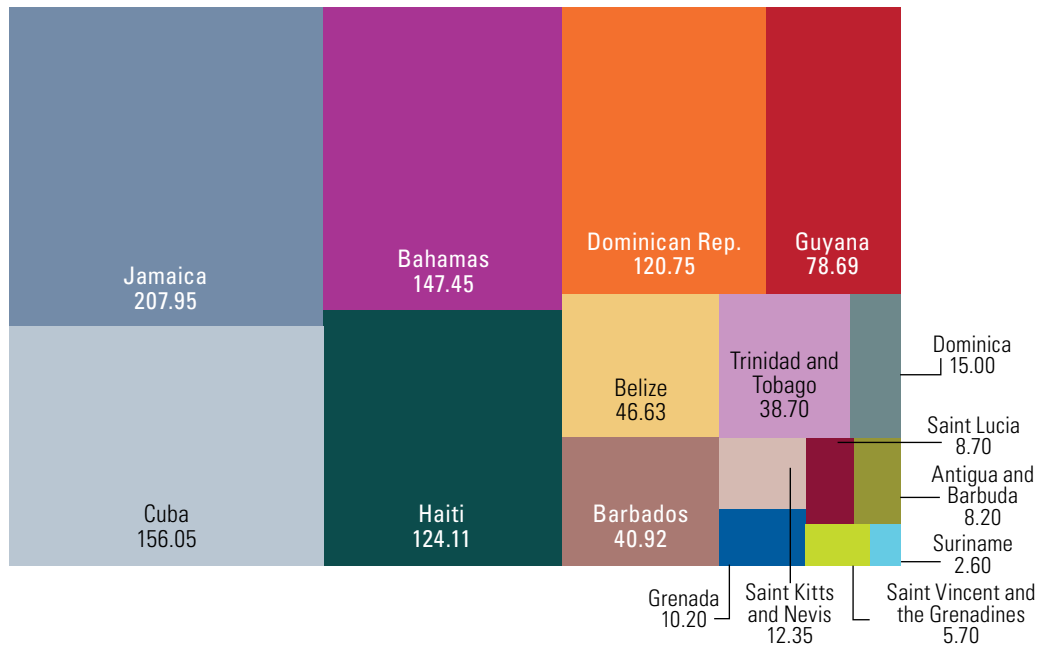
The Caribbean: spatial distribution of population, 2018



Source: Latin American and Caribbean Institute for Economic and Social Planning (ILPES), on the basis of CEPALSTAT [online database] <http://estadisticas.cepal.org/cepalstat/portada.html?idioma=english>.

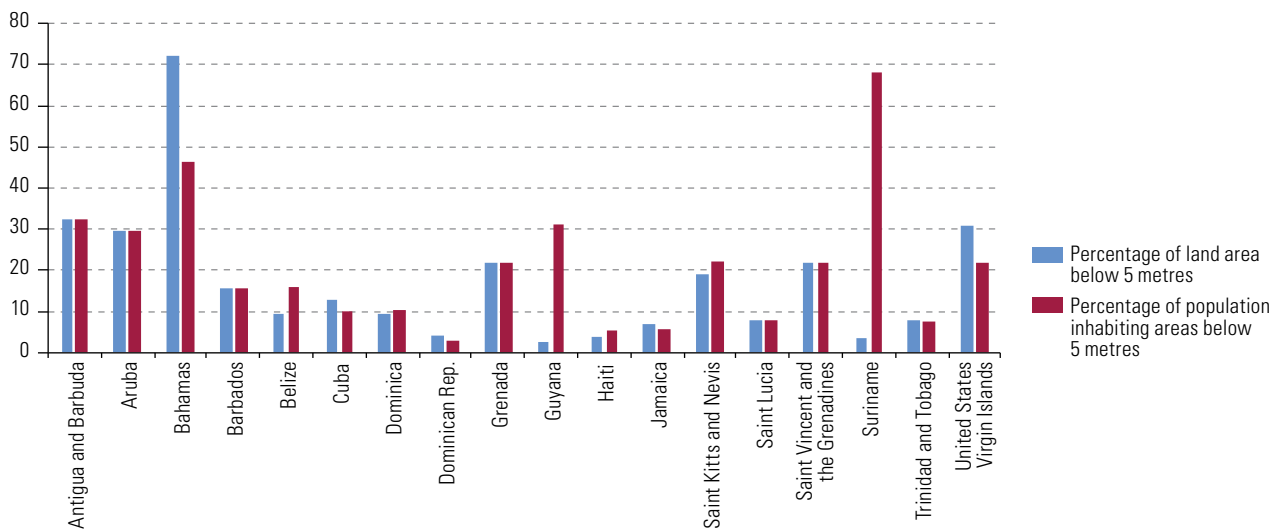
Caribbean cities differ from those of Latin America in two respects: proximity to the sea in most cases and a high percentage of the population inhabiting areas below 5 meters above sea level. Evidently, both factors increase the exposure of Caribbean cities to natural disasters. As regards the proximity of settlements to the sea, the Bahamas, Cuba, the Dominican Republic, Haiti and Jamaica have more than 100 km of urban coastline (see figure II.1). In addition, their size means that, in most countries and territories of the Caribbean the entire population lives less than 25 km from the coast and, in several of these countries, more than 20% of the population lives in areas below 5 metres. This applies to Antigua and Barbuda, Aruba, Bahamas, British Virgin Islands, Grenada, Guyana and Saint Vincent and the Grenadines, as well as the extreme case of Suriname, where nearly 70% of the population inhabits areas below 5 metres (see figure II.2). Flood risk is aggravated by complex water systems and countries' incipient adaptive capacity.

Figure II.1
The Caribbean: urban coastline
(Kilometres)



Source: M. Mycoo and M. Donovan, *A Blue Urban Agenda: Adapting to Climate Change in the Coastal Cities of Caribbean and Pacific Small Island Developing States*, Washington, D.C., Inter-American Development Bank (IDB), 2017.

Figure II.2
The Caribbean: land area and population inhabiting areas below 5 metres
(Percentages)



Source: United Nations Human Settlements Programme (UN-Habitat), *Urbanization and Climate Change in Small Island Developing States*, Nairobi, 2015.

In addition, it is projected that, by 2050, the Caribbean's urban population will be growing faster than that of Latin America and the Caribbean, with a rate of urbanization as high as 82.5%. Urban population projections vary widely within the subregion. In half the countries and territories of the Caribbean, the rate will grow by at least 15% (see table II.1). The spatial expression and growth patterns of urban settlements are also highly diverse: new, more polycentric urban forms are expected in the Caribbean, in contrast to the traditional monocentric design of Caribbean cities. Urban change in the Caribbean is expressed as new city-regions and urban corridors. Urban expansion in the Caribbean will result in a two- to fivefold increase in the current total urban area, in response to an estimated increase of some 10 million new urban inhabitants by 2050.⁷

If the aforementioned urbanization growth scenario becomes a reality, public responsibilities will also increase in response to new pressures on already strained urban infrastructure and public services. A new approach to land governance will be crucial, including measures to address security of land tenure, public land management, housing policy, transport, waste management, and water security. As the urban population and urban areas of the Caribbean grow, unprepared and unplanned areas pose a threat to development patterns in the subregion, with the expansion of informal settlements looking set to multiply existing vulnerabilities. To avoid a critical increase in vulnerabilities with respect to housing and basic urban infrastructure, an integrated and coherent approach to urban services needs to be promoted, considering in particular the most vulnerable populations.

2. Disasters in the Caribbean, 1990–2017

Disasters stem from a combination of two factors: (i) natural phenomena capable of triggering processes that lead to physical damage and loss of human life and capital; and (ii) vulnerability of individuals and human settlements. Vulnerability is a precondition (the scale of which becomes apparent during a disaster) and, at the same time, an indicator of the exposure of capital and the ability of individuals, households, communities and countries to tolerate and recover from damage (ECLAC, 2014). According to information from the EM-DAT International Disaster Database,⁸ the average number of disasters per decade in the Caribbean has increased significantly since the 1970s, as has the population affected and the scale of the damage suffered. Such phenomena exacerbate existing vulnerabilities and social inequalities and have a disproportionate impact on women, children, older persons, persons with disabilities, and poor and marginalized groups. The subregion's vulnerability to disasters should therefore be considered when discussing territorial development or the reduction of inequalities there.

(a) Characteristics

The following section provides a detailed description of disaster hazards in the subregion, based on information from the EM-DAT database.

(i) Frequency

Disasters are common in the Caribbean. Between 1990 and 2017, this subregion experienced 408 disasters associated with natural hazards, representing an average of 14.6 per year. While there were disasters every year during this period, the highest incidence was in 2004 and 2017 (30 and 29 disasters, respectively). The countries that suffered the greatest number of disasters were Haiti (90), the Dominican Republic (59) and Cuba (53). In the English-speaking Caribbean, Jamaica was the country that experienced the greatest number of disasters (26).

⁷ According to research by McHardy and Donovan, in 2050 the urban area of the Caribbean will be equivalent to an area between three times the size of Barbados and the whole of Trinidad and Tobago (see McHardy and Donovan, 2016). Studies by Angel and others (2010) have projected significant increases in urban land cover in the Caribbean and in Pacific small island developing States between 2000 and 2050. For example, Trinidad and Tobago is expected to experience a sevenfold increase in urban land cover.

⁸ EM-DAT contains essential core data on the occurrence and effects of over 22,000 mass disasters in the world from 1900 to the present day. The database is compiled from various sources, including United Nations agencies, non-governmental organizations, insurance companies, research institutes and press agencies. For a disaster to be entered into EM-DAT, at least one of the following four criteria must be met: (i) 10 people reported killed; (ii) 100 or more people reported affected; (iii) declaration of a state of emergency; or (iv) call for international assistance.

During this period, 90.4% of the disasters were associated with hydro-climatic hazards, including storms (58.1%) and floods (27.2%) (see table II.3). 2017 and 2004 were the years in which there were the highest number of storm-related disasters: 25 disasters in 2017 and 23 in 2004, respectively.⁹

Table II.3

Number of disasters by type, 1990–2017

Biological disaster	20
Geophysical disaster	14
Flood	111
Storm	237
Drought	21
Ground movement	2
Other	3
Total	408

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of EM-DAT International Disaster Database [online] www.emdat.be.

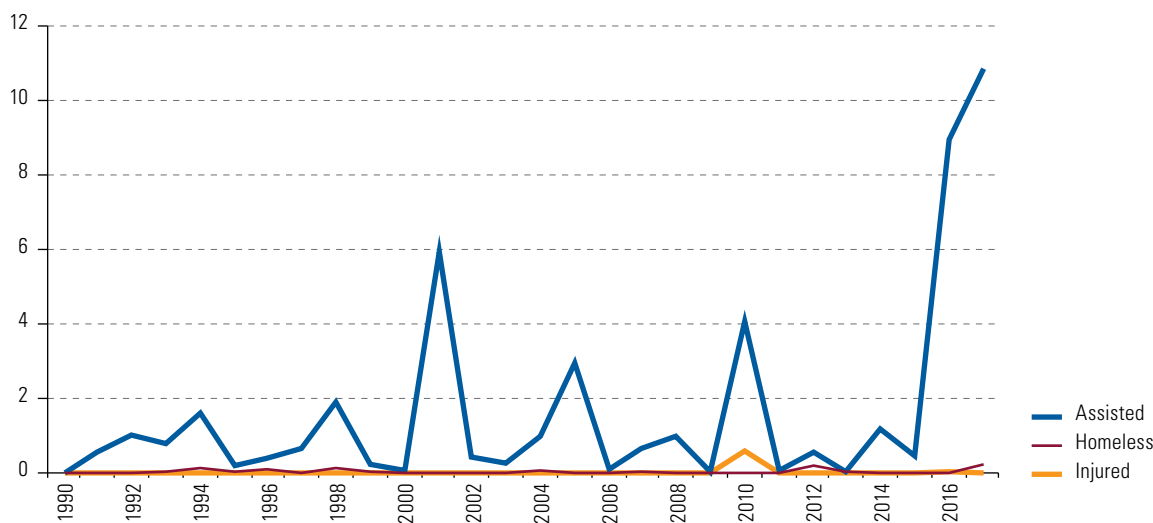
(ii) Deaths and population affected

Two of the most significant impacts of disasters are loss of human life and a large population affected (see figure II.3). A total of 241,000 deaths were caused by disasters in the Caribbean during the period under review. Ninety-five percent of these deaths occurred in 2010, as a result of two disasters that struck Haiti: (i) the earthquake in Port-au-Prince on 12 January, which caused 222,570 deaths; and (ii) the cholera epidemic unleashed in October, which caused 6,908 deaths. Most of the deaths recorded in other years were caused by floods (4,169 deaths) and storms (6,936 deaths).

Figure II.3

The Caribbean: population affected by disasters, 1990–2017

(Millions of people)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of EM-DAT International Disaster Database [online] www.emdat.be.

In the 1970–2017 period, the population affected by disasters totalled 47.4 million. Those affected included people injured (1.3%), people evacuated (2.1%) and people receiving post-disaster assistance (96.6%). Deaths accounted for 0.5% of all those affected. The series of total population affected fluctuated in line with the

⁹ This does not mean that the same number of storms occurred during those years. A single phenomenon can cause several disasters. For instance, a hurricane can affect a number of countries, as happened with hurricanes Irma and Maria during the 2017 hurricane season, or Hurricane Ivan during the 2004 season.

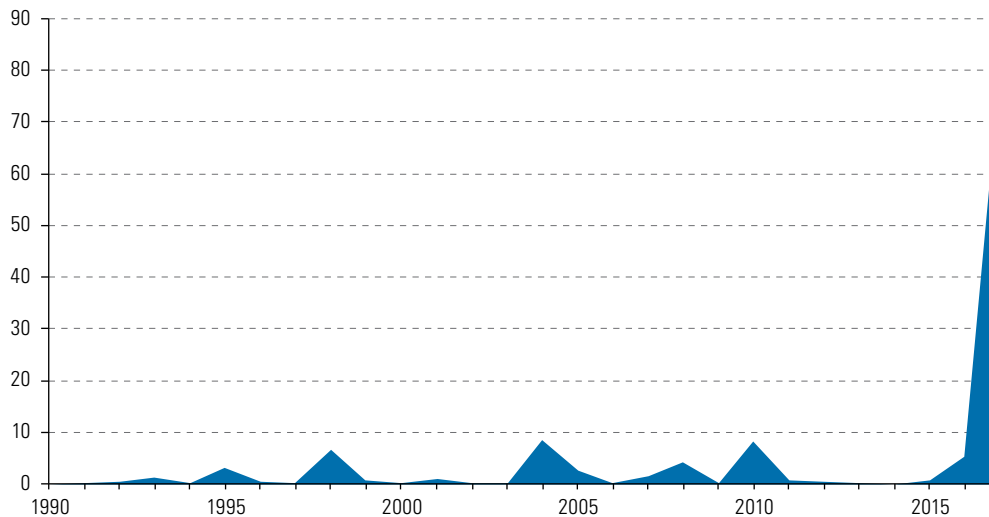
dynamics of storms and rainfall in the subregion over time. The highest values occurred in 2016 and 2017, when 9 million and 11 million people, respectively, were affected by some type of disaster. The types of phenomena that affected the largest number of people during this period were: storms (29.8 million people); biological disasters (7.5 million); drought (7.3 million); floods (5.9 million); and geophysical disasters (3.7 million).

(iii) Damage

Damage is understood as the value of assets totally or partially destroyed by a disaster and the value of stocks of final and intermediate goods totally or partially destroyed (see ECLAC, 2014). The total damage incurred in the Caribbean during the period under review was worth US\$ 140 billion. As with the series of total population affected, the damage series also fluctuated (see figure II.4). In five years (1998, 2004, 2010, 2016 and 2017), damage worth more than US\$ 5 billion was recorded, with 87.2% of the assets destroyed over the entire period concentrated in those years. The peak was in 2017 (US\$ 93.5 billion, or 66.7% of total damage over the period), owing to the effects of hurricanes Irma and Maria (see figure II.3). As regards the type of disaster, storms were responsible for the greatest destruction of assets, accounting for 92.7% of all damage.

Figure II.4

The Caribbean: disaster damage, 1990–2017
(Billions of dollars at constant 2017 prices)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of EM-DAT International Disaster Database [online] www.emdat.be.

This disaster effect has two noteworthy characteristics:

- (i) In relative terms, the Caribbean has been more affected than other regions that might be used as a comparison. For example, the impact of disasters in the subregion could be compared with Central America and South America. Over the period 1970–2010, in terms of the damage/GDP ratio of countries that experienced a disaster in a given year, the Caribbean was found to exceed the other two regions, with an average ratio of 6.9%, while in Central America the ratio was 3% and, in South America, it was 0.4% (see Bello and others, 2017). This is a consequence of the nationwide scope of some disasters in the Caribbean owing to the smaller size of territories.

Another way to highlight the relative impact of disasters in Caribbean countries is to compare it with disasters in other SIDS groups. Bello and De Meira (2019) show that, in the period 1990–2018, in terms of the number of disasters, the ratio of affected population to total population and the damage/GDP ratio, Caribbean countries have been relatively more affected than SIDS in the Pacific region or SIDS in the Atlantic, Indian Ocean, Mediterranean and South China Sea (AIMS) region. The affected population/total population ratio was 5.8% in Caribbean SIDS, compared with 3.5% in Pacific SIDS and 2.1% in SIDS in the AIMS region. As regards the damage/GDP ratio, the highest average value was in the Caribbean, followed by SIDS in the AIMS region (3.7%) and SIDS in the Pacific (2.8%).

- (ii) Damage figures underestimate the effects of disasters. The EM-DAT database contains information only about items defined as damage (physical assets partially or totally destroyed). ECLAC assessments also contain information about losses (the monetary value of goods no longer produced and services no longer provided) and about additional costs (incremental costs in the production of goods and in the temporary provision of interrupted services, in addition to the costs of dealing with the emergency) (see ECLAC, 2014). Assessments of the effects and impacts of hurricanes Irma and Maria in Anguilla, the Bahamas, the British Virgin Islands, Sint Maarten and the Turks and Caicos Islands found the losses to be significant, accounting for 48% of the total cost.

In conclusion, it is the size of the economic impact of certain disasters in relation to the size of the respective country's economy that distinguishes the Caribbean from other regions of the world. For example, in four of the disaster assessments of the 2017 Atlantic hurricane season, the total cost exceeded 40% of GDP, with three exceeding 100% of GDP. External shocks of this magnitude may undo the social and economic progress made by countries in previous years, underlining the importance of including resilience elements in development policies.

3. Sectoral vulnerabilities found by disaster assessments in the Caribbean

ECLAC assessments provide useful input for countries' territorial planning, as they facilitate a financial quantification of risk and propose options for mitigating future risk.¹⁰ The lessons learned from these assessments should be incorporated into post-disaster recovery and into planning processes. This section describes the vulnerabilities identified in the assessments of fixed assets in the infrastructure, production and social sectors.

(a) Vulnerabilities in the infrastructure sector

Island countries rely on an efficient and resilient transport system (especially maritime and air transport) to carry the imports needed to cover their consumption, food and energy requirements, and also because of the importance of tourism for the local economy. Transport infrastructure is critical for three main reasons. First, it supports both the internal and external production activities of communities and islands. Second, it facilitates the intra- and inter-island movement of people, which is especially important in multi-island States to enable the population of smaller islands to access critical public and private services. Lastly, it plays a vital role during an emergency in enabling the State to respond in a timely and appropriate manner.

In the maritime transport sector, port facilities, which are essential for supply and transport chains in the region, are highly vulnerable to storm surges because of their coastal location and low elevation. Problems observed in some port infrastructure and superstructure, such as terminals, logistics platforms and cargo storage areas, include obsolescence, poor maintenance and use of unsuitable building materials. Private marinas, which are important for tourism, also face problems. For example, in Bimini (Bahamas), Sint Maarten and the Turks and Caicos Islands, marinas have been created from fragile floating structures made of unsuitable building materials (such as polystyrene foam) which, in the event of a disaster, would create an additional environmental problem when the debris is washed out to sea.

The vulnerabilities identified in the air transport sector also have serious consequences for the day-to-day operation of tourism and commerce, as well as for emergency support activities. Geographical constraints or the lack of a territorial plan lead many air terminals to be sited in low-lying areas close to the coast, exposing

¹⁰ ECLAC has been a pioneer in the evaluation of disasters and the development of a methodology for this purpose. The DaLA methodology calculates the losses, damages and additional costs related to the specific event. For this section, the main references used are the disaster assessments carried out by ECLAC in the following countries: Bahamas (2015, 2016, 2017), Belize (2016), Anguilla (2017), British Virgin Islands (2017), Turks and Caicos Islands (2017) and Sint Maarten (2017). The DaLAs in Belize and Bahamas (2016) were carried out jointly with the Food and Agriculture Organization of the United Nations (FAO) and the Panamerican Health Organization (PAHO). The DaLAs in Bahamas (2015, 2017) were done jointly with PAHO. Those in Anguilla (2017) and Sint Maarten (2017) were done jointly with the Eastern Caribbean Development Bank.

them to high risk. A particularly vulnerable structure is the fencing around runways. If fencing is damaged, international standards preclude the airport from operating. Options such as building sea walls or inland embankments and raising the elevation of external infrastructure would protect the runway from storm surges or flooding from heavy rains.

The vulnerabilities found in most of the assessments of land transport in the subregion are associated with the following factors:

- Lack of proper design and construction standards for roads, reflected in such situations as insufficient elevation of roads in low-lying areas subject to flooding.
- Insufficient technical supervision during construction to ensure the right results.
- Inefficient, low-quality structural components and use of unsuitable materials, causing the structure to deteriorate and become unable to withstand the effects of natural phenomena.
- Lack of adequate channels and systems to drain rainwater.
- Lack of preventive and corrective maintenance.

In short, hurricanes can affect the operation of infrastructure such as airports, ports and roads. Yet such infrastructure is important not only in terms of quality of life on islands and the activity of various sectors of the economy but also because of the vital role this infrastructure plays in a disaster, in terms of handling medical emergencies, providing assistance and carrying out recovery efforts. For all these reasons, more robust and rigorous design standards should be implemented to make such facilities more resilient to disasters.

Similarly, unprotected power distribution infrastructure (pylons, cables and transformers) installed near the coast tend to be affected by tropical storms and hurricanes. Apart from severe weather events, such structures also suffer the cumulative effects of low-intensity disasters, coupled with poor maintenance, and, in many cases, they are not insured. Many assessments have found pylons overloaded with multiple services, installed at a shallow depth in disaster-prone places.

In some Caribbean countries, close to the principal urban agglomerations, the main power transmission and distribution system is underground, which protects it from wind and debris damage. However, some sections of the distribution grid, chiefly in the oldest and most remote regions, lie above ground and expose the grid to the ravages of storms. The 2017 assessment found that, even though 80% of Sint Maarten's distribution grid had been buried, Hurricane Irma still caused considerable damage to the 20% that remained exposed. Moreover, undergrounding is not a strategy available to all countries in the subregion because of cost and topographical constraints. For instance, in Anguilla, shallow soil depth and the presence of hard limestone very close to the surface make underground power cables 10 times more expensive to lay. Nor is undergrounding immune to other risks, as soil erosion by rain can affect underground cables.

Furthermore, territorial differences within countries make specific regions more vulnerable. For example, in the poorest areas of Belize, illegal electricity connections to the national grid were found to have been fashioned ad hoc, using unsuitable materials and practices, which heightens the risk of power outages in the event of rain or flooding. In all the cases analysed, diversification of the energy mix and power distribution methods would help to reduce dependence on fossil fuel imports and the need to resort to emergency generators. It would also increase the sector's resilience, meaning that the failure of a single power plant would not lead to total loss of power for the community (Peralta and Flores, 2018).

The main vulnerabilities identified in the telecommunications sector have been lack of maintenance and upgrading, together with the siting of critical infrastructure in risk areas. In the sector, transmission towers tend to be the assets that suffer the most damage from storms and tropical cyclones. Temporary solutions, such as portable mobile telephone transmission towers, or "cells on wheels" (COW), have been used to restore partial telecommunications service rapidly. Fixed-line telephony is more difficult to restore, as telecommunications companies often use the same pylons as the power grid and rely on power companies to restore the service.

Another significant infrastructure vulnerability in the Caribbean subregion relates to water availability, which depends largely on power generation because scarce freshwater sources make desalination necessary. In addition, failure to regulate and monitor the use of groundwater sources exacerbates the problems of access to and conservation of drinking water. While private wells are used in many areas, unregulated well-drilling can lead to over-abstraction, damage to sources from poor building techniques and the consumption of contaminated or poor-quality water. As regards storage, water tanks are vulnerable to high winds. One simple solution is to keep tanks full to make them better able to withstand the ravages of wind.

As regards sanitation, smaller islands (such as the Family Islands in the Bahamas) often use septic tanks for wastewater disposal. However, many such tanks are not properly maintained and are not emptied or cleaned frequently. As the assessment of Hurricane Joaquin found, when a disaster occurs, leachates from full or damaged septic tanks contaminate groundwater and already scarce water resources.

(b) Vulnerabilities in the production sector

Repeated disruptions to production sectors, such as tourism, fisheries and agriculture, have a significant impact, as these sectors are a source of employment for a section of the region's population. Property location and building quality affect the tourism sector, as most public and private investment is concentrated in risk areas. While proximity to water is an attraction for hotels, leisure facilities and tourism service providers, it makes them vulnerable to structural and equipment damage from water and wind. In the tourism sector, even if infrastructure is not damaged, it may still suffer losses from the stoppage of services in ports, airports and roads, and the interruption of critical services such as water supply. During the high season, reduced accommodation capacity and damage to support infrastructure cause losses in the local economy and in jobs. It is also common among entrepreneurs in the sector, especially small business owners, not to have financial protection for their facilities, which may prolong the reconstruction period.

The fisheries sector is particularly vulnerable to damage because infrastructure and equipment are in, or near, water. Oceanographic studies in exposed areas to determine sea level, wave intensity and other elements that may affect the construction and resilience of support structures for the sector would therefore provide a crucial contribution to the planning process. As an example of good practice, Belize has incorporated location as an important consideration for port construction in order to foster protected areas. Belize also gives preference to building in areas far from the usual track of storms.

In both agriculture and fisheries, production losses and supply chain disruption can lead to food price increases and reduced food availability. In addition, production and household incomes can be slow to recover for small-scale horticultural producers or fishing operations. Having lost upfront revenue, such producers do not have enough capital to replace damaged infrastructure quickly. Most also find it hard to access loans through local credit unions or microfinance institutions, as they do not have sufficient guarantees or a co-signer to underwrite the loans (Government of Dominica, 2017). At the same time, the haphazard conversion of land to agriculture can exacerbate existing vulnerabilities. For example, the siting of agricultural land on steep slopes exposed to heavy rainfall increases soil erosion and the transport of sediment to the coast, contributing to water turbidity and blocking the light needed for photosynthesis. The discharge of nutrients into coastal waters is also a major cause of eutrophication, which contributes to the growth of algae and the destruction of corals (ECLAC/IHCantabria, 2012).

(c) Vulnerabilities in the social sector and guarantee of fundamental rights

The provision of basic services, such as housing, education and health, also poses a challenge for multi-island States, which have infrastructure deficiencies and often have small, dispersed settlements that are difficult to connect. The impact of disasters on these sectors can have long-term consequences for quality of life and for poverty and social inequality indicators.

In the housing sector, the main vulnerabilities relate to:

- Land-use planning. In many island countries, the quantity, quality and adequacy of housing to meet demand remains a challenge. In addition, the lack of urban expansion projects, exacerbated by spatial constraints in some States, contributes to unsustainable land-use practices and the construction of homes in vulnerable areas, such as steep slopes, river banks and coastal areas. Ineffective urban planning, colonial land tenure systems and dysfunctional land markets in the Caribbean lead poorer populations to migrate to marginal lands close to cities (Mycoo and Donovan, 2017). In this case, informal settlements are at even greater risk of disasters owing to poor engineering and planning (Peralta and Flores, 2018).
- Unsuitable design, materials or installation procedures, and lack of maintenance. There are marked differences from one island to another in terms of disaster damage, depending on the type of building material used. For example, concrete has proved to perform better against hurricanes than other materials. Moreover, some minor structures, especially those used to support or suspend a roof (windows, doors and frames), have a big influence on the degree of internal damage that a house may suffer. The failure of a single connector can cause total collapse of the structure. In addition, the existence of many old buildings means that inspections should include a service life assessment of critical structural components.
- Inadequate supervision. Building regulations already exist in many countries in the subregion. However, the geographical dispersion of islands poses constraints in terms of human resources to properly supervise and inspect the building methods and processes used across all areas. Nor is there clarity regarding the penalties applicable under national legal frameworks for the infringement of rules.

The principal weakness of buildings in the education sector is also lack of maintenance of (usually old) buildings. Damage to schools interrupts the schooling of children and young people in the subregion on almost a yearly basis. In the health sector, the principal vulnerability was found to be the location of some small clinics in risk areas and the fact that no reinforcement work had been done on some old main hospitals. An additional challenge facing the health sector is that the recovery of facilities must be pursued at the same time as the emergency is being confronted, which may result in unsuitable reconstruction arrangements.

4. Climate change, coastal settlements and urban vulnerabilities

Climate change has been identified as a risk factor that is undermining international efforts to achieve the Sustainable Development Goals (SDGs). The consequences are particularly serious for SIDS, as noted in the previous section. According to one of the most important of the relevant international frameworks, the Small Island Developing States Accelerated Modalities of Action (SAMOA) Pathway, “small island developing States continue to grapple with the effects of disasters, some of which have increased in intensity and some of which have been exacerbated by climate change, which impede their progress towards sustainable development.”¹¹ There is consensus that the effects and impacts of climate-related disasters must be minimized if the SDGs are to be achieved, and that countries need to take concrete measures to this end, as outlined in SDGs 9, 11 and 13.¹²

While the impacts of climate change and the vulnerability of the poorest communities may vary, on the whole climate change will aggravate existing vulnerabilities (ADB, 2003). The poor tend to be worst affected by disasters and may also find it particularly hard to respond to the effects of climate change. In other words, impoverished communities are likely to be less resilient to climate change. This greater vulnerability is linked to territorial inequalities, as poorer populations tend to live in risk-prone areas, implying a greater threat of

¹¹ The special circumstances of SIDS were formally recognized in 1994 in the United Nations Programme of Action for the Sustainable Development of Small Island Developing States (Barbados Programme of Action) adopted at the Global Conference on the Sustainable Development of Small Island Developing States (Bridgetown, 1994), which included several measures to stimulate sustainable development in SIDS. This 14-point programme of action identified natural and environmental disasters as priority areas and indicated national, regional and international actions, policies and measures to strengthen resilience and mitigate potential impacts. On the basis of this document and of the Mauritius Strategy for the Further Implementation of the Programme of Action for the Sustainable Development of Small Island Developing States, the SAMOA Pathway was adopted at the Third International Conference on Small Island Developing States in 2014.

¹² Goal 9, “Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation”; Goal 11, “Make cities and human settlements inclusive, safe, resilient and sustainable”; and Goal 13, “Take urgent action to combat climate change and its impacts”.

natural disasters. The lands occupied by these communities are invariably those discounted by the formal planning system and considered unsuitable for planned urban development (ADB, 2003).

Greater planning efforts are required to break the cycle of poverty and address the root cause of key vulnerabilities in the Caribbean. Particular attention should be paid in this regard to territorial inequalities and spatial mobility, as proposed by the Montevideo Consensus on Population and Development.¹³ To this end, account must be taken of the characteristics of the subregion, the specific challenges of each country and concerns about the high cost associated with natural disasters in the subregion (Jones, Camarinhas and Gény, 2019).

As the Caribbean urbanizes, it is vital to increase its resilience. A growing concern is that major cities are located in low-lying coastal areas and are therefore highly exposed to rising sea levels. In addition, the risks to these coastal communities are projected to increase exponentially in the coming decades, exacerbated by resource exploitation and increasing urbanization (McHardy and Donovan, 2016). Sea level rise is accelerating at an unprecedented rate (Kopp and others, 2016). The rate of change, measured by satellite altimetry, is currently ± 3.4 mm per year. This will be particularly damaging to the numerous communities located in low-lying coastal areas. In the Bahamas, for example, 82.8% of the population lives less than 10 m above sea level and 94.9% live within 5 km of the coast (Mycoo and Donovan, 2017).

In addition to the increased risks to low-lying coastal zones and the exposure of people living in coastal areas, the vulnerabilities of SIDS are also spreading to other critical sectors because of the loss of biodiversity and the destruction of natural protection systems such as reefs and mangroves (LECRéD, 2016). Freshwater aquifers in the great coastal plains of Belize, Guyana and Suriname are also vulnerable to saline intrusion (IDB, 2014). At the same time, unsustainable production and consumption patterns are putting more and more pressure on resources such as land, water and biodiversity.¹⁴ Failure to pay attention to these factors may have severe environmental and socioeconomic consequences (UNEP, 2016).

Climate change is a major concern for Caribbean countries, not only because of the risks posed by rising sea levels, but also because of the expected impacts on water access, food production, health, land use and physical and natural resources. The demographic changes driving urbanization and other forms of human settlement are also factors that are placing ever-increasing strain on basic services such as health, water, energy and housing, as well as on natural ecosystems and chemical and waste management.

One of the clearest manifestations of inequality is territorial heterogeneity, visible in slums and informal settlements with inadequate housing and reflecting the deep-seated development gaps between rich and poor and the urban segregation they entail. Rapid population growth has resulted in a growing urban deficit that divides those who live in formal cities, with access to adequate housing and quality services, and those who live in poor neighbourhoods or informal areas without such access (Magalhães, 2016). The so-called “urban gap” reflects the divides of unequal growth.

Where people live is as crucial to their lives and personal success as their motivation and work ethic. It is therefore essential to acknowledge that “place matters”: the place where people are born, grow up, live and work is an integral part of their individual development potential that greatly influences their chances of prospering and reaching their full potential. A person’s place of birth or residence not only determines opportunities and socioeconomic conditions, but can be a source of discrimination (ECLAC, 2012) and a factor contributing to the intergenerational reproduction of poverty (ECLAC, 2016).

At the territorial level, residential segregation is a physical expression of inequality because of the separation of the different socioeconomic groups. As a result, these groups mix little or not at all, and the gaps between

¹³ The Montevideo Consensus was adopted by the governments of the Latin American and Caribbean region in 2013 and includes more than 100 priority actions. These cover issues such as population policy and planning, children and youth, ageing, sexual and reproductive health, gender equality, international migration, territorial inequality and indigenous peoples. For further information, see ECLAC (2019a).

¹⁴ Among harmful land-use practices, Mycoo and Donovan (2017) describe activities prompted in part by unresolved conflicts stemming from inherited land tenure systems associated with plantation economies. Other causes identified include obsolete land registration systems, poor implementation of physical development plans and environmental policies and regulations, poor site selection for urban settlements, inadequate enforcement of urban planning standards and building codes, deep governance and infrastructure deficits, and economic and social inequality, as well as limited application of tools for measuring the value of environmental resources when it comes to protecting urban assets.

them, between urban and suburban areas, between formal and informal cities and between the rich and the poor tend to widen. This situation of inequality is particularly harmful to people born and living in informal territories and to certain sectors of the population mainly residing on the outskirts of metropolises and in disadvantaged territories (ECLAC, 2010). The challenges faced by these communities include extreme poverty, environmental degradation, income inequalities, long-standing socioeconomic inequalities, marginalization and various forms of exclusion (UN-Habitat, 2010). The consequences go beyond cities, as they have implications for the entire development of the country. For example, they can lead to forced migration or urban violence (ECLAC, 2016).

The proportion of the urban population living in slums, informal settlements or inadequate housing will provide a measure of progress on SDG indicator 11.1.1, particularly as regards access to basic social services and equal opportunities. In the Caribbean, it has been found that people living in slums, informal settlements and inadequate housing are often particularly exposed to environmental problems and risks related to climate change. Risk factors include lack of high-quality housing, lack of basic services and poor location. Governments in the subregion have used different approaches to address the problem, as will be discussed in the two case studies presented in the next section.

B. Case studies in territorial inequality and coastal vulnerability: the Bahamas and Belize

SIDS have pioneered many innovative climate change adaptation initiatives in cities located in low-lying coastal areas. This section will analyse the cases of the Bahamas and Belize and the link between territorial inequalities and disaster resilience. It will also discuss how a mixture of integrated protection and mitigation measures has been used in these cities to respond to the impacts of climate change.

1. The Bahamas and the challenges of multi-island States

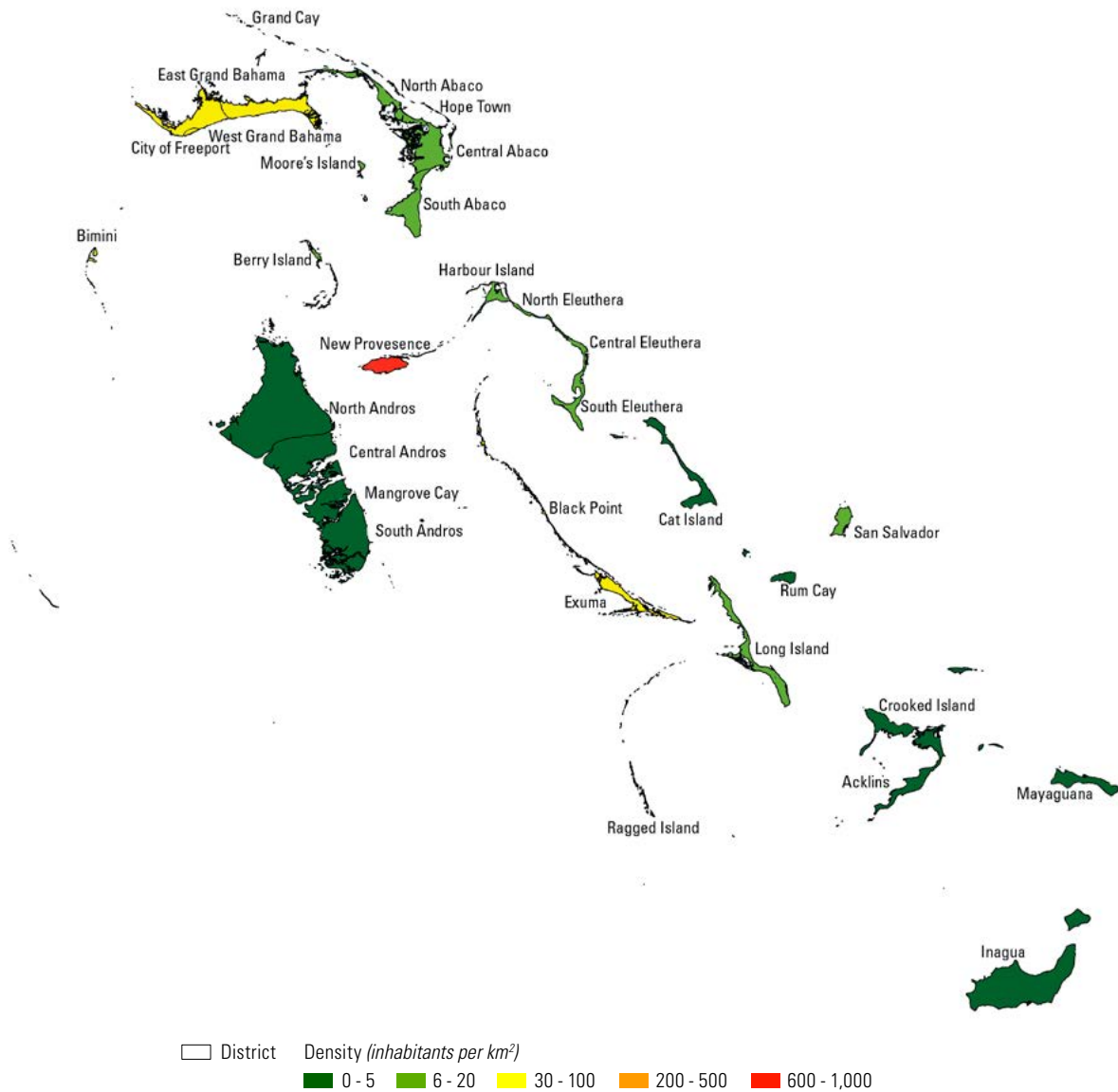
The Commonwealth of the Bahamas is a chain of more than 762 islands and cays extending over an area of 13,943 km². Of all these islands, only 19 are permanently inhabited. The archipelago is particularly vulnerable to climate change because of its geographical location in the corridor through which many Atlantic hurricanes and tropical storms pass. The country is also highly susceptible to sea level rise because of the small size of its low-lying islands. In fact, the majority of its land area is below 5 m (72.0%), and a big percentage of its population (46.5%) is also, therefore, living below 5 m.

According to the 2010 census, most people in the Bahamas live on two islands, New Providence and Grand Bahama, home to 70.1% and 14.6% of the population, respectively. In the 1990 census, these shares were 67.5% and 16.0%. After these islands, the most important is Abaco, in the northern Bahamas, closer to the coast of Florida; in 2010, it held 4.9% of the country's total population. In the remaining islands, population dynamics vary with employment opportunities, most of them in tourism and related activities. Between 1990 and 2000, for example, the population of the island of San Salvador increased from 0.18% to 0.32% of the national total, owing to the construction of a Club Med hotel. Similarly, the population of Exuma doubled between 2000 and 2010, reflecting investments in the tourism sector and new direct international air connections to Great Exuma.

Between 2005 and 2015, the urbanization rate in the Bahamas increased from 82.2% to 82.7%, which is above the subregional average of 70%. This is due to the level of urbanization in New Providence and Grand Bahama. Urbanization patterns are diverse, with islands varying not only in population, size and geography but also in settlement options and densities (see map II.2). In a multi-island country such as the Bahamas, exposure and increased vulnerability are associated with spatial inequalities between the main island and the other islands of the archipelago, reflected in difficulties in accessing basic services.

Map II.2

The Bahamas: population density distribution



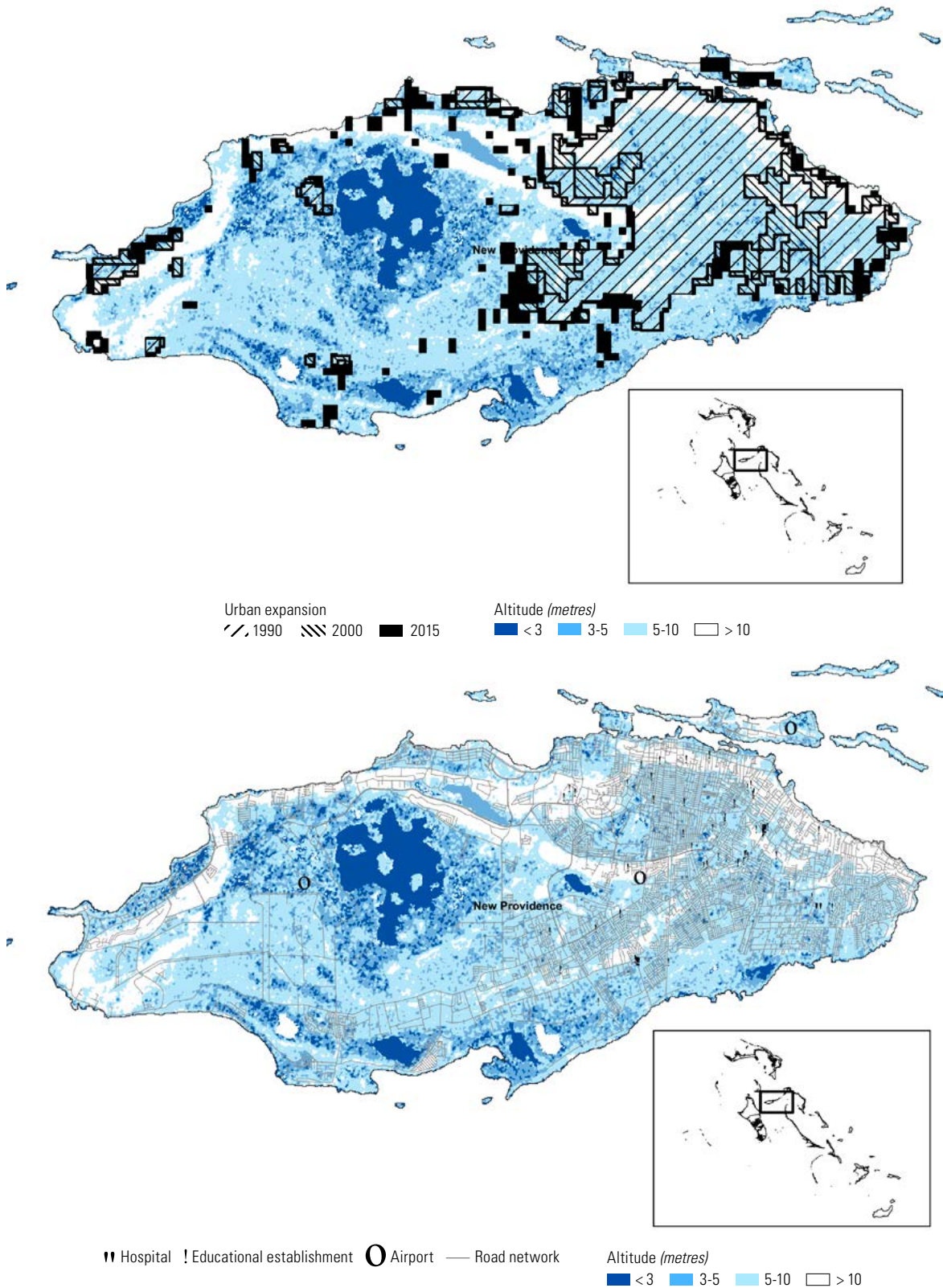
Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from OpenStreetMap, European Space Agency (ESA) and Shuttle Radar Topography Mission (SRTM).

Nassau, the capital city, located on the island of New Providence, is a traditional compact centre. Its urbanization rate peaked in the 1990s and has recently slowed, although the city continues to grow. Nassau is home to approximately 70% of the country's population. Many of the remaining 30% of Bahamians live in the second most populous urban centre, Freeport on the island of Grand Bahama, although some are dispersed around other parts of the country, sometimes in very isolated locations (see map II.2). The population of Grand Bahama has declined and the largest recipient of internal migrants is now New Providence, which holds 43.3% of the migrant population, with most coming from Grand Bahama (Department of Statistics, 2014).

Population growth has tended to disperse into the suburbs and along the coast (see maps II.3 and II.4). Deforestation of mangroves for tourism infrastructure has increased disaster vulnerability and pressure on basic services. Sprawling from its dense historical centre, Nassau is now a larger urban area, with increasing construction along the coasts, especially in the north-western part of the island.

Map II.3

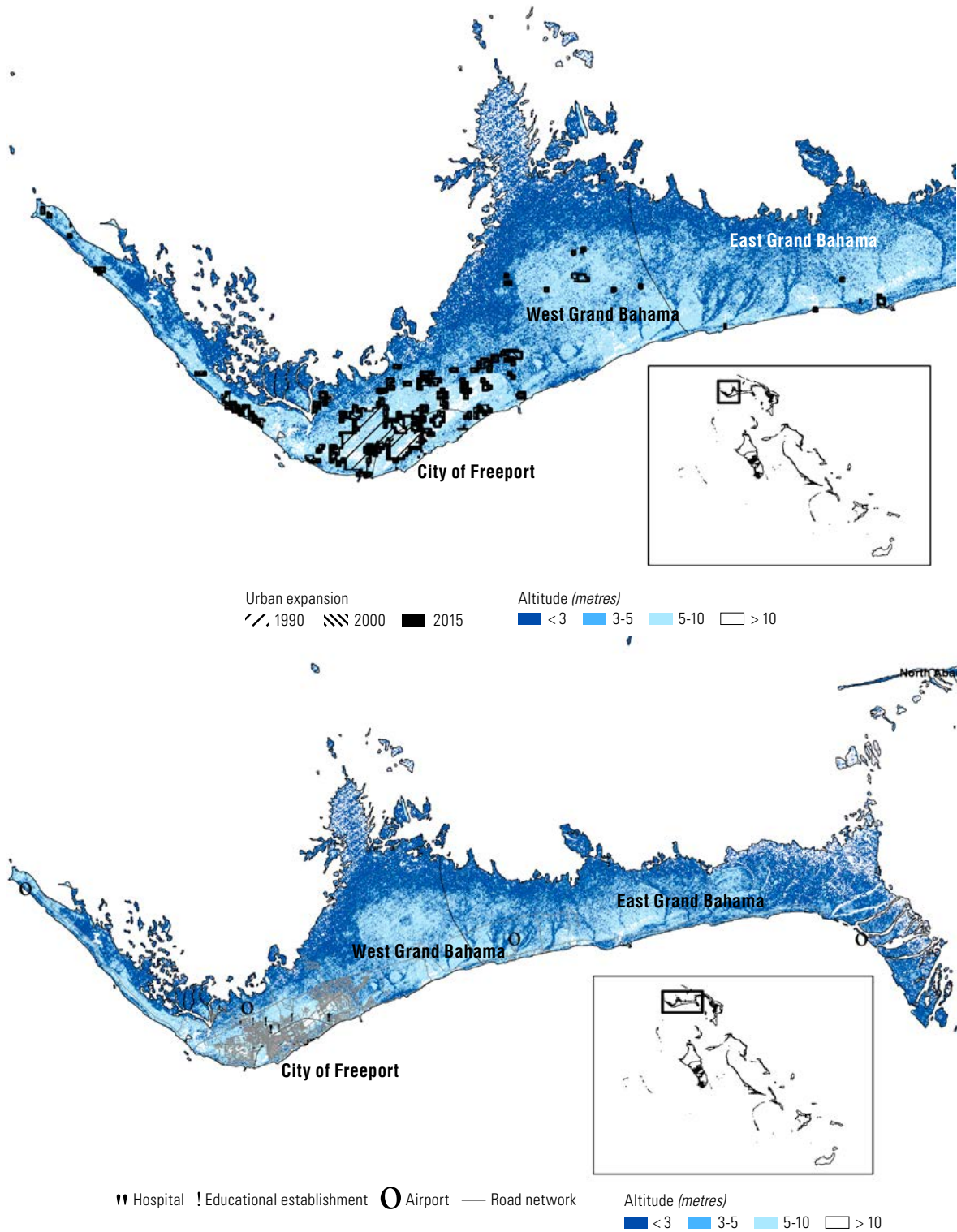
Bahamas: recent urban expansion and access to infrastructure and basic services on New Providence



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from OpenStreetMap, European Space Agency (ESA) and Shuttle Radar Topography Mission (SRTM).

Map II.4

Bahamas: recent urban expansion and access to infrastructure and basic services on Grand Bahama



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from OpenStreetMap, European Space Agency (ESA) and Shuttle Radar Topography Mission (SRTM).

The country is classified as having an extreme exposure index¹⁵ and, owing to its extensive urbanized coastline, it faces greater susceptibility to tropical cyclones, hurricanes and associated storm surges. In the decades since 1990, the Bahamas has been impacted by 33 hurricanes and tropical storms, an average of more than one a year.¹⁶

Another vulnerability of the Bahamas to climate change concerns secure access to safe drinking water. The country has the least fresh water per capita of anywhere in Latin America and the Caribbean. Of its 762 islands and cays, only three (Andros, Grand Bahama and New Providence) have freshwater sources (FAO, 2018). Many of the islands are supplied by desalination plants. In addition, the population is often small and scattered, so the cost of providing water is high. Lastly, the threat of rising sea levels can affect water quality in natural aquifers.

In a multi-island country like the Bahamas, the bicephalous nature of development represents a positive tendency towards compactness that may offer good prospects for addressing resilience. However, there are also challenges when it comes to maintaining the quality of and access to natural resources, infrastructure and mobility. Studies carried out by the Government of the Bahamas and the Inter-American Development Bank (IDB) have served to identify priorities regarding the main areas of action for Nassau: mobility, energy, vulnerability to natural disasters, security, solid waste management, sanitation and drainage.

Like many other Caribbean countries, the Bahamas has inherited colonial housing and planning policies.¹⁷ The country has succeeded in linking the environment and housing sectors in an unusual organizational structure. The Ministry of Environment and Housing has various responsibilities. First, it is in charge of the environment, forestry, environmental health services and the Bahamas National Geographic Information Systems (BNGIS). Other areas of responsibility include environmental protection, conservation and management in sectors such as mining and public sanitation. The Ministry has also made great strides in the area of affordable housing, where it is particularly concerned to reach the most vulnerable and provide alternatives in the rental market.

The National Development Plan (Vision 2040) follows the SDG framework. The Plan incorporates active principles regarding gender inclusion, citizen participation and youth involvement. The intention is to develop a comprehensive policy framework that will guide government decision-making and investment. The Plan was informed by extensive research, analysis and public consultation, addressing four main policy pillars: the economy, governance, social policy and the natural and built environment.

Vision 2040 identified specific measures to eliminate poverty. The plan proposes to develop and revitalize marginalized communities to ensure they have access to better housing, safe water and sanitation. Among the different measures aimed at sustaining resilience at the local level, actions are proposed to reduce slum-dwelling and revitalize and rebuild urban centres. An example is the local action plan Sustainable Nassau: Empowered People, Revitalized City. The plan addresses Nassau at two territorial levels: the island of New Providence as a whole, since urbanization has reached every corner of the island, and the centre of Nassau, an area that comprises two communities, the city centre itself and the Over-the-Hill district.

The Plan has recognized six priority areas that concern some of the major challenges identified: (i) traffic congestion and greenhouse gas emissions; (ii) renewable energy solutions; (iii) natural disasters and extreme weather events (exacerbated by climate change); (iv) crime and perceptions of insecurity that impact quality of life; (v) solid waste management; and (vi) water drainage. However, there are indications that health, digital connectivity, economic competitiveness, noise pollution and climate change mitigation currently work better than other sectors and could contribute to the future sustainable development of the island.

¹⁵ According to the Andean Development Corporation ranking, it is in eighth place in Latin America and the Caribbean after Jamaica, Dominica, Cuba, Guatemala, Haiti, the Dominican Republic and Saint Kitts and Nevis (CAF, 2014).

¹⁶ The years and names of the hurricanes and tropical storms that have affected the Bahamas are as follows: 1990 (hurricane Klaus), 1991 (tropical storm Fabian), 1992 (hurricane Andrew), 1995 (hurricane Erin), 1996 (hurricanes Bertha and Lili), 1998 (hurricane Georges), 1999 (hurricanes Dennis and Floyd and tropical storms Harvey and Irene), 2001 (hurricane Michelle), 2004 (hurricanes Frances and Jeanne), 2005 (hurricanes Katrina, Rita and Wilma), 2007 (hurricane Noel), 2008 (hurricanes Hanna and Ike and tropical storm Fay), 2011 (hurricane Irene), 2012 (hurricane Sandy), 2014 (hurricane Arthur), 2015 (hurricanes Joaquin and Kate), 2016 (tropical storm Bonnie and hurricanes Hermine and Matthew) and 2017 (hurricanes Irma, Maria and Jose).

¹⁷ Many Caribbean countries have inherited planning systems based on British, Dutch or French urban planning traditions, which provide a common understanding of the public good, common policy frameworks and a community-oriented public space and design styles. Recent planning methodologies have also been imported, such as the development of public-private partnerships, which in some cases have been adopted by post-colonial administrations. The influence of European planning models can thus still be seen in the policy and administrative structure.

In response to these challenges, the Plan contains 10 projects integrated into a citizenship strategy for Nassau's urban sustainability. The projects are all related to the SDGs and are divided into four strategic action areas that focus on the main themes of the plan: (i) achieving a resilient and sustainable Nassau; (ii) achieving a revitalized, inclusive and competitive Nassau; (iii) advancing towards a smart and transparent urban governance; and (iv) putting people at the centre. They are based on recommendations that include safeguards related to climate change, rising sea levels and seawater intrusions; productive use of land to create more green spaces; development of frameworks to improve the logistics of transporting goods and people; modernization of energy consumption; urban revitalization to improve quality of life; the development of resilient infrastructure; and a technical strategy to improve security and reduce crime, among other things.

In addition, the National Policy for the Adaptation to Climate Change of the Bahamas, announced in 2005, recognizes the negative impacts of climate change and links it to disaster risks, particularly in relation to alterations in weather patterns that cause changes of temperature and precipitation, flooding, tropical storms and other meteorological phenomena. This policy, like the National Development Plan and the Planning and Subdivision Act, recognizes the critical role of physical planning and emphasizes the importance of a national land-use plan in creating sustainable human settlements that are resilient to climate change and disasters. It also gives consideration to exposed infrastructure in coastal areas, which may be affected by rising sea levels or by erosion and damage due to natural hazards such as tropical storms, hurricanes and storm surges. The National Policy for the Adaptation to Climate Change is based on several principles that include the integration of climate change adaptation policies, plans and projects into national planning and budgets, the promotion of public participation and awareness-raising, the strengthening of physical and socioeconomic planning, and the protection and conservation of the environment. In addition, the Disaster Preparedness and Response Act enacted in 2006 (and amended in 2011) seeks to coordinate and implement actions for emergency and disaster mitigation, preparedness, response and recovery.

Energy is also an important topic in the sustainable development debate in the Bahamas. Given the expectation that energy consumption will continue to increase, the Government has embarked on the development of a national energy policy. As part of this process, renewable energy has been identified as a key component of national energy policy. Accordingly, the Government introduced a Petroleum Bill in Parliament in December 2014, and the Electricity (Amendment) Act of 2014, which allows individuals to generate energy and connect to the grid, entered into force in March 2015. The Electricity (Renewable Energy) Regulations bill was also submitted to Parliament. The country has established a national energy working group with the aim of ensuring that 40% of the Bahamas' energy needs are met from renewable energy sources by 2033. For residential users, the Government has eliminated tariffs on inverters for solar panels and LED appliances and lamps. The Bahamas is also discussing its renewable energy agenda with the Carbon War Room Corporation and the International Renewable Energy Agency (ECLAC, 2018b).

There are still challenges in the Bahamas with the implementation of efficient solid waste management practices. For example, institutional capacities and human resources are limited and there are geographical challenges due to the mixed density of scattered populations in the archipelago (see map II.2), the limited availability of suitable land and the excessive costs of waste management. Better efforts at coordination between private and public bodies are required so that the potential for green growth can be harnessed to surmount historical shortcomings.

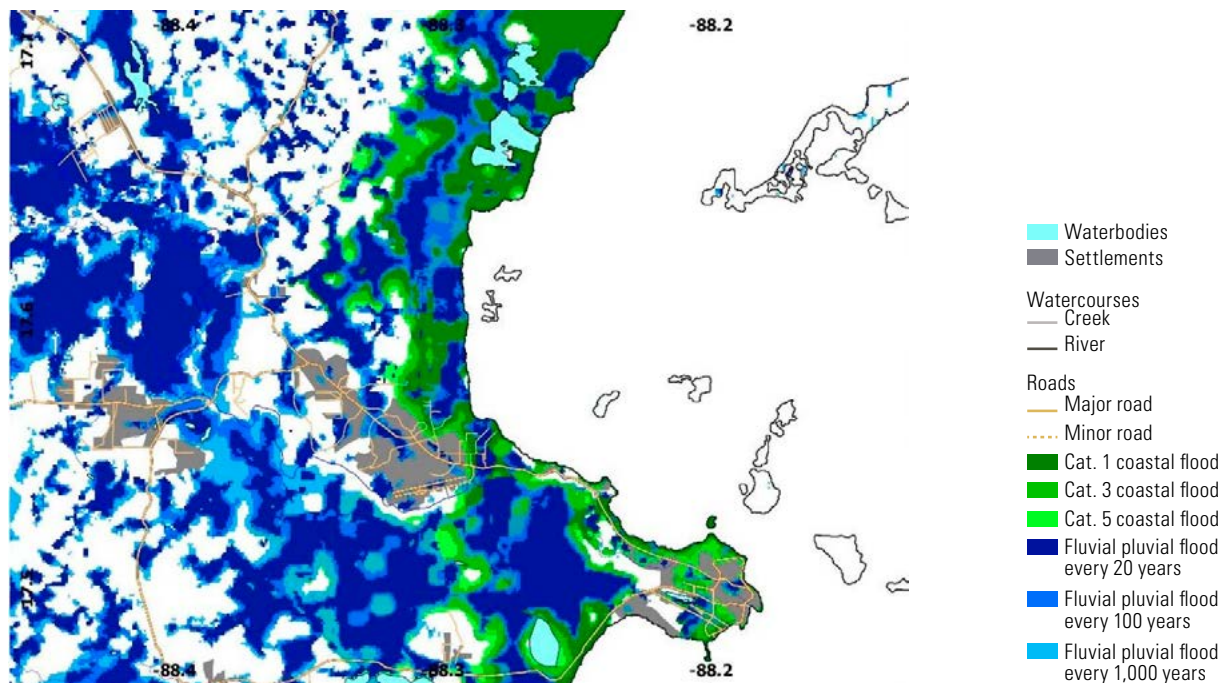
Sustainable consumption and production patterns require consumers and producers to take responsibility in a shared response. The role of civil society in waste management cannot be overstated. Local non-governmental and community-based organizations have already made a start on public awareness-raising and educational activities related to waste management. Some noteworthy local examples include the Bahamas Reef Environment Educational Foundation (BREEF) Eco-Schools programme aimed at promoting sustainable waste management practices. The Abaco-based Friends of the Environment group has also been set up to promote an awareness-based recycling and refuse reduction programme. At the national level, the annual coastal clean-up has won plaudits from many environmental and social groups. Even as the success of local and national programmes is recognized, however, international information-sharing efforts are needed to achieve greater results and learn from best practices developed in other contexts (Deopersad and Bethel, 2017).

2. Extreme risk and adaptation capacity in Belize

Belize is extremely vulnerable to climate change and presents certain challenges that differ from those usually affecting island States. Although its inhabitants are not numerous, the country has a land area of 22,960 km², including 1,060 coastal cays with an area of approximately 1,148 km², and 17,276 km² of forest. However, its low-lying topography makes it exceptionally vulnerable to rising sea levels. With most of its population and economic activity concentrated within and just outside a low-lying coastal zone and more than a third of the population living in areas below 10 m, the country faces severe flooding risks aggravated by a heavily irrigated topography, much of it covered by swampy mangroves (see map II.5). Of the 263 human settlements in the country, 163 (62%) are within the flood-prone areas. The population living in informal settlements (termed “squatters” in Belize) face increased public health risks, such as vector- and waterborne diseases, malnutrition and thermal stress.

Map II.5

Belize City: coastal area, pluvial speckle and overlapping flood hazards



Source: M. Trigg, A. Smith and C. Sampson, *Belize National Flood Hazard Mapping: Methodology and Validation Report*, Caribbean Handbook on Risk Information Management (CHARIM) project, 2016.

Belize has the highest proportion of indigenous peoples in the Caribbean subregion (17.4% of the country’s population), with two main groups, the Garifuna and the Maya. It is also one of the countries with the highest incidence of poverty and extreme poverty (41.3% and 15.8%, respectively), increasing its vulnerability to climate change. At the same time, the extreme isolation of the rural population causes difficulties in access to basic services such as education and health care or, in the event of a disaster, emergency services. Belize is classified as being at “extreme risk” on the Climate Change Vulnerability Index (CCVI) for Latin America and the Caribbean, where it is among the 10 countries most at risk (CAF, 2014).

Agricultural land is exposed to saline intrusion into coastal aquifers, and this process is expected to continue at a faster rate (BAS, 2008; CZMAI, 2016). Belize has the world’s second-largest coral reef system after Australia, making its habitats particularly vulnerable to global warming. This threatens the local economy and livelihoods, affecting vital sectors such as tourism and fisheries.

Like other countries in the subregion whose adaptive capacity is at high risk, Belize is hampered in its ability to respond by the performance of its economy. This imposes limitations that are manifested in the country's level of per capita GDP and the financial constraints it operates under. Any crisis could have a substantial impact on its economy, while compromising its ability to achieve stable and sustainable development and to build up its capacity for serving low-income populations (CAF, 2014).

Accordingly, resilience planning and commitment to environmental reforms have been central to Belize's policymaking for years, since long before the country submitted its intended nationally determined contribution (INDC) under the 2015 Paris Agreement. Belize continues to make enormous adaptation efforts. For example, its current capital, Belmopan, situated inland, became the new seat of government after the former capital, Belize City, was flooded by Hurricane Hattie in 1961.

Safety and security risks are present in a number of sectors, such as access to potable water and food security, owing to increased flood risks, lengthier droughts, temperature variations and salinization of aquifers. Public health is also affected by the potential increased risk of vector-borne diseases such as dengue fever, which are highly sensitive to climatic conditions (Vanzie, 2008). Climate change will affect rainfall, temperatures and the availability of water for agriculture in vulnerable areas, leading to losses in agricultural output.¹⁸

The capacity of institutions to respond and adapt depends on environmental and socioeconomic circumstances, human resources, access to finance and the availability of information and technology, as well as development policies. In its adaptation policy, the Government has identified a number of priority areas by analysing their specific challenges and vulnerabilities, and has set out to: (i) explore the opportunities being developed through the climate change negotiation process; (ii) prepare all sectors of Belize to meet the challenges of climate change; (iii) promote the development of economic incentives which encourage investment in public and private sector adaptation measures; (iv) develop Belize's negotiating position on climate change at the regional and international levels to promote its economic and environmental interests; and (v) foster the development of appropriate institutional systems for planning and responding to global climate change (Government of Belize, 2008).

The priority sectors identified as part of the National Climate Change Policy, Strategy and Action Plan are agriculture and food, forestry, fisheries, coastal management and water (for which the cost of implementing measures has been calculated), plus tourism, land resilience, transport, energy, health and waste (for which costing has not yet been completed, although some investments are already under way). According to the recent assessment of Belize's climate change policy by the International Monetary Fund (IMF), investment in strengthening the resilience of infrastructure connectivity (roads and bridges) has been flagged as the most urgent priority and has been prominent in recent budgets. An estimated one third of budget investment already goes to resilience-building projects. However, Belize falls short on its legal and regulatory framework, where key enabling frameworks for climate action remain to be developed (IMF, 2018).

The current land-use policy reform is part of a much larger climate-resilient infrastructure project being funded by the World Bank and implemented through the Belize Social Investment Fund. The Ministry of Natural Resources conducted a consultation on its land-use and planning policy in February 2019, and important aspects relevant to resilience and the country's approach to risk reduction are being introduced into this: the use of information systems, land registration and security of tenure.

There are currently more than 20 different government departments and units involved in implementing this reform. Against this backdrop, the plan is to set up a national spatial data department, which would supplement the land information centre established in 1992 with a system for collecting and sharing information which the Government is trying to consolidate into a national spatial data infrastructure. The infrastructure is also linked to the Biodiversity and Environmental Resource Data System, the idea being for planning to take account of how Belize's flora and fauna will be affected by climate change. In addition, the country is venturing into innovative areas, such as integrating the potential of youth innovation into development planning, building collaborative partnerships and applying new participatory approaches to electronic governance that can help bridge significant social and developmental gaps.

¹⁸ ECLAC estimates that cumulative losses in the agricultural sector as a whole could be equivalent to some 35% of GDP and that the sectors most affected by climate change will include vital agricultural sectors such as maize, beans, sugar cane and citrus fruit (Ramírez and others, 2013).

Access to reliable data is what currently limits the planning capacity of many Caribbean countries. The new policy reform proposes the use of geographic information system (GIS) technology and open source software to create web-based mapping tools that give users greater flexibility to conduct scenario analyses in the tourism, agricultural and residential sectors, among others. The aim is to have accurate maps to ensure appropriate land use. The entire coastline of Belize is currently included in the Integrated Coastal Zone Management Plan. The new action plan will guide economic and legal reforms aimed at effective land-use governance. The relevant policy will guide decision-making on how land is distributed to ensure balanced access to land and resources.

Much like the Bahamas and other Caribbean States, Belize has had challenges in solid waste management. To ensure financial viability, a public-private partnership has been set up to build, manage, operate and maintain the main facilities. The project has been financed through an environmental tax and the gradual introduction of user fees, set at a socially acceptable amount. To ensure social sustainability, special care has been taken to integrate measures to strengthen institutions and raise public awareness (Deopersad and Bethel, 2017).

These are important bottom-up approaches that can provide a collaborative dimension lacking in traditional planning systems. It would be very beneficial if the role of civil society organizations, non-governmental organizations and local communities in the process could be assessed. In this way, the role of indigenous knowledge, youth activism and the inclusion of particularly vulnerable groups, such as people with disabilities, children and older people, could be further explored. Greater participation and outreach are required to raise awareness in the business community about the government initiatives and global processes taking place, as this would give that community a chance to collaborate and benefit from the potential for green growth. The inclusion of these diverse stakeholders in the design, implementation and monitoring of government-level policies is a way of ensuring not only a maturer and better-coordinated outcome, but also greater potential for inclusiveness and successful implementation.

Building resilience to natural disasters is a priority for both the Bahamas and Belize. Both countries are seeking to improve coastal zone management and incorporate critical areas such as risk reduction and climate change adaptation measures into development planning in sectors such as water management, energy security and resilient infrastructure. Concern about controlling and overseeing development is considered essential to avoid further exacerbation of existing patterns of vulnerability. The mainstreaming of youth and the gender perspective are areas that have recently come to be considered more relevant and must remain a priority to ensure that no one is left behind. Annex II.A1 provides a detailed comparison of risk management aspects in the development plans of Belize and the Bahamas.

C. Planning and resilience

This section discusses resilient planning strategies in the Caribbean, taking into account the specific vulnerabilities and characteristics of the subregion. First, the meaning of the concept of resilience for Caribbean States will be analysed. To this end, issues such as spatial planning (land use, zoning, informal settlements) and climate change will be examined, with particular reference to the connection of the Caribbean countries to the sea. The integration of disaster risk management and development planning will also be discussed, as will the state of incorporation of disaster risk reduction into legal frameworks and development planning in the subregion's countries. These considerations and criteria form part of the design of the Territorial PlanBarometer model, which is described in chapter VI.

1. A resilient development concept for the Caribbean

The 2030 Agenda for Sustainable Development recognizes the fundamental role that urban and territorial development can play in pursuing the goal of reducing inequalities and closing social, economic and territorial divides. The role of cities is expressed in SDG 11: make cities and human settlements inclusive, safe, resilient and sustainable. The Agenda proposes that cities and human settlements be repurposed and planned with a

view to fostering community cohesion and security so that they continue to act as engines of employment and prosperity without straining land and resources. Support is also required for territorial systems that integrate urban and rural functions in ways that contribute to the sustainable management and use of natural resources and land.

The SDGs and the New Urban Agenda underscore the importance of creating and building inclusive, safe and sustainable territories conducive to the integration of groups of citizens, local collaboration and sectoral linkages and to the creation of partnerships and the formulation of strategies for the protection of ecosystems and the services they provide.¹⁹ These international agreements offer a road map for correcting imbalances, asymmetries and polarizations in keeping with the aspiration for inclusive, sustainable development that leaves no one behind and protects the environment.

The Subregional Action Plan for the Implementation of the New Urban Agenda in the Caribbean (2016–2036) was created to serve as a strategic and policy benchmark and as a governance tool, this being vital for promoting the implementation of the new urban agenda in the Caribbean and guiding national and subnational development. It is intended to be a regional guide, adaptable to local conditions and needs and capable of creating synergies with existing global agreements and agendas. These instruments include the 2030 Agenda and SDGs, the Sendai Framework for Disaster Risk Reduction 2015–2030, the Addis Ababa Action Agenda of the Third International Conference on Financing for Development, the Paris Agreement and the Samoa Pathway.

With regard to urban development, the Subregional Action Plan recognizes the unique and emerging urban challenges of the Caribbean and proposes a subregional action plan to adapt the global agenda to the Caribbean context. The areas of action identified for the specific goals of the Caribbean are: (i) national urban policies; (ii) urban legal frameworks; (iii) urban and territorial planning and design; (iv) financing urbanization; and (v) local implementation. In addition to the above, there is a sixth area of action that sets forth the monitoring framework and mechanisms for follow-up. The document also acknowledges a key challenge for monitoring the implementation of the SDGs and the New Urban Agenda in the Caribbean: the lack of high-quality data and analysis on urban and development issues. The Secretariat of the Caribbean Community (CARICOM) is leading the development of a core set of SDG indicators that will serve as a monitoring framework for the subregion.

In addition to the principles of action laid down at the regional level (inclusive cities, sustainable and inclusive urban economies, urban environmental sustainability and effective and democratic governance), guiding principle 5 (“Resilient communities, cities and territories”) was added to the subregional action plan of the New Urban Agenda. This recognizes the importance of minimizing vulnerability and disaster risk in Caribbean communities, cities and territories so that can they respond effectively and efficiently to natural hazards and climate change and achieve resilient social and economic development for all (see diagram II.1).

Disaster risk reduction (DRR) has been integrated into a number of development frameworks and international agreements, such as the Hyogo Framework for Action 2005–2015: Building the resilience of nations and communities to disasters, and its successor, the Sendai Framework for Disaster Risk Reduction 2015–2030.²⁰ In addition, the Samoa Pathway and the 2030 Agenda for Sustainable Development place great emphasis on DRR as a key element in achieving the SDGs. The following goals and targets refer directly to this theme: SDG 1: no poverty (target 1.5), SDG 2: zero hunger (target 2.4), SDG 3: good health and well-being (target 3.d), SDG 6: clean water and sanitation (target 6.6), SDG 9: industry, innovation and infrastructure (targets 9.1 and 9.a), SDG 11: sustainable cities and communities (targets 11.3, 11.5, 11.b and 11.c), SDG 13: climate action (targets 13.1, 13.2, 13.3, 13.a and 13.b), SDG 14: life below water (target 14.2) and SDG 15: life on land (target 15.3).

¹⁹ The New Urban Agenda is a binding instrument whose purpose is to specify the role cities should play in promoting social inclusion, eradicating poverty and hunger, reducing inequalities, promoting sustained economic growth, achieving gender equality, improving human health and well-being, building resilience and generally contributing to sustainable development and environmental protection.

²⁰ International agreements and declarations are designed to resolve problems of global cooperation and may or may not be legally binding. The 2030 Agenda, the Samoa Pathway and the Sendai Framework, while non-binding, reinforce existing international standards and provide a platform for action on common problems. In addition, they encourage international cooperation on this issue and help strengthen existing monitoring platforms. These agreements can lead to engagement at the country level and have normative effects by increasing the social acceptance of ideas and thus the pressure on governments, leading to domestic legislative changes.

Diagram II.1

The Caribbean: the challenge of resilience in the subregion's New Urban Agenda



Source: Latin American and Caribbean Institute for Economic and Social Planning (ILPES).

In the region, it is important to devise a balanced process of territorial development that fosters the relationship between city and countryside and, most importantly, helps ensure that human activity takes place in harmony with the elements of the natural ecosystem. In addition, given the vulnerability of the Caribbean to disasters, there is a need for stakeholders in the subregion to improve their ability to incorporate disaster risk management components into sectoral and budget planning.

2. Disaster risk management

Disasters can result in substantial setbacks for economic development and social welfare, as mentioned in point 2 of section A. Disaster risk management (DRM) is a comprehensive strategy whose ultimate objective is to minimize the economic and social effects and impacts of disasters by reducing the vulnerability of communities while developing response capacities. Hence the importance of understanding the hazards, exposure and vulnerabilities that a territory confronts during the planning process, especially in regions that are exposed to the greatest risks. In the Caribbean countries, DRM elements need to be incorporated into the planning process to make development policies resilient.

DRM is a multisectoral process and, as such, should be incorporated into national planning as a discipline that coordinates the different actors. DRM consists of five pillars: (i) risk identification; (ii) risk reduction; (iii) preparedness; (iv) financial protection; and (v) resilient recovery. These pillars are closely interrelated and must be supported by an appropriate institutional, political, regulatory and financial environment that enables resources to be allocated and roles and responsibilities to be established. Table II.4 provides a brief description of each pillar.

Table II.4

Five action pillars for disaster risk management

Pillar 1	Risk identification	Better identifying and understanding disaster risks by creating evaluation and analysis capacity.
Pillar 2	Risk reduction	Avoiding the creation of new risks and seeking to reduce risks in society by taking greater account of disaster risk in public policies and investments.
Pillar 3	Preparedness	Improving crisis management capacity by developing disaster forecasting and management capacity.
Pillar 4	Financial protection	Using financial protection strategies to increase the financial resilience of governments, businesses and households.
Pillar 5	Resilient recovery	Achieving faster and more resilient recovery through support for the planning of reconstruction processes.

Source: Global Facility for Disaster Reduction and Recovery (GFDRR), *Managing Disaster Risks for a Resilient Future: A Strategy for the Global Facility for Disaster Reduction and Recovery 2013–2015*, Washington, D.C.

Given the vulnerability of the Caribbean to disasters, as discussed in section A, incorporating DRM elements into national plans is as important as a rapid and efficient emergency response. Accordingly, this section discusses strategies for resilient planning and reconstruction in the countries of the subregion. The presentation takes the five pillars mentioned above as its frame of reference and uses examples based on the analyses carried out by experts during field visits in a number of disaster assessment missions in the subregion.²¹

(a) Risk identification

Risk identification focuses on two aspects. The first is the description of multiple hazards, including their frequency, intensity and magnitude. The second is the identification of the infrastructure, services and communities that are exposed, together with their vulnerabilities. The following are useful for this purpose: (i) detailed risk and essential infrastructure maps; (ii) detailed and up-to-date economic statistics and national accounts; and (iii) disaster assessments.

As mentioned in section A, most highways, ports, airports, tourist facilities and other infrastructure assets in the Caribbean are near coasts, which increases their vulnerability to storms and hurricanes. Besides these threats, the potential impacts of climate change are particularly important for SIDS. Thus, addressing current and future risks requires not only a good knowledge of the territory but also an understanding, even if partial, of how the likely consequences of climate change could translate into new risks for these countries.

Planning should be informed by the mapping of natural hazards and the identification of potentially exposed communities and infrastructure, such as schools, health centres, highways and water, energy and telecommunications systems. By mapping all areas at risk and assessing the level of deterioration, it is possible to create a zoning system to guide future construction projects. During this process, it is also recommended that public institutions draw up risk profiles, i.e. that they reference their infrastructure geographically and identify facilities located in areas at risk.

A common theme in the disaster assessments carried out by ECLAC has been the lack of sectoral data to establish baselines. This information would make it possible to improve estimates of exposed infrastructure and the economic flows associated with it. Planning therefore requires improvements in national statistics including:

- Disaster profiles to determine the possible types of disasters that may affect the region and their possible effects. To this end, an inventory of past events and an economic evaluation of all events should be carried out so that robust disaster profiles can be prepared and their impact on national finances quantified. ECLAC has striven to increase national disaster assessment capacities in the subregion.²²

²¹ Disaster assessment teams are multidisciplinary, being made up of professionals from various sectors, such as economists, sociologists and structural and environmental engineers, who formulate their recommendations on the basis of existing studies, observations and information shared with local specialists.

²² Since 2015, ECLAC has conducted two regional training events participated in by officials from 11 countries. Seven national training events have also been held.

- Improvements in economic statistics, especially quarterly national accounts, which are central to disaster assessments. This requires the allocation of more financial resources to national statistical institutes. In addition, it is crucial for Caribbean countries where tourism is an important economic activity to have a tourism satellite account.²³ It is likewise essential to include the environmental sector in the national accounts in order to improve the baseline information.²⁴ The economic data available should be accompanied by appropriate metadata to ensure transparency and the best use of information by decision-makers in the public and private sectors, as well as planners, analysts and civil society.
- Information transparency. The idea that decision-making with environmental implications should be participatory, open and inclusive has been stressed in international conferences and agreements for more than 25 years, ever since the 1992 United Nations Conference on Environment and Development in Rio de Janeiro, Brazil.²⁵ Not only is access to information and participation in decision-making a right that must be guaranteed, but it also improves the quality and acceptability of decisions, while helping to ensure their legitimacy and the impartiality of processes. This is part of a broader need to build effective knowledge-sharing platforms.

(b) Risk reduction

The second pillar of DRM are measures to achieve risk reduction and ensure its inclusion in the governance framework. This process involves the amendment or creation of national laws, ordinances and other long-term planning instruments. Risk management also encompasses investment policies and programmes that take account of vulnerabilities and include instruments aimed at reducing the exposure of a community or asset to a particular threat.

In the Caribbean, DRM should generally be based on three elements: (i) planning for resilience, integrated with spatial planning; (ii) incorporation of a risk reduction module into national public investment systems; and (iii) modification and enforcement of building codes. Each of these will now be expanded on:

- Planning for resilience and spatial planning: potential disaster risks should be considered when development master plans are being prepared, or revised and updated. This effort should focus on the different risk factors and incorporate multisectoral aspects such as water and sewage management, environmental management, infrastructure development, flood mitigation, zoning and land use.

Such planning would enable essential infrastructure to be properly designed and built, with due regard for special considerations to help withstand the most common threats. Spatial plans also need to cover technical, sociological, economic and political aspects, as they may involve difficult decisions, such as relocating villages and prohibiting human settlements in certain areas. If the relocation of infrastructure and people is desirable and feasible in specific cases, it should be carried out in a coordinated and inter-institutional manner. Territorial development must treat all segments of the population equitably in order to ensure that basic needs are met and that there is access to safe infrastructure, whatever the situation. Security of location is also important when it comes to institutional presence and service delivery. During and after an emergency, it is essential to have a solid network of institutions that can inform and guide the population from the response phase to that of recovery. Often, however,

²³ The tourism satellite account is an extension of the system of national accounts whose purpose is to increase knowledge of tourism activities in line with the recommendations of the World Tourism Organization (UNWTO), thereby creating a basic analytical tool that can be used to formulate policies for supporting and marketing the sector.

²⁴ There needs to be a comprehensive appraisal of the ecosystems that provide services to humans and biodiversity. For example, forests are typically monitored for their value as a source of timber rather than for their storage capacity, the habitat they provide for birds and mammals, their role in nutrient cycling or the recreational opportunities they offer. These services should also be evaluated.

²⁵ A recent achievement in this area is the adoption of the first binding regional agreement, the Regional Agreement on Access to Information, Public Participation and Justice in Environmental Matters in Latin America and the Caribbean (Escazú Agreement). The text of the agreement was finalized at the Ninth Meeting of the Negotiating Committee of the Regional Agreement on Access to Information, Public Participation and Justice in Environmental Matters in Latin America and the Caribbean, held in Costa Rica from 28 February to 4 March 2018. The agreement was opened for signature by all Latin American and Caribbean countries at United Nations headquarters in New York from 27 September 2018 to 26 September 2020 and represents a major step towards sustainable development and international cooperation in the region.

public buildings are located in at-risk areas and suffer damage that makes it impossible to occupy them, interrupting operations and services. Construction standards and proper location are especially important for public buildings. New settlements should therefore be located in areas that provide basic public services and infrastructure and also opportunities to engage in productive activities, so that new territorial disparities do not arise.

- National public investment systems: where public investment is concerned, it is highly advisable for any new investment in infrastructure to be based on the development plan and incorporate a multi-hazard assessment component with a view to disaster risk reduction. Ministries responsible for project approval could include measures to protect the investment and infrastructure from the feasibility and design phases onward.

Risk must be managed prospectively, correctively and reactively. Prospective management is concerned with preventive or anticipatory measures to minimize the creation of new vulnerabilities. Future maintenance estimates are crucial to increase the sustainability and resilience of works (Verdejo and others, 2010). Corrective management is about anticipatory measures that help reduce existing vulnerabilities. These could include relocation of communities, modernization of existing infrastructure, and education and behaviour changes among the population at large. Consideration could also be given to local initiatives and those related to the family, education and community participation.

- Amendment and enforcement of building codes: another significant measure in this pillar is the adoption of mandatory building codes and their enforcement in all segments. Codes should incorporate the concept of essential infrastructure, meaning assets critical to the functioning of society and the economy. Essential infrastructure, particularly that related to food storage and the supply chain, health, education, water, energy and telecommunications, must be properly designed and constructed to withstand the most common threats.

Preparation of manuals that translate building codes into simpler language for the benefit of traditional builders. The purpose of these manuals is to provide step-by-step guidance to professionals in the sector, regardless of their level of education, by explaining the technical principles and methods necessary to comply with building code standards. For example, they may describe typical construction details and show ready-calculated project plans, while detailing suitable materials for safe and affordable housing. Building codes and manuals that are not based on traditional and enforceable building methods, and that require complex approval procedures, can delegitimize new housing and, by extension, lead to the formation of slums.

Where land transport is concerned, it is recommended that transport and mobility system planning be integrated into territorial plans. Here it is important to ensure that mobility studies are based on spatial and population data, paying particular attention to the most vulnerable populations and making efforts to reduce the use of private cars. Topographical studies are important to minimize vulnerability to flooding on roads near the coast. It is also recommended that the redundancy of the road network be improved by incorporating more connections and establishing a set of minimum standards applicable to highways, bridges, drainage systems and any other essential components. However, changing essential transport infrastructure is costly and many of these projects are financed through international grants or loans. To ensure efficient use of scarce resources, an assessment of highways and their functionality is suggested so that interventions can be prioritized. With respect to financing, consideration could be given to approving concessions and entering into public-private agreements of other types. In any event, conditions and standards should be laid down by the government or regulatory agencies so that future infrastructure incorporates disaster risk reduction into its design and management.

In other sectors, such as hotels and commerce, buildings must be far enough from the coast to reduce the risk from storm surges. If this is not possible, solutions exist to prevent flood damage in coastal areas. These include elevating buildings using materials such as wood, concrete columns and piles, or applying pre-engineered solutions such as multipoint foundation systems. Another option in these cases is the use of an ecosystem approach, linking adaptation efforts to risk mitigation measures. Such green or natural infrastructure design

options not only cut costs, including maintenance costs, but can also enhance biodiversity and reduce erosion. A hybrid approach combining sea walls with mangroves or artificial reefs could be applied in high-wave areas, extending the life of dams while providing critical habitat for marine species and protecting the coastline. For example, the Belize City Master Plan provides for the use of alternative ecological infrastructure and networks of green and blue spaces (with forested coastal and river wetlands) to reduce vulnerability to natural hazards, as well as poverty, hunger and disease. These ecoinfrastructures contribute to the restoration and conservation of ecosystems and provide additional protection by absorbing excess water brought by storms or rainfall and slowing its advance, which can be reflected in insurance premiums (ECLAC and others, 2016).

The water and sewerage infrastructure should be strengthened to ensure that it is resilient to natural hazards. Access to these basic services is vital, especially in low-income urban areas, which are particularly vulnerable to disease and scarcity. In this regard, it should be ensured that services are reliable and as independent as possible of other sectors. Decentralized supply systems, such as rainwater capture and storage, can be a good option for remote communities, increasing resilience and reducing the cost of provision.

Waste management is an important issue to consider, as poorly operated disposal sites tend to be affected by storms. For wastewater, alternative solutions for small (and isolated) communities are suggested, such as the development of low-cost infrastructure, small-bore sewers and cost-effective wastewater treatment and management. The transformation of refuse dumps into sanitary landfills incorporating soil and groundwater protection is an important goal for the future of solid waste management. Countries can also consider waste-to-energy solutions, which can help reduce dependence on imported fuel and the amount of waste needing to be buried.

Since damage to electricity and telecommunications networks is concentrated in areas where the pole infrastructure is older and does not meet current standards, in some cases it is recommended that technologies be replaced with more resilient models. If such modernization is not possible, there are simple adaptations that require little investment, such as the installation of steel bars at the top of towers to protect the infrastructure against strong winds.

To increase resilience on islands affected by hurricanes, it is generally necessary to diversify power generation so that the failure of a single power plant, or the destruction of the grid carrying power to the farthest corners of the country, does not lead to a total loss of that service. This diversification is essential when the supply of energy is inseparably linked to the supply of drinking water in places that depend on desalination. This means expanding the use of renewable energy and improving energy efficiency to reduce financial costs and ensure the continuity of both services. Accordingly, a modern energy policy should seek to increase diversification and resilience in the energy and water sectors and improve the quality and stability of utilities.

In the case of schools, temporary shutdowns disrupt the normal cycle of education. They also exacerbate inequalities, since students, usually in poorer areas, do not complete the education cycle or receive it under suboptimal or stressful conditions. Frequent compulsory inspections of the entire educational infrastructure are helpful for detecting and eliminating threats. It is equally important for school maintenance to be rigorously carried out, with attention paid to seemingly minor issues like cleaning drains in and around the school and strengthening defective doors or windows. Apart from the direct risks to students, the networks and support systems that normally protect children and adolescents can come apart in a disaster. In these cases, schools also take on protection and essential service delivery functions (UNICEF, 2008). In the health sector, the quality of infrastructure is critical to ensure continuity of services throughout the emergency.

(c) Preparedness

Disaster preparedness can and must be part of any national development plan. Preparedness means the knowledge and skills developed by government, the private sector and communities to anticipate, respond to and recover from the effects of a disaster. It encompasses not only everything done prior to disasters, but also the measures put in place so that they can be responded to effectively, allowing an organized transition from response to recovery. The degree and quality of preparedness are closely correlated with the prior conduct

of community-based risk analysis and the deployment of efficient early warning mechanisms. All this requires the establishment of institutional channels of communication between public bodies and the community.

The timely activation of warning systems ensures that the population has time to prepare and to protect homes and businesses, and that the government can organize an appropriate evacuation process, thereby reducing the potential number of deaths and injuries. New technologies for hazard identification and communication are important, as are efforts to educate the population and raise awareness. Local evacuation plans should be developed with routes and shelters clearly identified. In addition, it is important to set national standards for the establishment and operation of shelters, in accordance with international best practices.

At the same time, telecommunication systems have the potential to be valuable tools in disaster preparedness and response management. For example, telecommunication companies can quickly distribute a warning text message to mobile phone users within a specific geographical area. Such warnings can reach a substantial portion of the population, but a considerable number of people do not have access to mobile phones or do not make regular use of these devices. These include some of the most vulnerable, such as the poor, children and the elderly. There thus remains a need to create alternative warning channels and to ensure that these procedures are implemented and tested frequently to ensure they function properly.

It is also suggested that campaigns to raise awareness of natural hazards be carried out and that people be educated on measures to prevent disasters and mitigate their effects. Initiatives such as the preparation of a construction manual would not only provide technical tools but also teach people how to prepare properly for future disasters. Educational materials for teachers and students can and should be shared with the general public, for example through the organization of disaster awareness weeks or similar events. In addition, the public could be involved in the process of developing future district master plans, as part of an effort to increase ownership of development tools and take advantage of local knowledge. Lastly, other effective and low-cost measures could include the signposting of evacuation routes, lighting and signage to make highways more accessible during power cuts.

Early warning systems are also important for the tourism, agriculture and fisheries sectors. Efficient systems allow tourism facilities to start preparing in good time to protect tourists and facilities. They also mean that larger vessels can move promptly away from storms and small boats can be protected along the coast. In the case of the agricultural subsector, appropriate deployment of warning messages could allow greenhouses to secure infrastructure by removing plastic sheeting and other materials so that the wind can pass through. In addition, with sufficient advance notice, owners of long-cycle crops can take other measures such as pruning to protect trees and plants.

Most countries in Latin America and the Caribbean have focused their efforts on this pillar through the implementation of warning systems, contingency plans and emergency responses. However, this has resulted in less attention being given to other areas of DRM. Consequently, stress must be placed on the need to strengthen other pillars through integrated and comprehensive risk management and the inclusion of the issue in planning processes.

(d) Financial protection

The effects of disasters have impacts on a number of macroeconomic variables. In fiscal terms, the most common impacts are the worsening of financial constraints, the weakening of fiscal balances, the diversion of funds from development programmes and a possible increase in borrowing to respond to the event or to finance reconstruction. Resilient planning should provide for a financial strategy to protect public sector assets and create incentives for the private sector to protect its own. Financial protection relies on ex ante instruments to finance disaster risk. It is assumed that the other risk reduction mechanisms explained in other pillars have been applied, and this measure focuses only on residual risk.

A fiscal strategy for financial protection includes various instruments, such as insurance, loans and the use of national funds. Some features of such a strategy will now be listed:

- Parametric insurance: a parametric insurance policy, unlike indemnity insurance, pays out on the occurrence of an event and impact of a predetermined intensity. The Caribbean Catastrophe Risk Insurance Facility Segregated Portfolio Company (CCRIF SPC), created in 2007, is the first country risk fund based on this type of insurance. It was originally designed to deal with catastrophes related to hurricanes and earthquakes in Caribbean countries. The institution currently provides services to 19 Caribbean governments and 2 Central American governments.^{26 27} This instrument was not designed to cover all the damage caused by a disaster but to give governments access to short-term liquidity mechanisms with a view to dealing with the emergency and reducing budgetary volatility.²⁸
- Another type of parametric instrument that could be employed is based on weather derivatives. These are used as protection against damage caused by abnormal or unexpected weather conditions, such as extreme temperatures and rainfall. Unlike traditional insurance, weather derivatives are not based on demonstrated damage and therefore do not require comprehensive post-disaster analysis to trigger payments. They are parametric instruments based on meteorological indices and, as such, require historical data for the required index to be established. Payments are activated as soon as there is a change in the pre-established index. This type of instrument has not been used in the Caribbean.
- Contingent credit lines. These are arranged before a disaster occurs and activated in the event of an emergency. They provide immediate liquidity and their interest rates are usually lower than those of traditional credits, but their use increases countries' debt. The Inter-American Development Bank (IDB), CAF-Development Bank of Latin America and the World Bank offer these instruments. The funds obtained through these loans are normally used during the emergency phase and the first stage of recovery.
- Funds from the national budget. Emergencies are partially dealt with using a country's own budgeted funds. Disaster offices have approved lines of funding for emergencies, as do sectoral ministries such as those for public works, housing, health and defence. These budget lines are available but tend to run out quickly when an event occurs. Funds can be accessed immediately and are usually spent in the emergency phase.
- Traditional insurance. Another form of financial protection is based on traditional insurance. These funds are available within 90 days, usually in the recovery phase, and are employed in both the recovery and reconstruction phases. Insurance of this type divides up sectorally:
 - Public sector property insurance. Specialized agencies and regional good practices emphasize the importance of insuring public sector assets to protect government investments and alleviate the impacts of disasters on a country's finances. Legally mandating insurance for public sector assets adds depth to the insurance sector and sets an example to the private sector. It is recommended that this decision be implemented in regulatory frameworks (e.g. building codes and procurement and spending rules) that lay down insurance guidelines and assign responsibilities to the bodies in charge of the construction process, from feasibility studies and design all the way through to project completion. The guidelines should include provisions for constant updating of insurance policies.
 - Home insurance. Housing is an essential asset for families. ECLAC has determined in its evaluations that the penetration of housing insurance is low and coverage inadequate. This problem is associated with the high cost of insurance in the region. Governments, working alongside the insurance sector, could establish discounts for dwellings implementing measures that contribute to the resilience of their infrastructure (ECLAC, 2017a and 2017b; ECLAC/ECCB, 2017a and 2017b; ECLAC/IDB/PAHO, 2017).
 - Insurance for small and medium-sized enterprises. Another important finding from the evaluations conducted by ECLAC is that many companies are not financially protected. When a disaster causes

²⁶ Anguilla, Antigua and Barbuda, Bahamas, Barbados, Belize, Bermuda, British Virgin Islands, Cayman Islands, Dominica, Grenada, Haiti, Jamaica, Montserrat, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Sint Maarten, Trinidad and Tobago and Turks and Caicos Islands.

²⁷ Panama and Nicaragua.

²⁸ The payout from this insurance is arrived at as follows. First, CCRIF SPC immediately considers the threats for each type of product. In other words, it determines the wind speed and the magnitude of the storm surge (tropical cyclones), ground movement (earthquakes) or pluvial volume (excess rainfall). In each case, the information is incorporated into the CCRIF SPC damage simulation models, setting out from baseline information that includes a measure of exposed physical assets. The damage simulated in the previous point is compared with the minimum level insured. If it exceeds it, a payment is generated up to the coverage limit. CCRIF SPC makes payments 14 days after the event. Since its foundation, it has made 38 payments totalling US\$ 138.8 million.

significant damage to their assets, the recovery of these sectors is protracted and entails additional fiscal burdens because of the loss of taxes and an increase in associated fiscal expenditure (ECLAC, 2017a and 2017b; ECLAC/ECCB, 2017a and 2017b; ECLAC/IDB/PAHO, 2017).

As a general measure, the promotion of an insurance culture would protect investments, contribute to better evidence-based decision-making and promote the development of exposure models and maps. It would also raise public awareness of the damage and losses that could occur in the absence of financial protections and would increase investors' trust in the region, which should encourage private investment.

Box II.1

The Caribbean: disaster risk management and the public finances in the countries of the subregion

Disaster risk management (DRM) requires significant financial resources for actions related to pillars 2 and 5 and raises costs for the public sector owing to the inclusion of disaster risk reduction elements in investments. Most countries are not able to engage in a resilient reconstruction process after a disaster owing to the lack of financial resources. Moreover, managing disaster risk in an integrated and prospective manner is a relatively new approach; accordingly, the idea is not always properly applied in reconstruction plans.

It is worth mentioning that most Caribbean countries have considerable vulnerabilities in their public finances. They have limited fiscal space to raise spending levels. In 2018, 58% of Caribbean countries had a debt to GDP ratio above the 60% threshold usually considered a benchmark for debt sustainability (CDB, 2019). This proportion rises to two thirds when CARICOM countries are considered (ECLAC, 2018).

Similarly, debt service averaged 29.5% of government revenue in small Caribbean States in 2016. The pressure on revenues was much higher in several countries: Suriname (80.7%), Antigua and Barbuda (60%), Grenada (50.1%), Bahamas (45.5%) and Jamaica (43%). This debt servicing pressure has led to reductions in public expenditure, reflected in public investment cuts as an adjustment strategy. In the Caribbean, for example, public capital expenditure (including that of public enterprises) increased by an average of just one percentage point to 5.7% of GDP between 2000 and 2015 (see ECLAC, 2018).

Rustomjee (2017) notes that as of 2015, going by standardized measures of debt (debt to GDP ratio) and debt service sustainability (debt service to exports ratio) used by the World Bank and the International Monetary Fund (IMF), most English-speaking Caribbean SIDS had unsustainable debt levels and performed much worse than their peers in the Pacific and sub-Saharan Africa and, indeed, worse than the world's low- and middle-income countries generally. According to this author, projections for future debt sustainability in the subregion were bleak. By 2020, debt would still be unsustainable in 11 of the 13 English-speaking Caribbean countries.

This fiscal situation is a factor that could lead to a vicious circle in which reconstruction is not completed after a disaster and such reconstruction as is carried out is not resilient because of a lack of financial resources. This would increase vulnerability, and the effects and impacts of a further disaster would be greater.

ECLAC has presented an important proposal for reducing public debt in Caribbean SIDS, contributing to investment in DRR and facilitating implementation of the SDGs. The ECLAC initiative of swapping debt for climate change adaptation measures is based on the creation of a Caribbean resilience fund that is expected to provide financing for investment in climate resilience, green growth and structural transformation in the economies of the subregion (see ECLAC, 2018). The ECLAC proposal was approved at the twenty-sixth session of the Caribbean Development and Cooperation Committee (CDCC), the subsidiary body of ECLAC for the Caribbean, in Basseterre on 22 April 2016, pursuant to resolution 93(XXVI) of the CDCC. The essential thrust of this proposal is to provide a solid foundation for highlighting the debt challenges facing small vulnerable economies in the Caribbean, which will then be presented to donors such as the Green Climate Fund. More recently, ECLAC has also formed a working group to address this issue more strategically, focusing on advocacy to increase support. The ECLAC climate adaptation debt swap initiative deserves the full support of the hemisphere and the global community.

Source: Latin American and Caribbean Institute for Economic and Social Planning (ILPES), on the basis of Caribbean Development Bank (CDB), "Caribbean Economic Outlook", presentation at the Technical Stakeholders Workshop on New CCRIF Models, Bridgetown, 14–15 March 2019, and Economic Commission for Latin America and the Caribbean (ECLAC), *The Caribbean Outlook*, 2018 (LC/SES.37/14/Rev.1), Santiago, 2018.

(e) Resilient recovery

While disasters have detrimental effects on societies and economies, they also represent an opportunity to change policies and practices in order to improve resilience in affected areas and incorporate DRM into future development projects. Incorporating the DRM strategy into national development policies and plans is the ultimate goal of DRM, and is an intrinsic part of sustainable development.

The recovery process takes place in two stages. The first involves attending to the affected population and seeking to restore the functionality of existing infrastructure and normalize production activities. The second involves upgrading strategic infrastructure in accordance with a vision of local development that takes into account the aspects mentioned in the other pillars. If the decision is made to undertake reconstruction, this should entail: (i) a master plan setting out the criteria for the location and resilient reconstruction of the affected structures, and (ii) economic viability criteria and social cost-benefit assessment of the territory affected by the event.

Accordingly, the reconstruction process must take account not only of the danger that caused the disaster but of any danger the country or community is exposed to, so as to avoid the reproduction of risk conditions and ensure that the financial resources needed to bring about change are in place. In addition, disaster resilience must be properly integrated with resilience to other phenomena such as climate change. It is therefore important for each building or structure to be resilient and appropriately designed to cope with the environmental conditions of the subregion. It is also important to analyse the possibility of relocating some affected structures that are in risk-prone areas, using high-quality spatial data. If relocation is not possible in the short or medium term, these structures should be remodelled, elevated and protected with sea walls and other types of solid protections.

Resilient recovery also entails a change in the way the whole development process is viewed, with all the pillars analysed above being incorporated into national plans. DRM means that there needs to be a rights-based approach to increasing resilience and the general well-being of the population. Recovery must therefore focus not only on infrastructure, but also on ensuring access to basic services and livelihoods, factors that are essential for development. In the agricultural sector, for example, besides the immediate need to help farmers recover their production infrastructure, planning should include the promotion of crop insurance and the development of robust market chains.

National plans should envisage moving to a sustainable, decentralized energy model that reduces dependence on a single system and its transmission and distribution lines, which are at risk of storm damage or other causes of blackouts. This is very important for remote communities with weak network connections. The potential for redundancy and load balancing may justify maintaining the overhead network in more densely populated areas. However, in peripheral areas and smaller communities, the recommendation is simply to ensure that each home is equipped with solar panels and a back-up battery system, it being understood that in this case the owner is responsible for electricity provision. On small islands, for example, such solutions reduce the dependence of energy and telecommunications systems on more vulnerable overhead lines.

Similarly, when coastal and marine management plans are developed or updated, they should incorporate considerations such as dock construction requirements (height, distance between docks and materials) and the introduction of building restrictions in coastal and marine areas to protect ecosystems and promote tourism. A number of Latin American and Caribbean countries (such as the Bahamas and Belize) have successfully implemented terrestrial and marine protected areas. As part of other initiatives, possible solutions for flood control have been identified, in addition to different alternatives such as green infrastructure and environmental protection, as a way to reduce risk.

Disasters have cumulative effects, and although the damage may seem insignificant immediately after a single event, chronic effects progressively impact infrastructure and economic activities to a point where recovery costs become prohibitive. For this reason, land-use planning, building codes and soil studies, as well as environmental and risk reduction strategies, are key components for a sustainable development process in the region.

3. Incorporating the concept of resilience into development plans

Development plans in the Caribbean subregion should incorporate planning tools that take account of problems such as informal settlements, substandard housing and territorial inequalities. They must also reflect internationally recognized strategies and good practices that mitigate the impacts of disasters on society and the economy.

A number of measures have been taken in recent years in pursuit of housing objectives and the expansion of basic services, with a gender and human rights perspective centred on a vision of sustainability and environmental risk management. Many governments have implemented slum improvement programmes, although a lack of reliable and comparable statistics makes it difficult to assess the impact of these policies (Jones, Camarinhas and Gény, 2019). However, a review of national experiences shows that countries such as Jamaica and Guyana have developed wide-ranging programmes to strengthen housing policies.

In 2013, Guyana's Ministry of Housing initiated a process of housing improvement in the country's interior, at the same time as expanding access to safe drinking water and sanitation services and promoting women's empowerment. This initiative led to the Hinterland Sustainable Housing Programme, which is designed to improve living conditions for low-income families in selected communities in the interior of the country.

A review of the National Housing Policy and Implementation Plan is ongoing in Jamaica. The new plan will include climate change considerations and disaster risk mitigation, and will address issues such as squatting. The National Land Policy is also at an advanced stage of revision, and the National Spatial Plan will include a housing component to address housing provision, using spatial policies and strategies. Meanwhile, the Squatter Management Unit in the Ministry of Economic Growth and Job Creation is preparing a Squatter Management Policy and Implementation Plan. The Government has allocated J\$1 billion to the Ministry to support the implementation of an island-wide social housing programme. A database on squatter communities (about 20% of the total population) was completed in 2014 and will be used as a guide to policy. Other housing measures have addressed issues related to affordable housing and access to finance for low-income groups via lower interest rates (ECLAC, 2019b).

At the regional level, the Latin American and Caribbean Urban and Cities Platform, a joint initiative of ECLAC and the United Nations Human Settlements Programme (UN-Habitat), seeks to create an instrument that will facilitate the follow-up and monitoring of urban development in the subregion. The platform, currently under development, aims to develop capacity and knowledge, data collection and the sharing of experiences to support the implementation of SDG 11 and the New Urban Agenda and submission of the relevant reports. At the same time, it is expected to provide consolidated information on cities and urban areas in the subregion. The platform will host a virtual forum to foster capacity-building among stakeholders on city-related issues and to contribute to inclusive urbanization and social equity.

The countries of the region have also made progress in developing their normative and institutional frameworks for comprehensive risk management. After Hurricanes Mitch and Georges, which affected the countries of Central America and the Caribbean in 1998, there was a broad consensus that disaster risk reduction should be seen as an investment and an integral strategy in development processes and instruments. ECLAC research on inclusion of the topic in development plans in the subregion identified two main areas of action: (i) the establishment of a political and institutional framework for comprehensive DRM, and (ii) the strengthening of macroeconomic capacities so that countries can better absorb the economic effects of disasters (Bello and others, 2017). It is expected that countries implementing measures in these two areas will be better able to absorb the economic effects of disasters. For example, they might be able to afford to defray emergency and reconstruction costs without having to reschedule investments. Seven key elements were identified: (i) the DRM governance framework; (ii) quality information for DRM decision-making; (iii) integration of DRM into the project preparation and evaluation cycle; (iv) the territorial approach; (v) the sectoral approach; (vi) macroeconomic policies; and (vii) integration of DRM into development policies and other instruments. The scope of the analysis of each element in this study is detailed below:

- With regard to the governance framework, the analysis considers whether the country's legal framework provides regulatory and policy instruments that assign roles and responsibilities to different parts of the public sector, companies, academic institutions and civil society, and that enable DRM actions to be implemented in each sector. It also examines whether these are linked to other strategies and cross-cutting issues such as the environment, climate change and water resources.
- Regarding information, the analysis seeks to ascertain whether there are solid institutions providing technical assistance and guidance for data generation and use and a platform serving to keep such information up to date and available to local authorities and other public, private and social institutions and organizations. It also seeks to determine whether technical institutions are well coordinated with other actors to ensure that the data they collect and analyse are turned into accessible and useful information for planning and decision-making.
- With regard to the incorporation of DRM into projects, the analysis focuses on the existence of disaster risk studies carried out at different stages of the project cycle. Depending on the results, project modifications contributing to the implementation of risk mitigation and reduction measures are proposed.
- The sectoral approach seeks to determine whether DRM-related normative and institutional frameworks have been conferring competences on territorial management units, given the importance and role of communities and local authorities in disaster preparedness and response. Public institutions, the private sector, community organizations and the general population living in a given territory are the first to respond in the event of disasters, and they are also the ones who know best about their conditions, capabilities and resources. In view of this, and under the principle of subsidiarity between the different levels of government, the normative and institutional frameworks for DRM should be established in the light of the competences of local territorial management units.
- The sectoral approach analyses the systemic and inter-institutional aspects of the DRM strategies adopted. It also considers how national DRM systems have been delineating the roles and responsibilities of the different sectors and institutions in charge of DRM-related issues in a way that translates into the adoption and effective discharge of these roles and responsibilities.
- On the macroeconomic side, it identifies countries that will adopt macroeconomic policies relating to the allocation of resources, both for ex ante DRM activities and for disaster response (e.g. specific funds).
Finally, the phase arrived at in the incorporation of DRM strategies into national development policies and plans is analysed.

The findings of ECLAC in the region are set out in table II.5.

The Caribbean countries have been strengthening their resilience policies. For example, the Government of Grenada has implemented major initiatives in the field of prevention, mitigation of socioenvironmental disasters and environmental vulnerability, including the approval of the Physical Planning and Control bill (2016), the National Physical Development Plan and the Disaster Vulnerability Reduction Project. The Government identifies the main challenges as access to funding, intersectoral collaboration and supportive infrastructure (ECLAC, 2019b).

Jamaica enacted the National Disaster Risk Management Act in 2015. This is an update of the previous Disaster Preparedness and Emergency Management Act of 1995, which already emphasized the importance of disaster mitigation by promoting a series of policies and instruments focused on preparedness for response and improved alert systems. This comprehensive approach to DRM was also included in the national development plan known as Vision 2030 Jamaica (2009) (Bello and others, 2017).

Dominica has also recently adopted its National Resilience Development Strategy Dominica 2030 and continues with the integration of sectoral plans in order to increase policy consistency. The national resilient development strategy is at the heart of this framework, which provides guidance and content to orient sectoral strategies and action plans. In addition, following the devastation caused by Hurricane Maria, the Government undertook to establish an executive agency, the Climate Resilience Execution Agency of Dominica, which will facilitate the implementation of projects as part of the effort to rebuild Dominica as the world's first climate-resilient country.

Table II.5

Analysis of the integration of disaster-related issues into development policies and plans

Measures	Taken from the plans and regulations of the countries analysed (Bahamas, Barbados, Belize, Dominican Republic, Guyana, Haiti, Jamaica, Saint Lucia, Suriname and Trinidad and Tobago)
Disaster risk management governance framework	The countries have made progress with their normative and institutional frameworks for DRM. Recent or updated frameworks now reflect the explicit roles and responsibilities of national agencies responsible for DRM. Highlights include efforts to improve recovery and reconstruction processes and to incorporate financial protection measures. However, this approach has not yet permeated either the normative and institutional frameworks governing sectoral and territorial institutions or the planning and budgeting processes.
Information for disaster risk management decision-making	<p>Although most development and sectoral policies recognize the need for data and identify important gaps, there are no clear guidelines that can be applied to the generation and dissemination of information related to DRM. The countries analysed have institutions responsible for the study and monitoring of geological and hydrometeorological hazards, but the information they produce is not always accessible or used to guide actions and decision-making. The information continues to be used primarily in academia and early warning systems. However, it should be borne in mind that most countries already have laws guaranteeing access to public information. It is therefore necessary to clarify the role of DRM in this regard and take advantage of the legal framework that has been created. As expressed in most DRM instruments, it is recommended that DRM information systems be implemented, as well as technical guidelines to underpin sectoral and territorial commitment, while ensuring consistency in data collection.</p> <p>It is worth stressing the importance of collecting sectoral baseline data consistently, as they contribute not only to risk identification and reduction but also to the assessment of the effects and impacts of disasters. As regards sectoral data, ECLAC and the World Bank have evaluated a number of disasters in the subregion, consolidating a baseline for several sectors that needs to be constantly updated.</p>
Integrating DRM into the project preparation and evaluation cycle	Disaster risk analysis and the design and implementation of disaster risk reduction measures are already integrated into the standards and instruments used in some countries to conduct environmental impact assessments. However, the lack of national information systems or technical guidelines makes it difficult to properly consider DRM in the preparation and evaluation cycle of public investment and development projects in general. A combination of improved data and strengthened technical capabilities is crucial to incorporating DRM into public investment projects. The incorporation of a multi-hazard DRM component throughout the life cycle of a project would increase its resilience and sustainability and contribute to protecting public investments, while ensuring continuity in the provision of public services and products.
The territorial approach	<p>Responsibilities have varied by country as regards both DRM roles and the tools to be developed to implement DRM measures. In some countries, the development of (regional, provincial, municipal) DRM plans has been promoted, while in others the incorporation of DRM into development plans or the coexistence of both types of instruments has been encouraged. However, the territorial approach and the identification of sectoral roles and responsibilities for DRM have not always been accompanied by the allocation of financial resources or budget incentives.</p> <p>It is suggested that countries strengthen the territorial component of their DRM strategies, as it is observed that most local authorities are tasked primarily with emergency preparedness and response tasks. This requires an update of DRM frameworks to establish binding responsibilities for territorial levels and incorporate or strengthen areas such as risk identification, planning of mitigation measures, data gathering and considerations for reconstruction processes that do not reproduce the risks and vulnerabilities recognized.</p>
The sectoral approach	<p>The countries of the subregion have evolved from having a national institution in charge of disasters to national DRM systems which have generated normative and institutional frameworks that have gradually defined the roles and responsibilities of the different sectors and institutions in charge of DRM matters. Some specific sectors such as agriculture, the environment, infrastructure and health show advances in the incorporation of DRM. Perhaps one of the strongest links identified is between the environment, climate change and DRM. It is also observed that, to the extent that a country has updated frameworks for climate change adaptation and mitigation, there is articulation with the principles and activities of DRM. Similarly, several development and sectoral policies recognize the importance of land use and territorial planning to increase resilience and adapt to or mitigate the effects of climate change.</p> <p>Furthermore, some aspects of DRM have been considered in environmental impact studies, in particular the identification of natural hazards that may affect a given project, as well as the elaboration of mitigation measures to ensure its sustainability. Sectors that have modified their norms and structures to incorporate a DRM strategy show better performance through the incorporation of specific actions in planning and sectoral budgets.</p>
Macroeconomic policies	Some normative frameworks for DRM in the subregion already provide for the creation of national funds. Some of these are qualified for the financing of ex ante activities and others are only qualified to meet the emerging needs of disaster response. However, the fact that legal frameworks provide for the creation of these funds does not necessarily mean that the required resources have been estimated or actually allocated. When ministries of economy and finance have well-defined DRM roles and responsibilities, the design and establishment of national financial protection strategies has been facilitated, which also contributes to the sustainability and acquisition of the funds. Many countries have also taken out catastrophe insurance in the international market.
Integration of disaster risk management into development policies and other instruments	The countries of the subregion have made differing degrees of progress, which opens up a number of opportunities for sharing experiences and cooperating. Post-disaster recovery processes represent an opportunity to rectify the previously followed course and rebuild with resilience by incorporating DRM into development strategies.

Source: O. Bello and others, "Mainstreaming disaster risk management strategies in development instruments: policy briefs for selected member countries of the Caribbean Development and Cooperation Committee", *Studies and Perspectives series-ECLAC Subregional Headquarters for the Caribbean*, No. 58 (LC/TS.2017/80; LC/CAR/TS.2017/6), Santiago, Economic Commission for Latin America and the Caribbean (ECLAC), 2017; C. Weekes and O. Bello, "Mainstreaming disaster risk management strategies in development instruments (II): policy briefs for Barbados, Guyana, Saint Lucia, Suriname, and Trinidad and Tobago", *Studies and Perspectives series-ECLAC Subregional Headquarters for the Caribbean*, No. 75 (LC/TS.2019/7; LC/CAR/TS.2018/3), Santiago, Economic Commission for Latin America and the Caribbean (ECLAC), 2019.

In Trinidad and Tobago, the National Protected Areas Policy emphasizes the link between DRM and environmental protection through the designation of forest reserves, marine protected areas and ecologically vulnerable zones, and also recognizes the role played by conservation in slope stabilization and coastal protection. The Coastal Protection Programme contributes to the stabilization of areas affected by coastal erosion and flooding by constructing marine defences, pursuing best practices and conducting coastal studies. To complement these strategic actions, Vision 2030 calls for the development and implementation of an integrated coastal zone management plan by 2020 (Weekes and Bello, 2018).

Table II.6

The Caribbean: strategic development planning policies and instruments

Country	Policy or strategy
Anguilla	National Sustainable Development Plan: Anguilla 2040 (in preparation, subcontracted)
Antigua and Barbuda	Medium-Term Development Strategy 2016–2020, national development plan (in preparation, with support from the Economic Commission for Latin America and the Caribbean (ECLAC))
Aruba	Nos Aruba 2025: National Integrated Strategic Plan (2010)
Bahamas	National Development Plan of the Bahamas: Vision 2040
Barbados	Barbados Growth and Development Strategy 2013–2020 (BGDS), National Strategic Plan of Barbados 2005–2025, national development plan (in preparation, with support from ECLAC)
Belize	Growth and Sustainable Development Strategy (GSDS) 2016–2019, Land Use Policy and Planning Framework (currently undergoing reform)
British Virgin Islands	enVision 2040 Smart Land Use Planning for the Virgin Islands, national physical development plan (in preparation)
Cayman Islands	Development Plan (1997, undergoing revision)
Curaçao	National Development Plan Curaçao 2015–2030
Dominica	National Resilience Development Strategy Dominica 2030
Grenada	National Sustainable Development Plan 2030 (2015), National Physical Development Plan 2030 (2016)
Guadeloupe	Guadeloupe 2020 Strategy: Action plan for the region of Guadeloupe for the programming of European Funds 2014–2020, Regional Territorial Management Scheme (2017)
Guyana	Green State Development Strategy (2017)
Jamaica	Vision 2030 Jamaica national development plan (2010), national spatial plan (in preparation)
Martinique	Management and Sustainable Development Plan for Martinique (in preparation), Territorial Scheme for Economic Development, Innovation and Internationalization (2017)
Montserrat	Sustainable Development Plan 2008–2020
Saint Kitts and Nevis	Adaptation Strategy in Response to The New EU Sugar Regime 2006–2013 (2006)
Saint Lucia	Medium Term Development and Strategic Plan (2016–2020, under review), national development plan (in preparation, with support from ECLAC)
Saint Vincent and the Grenadines	National Economic and Social Development Plan 2013–2025
Sint Maarten	National Recovery and Resilience Plan (2018), national development plan (in preparation, with support from ECLAC)
Suriname	Policy Development Plan 2017–2021
Trinidad and Tobago	National Development Strategy 2016–2030 (Vision 2030) (2016)
Turks and Caicos Islands	Development Strategy 2013–2017

Source: Economic Commission for Latin America and the Caribbean (ECLAC), Regional Observatory on Planning for Development in Latin America and the Caribbean [online] <https://observatorioplanificacion.cepal.org/en>, and The Caribbean Development Portal [online] <http://caribbean.cepal.org>.

D. Conclusions

As of 2015, urbanization in the Caribbean had kept pace with that of the other countries of Latin America. This trend is projected to become even more dynamic between 2020 and 2050, with the urbanization rate rising from 70% to 82.5%. Cities in the Caribbean differ from those in Latin America in two important respects: the proximity to the sea of the main human settlements, where the countries' essential infrastructure is concentrated, and the percentage of the population living below an elevation of 5 metres. These two factors make Caribbean cities particularly vulnerable to natural hazards such as storms and cyclones and to the likely consequences of climate change, such as rising sea levels.

These structural characteristics of the Caribbean, combined with the financial constraints caused by the high cost of external debt service in many countries of the subregion, create major challenges for its development. In this regard, stress should be laid on the need to strengthen national planning and specifically land-use planning, on the basis of the New Urban Agenda and other international agreements mentioned in this document. With respect to the former, the Subregional Action Plan for the Implementation of the New Urban Agenda in the Caribbean (2016–2036) aims to promote the formulation of public policies that will strengthen the sustainable development of cities and their territories in a resilient manner, taking into account the vulnerability to which their citizens are exposed, both socially (poverty, migration and violence) and environmentally (due to the fragility of their ecosystems and their vulnerability to climate change). In an effort to address these issues, the 2030 Agenda aims to guide the development of appropriate policies and programmes to improve slum areas and ensure access for all to adequate housing.

As indicated in the case studies, the impacts of climate change threaten countries' resilience with respect to biodiversity, coastal protection, water, energy and food security, among other areas. The poor and segments of the population that are vulnerable, such as children, women and the elderly, are most at risk because they have limited safety nets and receive less institutional support.

Unplanned cities are also particularly vulnerable. Urbanization can significantly increase the number of people at risk when the pace of growth is not matched by formal planning capacity. This deficiency encourages the formation of uncontrolled and densely populated informal settlements in areas exposed to various hazards. There is therefore scope in Caribbean cities for the use of new tools to help local authorities prioritize spatial planning and investment based on DRM.

An analysis of development plans in the subregion reveals uneven progress and identifies areas for improvement. Some countries have made progress with their DRM-related regulatory and institutional frameworks and with the development of a sustainable urban agenda. A positive aspect that deserves recognition is that most of the development plans of the countries of the subregion clearly link climate change and DRM. Although climate change policies do not always address DRM, most proposed adaptation or mitigation measures have beneficial effects in this regard. This is because climate change policies reflect a sound understanding of the links between environmental degradation and poverty alleviation, land-use planning and disaster risk reduction. There is also a link with tourism and agriculture in countries that depend on these production activities.

Although the integration of development planning and climate response has been a strong point in several Caribbean countries, many still lack public-private cooperation frameworks and public investment management tools. In this regard, it is advisable to: (i) design and implement policies for financial protection against disaster risk; (ii) estimate the resources needed annually to cover response, rehabilitation and reconstruction after different types of events; (iii) allocate resources within the national budget for DRM activities; and (iv) establish a disaster risk retention and transfer structure in the country. It is also essential to achieve a combination of statistical improvements and technical capacity-building to incorporate DRM into public investment projects.

In addition to ensuring information and data availability and access for better decision-making, there is a continuing need to improve planning methodologies so that more collaborative democratic participatory approaches are applied, working at different levels to promote more sustainable cities and territories. Each participant has a role in the process, from citizens and local activists to elected officials, developers, experts and researchers. Attention should be paid to the gender inequalities that manifest themselves in information access, for example, causing disasters to have differentiated impacts on men and women. It is also crucial for the public and private sectors to join forces in this endeavour, especially by creating incentives for the participation of domestic and foreign private investment.

Vulnerability to natural hazards such as floods and hurricanes, sea level rise related to climate change and the consequent need to increase resilience all necessitate the preparation of a comprehensive development strategy that includes DRM. Legislation and technical instruments for planning (including physical planning) should not only cover identification and DRM aspects, but should also ensure that they are applied at both territorial and sectoral levels. The regulatory framework or DRM strategy needs to assign competences to sectors, and this needs to translate into the adoption and fulfilment of these roles and responsibilities and into

the allocation of financial resources or budgetary incentives. Looking beyond approaches focused on housing processes and urban growth, the subregion should step up collaboration to adapt to future environmental changes by increasing the resilience of its ecosystems. Adequate investment in ecological infrastructure will play an important role in reducing the vulnerability of populations to future environmental and socioeconomic crises. A significant shift in the social and economic landscape of the subregion towards greater sustainability will require stronger governance and the implementation of policies capable of reflecting future risks and uncertainties, as well as a greater emphasis on social behaviours and actions geared towards protecting and valuing natural capital (UNEP, 2016). Bearing in mind the strong similarities between the Caribbean countries, it is recommended that bilateral and regional cooperation options be explored, including technical assistance and the sharing of information in specialized forums.

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Annex II.A1

Risk management in Belize and the Bahamas

Table II.A1.1

Comparisons of risk management in the development policies and plans of Belize and the Bahamas

Country and measure	Bahamas	Belize
Governance framework for disaster risk management	Enacted the Disaster Preparedness and Response Act in 2006 (amended in 2011) with the objective of coordinating and implementing the mitigation of, preparedness for, response to and recovery from emergencies and disasters. The Act provides that the National Emergency Management Agency (NEMA) is the government department responsible for managing assistance in cases of disaster. The subjects dealt with in the Act are also reflected in the working draft of Vision 2040, the National Development Plan of the Bahamas, which frames the country's development agenda within the Sustainable Development Goals (SDGs).	The Disaster Preparedness and Response Act (DPRA) (2000) established the National Emergency Management Organization (NEMO) and the post of National Emergency Coordinator (NEC). This public official is responsible for coordinating the general policy of the Government of Belize relating to the mitigation of, preparedness for, response to, and recovery from emergencies and disasters and for implementing the provisions of the National Disaster Preparedness and Response Plan. Horizon 2030: National Development Framework for Belize 2010–2030 recognizes the importance of managing external crises, including disaster risk, to improve the country's economic resilience. The plan covers planning and mitigation topics with a view to incorporating DRM, reducing the country's vulnerability and implementing a national disaster management strategy.
Information for disaster risk management decision-making	The National Development Plan (NDP) sets out an open government strategy that requires ministries to proactively publish data, improve public communications and increase transparency. To promote openness, the Freedom of Information Act requires each authority to appoint an information manager to handle internal information and communicate with the public to respond to its information needs. With respect to DRM-specific information, the Disaster Preparedness and Response Act requires NEMA to conduct public awareness, information and education programmes on mitigation, preparedness, response and recovery. The Act also makes provision for information access and the production of environmental information. However, there are no clear guidelines on the type of information NEMA should produce, or its role in assisting other government organizations in this task.	The National Development Framework recognizes the importance of a comprehensive information and communication strategy to ensure regular and consistent publication of government information, particularly as it relates to attainment of the objectives set out in the plan. Sectors are obliged to publish information. As part of an effort to strengthen transparency and accountability, the National Development Framework proposes to expand the information that the Government is required to publish on a regular basis. The Freedom of Information Act (2000) applies to all public authorities and grants access to institutional documents to all persons. With respect to DRM-specific information, the Disaster Preparedness and Response Act obliges the NEC and NEMO to implement public awareness, information and education programmes on mitigation, preparedness, response and recovery. However, there are no clear guidelines on the type of information that should be produced or the role that NEMO should play in assisting other government organizations in this task.
Integration of disaster risk management into the project preparation and evaluation cycle	The National Development Plan and the National Policy for the Adaptation to Climate Change envisage the integration of climate change adaptation policies, plans and projects into national planning and budgets, as well as the preparation of environmental impact assessments in certain cases. Although some projects must undergo an environmental impact assessment and include a mitigation plan, this is not mandatory for their approval. This requirement also varies from agency to agency. In addition, the country has not developed conceptual models for incorporating DRM or climate change adaptation into public investment portfolios, whether for new projects or for post-disaster reconstruction.	The National Climate Change Policy, Strategy and Action Plan seeks to integrate adaptation and mitigation initiatives into development plans, strategies and budgets and to ensure funding for effective adaptation and mitigation responses. The National Development Framework recognizes the importance of allocating financial resources for DRM. Therefore, the plan sets a goal of greater financial support to public sector institutions that play a role in natural resource management and risk reduction. However, the country does not have a national strategy to incorporate DRM into public investment projects.
The territorial approach	The Disaster Preparedness and Response Act provides that a NEMA office or post shall be located on one of the Family Islands readily accessible to two or more of the neighbouring Family Islands. In addition, the Prime Minister, after consultation with the Director of NEMA and each Administrator on a respective Family Island, shall appoint a disaster consultative committee consisting of not less than five residents of each settlement or town area or district. Another task related to the territory is the establishment and maintenance of a national emergency operations centre to function as a headquarters, and the establishment of supplementary centres distributed according to geographical location or local government unit. The Town Planning Act, as implemented by the Town Planning Committee, establishes the authority to prescribe areas in which construction is restricted or prohibited, as well as the responsibility to control, regulate or modify the architectural design of any new building or control, regulate or prohibit any alteration to existing buildings. However, the Act applies only to the island of New Providence. The Governor General has the authority to direct that all or some provisions be extended to the other islands and districts. In addition, under the Local Government Act, district councils shall have and exercise the functions assigned to the Town Planning Committee under the provisions of the Town Planning Act and the powers of the Buildings Control Officer to grant building permits. Each island is expected to develop land-use plans including designations for different purposes, the location of existing and planned thoroughfares, policies to prevent or minimize conflicts, provisions for the development of public infrastructure (including cemeteries) and the designation of areas that are not to be developed.	The Disaster Preparedness and Response Act establishes a centralized responsibility vis-à-vis NEMO and the NEC. However, it stipulates that the National Disaster Preparedness Response Plan will include procedures related to disaster preparedness and response for public officials, including provisions for local government units. It also provides for the establishment and maintenance of supplementary emergency operations centres, distributed according to geographical location or local government unit. In addition, the membership of the Advisory Committee will include the ministry responsible for local government. Villages are also responsible for certain land-related activities. Village councils are responsible for producing maps showing the land in the village, and may form a lots committee to make recommendations to the Ministry with regard to the distribution of lots and lands within or affecting the boundaries of the village. It also emphasizes the importance of development planning based on environmental sustainability criteria. The National Disaster Preparedness and Response Plan seeks to strengthen and harmonize the legislative framework for risk reduction and advocates the enactment of complementary policies that are critical to DRM, such as land use, human settlements planning and transport policies.

Table II.A1.1 (concluded)

Country and measure	Bahamas	Belize
The sectoral approach	The National Development Plan and the National Policy for the Adaptation to Climate Change establish strong correlations between climate change and disasters, and with multiple sectors such as physical planning, energy, health, tourism and natural resource management. Both instruments emphasize the links between environmental protection and conservation, and likewise resilience to disasters and to climate change. The plan and policy are supported by sectoral policies, including the Environmental Health Services Act, the Fishery Resources Act, the Agriculture and Fisheries Act, the Forestry Act and the Environmental Planning and Protection Act, among others.	The National Development Framework and the National Climate Change Policy, Strategy and Action Plan establish strong correlations between socioeconomic resilience and climate change and disasters. Both instruments are supported by sectoral policies, including the National Biodiversity Strategy and Action Plan, the Integrated Coastal Zone Management Plan, the National Sustainable Tourism Master Plan and the Sustainable Energy Action Plan 2014–2033.
Macroeconomic policies	The National Policy for the Adaptation to Climate Change identifies several opportunities to strengthen financial protection. The plan provides for the implementation of fiscal and financial measures that can contribute to an equitable distribution of the economic burden among stakeholders, plus collaboration with the financial sector to develop risk management measures and regimes to address the impacts of climate change. In addition, both the plan and the policy highlight the need to incorporate climate change adaptation and mitigation strategies into national planning and budgets. The Emergency Relief Guarantee Fund Act (1999) allows the Government to guarantee loans for the relief of people who have suffered hardship and loss as a result of a disaster. The Bahamas was a member of CCRIF SPC (formerly the Caribbean Catastrophe Risk Insurance Facility) for about 10 years, and as a member has a full country risk profile prepared by CCRIF SPC. However, it lost its membership owing to non-payment of its contribution following the emergency caused by Hurricane Joaquin.	The country has taken steps to incorporate climate change projects into national development and budgets by drawing up a National Climate Resilience Investment Plan. The plan is data-driven and gender-sensitive and prioritizes finance and planning. While several instruments mention the importance of financial protection, the country does not have a financial strategy or policy for DRM. Belize is a member of CCRIF SPC (formerly the Caribbean Catastrophe Risk Insurance Facility), and as a member has a comprehensive country risk profile prepared by CCRIF SPC.
Integration of disaster risk management into development policies and other instruments	The National Development Plan treats DRM as a strategy for integrating disaster risk reduction into development policies. The plan recognizes the role of a healthy environment in increasing resilience to climate change and other natural hazards. While the country does not have a specific policy for post-disaster reconstruction, several development instruments highlight the importance of environmental conservation and land management in addressing the challenges posed by climate change, as well as in mitigating and adapting to its effects. In addition, both the plan and the policy underline the need to address economic, social, environmental, geographic, infrastructure and institutional vulnerabilities. This suggests an understanding of the underlying factors of vulnerability that could lead to increased disaster risk, indicating a transition to a proactive approach to DRM.	The economic resilience pillar of the National Development Framework is based on the understanding that external shocks, specifically international economic crises and disasters, have detrimental effects on Belize's economy and development. The National Development Framework aims to build economic resilience, promote productivity and competitiveness and ensure the environmental sustainability of economic activity. Mitigation and recovery measures are therefore considered necessary to enable the economy to return to normal more quickly. The National Development Framework proposes the development and implementation of a national disaster management strategy that can ensure protection, cohesion and restoration before, during and after a disaster.

Source: Latin American and Caribbean Institute for Economic and Social Planning (ILPES).



CHAPTER



Towards an ecosystem of territorial development policies and instruments: legal frameworks and development plans and policies at the national level

Introduction

- A. A crucial starting point: the scope of the territorial challenge reaches far beyond the realm of public territorial development policy
- B. A taxonomy of territorial development policy families and the territorial approach to development planning at the present time
- C. Territorial development policies
- D. Development plans and their dialogue with territorial development policies
- E. A dialogue between development plans and territorial development policies
- F. Conclusions: towards an ecosystem of policies and plans for strengthening territorial development in the region

Bibliography

Annex III.A1

Introduction

This chapter offers a description of the broad-ranging and highly varied assortment of public policy efforts to lessen territorial inequalities that are being deployed by the countries of the region. This cluster, which is composed of an assemblage of very different types of policies, given their territorial focus, is referred to as a “family” of policies. This rich array of policies is, however, showing signs of becoming scattered and disjointed, and a need has therefore been seen to analyse and characterize the present state of affairs as a basis for constructing a genuine ecosystem of territorial development policies and instruments.

This ecosystem can be understood as a constellation of policies, plans and regulatory instruments that have an impact at the territorial level. It is hoped that a proper understanding and management of this policy cluster will pave the way for interactions and synergies among its various components and will guide and facilitate the design, implementation and assessment of types of public action that will have a major impact in reducing territorial inequalities and in building capacity at the local level and among local stakeholders.

With a view to providing building blocks for the construction of this ecosystem, this chapter offers some strategic inputs for the development of the Territorial PlanBarometer, a tool that is described in detail in chapter VI. To that end, a methodology of analysis and a number of categories and classifications (a taxonomy of territorial policies) will be proposed here that each country can then use as a frame of reference for making its own corrections and adaptations as it works to piece together a complete picture of the current status of its territorial development policies. Based on that understanding and the information that can be derived from the Territorial PlanBarometer, governments will be in a better position to build such an ecosystem.

This analytical and descriptive methodology was developed by means of a hands-on approach involving the identification and study of territorial development policies and legal frameworks in 33 countries of the Latin American and Caribbean region. Its development also drew on an analysis of the orientation and approaches used to confront territorial challenges in each nation-State as set forth in 27 national development plans (or government plans when the former were not available).

The chapter is divided into six sections that provide an overview of public territorial development policies in the region and highlight the importance of territorial development issues in national development or government plans.

A. A crucial starting point: the scope of the territorial challenge reaches far beyond the realm of public territorial development policy

Strategies and measures for furthering a country’s territorial development are not confined to public policies that explicitly focus on territorial development. They are also present in a vast cluster or family of public policies that come under various headings but whose content and objectives are relevant to territorial development. The impact of territorial issues is thus not delimited by public territorial development policy but instead radiates out to a broad spectrum of public policies in the region. The breadth of this spectrum is too great, however, to be identified or studied within the scope of this analysis.¹

This study deals with a very wide range of initiatives but one which is, nonetheless, not as broad as it would have had to be to encompass this entire policy family. A total of 153 policies, plans, strategies and regulatory instruments (which will hereinafter be referred to simply as “policies”) relating to territorial development were

¹ This research was conducted in 2017 and 2018 and was based on a comparative study of research projects undertaken in 10 countries of the region (Argentina, Brazil, Chile, Colombia, Ecuador, El Salvador, Honduras, Mexico, Peru and the Plurinational State of Bolivia). The findings have been presented by ECLAC (2009, ch. V).

reviewed in order to establish a basis for the construction of a taxonomy that can be used to describe and classify this broad policy landscape.²

The main criteria used in this selection process focused on what is defined in this study as territorial development policy. These policies, as defined in chapter I, are instruments of State action aimed at reducing inequality and strengthening the capacities and assets of local territorial units and local stakeholders so that they will be better able to meet the development challenges confronting them. The group of policies that is analysed here therefore includes only those that are the most directly linked to efforts to strengthen local territories in each country and to diminish inequality among them. It must be remembered, however, as noted earlier, that they do not represent the entire spectrum of territorial development policy, which is much broader.

The taxonomy and categories used for this analysis are not confined to the present. Instead, they reflect the long history of territorial development policy and the policy path that the countries have traversed over time, which are summed up in boxes I.2 and I.4 in chapter I.

B. A taxonomy of territorial development policy families and the territorial approach to development planning at the present time

A total of 153 policies and 27 development plans were reviewed as a basis for creating a taxonomy for use in describing the current status of territorial policy approaches in the countries of the region.³ This taxonomy can be employed to arrive at a fuller understanding of the pivotal characteristics and main variants of the territorial policies being applied today.

The information used for this purpose has been drawn from policy documents, laws and official development plans. Given the nature of these sources, one highly important aspect is left unexplored: the actual processes and steps involved in their implementation or application. As explained earlier, these sources do not reflect all the policies and interventions influencing development at the territorial level which have not been covered in this analysis.

Thus, this taxonomy, while soundly constructed, is not exhaustive. Nonetheless, it can serve as a foundation for ongoing efforts by the countries of the region (and for researchers and specialists) to maintain and update this regional X-ray on a continuing basis.

One of the first aspects of the situation that emerges from a consideration of this taxonomy is that the breadth and variety of policies that it includes provide evidence of the region's manifest interest in territorial issues. These issues are not being overlooked or sidelined, as they were in the 1990s.

Another finding is that, in contrast to the situation a few decades ago, when there were only a very few territorial policies to serve as a frame of reference, today there is a wide and varied range of such policies, very few of which are actually called "territorial development policies". They are, nonetheless, all part of the same family of policies because they all share the same objective: that of reducing territorial inequalities and building the capacities and assets of local stakeholders and territories.

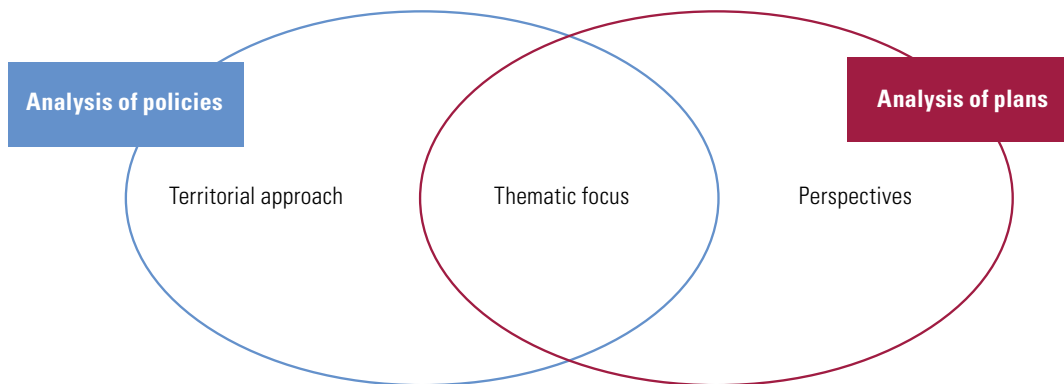
Diagram III.1 depicts the dimensions involved in the analysis of territorial development policies and national development plans. As can be seen from the diagram, the thematic focus of both plans and policies was examined, but the analysis of territorial approaches was confined to policies and the exploration of the various perspectives was limited to territorial development plans. Each of these components yields additional significant findings.

² For a detailed list, see annex III.A1.

³ These policies and plans were selected at a given stage in the process, which means that some new policies or development plans may have been formulated while this study was being written up. It also means that some of the policies that are analysed here may no longer be in operation for any of a number of reasons, such as a change in government, a lack of funding, changes in political priorities, a lack of capacity and so forth. In the case of the development plans, on the other hand, set time periods are involved; they either correspond to a given Administration or the period that they were or are in effect is specified.

Diagram III.1

Taxonomy of subjects of analysis



Source: Latin American and Caribbean Institute for Economic and Social Planning (ILPES).

A third group of findings can be arrived at by gaining an understanding of exactly how the territorial dimension has been embedded in each policy and each plan (approach and perspective).⁴

As illustrated in diagram III.2, the territorial perspective is marked by a greater or more limited presence of the territorial dimension in these plans. When a plan is classified as having a cross-cutting perspective, it is because the territorial dimension is in evidence throughout the document, its objectives are territorialized, or the diversity to be found at the territorial level is clearly reflected. By contrast, plans classified as having a focused perspective are ones in which territorial issues are addressed by only some of their objectives.

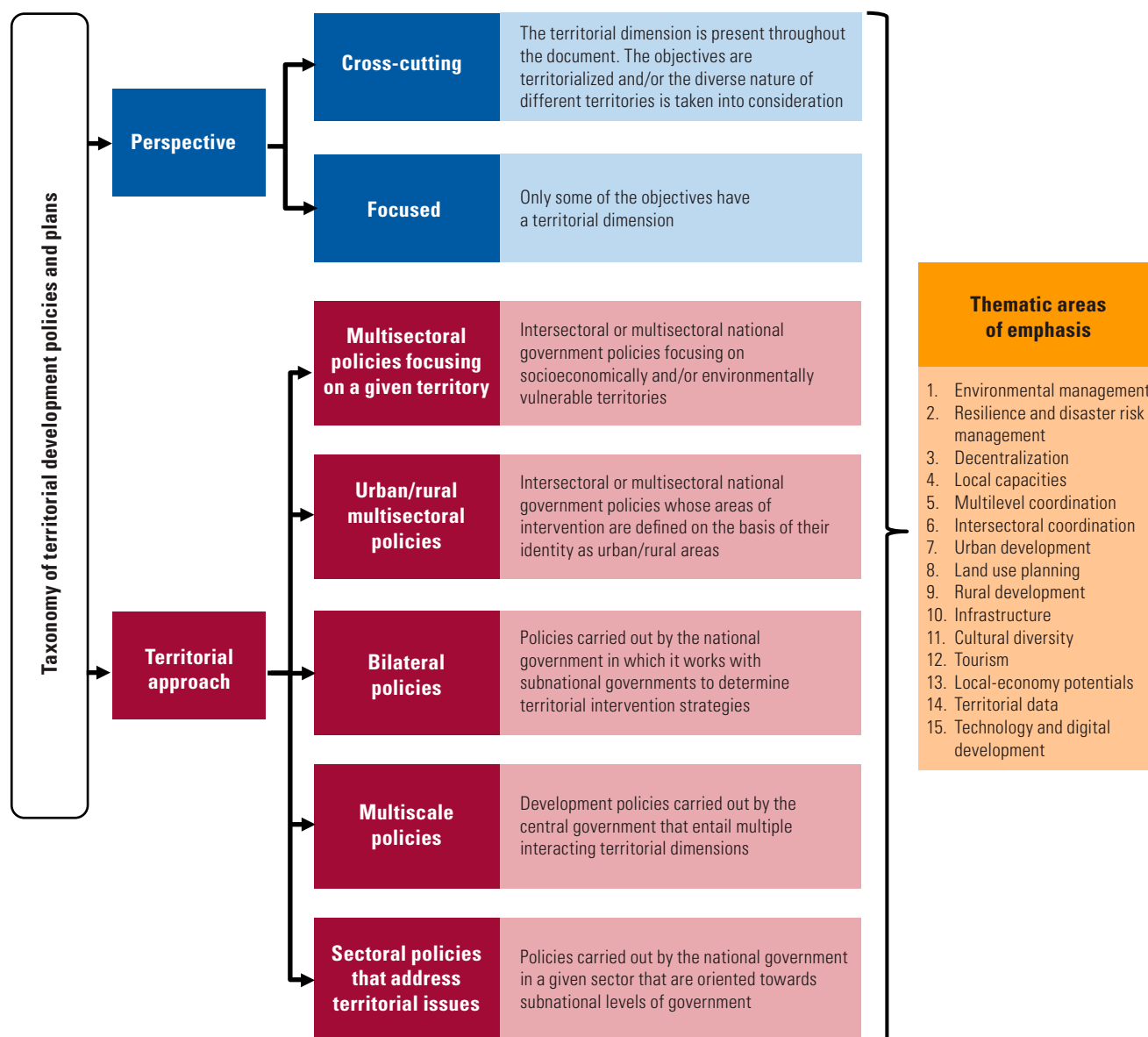
The classification of policies is more complex, since it is based on the ways in which sectors and territorial levels or scales are combined. Some policies are multisectoral and deal with a particular type of territory; this is the case of the first two categories, one of which deals with specific territories, while the other draws a distinction between rural and urban territorial levels. Others are defined by the presence of multiple scales and levels: in one case, just two levels and, in the other, a wider range of levels. The last category includes monosectoral, rather than multisectoral, policies that generally encompass all the various subnational levels of government.

A fourth group of findings has to do with the thematic emphases of these policies and plans, which, as shown in diagram III.2, are a dimension in which these two areas of analysis overlap. This is a sphere in which the interaction between territorial development plans and territorial development policies can be explored. There are a great number of different areas of emphasis, and they involve a wide range of perspectives. This is yet another reason to speak, as was done at the beginning of this chapter, of the rich variety of ways in which the region is taking on territorial issues today. Of this wide range of options, however, four subject areas can be discerned that are highly topical at this point in time: (i) environmental management; (ii) risk management and resiliency; (iii) land use planning; and (iv) rural development. The rest of this chapter will be devoted to these categories and to an in-depth analysis of what they involve.

⁴ The classification of policies according to their territorial approaches and thematic emphases provides a way of arriving at a fuller understanding of their characteristics, as different analytical dimensions can be applied to any given policy. The same is true of plans, as any given plan can be classified according to whether it has a cross-cutting or focused perspective or according to the thematic area or areas that it highlights.

Diagram III.2

Taxonomy of national territorial development policies and the territorial focus of national development plans



Source: Latin American and Caribbean Institute for Economic and Social Planning (ILPES).

C. Territorial development policies

1. Territorial development policies: approaches

The first category of policy analysis deals with the territorial approach to policy interventions at the territorial level. Based on this criterion, five policy types can be identified (see table III.1).

Table III.1
Approach taken by territorial development policies

Territorial approach	Cases
Multisectoral policies focused on a specific territory Intersectoral or multisectoral policies applied by the national government that focus on socioeconomically and/or environmentally vulnerable territories	Special zones or areas of the national territory (Peru, Barbados, Chile, Brazil, Ecuador) Binational or cross-border plans (Ecuador, Colombia, Honduras, El Salvador and Guatemala)
Urban/rural multisectoral policies Intersectoral or multisectoral national government policies whose areas of intervention are defined on the basis of their identity as urban/rural areas	Urban development policies (Panama and Chile) Rural development policies (Costa Rica and Ecuador) Rural or urban territorial management policies (all countries) Resilience and disaster risk management policies (several countries) Biodiversity or environmental protection policies (several countries)
Multiscale policies Development policies carried out by the central government that entail multiple interacting territorial dimensions	National policies on regional development; macro-, meso- and microregions (Brazil)
Bilateral policies Policies carried out by the national government in which it works with subnational governments to determine territorial intervention strategies	Policy agreements (Chile and Colombia)
Sectoral policies that address territorial issues Policies carried out by the national government in a given sector that are oriented towards subnational levels	This category of policies is found in all the countries. It includes all public policies that implement a given sectoral policy at the local level in the various parts of the country. This type of policy is in place in all the governmental structures in the region. One example is education policies that are adapted in line with different curricula based on the geographic and social characteristics of a particular area (as in the case of indigenous communities). Not all of these policies are directed at closing gaps or building local stakeholders' capacities, but they are included in the classification because they establish territorial links.

Source: Latin American and Caribbean Institute for Economic and Social Planning (ILPES), on the basis of the analysis of the respective policies.

Boxes III.1 to III.5 provide overviews of a number of cases that illustrate these types of territorial approaches.

Box III.1

Brazil: Border Area Development Programme

Type of policy: A multisectoral policy focused on a specific territory.

Objective: The Standing Committee for Border Area Development and Integration (CDIF) works to enhance the management of public policies for the development of border areas by supporting the coordination of local government actions.

Year issued: Decree of 8 September 2010.

Lead agency: Ministry of Regional Development (online <http://mi.gov.br/>).

CDIF is composed of representatives of 20 federal government agencies and 8 guest institutions.^a

The Secretariat for Regional Development of the Ministry of Regional Development serves as the Committee's executive secretariat, while institutions working to promote the development of border areas make up its operational units at the state level.^b

CDIF promotes the socioeconomic development of the 588 Brazilian municipalities located along the country's border in the states of Amapá, Pará, Roraima, Amazonas, Acre, Rondônia, Mato Grosso, Mato Grosso do Sul, Paraná, Santa Catarina and Rio Grande do Sul.

Source: Ministry of Regional Development of Brazil, "Comissão Permanente para o Desenvolvimento e a Integração da Faixa de Fronteira", 20 September 2017 [online] <http://mi.gov.br/comissao-permanente-para-o-desenvolvimento-e-a-integracao-da-faixa-de-fronteira>.

^a See [online] http://www.planalto.gov.br/CCIVIL_03/_Ato2007-2010/2010/Dnn/Dnn12853.htm.

^b The Border Area Development Programme is currently under review by the Ministry of Regional Development, which has taken the place of the Ministry of National Integration. One of the programme's lines of action focuses on the tourism sector (Iguazu Falls and the Jesuit missions) in the Brazil-Argentina-Paraguay tri-border area. The Brazilian term *faixa de fronteira* (border area or strip) refers to the strip of land 150 km in width that runs along the country's 15,719-km international land border, which takes in 11 states and 588 municipalities (out of a total of 5,564). This border strip accounts for 27% of the country's land area and is home to nearly 10 million people.

Box III.2

Chile: National Urban Development Policy

Type of policy: An urban/rural multisectoral policy.

Period covered: 2014.

Lead agency: Ministry of Housing and Urban Development.

Objective: The chief aim of this policy is to lay the groundwork for an improved quality of life based on a sustainable form of development. The concept of "quality of life" is defined not only in terms of material goods or objective conditions but also in subjective terms relating to the human dimension and inter-personal relationships.

This intersectoral policy is based on a series of guiding principles relating to a number of areas, including decentralization, equity, commitment and graduality. It is structured around thematic areas and the objectives defined for each of those areas. These areas are: social integration, environmental balance, identity and heritage, and economic development. Consideration is also given to the institutional and governance reforms required in order to attain the defined objectives.

Source: Ministry of Housing and Urban Affairs of Chile, "Política Nacional de Desarrollo Urbano", *Hacia una nueva política urbana para Chile*, vol. 4, Santiago, 2014.

Box III.3

Costa Rica: Policy of State for Rural Territorial Development, 2015–2030

Type of policy: An urban / rural multisectoral policy.

Year issued: 2015.

Lead agency: Institute for Rural Development (INDER).

Objective: This policy focuses on furthering the development of populated rural territories while acknowledging and respecting their diversity. It is based on a coordinated public-private system designed to reduce economic, social, cultural, environmental and political/institutional disparities and inequalities while ensuring equity, cohesion, inclusion and social identity and meeting the population's basic needs for goods and services.

Its main strategic lines of action are:

- Infrastructure for the development of rural territories
- Equity and inclusion of the population in the rural territorial development process
- Institutional and organizational management for rural territorial development
- Rural territorial economies
- Territorial ecosystems

Since this is an intersectoral policy, INDER needs to coordinate its implementation of the policy with other agencies, which are clearly identified in the policy as partner agencies or cooperating institutions.

In 2017 a short- and medium-term strategy for the policy's implementation was devised: the National Rural Territorial Development Plan 2017–2022. Its focus is on the identification, formulation and execution of programmes and projects that will have a positive impact on the rural population's living conditions. Priority is placed on territories whose overall development is lagging the furthest behind.

The plan, whose implementation is coordinated with many different stakeholders, ties in with a wide range of legal frameworks and international agreements, such as those underlying the Sustainable Development Goals. It is the fruit of a participatory, consensus-based planning exercise in which high-priority intersectoral policy actions were identified within the context of rural territorial development plans linked to the strategic lines of action established by the National Rural Territorial Development Plan and to the various spheres or levels of planning functions established in the country's legal system.

Source: Institute for Rural Development (INDER) of Costa Rica, *Plan Nacional de Desarrollo Rural Territorial 2017–2022*, San José, 2017.

Box III.4

Brazil: National Regional Development Policy, Phases I and II, macro-, meso- and microregions

Type of policy: A multiscale policy.

Year issued: 2004

On 30 May 2019, the new National Regional Development Policy was promulgated by Decree No. 9810.

Lead agency: Ministry of Regional Development.

Objective: Phases I and II of this policy were aimed at reducing inequalities in living conditions across the country's various regions, promoting equitable access to development opportunities and providing orientation for federal programmes and policy actions in line with section III of article 3 of the Constitution (Decree No. 6047 of 22 February 2007).

The objective of the 2019 National Regional Development Policy is to reduce economic, social, and intra- and interregional inequalities through the creation of development opportunities that will open the way for economic growth, income generation and improvements in the population's quality of life (Decree No. 9810, art. 1).

Article 1 of the cited decree provides for a well-planned, coordinated mobilization of public and private actions at the federal, state, district and municipal levels that will drive national and state-level programmes and investments that will work together to further and support development processes.

Source: Ministry of Regional Development of Brazil, "Nova Política de Desenvolvimento Regional vai beneficiar brasileiros em todos os cantos do País", 30 May 2019 [online] <http://www.cidades.gov.br/ultimas-noticias/11200-nova-politica-de-desenvolvimento-regional-vai-beneficiar-brasileiros-em-todos-os-cantos-do-pais>; "Proporcionar o desenvolvimento do Nordeste é garantir futuro positivo para o Brasil, afirma ministro", 24 May 2019 [online] <http://www.cidades.gov.br/ultimas-noticias/10731-proporcionar-o-desenvolvimento-do-nordeste-e-garantir-futuro-positivo-para-o-brasil-afirma-ministro>; "Investimentos em biodiversidade serão destaque para alavancar o desenvolvimento da Amazônia", 23 May 2019 [online] <http://www.cidades.gov.br/ultimas-noticias/10502-investimentos-em-biodiversidade-serao-destaque-para-alavancar-o-desenvolvimento-da-amazonia>; "Plano Regional de Desenvolvimento do Centro-Oeste é aprovado no Condel", 21 May 2019 [online] <http://www.cidades.gov.br/ultimas-noticias/10189-plano-regional-de-desenvolvimento-do-centro-oeste-e-aprovado-no-condel>.

Box III.5

Colombia: Contract Plans for Peace

Type of policy: A bilateral policy.

Year issued: 2011.

Lead agency: National Planning Department and its subnational offices.

Objective: Under the terms set forth in Territorial Land Use Act No. 1454, different regions of the country and the central government conclude planning contracts under which State functions are delegated to territorial bodies. This new type of vehicle for the flexible distribution of areas of authority between the central government and territorial institutions has been created pursuant to article 8 of Act No. 1450, which promulgated the National Development Plan 2011–2014. Areas of authority are distributed on the basis of the various entities' fiscal, technical and administrative capacities by means of strategic alliances for the design and execution of investment projects by the various levels of government.

This instrument fosters ongoing, multilevel coordinated efforts on the part of the central and territorial governments to promote long-term development, supports the convergence and alignment of priority investments, bolsters decentralization and contributes to the redistribution of wealth and to efforts to overcome inequity and extreme poverty.

Although initially referred to as "planning contracts", in 2016 these arrangements were given the name of "contract plans for peace" or simply "contracts for peace" to more accurately reflect their strategic role in channelling available resources towards the achievement of clearly defined, collective goals in the new, post-conflict national context.

Source: National Planning Department (DNP) of Colombia, "Contratos Paz" [online] <https://www.dnp.gov.co/Contratos-Plan/Paginas/ContratosPlan.aspx>.

2. Territorial development policies: thematic areas of emphasis

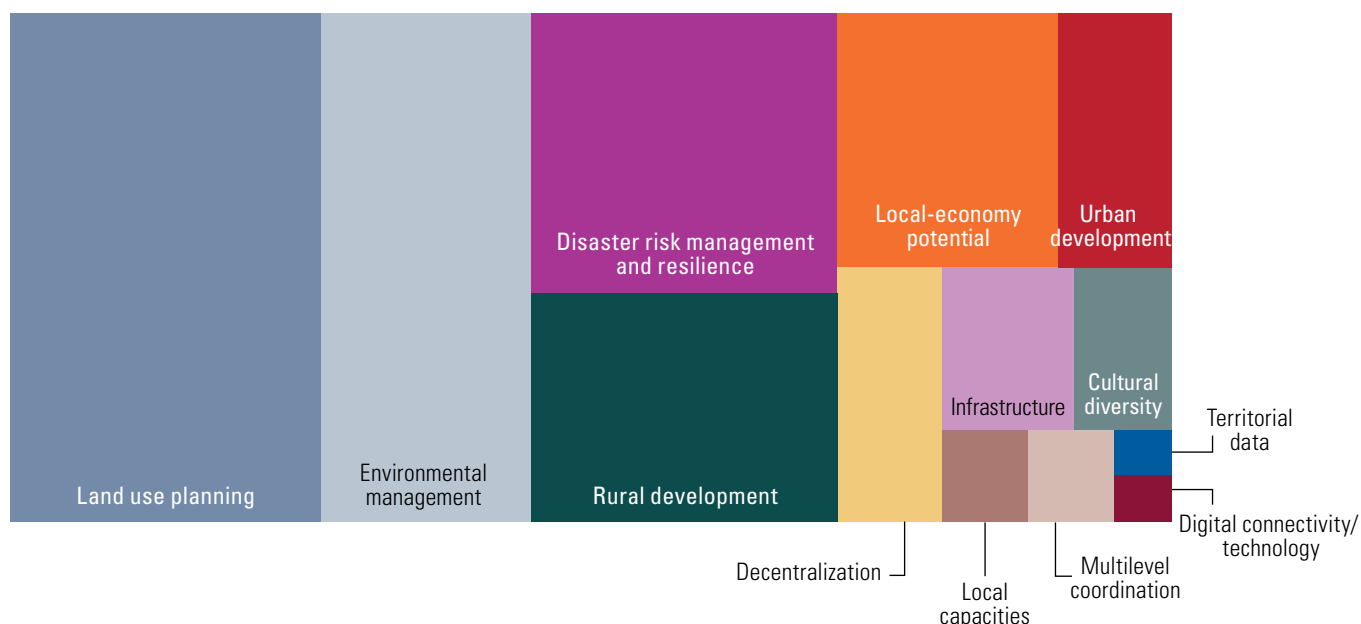
Another way of analysing this family of policies is by looking at the various thematic areas of emphasis that they address (see diagram III.3). It is important to note that, since all the territorial development policies, plans, strategies and regulatory instruments of the countries of the region that were selected for inclusion in this study have been analysed from this standpoint, and since any given country may have a law, a policy, a plan and a strategy dealing with the same subject area, some issues might appear to be overrepresented. Nonetheless, the existence of more than one mechanism for addressing a given problem can also be seen as an indication of the importance assigned to that issue by the country in question, and the present analysis takes this into consideration. For example, as indicated in box III.3, Costa Rica has a Policy of State for Rural Territorial Development, 2015–2030 and a National Rural Territorial Development Plan 2017–2022, both of which are categorized here as placing emphasis on rural development. The same kind of situation arises when a country has a law on a given subject (e.g. land use planning or environmental protection) and instruments (policies, plans or strategies) for the enforcement and application of that law. Each of the 153 instruments analysed here has been classified according to its thematic area of emphasis. Figure III.1 shows the number of times that each issue or area of emphasis is repeated.

By the same token, a policy may be classified under more than one thematic area. For example, the National Climate Change Strategy of Ecuador (2012–2025) focuses on both environmental management and on disaster risk management and resilience.

Most of the policies analysed here focus on land use planning, environmental management, disaster risk management and resilience, rural development and the potential of local economies. Yet some of these policies, as well as others not covered in this analysis, also address such issues as urban development, decentralization, infrastructure and cultural diversity.⁵ Other issues that are a priority area for some of the above policies include multilevel coordination, the strengthening of local capacity, the incorporation of technologies and the provision of more territorial data.

Diagram III.3

Latin America and the Caribbean: issues addressed by territorial development policies

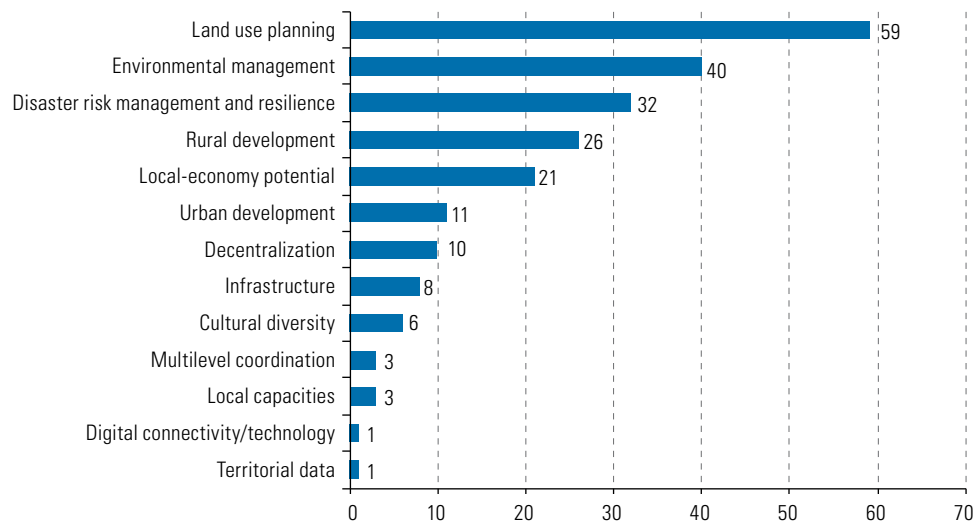


Source: Latin American and Caribbean Institute for Economic and Social Planning (ILPES), on the basis of the analysis of the respective plans and policies.

⁵ For example, a land use planning policy may focus exclusively on urban areas or may encompass both urban and rural zones. Therefore, this type of policy could place emphasis on all of these issues (land use planning, urban development and rural development).

Figure III.1

Latin America: issues addressed by territorial development policies



Source: Latin American and Caribbean Institute for Economic and Social Planning (ILPES), on the basis of the analysis of the respective plans and policies.

The most frequently named issue —land use planning— is a very broad category which is included in many regulatory frameworks and planning instruments and which may refer to land use or physical planning at the territorial level. Specific areas may be set aside for economic development or for environmental conservation and protection. Some policies focus on urban areas and some on both urban and rural areas.

Of the policies classified as placing emphasis on environmental protection, some focus on sustainable local development, some on climate change, others on environmental protection, biodiversity and sustainable natural resource management. These policies have been issued in different years, although six new policies on these subjects were all unveiled in 2014.

Most of the policies on disaster risk management and resilience have been launched since 2010. These are very explicit policies in the sense that they all bear that exact name or something quite similar, although some rural development and land use planning policies also address these issues. The results of this analysis for each subregion are discussed below.

(a) Recurring themes in territorial development policies in the Caribbean

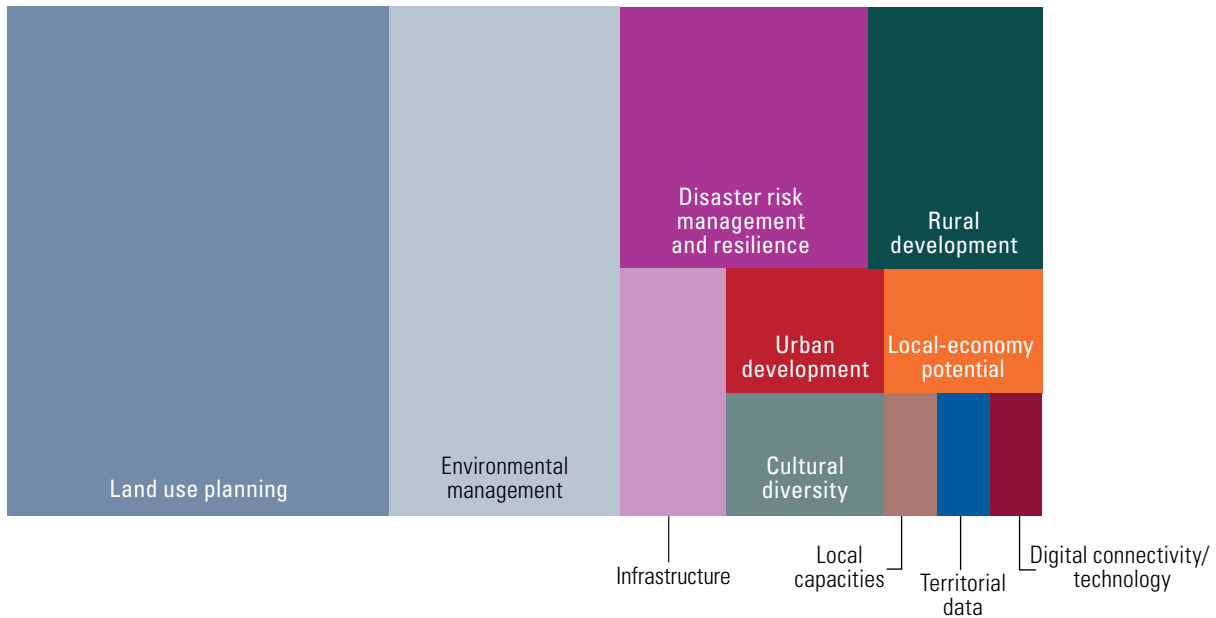
As shown in diagram III.4 and figure III.2, in the Caribbean land use planning is the focus of the largest number of these policies, followed by environmental management and disaster risk management and resilience.

Of the 30 land use planning instruments covered in this study, 16 are physical urban or rural and land use planning laws or decrees. The rest are plans or policies. In some cases, the two types of instruments come in combination with one another, as in the case, for example, of Jamaica's Territorial Development and Land Use Act of 1996 (amended in 1997) and its National Land Policy of the same year. Saint Lucia's Physical Planning and Development Act (chapter 5.12) of 2005 and its National Land Policy of 2007 are another example.

Examples of environmental management policies include Antigua and Barbuda's National Strategic Biodiversity Action Plan 2014–2020 and Dominica's National Biodiversity Strategy and Action Plan 2014–2020.

Diagram III.4

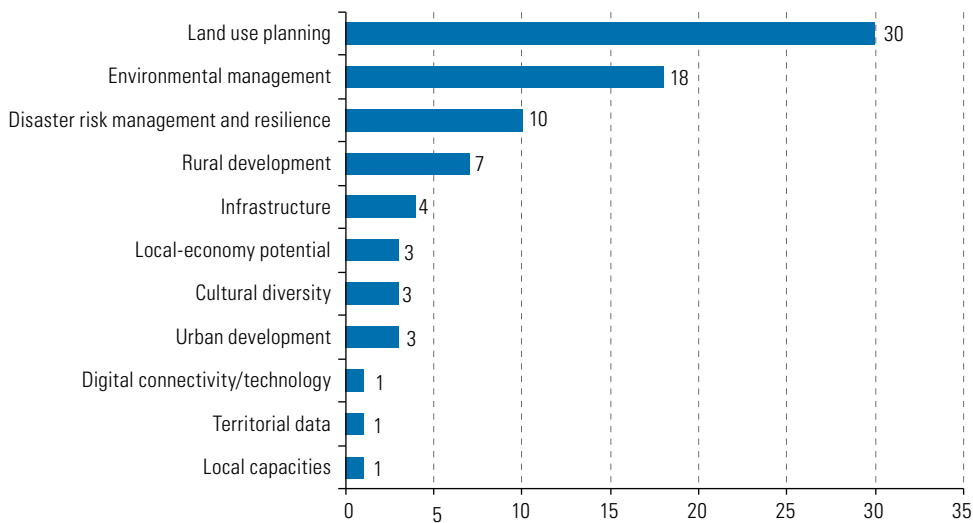
The Caribbean: recurring themes in territorial development policies



Source: Latin American and Caribbean Institute for Economic and Social Planning (ILPES), on the basis of the analysis of the respective plans and policies.

Figure III.2

The Caribbean: issues addressed by territorial development policies



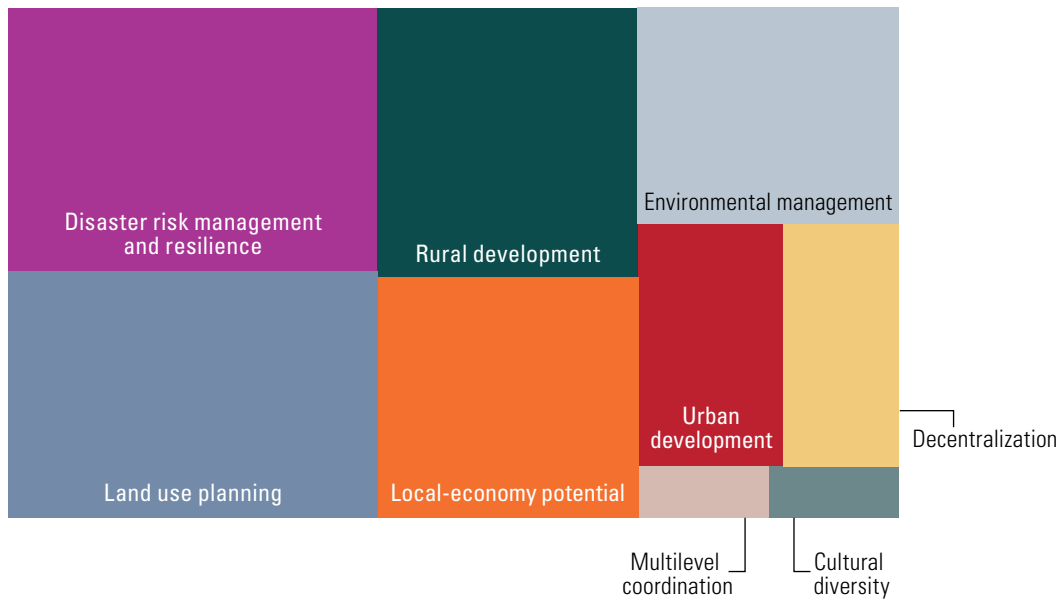
Source: Latin American and Caribbean Institute for Economic and Social Planning (ILPES), on the basis of the analysis of the respective plans and policies.

(b) Recurring themes in territorial development policies in Central America

The most frequent focus of territorial development policies in Central America is disaster risk management and resilience (see diagram III.5 and figure III.3). A number of these countries have risk management plans and others have plans dealing with climate change that also focus on disaster risk management. Rural development

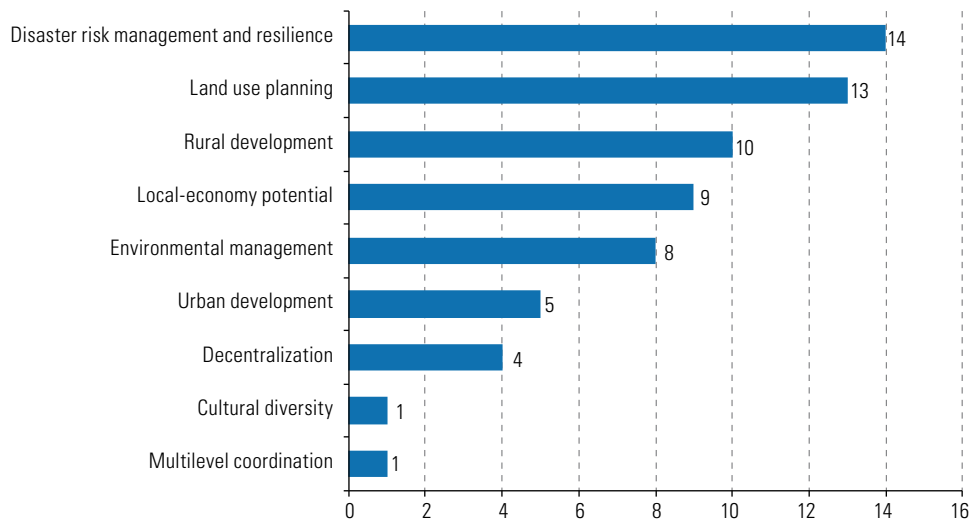
issues are addressed by agricultural development, agrifood and rural development policies. Examples include Guatemala’s National Policy for Integrated Rural Development of 2009 and its 2016–2020 Rural Agenda. Most of the policies classified as dealing with the potentials of local economies place emphasis on rural development, as in the case of Nicaragua’s 2002–2020 Agriculture Sector Policy, which promotes production in the agrifood and forestry industries.

Diagram III.5
Central America: recurring themes in territorial development policies



Source: Latin American and Caribbean Institute for Economic and Social Planning (ILPES), on the basis of the analysis of the respective plans and policies.

Figure III.3
Central America: issues addressed by territorial development policies



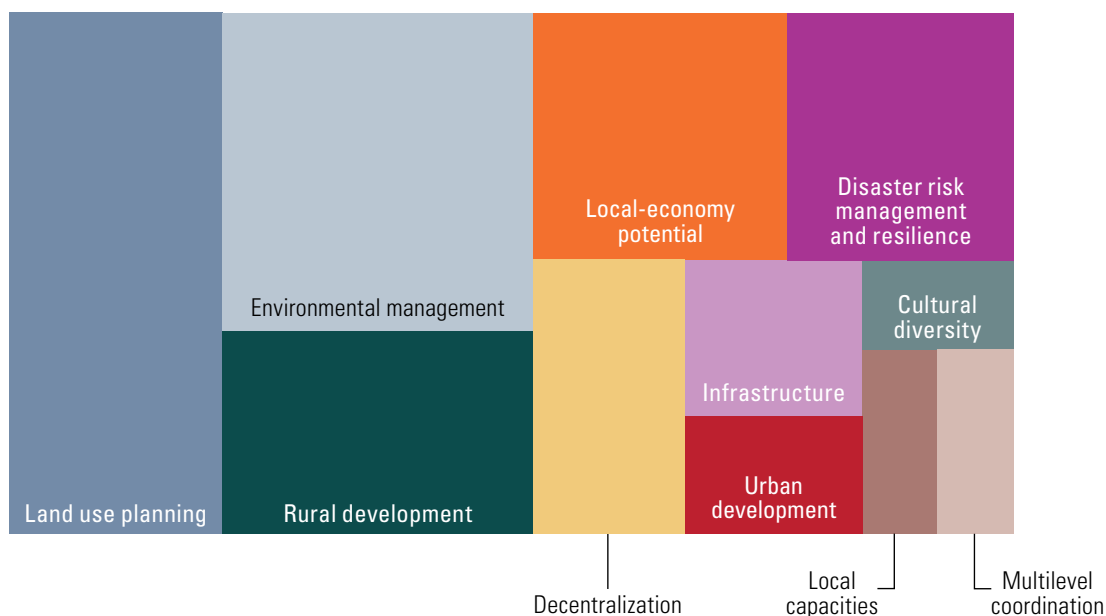
Source: Latin American and Caribbean Institute for Economic and Social Planning (ILPES), on the basis of the analysis of the respective plans and policies.

(c) Recurring themes in territorial development policies in South America

In South America, an emphasis on environmental management is, in addition to land use planning, more common than a focus on disaster risk management and resilience, which is found more frequently in Central America and the Caribbean (see diagram III.6 and figure III.4). A substantial number of policies also address the potentials of local economies and rural development issues. In this subregion, policies aimed at developing the potential of local economies are more often linked to environmental management policies than they are in other subregions. Examples include Brazil's National Policy for the Sustainable Development of Traditional Peoples and Communities of 2006 and its 2002 Federal Decree No. 4,297 on ecological/economic zoning and the 2014–2022 Ecuador-Colombia Binational Border Integration Plan.

Diagram III.6

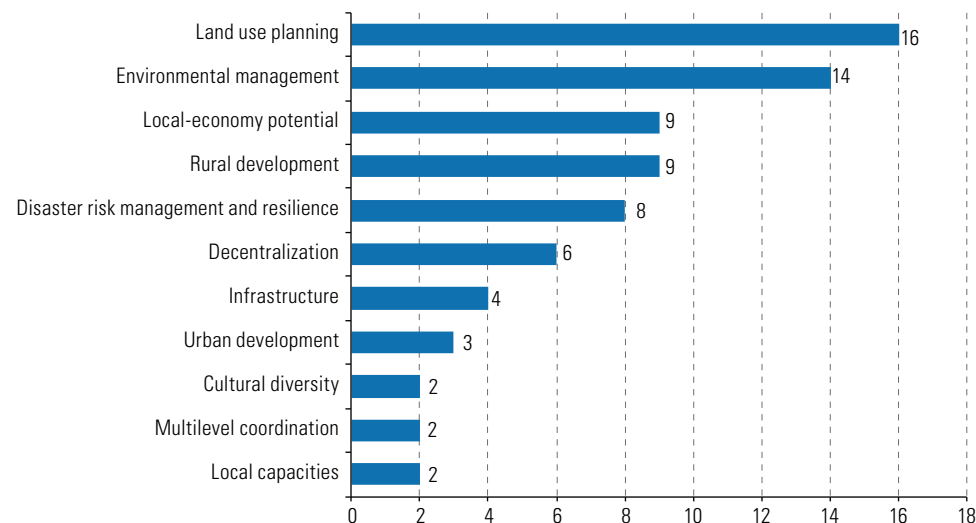
South America: recurring themes in territorial development policies



Source: Latin American and Caribbean Institute for Economic and Social Planning (ILPES), on the basis of the analysis of the respective plans and policies.

Figure III.4

South America: issues addressed by territorial development policies



Source: Latin American and Caribbean Institute for Economic and Social Planning (ILPES), on the basis of the analysis of the respective plans and policies.

(d) The cluster or family of territorial development policies

The policies covered in this study are an assemblage of strategies that have been designed at different points in time and that exhibit varying orientations and emphases. They address a highly complex constellation of issues in their past, present and future dimensions. This cluster displays some aspects that are shared by the entire region, while others are specific to a given subregion or country.

The territorial development policies in place in the region during the early twenty-first century reflect three different approaches or perspectives, each of which is associated with a particular span of time, as described in chapter I: (i) a central orientation; (ii) local/territorial initiatives; and (iii) a combination of the two approaches. None of the individual policies being analysed here exemplifies any of these approaches in its pure form; instead, they all merge differing features of each.

Of these three general approaches, those associated with the first period (prior to the 1980s) and the third (the twenty-first century) are much more evident today than the approach associated with the second period (the 1980s and 1990s). The latter type of policy, which favoured decentralized initiatives, no longer figures nearly as prominently as it once did. While the territories' self-initiated undertakings are still important, it is clear that they no longer play the leading role that they did in the 1990s.

An abiding awareness of this diversity is important if a successful transition is to be made towards the construction of an ecosystem of territorial development policies. An in-depth, discerning assessment of the trade-offs and inconsistencies, gaps and complementarities to be found in this evolving ecosystem will be called for if the region is to piece together a structure based on the synergy and convergence of the efforts of all the various stakeholders concerned.

D. Development plans and their dialogue with territorial development policies

The analysis of territorial development policies (although they may not have been explicitly identified as such) undertaken in this chapter indicates that a spectrum of policies began to take shape in the twentieth century and then became much more defined in the early decades of the twenty-first century. This has ultimately given rise to what has been referred to here as a family of territorial policies. A cluster of public policies informed by a territorial perspective has taken shape even though those policies are not necessarily interconnected within a given country or linked to international or regional agreements signed by the countries of the region, such as the 2030 Agenda for Sustainable Development (2015), the New Urban Agenda adopted at the third United Nations Conference on Housing and Sustainable Urban Development (Habitat III) (2016), the Montevideo Consensus on Population and Development (2013) or the Sendai Framework for Disaster Risk Reduction 2015–2030.

Each country thus has a set of policies that could be likened to a family of national policies but that does not actually constitute a territorial development policy ecosystem. In order to form such an ecosystem, that set of policies, plans and regulatory instruments would have to have a territorial impact. An appropriate understanding and management of such a policy ecosystem would pave the way for the synergistic interaction of its components. Such an ecosystem would presumably also guide and facilitate the design, implementation and assessment of public policy actions that would have a greater impact in terms of the reduction of territorial inequalities and the generation of greater capacity at the territorial level and among local stakeholders.

Planning as an instrument for the implementation of public policies began to gain in importance in the region in the late twentieth and early twenty-first centuries. During that time period, many of the 33 countries of Latin America and the Caribbean drew up national development plans, long-term agendas or government plans. These initiatives gave rise to a number of instruments of this type which have now been systematized and shared via the Regional Observatory on Planning for Development in Latin America and the Caribbean.⁶

⁶ See [online] www.observatorioplanificacion.cepal.org.

In view of these developments and the importance of planning functions and their implications for territorial development in each country, 27 different development or government plans will be explored here. The point of this exercise is to see to what extent the subject of territorial development figures among the objectives of these plans and to determine whether there are ongoing interactions or links between these territorial development policies and the national plans that have been examined in the course of this study.

1. Analysis of development plans or government plans by perspective

These 27 development plans or government plans were reviewed in order to determine whether they embodied a cross-cutting or focused territorial perspective. In the course of this analytical exercise, it became clear that the plans of Caribbean countries (13) would have to be considered separately because they could not be classified on the basis of their perspective, as they address the country as a whole and do not distinguish between different territories within it. Saint Lucia is an exception, as it territorializes its objectives and uses highly detailed maps. To some extent, Suriname (which was grouped together with the Caribbean countries in this study) is another exception, since it has regional strategies, explicitly refers to the need to reduce territorial disparities and sets out urban development objectives. However, given the near absence of plans having a territorial perspective in these countries, a perspective-based analysis was not conducted for this subregion.

In order to determine the type of perspective associated with a given plan, the following criteria were used:

- Plans with a cross-cutting perspective take territorial factors into consideration in setting out each of their objectives or take the differing traits of the various territories in the country into account in the determination of their lines of action, goals and indicators.
- Plans with a focused perspective are those in which territorial factors are taken into account only in some of their objectives or in specific areas or those that have a special section devoted to a given territory in particular.

Table III.2 presents the country classification and the planning instruments of each one.

Table III.2
Countries' development or government plans: focused or cross-cutting perspectives

Country	Planning instrument	Focused	Cross-cutting
Argentina	Government Objectives 2015–2019	✓	
Bolivia (Plurinational State of)	Economic and Social Development Plan within the framework of the Integral Development Plan for the Right Way of Living (Sumak Kawsay) 2016–2020		✓
Brazil	Multi-Year Plan 2016–2019	✓	
Chile	Government Programme 2018–2022	✓	
Colombia	Foundational Elements for the National Development Plan 2018–2022		✓
Costa Rica	Bicentenary National Development and Public Investment Plan 2019–2022		✓
Ecuador	National Development Plan 2017–2021: lifelong plan for all		✓
El Salvador	Five-Year Development Plan 2014–2019: A productive, educated and safe El Salvador		✓
Guatemala	K'atun National Development Plan: our Guatemala 2032		✓
Honduras	The Plan of the Nation 2010–2022	✓	
Nicaragua	National Human Development Plan 2018–2021: times of victory	✓	
Panama	Strategic National Plan of State: Panama 2030	✓	
Paraguay	National Development Plan: Paraguay 2030	✓	
Peru	Bicentenary Plan: Peru 2021	✓	
Total		8	6

Source: Latin American and Caribbean Institute for Economic and Social Planning (ILPES), on the basis of the analysis of the respective plans and policies.

A slight leaning towards more focused territorial perspectives can be detected from this review of the planning instruments used by the countries of the region, and this preference is more marked in the South American subregion. The exceptions in this case are Colombia, Ecuador and the Plurinational State of Bolivia, whose plans specify territorial factors in each of their objectives.

2. Development plans or government plans: thematic areas of emphasis

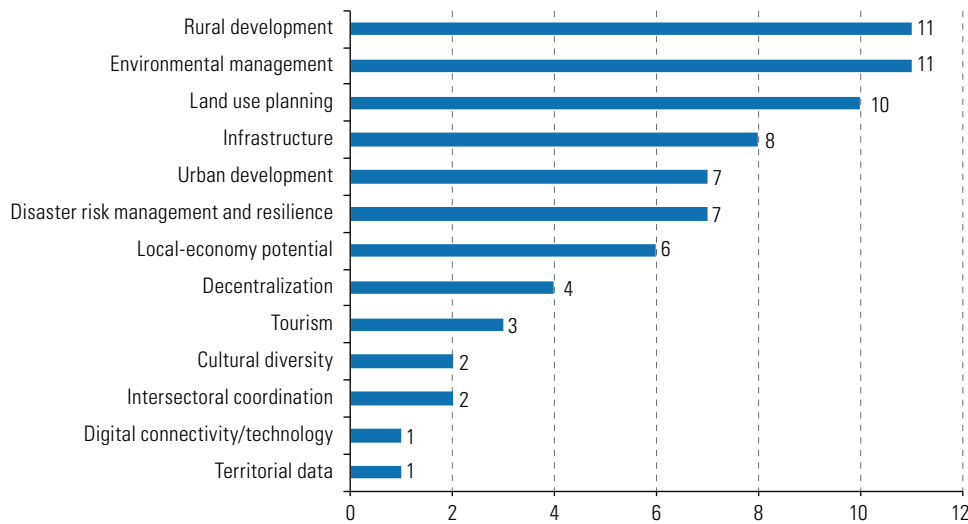
The second category of analysis refers to the issues addressed by these plans. A total of 15 subject areas were selected for use in classifying these plans on this basis (see diagram III.3).⁷ As a next step, their areas of thematic emphasis were identified by examining the plans to determine which issue or issues they characterized as the most important ones for the country. The criteria used for this determination were as follows:

- The extent to which the issue was explored and addressed (the more in-depth the treatment of an issue, the greater the importance attributed to it)
- The relative hierarchical placement of the strategic lines of action set out for dealing with the issue

The results of this analysis are presented below.

Figure III.5

National development plans: thematic areas of emphasis



Source: Latin American and Caribbean Institute for Economic and Social Planning (ILPES), on the basis of the analysis of the respective plans and policies.

The most prominent thematic areas of emphasis are rural development and environmental management, followed, in order of frequency, by land use planning, infrastructure, urban development, disaster risk management and resilience, and the potential of local economies.

All the plans address the issue of environmental management, as environmental sustainability is part of a cross-cutting approach to sustainable development in the majority of the plans. Environmental protection, waste management, the green economy and the protection of natural resources and reserves are of concern to the entire region. On the basis of the criteria used in this analysis, however, some plans can be seen to place greater importance on these issues than others. This is the case of the plans of Barbados, Belize,

⁷ For the analysis of these two categories, a four-person team worked in consensus-based, individual and then group sessions to determine whether the underlying concept of territorial development was a focused or cross-cutting one and how the plan pursued territorial development objectives at the national level. The team members sought to detect the most thoroughly developed categories in each plan as a basis for identifying the thematic areas of emphasis in each case.

the Dominican Republic, Ecuador, Guyana, Honduras, Jamaica, Panama, the Plurinational State of Bolivia, Saint Vincent and the Grenadines, and Trinidad and Tobago, most of which, as the reader will note, are countries in Central America or the Caribbean.

Much the same situation is found in the case of the issue of rural development; 24 planning instruments that address this issue were identified, but those of 11 countries assign it special importance: Bahamas, Belize, Brazil, Chile, Colombia, the Dominican Republic, Guatemala, Honduras, Peru, the Plurinational State of Bolivia, and Saint Vincent and the Grenadines.

The issue of land use planning is a thematic area of emphasis in 10 of the plans, followed by infrastructure, urban development, disaster risk management and resilience, and local-economy potential. Decentralization also continues to be an important development issue: 14 plans deal with it, although only 4 go into the subject in detail or place major importance on it.

Each of the plans' objectives or lines of action relating to the most recurrent issues (rural development and environmental management) are outlined in section B of annex III.A1.

(a) Thematic areas of emphasis in plans, by subregion

Trends in terms of the thematic focus of these plans can be broken down by geographic area. Figure III.6 graphs the distribution for the Caribbean subregion.

Figure III.6

The Caribbean: thematic focus of plans



Source: Latin American and Caribbean Institute for Economic and Social Planning (ILPES), on the basis of the analysis of the respective plans and policies.

In the Caribbean, attention is focused on risk management as a tool for the climate change mitigation and adaptation and for shaping more resilient territories. Many of the objectives associated with this area of emphasis are included in the Barbados Growth and Development Strategy 2013–2020, which deals with improving disaster management; building climate-change and economic resilience; developing a holistic approach; forming partnerships among government, the private sector and local communities; devising a regional framework for common norms on social protection; updating the National Multi-Hazard Disaster Management Plan; developing a modern disaster management system; and gaining access to climate change funding from the various climate funds, such as the Adaptation Fund and the Green Climate Fund.

One of the main lines of action set out in the 2017 Framework of the Guyana Green State Development Strategy and Financing Mechanisms deals with resilient infrastructure and spatial development, particularly in the areas of coastal protection and road and rail transport.

The objectives of the National Resilience Development Strategy 2030 of Dominica include establishing a comprehensive risk management framework and strengthening preparedness for effective emergency response at the national and local community levels. This vision is clearly oriented towards risk management and resilience. In fact, Dominica is working to transform itself into the world's first climate-resilient country. The Strategy also includes disaster management legislation and frameworks.

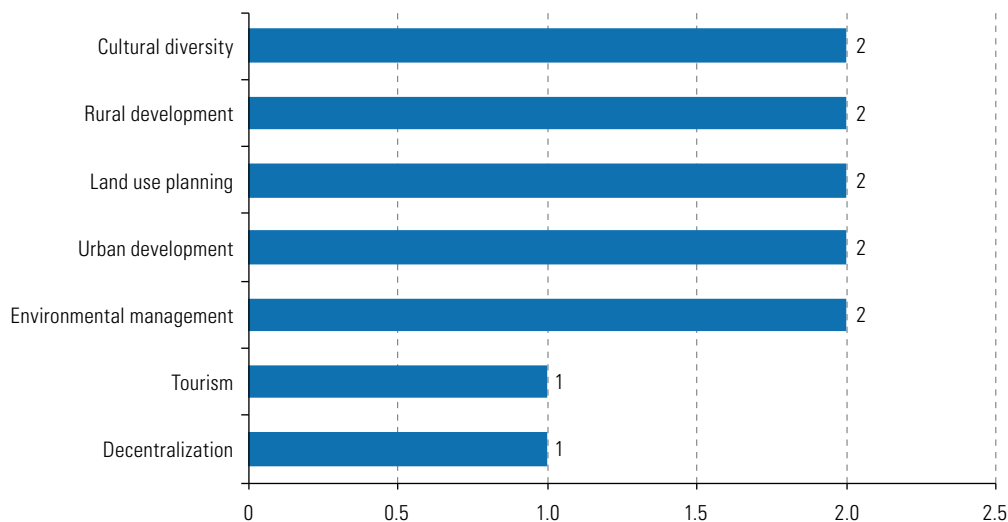
Environmental management is seen as a correlate of the focus on disaster risk management. For example, the Barbados Growth and Development Strategy 2013–2020 couples a holistic approach to disaster risk management designed to forge economic and climate-change resilience with the objectives of transitioning to a green economy, promoting sustainable natural resource use, reducing solid waste levels, establishing marine and terrestrial protected areas and strengthening the conservation management and use of coastal zones. Mention should also be made of the National Economic and Social Development Plan 2013–2025 of Saint Vincent and the Grenadines, which calls for the promotion of green growth, the reinforcement of natural resource (soil, forests, marine areas) conservation, the enforcement of land-use zoning legislation in order to protect critical ecological balances and biodiversity, and the reinforcement of the existing legal framework with a view to promoting integrated approaches to marine management and reducing environmental degradation.

(b) Thematic areas of emphasis in plans in Central America

Figure III.7 reflects the situation in Central America, where no one issue stands out from the rest, although the emerging theme of cultural diversity is attracting increased attention, perhaps because this subregion has a large indigenous population.

Figure III.7

Central America: thematic focus of territorial development plans



Source: Latin American and Caribbean Institute for Economic and Social Planning (ILPES), on the basis of the analysis of the respective plans and policies.

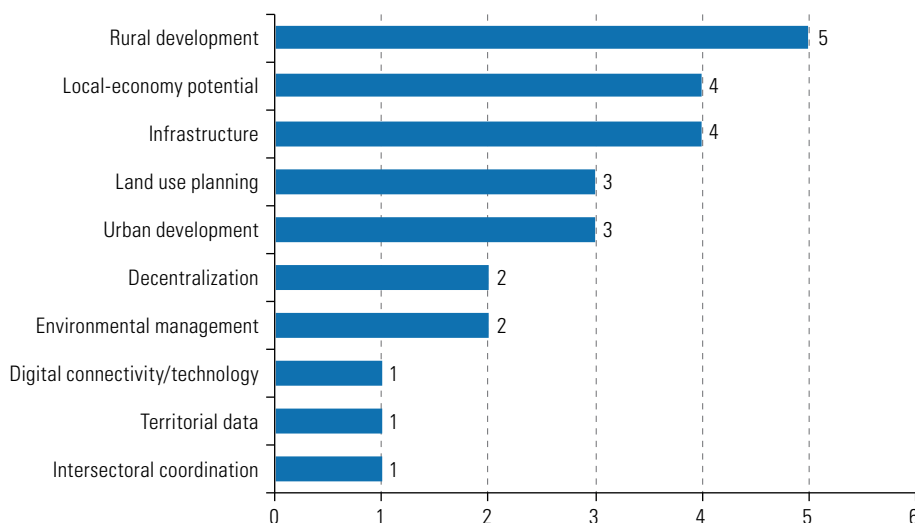
The 2032 K'atun National Development Plan: Our Guatemala is one of the plans in the subregion that places emphasis on cultural diversity. It focuses on enhancing the participation of Guatemala's indigenous population in territorial management and land-use planning processes with a view to the development and conservation of natural resources, promoting the management of communal lands in accordance with the indigenous customary laws of the Maya, Xinka and Garifuna peoples, and bringing about a transformation in the approach taken to the protection and conservation of the country's heritage by institutionalizing the recognition and appreciation of the wisdom and knowledge of the nation's peoples. This focus is also found in the Panama 2030 National Strategy and Vision, which calls for attaining greater inclusion by combating discrimination and ensuring full respect for the human rights of all population groups in the country. Its objectives include an explicit focus on the country's indigenous areas and regions. Under Panama 2030, interculturality is seen as a cross-cutting aspect of policy interventions and as one of the emerging themes that will help to define public policy in the coming years. This approach is expected to "promote the necessary adjustments in line with the traits, needs and interests of the [country's] different cultures and their various forms of social interaction" (Consejo de la Concertación Nacional para el Desarrollo, 2017, p. 18).

(c) Thematic areas of emphasis in plans in South America

Figure III.8 reflects the different areas that are emphasized in territorial development plans in South America. The issue receiving the most widespread attention is rural development, followed by the potential of local economies and infrastructure. These last two issues may be directly related to the size of these countries and their geographic configurations, which pose very real challenges in terms of the promotion of territorial development.

Figure III.8

South America: thematic focus of territorial development plans



Source: Latin American and Caribbean Institute for Economic and Social Planning (ILPES), on the basis of the analysis of the respective plans and policies.

The countries that place the greatest emphasis on rural development issues are Brazil, Chile, Colombia, Peru and the Plurinational State of Bolivia. In its Bicentenary Plan: Peru to 2021, Peru designates the State's agrarian and rural development policy as one of the core components of its strategy for strengthening the country's competitive position. This strategy, in which a great deal of attention is devoted to economic development, calls for efforts to boost employment and productivity in rural areas as a means of reducing inequalities and helping to ensure that poor, rural women heads of household who are participating in any of the country's

social programmes learn about and make use of the available financial savings and credit mechanisms. The plan also includes a strategic programme aimed at raising the productivity levels of small-scale agricultural producers. This same section of the plan also addresses the issues of health, technology, education, access to public services and territorial management in rural areas.

Peru's development plan also highlights the potentials of local economies. The section of the plan dealing with regional development calls for efforts to help the various regions in the country to shape their own productive profile by engaging in activities that are based on their particular potentials and their competitive and comparative advantages while complementing those of other regions in the agrarian, fishery, mining and tourism sectors. Reference is also made to the need to establish support mechanisms for the development of industrial parks and production clusters and chains serving the national, regional and local markets as a way of strengthening and expanding the domestic market. Another of its objectives is to create a national brand identity in the international market that reflects Peru's competitive advantages and highlights its flagship products with a view to opening up new markets for the country.

E. A dialogue between development plans and territorial development policies

An analysis of territorial development policies (or at least the type of analysis undertaken here, which is based on the corresponding policy documents) shows that there are a cluster of policies for which there is neither an inter-policy dialogue nor a dialogue between those policies and the relevant international policy frameworks.

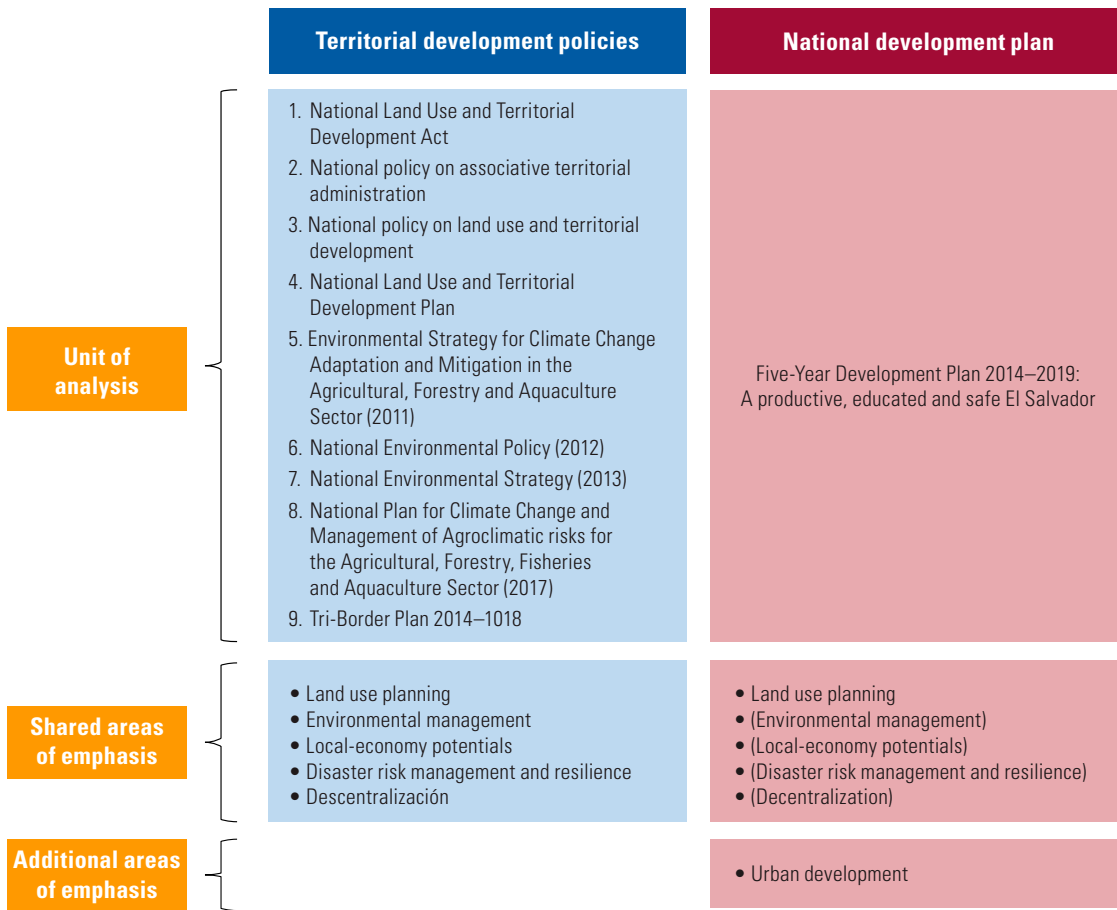
The next step is to analyse the extent of the dialogue between territorial development policies and development plans. The idea here is to initiate a textual dialogue between these policies and plans in order to see where such a dialogue might lead:

- Such a comparison cannot be attempted in the case of the different types of perspectives, however, because, for the reasons stated earlier, this category of analysis was applied only to the countries' development plans. National development plans and government plans in the region tend to embody a focused perspective, with territorial considerations being cited in one or a few of the plans' objectives rather than being a cross-cutting factor.
- Nor can a comparison be conducted on the basis of the territorial approach being used, since the planning instruments being dealt with here have different scopes.
- The three most common thematic areas of emphasis in territorial development policies are disaster risk management and resilience, land use planning and environmental management. In the case of the plans, they are rural development, environmental management and land use planning. These two kinds of instruments therefore have two main subject areas in common. This provides an indication of the types of areas towards which resources will be channelled at the territorial level if these policy directions are pursued: environmental management and land use planning.

Generally speaking, then, although rural development is repeatedly cited as a focus of development plans, policies on this subject are far less common. This points to a possible gap between what the countries of the region seek to achieve in this area and the planning tools that they have for doing so. In the case of environmental management and land use planning, however, there is a greater convergence between the importance of the role they are assigned in the countries' plans and in their policies and strategies.

A consideration of the cases of El Salvador and Saint Lucia can serve to illustrate the kind of textual dialogue that will shed light on the areas in which policies and development tools converge and diverge and on the implications that this has at the territorial level (see diagrams III.7 and III.8).

Diagram III.7

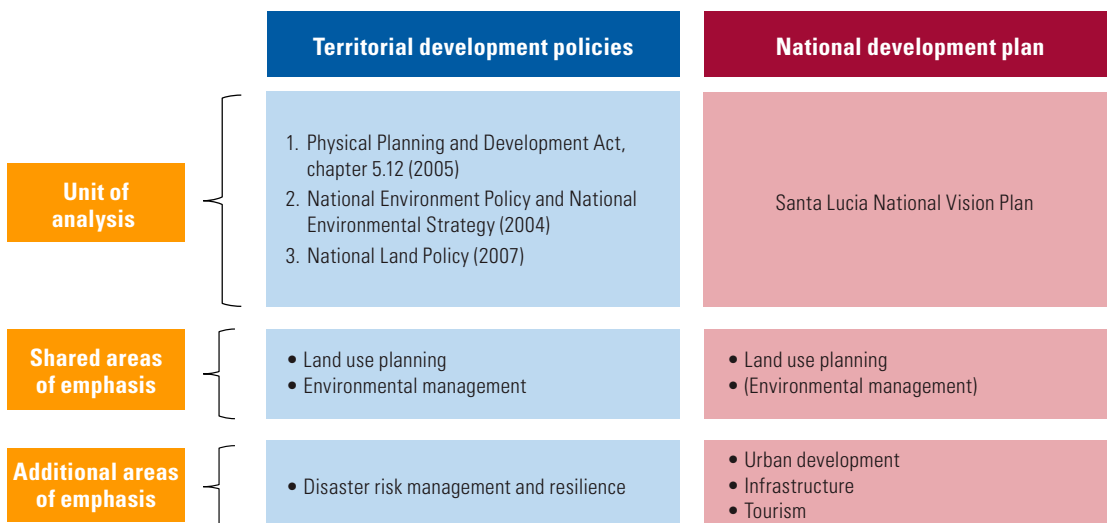
El Salvador: a dialogue between its development plan and its territorial development policies^a

Source: Latin American and Caribbean Institute for Economic and Social Planning (ILPES), on the basis of the analysis of the respective plans and policies.

^a The entries shown in brackets were named but were not highlighted to an extent that would qualify them as “areas of emphasis” for the purposes of this study.

Diagram III.8

Saint Lucia: a dialogue between its development plan and its territorial development policies



Source: Latin American and Caribbean Institute for Economic and Social Planning (ILPES), on the basis of the analysis of the respective plans and policies.

El Salvador is an example of a country that has created a wide range of territorial development planning tools. Its policy objectives vary according to the subject area concerned, but it has devoted a great deal of attention to land use planning, environmental management, local-economy potentials, disaster risk management and resilience, and decentralization.

In addition to the fact that territorial considerations figure in a number of its objectives, the Five-Year Development Plan 2014–2019 has a special section on territorialisation and therefore can be characterized as having a cross-cutting perspective. It entails a number of strategic undertakings, one of which is to create more connected, balanced, polycentric territories capable of realizing their potentials. The importance attributed to urban development stems from El Salvador's quest to become a polycentric country with integrated cities. No regulatory or other sorts of government documents on urban development policies were to be found, however, so, although this subject area should not be categorized as an area of divergence, it is one in which the types of planning tools being analysed here are not in evidence.

It is clear that land use planning in El Salvador is strongly influenced by the country's desire to organize its territorial units and land use patterns. Its development plan's objectives include the implementation of the National Land Use and Territorial Development Act and progress towards sustainable territorial management, thereby linking up the plan with one of the policy tools that have been analysed in this study.

In addition to its emphasis on land use planning, El Salvador's development plan sets out objectives relating to environmental management, local-economy potentials, disaster risk management and resilience, and decentralization, all of which are addressed by government policies as well. Not enough attention is devoted to these issues to qualify them as thematic areas of emphasis in this study, however. Even so, by way of example, two of the objectives in connection with the realization of local-economy potentials have to do with inclusive development at the territorial level in line with each territory's productive potentials and inclinations and with expanding the "One People, One Product" Strategy, which is aimed at promoting territorial economic development on the basis of distinctive local industries composed of microenterprises and small businesses. The development plan's environmental management objectives deal with the sustainable development and protection of marine and coastal areas as a basis for harnessing the resources to be found in territorial waters and the furtherance of sustainable territorial management.

Chapter 5.12 of the Physical Planning and Development Act deals with land use planning and provides for the preparation of physical plans to ensure the appropriate use of all public and private lands on the island. The country's environmental policy is designed to ensure that the development process is an environmentally sustainable one while optimizing the environmental contribution to the economic, social and cultural dimensions of development. Finally, the National Land Policy focuses on guiding the use, management, development and administration of Saint Lucia's land resources to optimize their contribution to sustainable development. In addition to land use planning, this policy also deals with environmental management and disaster risk management and resilience.

Saint Lucia is the only country in the Caribbean whose development plan sets out its territorialized strategies in full. (Suriname would be the second if it were to be considered part of this subregion.) Its plan includes maps and diagrams that trace its territorialized objectives, and territorial management and development are the chief focus of the plan as a whole. Different types of sustainable land use are defined in such areas as transport, urban development and tourism. In addition, the entire plan is divided into territorially based sections for the north-east, southern, west-central and north-west quadrants of the island.

The plan's additional areas of emphasis play a complementary role, as the portion on infrastructure, for example, is a component of one of the objectives of the Physical Planning and Development Act. This law was passed in 2005, and the development plan was approved in 2008. This is one of the rare cases in which the relevant official documents make explicit reference to the link between planning tools and the national development strategy.

Other cases in which policies are explicitly linked with development plans are the Dominican Republic's Strategic Agricultural Development Plan 2010–2020, which establishes a clear-cut link with various sections of the National Development Strategy 2030, and Dominica's National Biodiversity Strategy and Action Plan 2014–2020, which is aligned with the 2011–2020 National Plan, which calls for the creation of a "nature island"

F. Conclusions: towards an ecosystem of policies and plans for strengthening territorial development in the region

A number of important conclusions can be drawn from the broad review and analysis of territorial development policies and instruments in each of the countries of the region that has been presented here.

A first observation is that the family of territorial development policies in the region is a very large and varied one. These policies are not always labelled as such, and they take differing approaches to land use planning, environmental protection, decentralization, resilience and other issues. Nonetheless, they all belong to the same family because, as explained earlier, regardless of their name, they include objectives dealing with the reduction of territorial inequality, respect for diversity and/or the creation of local capacities for development. The territorial development tools available to the countries of the region are therefore not confined to the policies that bear that exact name.

The policies covered in this study are an assemblage of strategies that were formulated at different points in time and that exhibit varying orientations and emphases. They address a highly complex constellation of issues in their past, present and future dimensions. This cluster of policies exhibits some aspects that are found throughout the region and others that are specific to a particular subregion or country. The territorial development policies in place in the region reflect three different approaches or perspectives, each of which is associated with a particular time span, as described in chapter I: (i) a central orientation; (ii) local/territorial initiatives; and (iii) a combination of the two approaches. Of these three general approaches, those associated with the first period (prior to the 1980s) and the third (the twenty-first century) predominate. An abiding awareness of this diversity is important if a successful transition is to be made towards the construction of an ecosystem of territorial development policies. An in-depth, discerning assessment of the trade-offs and inconsistencies, gaps and complementarities to be found in this evolving ecosystem will be called for if the region is to piece together a structure based on the synergy and convergence of the efforts of all the various stakeholders concerned.

This review of 153 policies relating to territorial development issues has served as the basis for the construction of a proposed taxonomy that has been built around a number of specified criteria, but other useful criteria may be put forward in the future. Apart from offering an overview of the existing situation at the national and regional levels, the factors and criteria that have informed the construction of this taxonomy may prove to be extremely useful in gaining an understanding of this policy cluster as a whole and in devising strategies for converting the existing family of territorial policies into a genuine ecosystem.

A cross-check of these plans and policies is a first step towards determining to what extent these instruments of public action match up with each other or fail to do so in each country. This study has shown that the territorial dimension is present in just a few objectives of each of the 27 national development or government plans analysed here. The main thematic areas dealt with in these instruments have been seen to be rural development, environmental management and land use planning. A comparison between plans and policies indicates that the areas in which they tend to overlap are environmental management and land use planning. This comparison has been based entirely on the official documents that set out these policies and plans, as no empirical evidence of the sort that might be provided by surveys or interviews was available.

Finally, it is important to point out that it is not enough simply to have this kind of cluster of territorial plans and policies (153 policies and 27 development or governance plans). It is essential for every country in the region to appreciate the need to transition towards the creation of a true ecosystem of territorial development policies. And in order for this to happen, conditions have to be created that will be conducive to the formation of a habitat in which existing policies (whatever name they happen to go by) can interact, and a structure or scaffolding has to be pieced together, with synergy and coordination being the glue holding its various components together. As will be seen in chapters IV and V, this same type of structure will be needed for the region's territorial development information systems and financing policies and instruments.

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Annex III.A1

Working methodology for the review of national development plans and territorial development policies

A. Methodology

A number of decisions were taken which shaped the research project presented in this chapter. Those decisions are detailed below:

- **Research subjects:** The first step was to examine the national development plans or, in their absence, government plans of each country in the region. The next was to analyse the national policies of each country that were linked in some way to territorial issues. A total of 27 national plans were studied. This analysis did not cover the national plans that were not up to date or that were in the process of being drawn up (the Bolivarian Republic of Venezuela, Cuba, Grenada, Mexico, Saint Kitts and Nevis, and Uruguay).

It proved difficult to identify the relevant policies simply by looking for those bearing the name “territorial development policies.” The selection was therefore extended to include public policies that refer to the territorial dimension or whose objectives include the reduction of territorial inequalities or that focus on building capacity at the territorial level.

- **Sources consulted for the selection of policies and plans:** The primary source of information on the development plans and governance plans of the countries of the region was the database of the Regional Observatory on Planning for Development in Latin America and the Caribbean of the Latin American and Caribbean Institute for Economic and Social Planning (ILPES). For the identification of the relevant policies, use was made of a combination of databases constructed by ILPES consultants in the course of their preparation of publications issued in 2017 (see ECLAC, 2017), online surveys conducted by territorial development experts and the information available on the countries’ government websites.
- **Analytical tools used in the research:** A total of 153 policies were examined. A comparative matrix was constructed for this purpose that included entries such as the year of issuance, the lead agency, a brief description of the policy, its objectives, the classification of its cross-cutting or focused perspective, its territorial scope and the subject areas that it highlighted.

In the case of the countries’ development of government plans, since each document is different, the analysis focused on the plans’ objectives, purposes and strategic lines of action or strategies. A comparative matrix was also created that included the name of the plan, the lead agency, the perspective (cross-cutting or focused) and the subject areas that figured the most prominently.

B. Thematic areas of emphasis in the categories that appear the most often in national development plans and their associated objectives

Table III.A1.1

Thematic areas of emphasis in the category of rural development

Country	Rural development
Bahamas	Maximizing the potential of agroindustry, extending the coverage of agricultural activities to include neighbouring islands, expanding financing, improving agricultural policy and its administration, strengthening the agricultural sector as a whole. Formulating equitable land policies, amending existing legislation to permit the productive use of collectively owned property.
Belize	Strengthening the sector as a means of boosting production and productivity, reinforcing the Belize Rural Development Programme, creating linkages between agriculture and other sectors such as tourism, developing the agritourism industry.
Bolivia (Plurinational State of)	Boosting agricultural production, with emphasis on community-based family farming and campesino agriculture; overhauling the agrarian property system.
Brazil	The programme on sustainable agriculture focuses on food security, access to public services and economic opportunities in rural and urban areas and the promotion of sustainable rural development. The programme's objective is to support the expansion of agricultural output while creating jobs, generating income and foreign exchange, and opening up access for the rural population to public goods and services. Agrarian reform, strengthening the governance of the agrarian system and promotion of the aspects of agrarian reform that uphold the rights of indigenous peoples and traditional peoples and communities.
Chile	Implementing the National Rural Development Policy; establishing an external observatory to track policy implementation, progress and outputs; setting up an intersectoral committee (Committee of Ministers of Rural Development and a technical secretariat); improving campesinos' working conditions and crop financing and insurance systems. Ensuring the sector's water supply. Strengthening programmes for the regularization of rural households' land titles and developing a public registry of indigenous lands and waterways, undertaking an assessment of the existing policy on land grants or title transfers as a recognized mechanism of redress to which the Chilean State is committed.
Colombia	Alliance for Food Security and Nutrition: citizens who are sound in both mind and body. Line 5: Rural areas moving forward: a partnership working to galvanize development and productivity in rural Colombia. Creating the necessary conditions to permit the land tenure system and the organization of production to drive agricultural development, productive inclusion and legal certainty; promoting changes in agricultural production patterns through the organization of production and the development of agro-industrial clusters and value chains that bring together industrial producers and small and medium-sized producers; incentivizing investment in rural areas by overhauling the National Agricultural Credit System and the way in which market and climate risks are handled; boosting rural households' income-generation capacity by enhancing household members' employability and ability to undertake non-agricultural economic activities; modernizing and consolidating the sector's institutional framework and increasing its technical sophistication; promoting inter-agency coordination and interaction with a view to driving change in agricultural and rural production patterns at the territorial level.
Dominican Republic	Improving roadway and public utility infrastructure in rural areas and in outlying urban zones; developing high-density rural settlements in order to facilitate economies of agglomeration in access to basic public services and effective risk management; boosting the productivity, competitiveness and environmental and financial sustainability of agricultural production chains in order to strengthen food security, taking advantage of export potential, creating jobs and generating income for the rural population (14 lines of action).
Guatemala	The K'atun National Development Plan: Our Guatemala 2032 and integral rural development represent a strategic, high-priority line of action; enhancing the functionality of the entire cycle of the National Comprehensive Rural Development Policy; strengthening legal arrangements and mechanisms such as those supporting land title regularization, land tenure systems and legal certainty for land-related matters; designing and implementing strategies for promoting sustainable production. Establishment of the goal that, by 2032, the rural population will be reaping the fruits of sustainable human development.
Honduras	Closing gaps in rural electrification and expanding the coverage of agricultural irrigation systems in order to maintain food security; revamping the rural road system in order to enhance commercial opportunities for thousands of small-scale agricultural producers throughout the country; reducing the rate of illegal land occupation to under 5%.
Peru	Converting campesino agriculture into rural marketing enterprises; strengthening agrarian producers and promoting investment mechanisms.
Saint Vincent and the Grenadines	Revitalizing the farming and fishery sectors; strengthening rural development; improving the image of agriculture in order to promote young people's involvement in the sector; formulating rural development policies; boosting the farming sector's productivity, efficiency and competitiveness; augmenting the agricultural sector's contribution to the domestic economy.

Source: Latin American and Caribbean Institute for Economic and Social Planning (ILPES), on the basis of the respective territorial development policies.

Table III.A1.2

Thematic areas of emphasis in the category of environmental management and sustainability

Country	Sustainability, environmental management
Barbados	Making the country's economy green, promoting sustainable natural resource use, reducing levels of solid waste, establishing protected marine and terrestrial areas, promoting conservation in the management and use of coastal areas. Mention is also made of plans and laws that will turn these aspirations into planning tools.
Belize	Using a cross-cutting approach to the incorporation of green technologies; generating electricity from renewable energy sources; achieving sustainable forms of environmental, ecosystem, water resource and waste management; curbing pollution; strengthening the implementation of the National Protected Areas System.
Bolivia (Plurinational State of)	Development is seen as an integral process entailing respect for Mother Earth's rights. Consistent strategies are to be developed for sustainable environmental management and for ensuring the quality of water for human consumption in both urban and rural areas. The latter strategies will form part of the Water Quality Programme to be implemented by public water utilities. Environmental standards and regulations are to be revamped in order to align them with the life-systems management approach and to promote a better balance between conservation and integral development that is in harmony with Mother Earth. Efforts are to be made to ensure integral, sustainable forms of forest management. Policies, programmes and projects will be developed to promote integral, multiple-use (e.g. irrigation, industry and human consumption) water resource and river basin management. A plurinational system of protected areas will be created.
Dominican Republic	Sustainable environmental management and suitable climate change adaptations. Environmental sustainability, natural resource conservation and water management.
Ecuador	Boosting the growth of the urban and rural economies through the sustainable, value-adding use of renewable resources while fostering shared social responsibility and the development of the bio-economy. This subject is dealt with extensively, and systems are proposed for the integral management of the environment, waste and emissions. Priority is placed on reforestation, research on sustainable production methods and the management of activities involving the use of natural resources, with emphasis on the Amazon rainforest and coastal areas. The plan also calls for water conservation and the creation of a comprehensive system of protected areas.
Guyana	The plan takes a cross-cutting approach to sustainability. Different sections address environmental issues, notably the section on sustainable natural resource management.
Honduras	Expanding the share of renewable energy in the country's electrical power matrix to 80%. By 2034, Honduras is to be the leading Central American country in the sustainable use of natural resources, with emphasis on generating power and obtaining food, minerals and associated products from the forestry sector. By 2022, Honduras is to have consolidated an institutional structure that will enable it to promote and maintain climate change adaptation and mitigation actions. The private sector will have taken ownership of energy efficiency and public-private partnerships will engage in joint research on the use of natural energy sources for power generation.
Jamaica	Promoting eco-efficiency and the green economy. Environmental concerns are to be incorporated into economic and social policies and decision-making. Contributing to the effort to reduce the effects of climate change through the sustainable management and use of natural and environmental resources, the development and implementation of mechanisms for the conservation of biodiversity and ecosystem management, and efficient waste management.
Panama	Establishing an environmental management and sustainable production system in all of the production sectors of the economy, including tourism, agriculture, the forestry industry and fisheries; reducing the environmental, economic and social impact of climate change on people's day-to-day lives; taking action to ensure the integral management of catchment areas and the conservation of ecosystems and their biodiversity by working with the population in areas and regions of the country containing protected areas or critical, vulnerable, underrepresented or high-priority ecosystems; ensuring the conservation of coastal and marine resources through the application of the relevant international standards and agreements.
Saint Vincent and the Grenadines	Promoting green growth, enhancing natural resources management and the conservation of soil, forest and marine resources; enforcing land-use zoning laws to protect biodiversity and maintain a critical ecological balance; strengthening the regulatory framework by incorporating a marine resource management approach and reducing environmental degradation.
Trinidad and Tobago	The protection of biodiversity and the ecosystem should be embedded in all areas of environmental governance and, to this end, new policies should be introduced or existing ones updated whenever necessary. The national policy framework includes environmental policy and policies on protected areas, forestry, wildlife, biosecurity, wetlands, climate change and waste recycling. An integrated coastal zone management policy is currently being developed. Other objectives include implementing the national recycling programme at the regional corporation level; implementing an integrated water resource management system, which will entail setting up an independent agency to regulate and administer the country's water resources; reclaiming degraded areas and protecting endangered species and coastal and marine areas.

Source: Latin American and Caribbean Institute for Economic and Social Planning (ILPES), on the basis of the respective territorial development policies.

C. Glossary

Table III.A1.3

Glossary of categories of thematic areas of emphasis

Category	Description
Cultural diversity	<p>This term refers to peaceful interaction among different cultures in a given geographical area shared by a group of persons or a society.</p> <p>Cultural diversity entails the different cultural expressions of a people, country or region which have, in turn, been influenced by various factors associated with the cultural forms of expression of other territories.</p> <p>Actions or strategies that assign value to multiculturalism and the collective identities of a given territory or territories fall into this category.</p>
Decentralization	<p>The term “decentralization” should be distinguished from “deconcentration”, although the two terms are often used interchangeably.</p> <p>Decentralization is a process involving government bodies having legal capacity in their own right, budgetary resources and government assets, and the authority to administer those funds. Deconcentrated bodies do not have legal capacity, nor do they have government assets or budgetary allocations of their own.</p> <p>A hierarchical relationship exists in the deconcentration processes, whereas, in the case of decentralization, the State acts as a guardian and performs an oversight role entailing implicit and explicit powers and authorities that are less restrictive than in the case of deconcentration processes (Gallo, 2011).</p>
Digital connectivity/technology	<p>This category of territorial development actions involves the use of technologies to increase connectivity and provide information that can contribute to territorial development.</p>
Disaster risk management and resilience	<p>Administrative and organizational decision-making and the operational knowledge developed by societies and communities involved in implementing policies and strategies and in building capacity for reducing the impact of natural hazards and environmental and technological disasters.</p> <p>Disaster risk management is the sum of the policies, strategies, standards and regulations, activities, operational capacities and other elements involved in averting, mitigating and coping with the adverse impacts of natural events, with the ultimate aim being disaster risk reduction (OPS, 2016). The contemporary meaning of the term “resilience” in this context refers to a three-pronged community-based, cultural process incorporating the elements of compensatory action, protection and challenges. Resilience is thus defined as the capability to achieve a level of success that is acceptable to society in the face of shocks or adversity that would normally pose a serious threat in terms of a negative outcome (Evans and Reid, 2016).</p>
Environmental management	<p>This term refers to the concepts of sustainability and natural resource management, the protection of nature reserves, waste management and all the other actions involved in protecting the environment.</p>
Infrastructure	<p>This term, as used in this study, refers to the construction of large-scale infrastructure, such as roads and bridges, to improve connectivity.</p>
Land use planning	<p>The process of establishing order and regulating the organization of a given territory. In spheres of action of this type, spatialized power relations take form that give rise to clashes between the various socioeconomic interest groups existing at the territorial level.</p> <p>Today, land use planning is necessarily a multi-scale, multi-territorial process, as it deals not only with a combination of economic, social and cultural power relations within a single, defined area but also with relations among multiple scales and spatial forms in which power relations are manifest (Haesbaert, 2017, pp. 290–291).</p>
Local capacities	<p>This term refers to the technical and policy-based skills or capacities of local officials. The focus here is on strengthening local or subnational governments rather than the community.</p>
Local-economy potentials	<p>This term refers to the development and enhancement of the specific traits of a given territory or its comparative advantages.</p> <p>A person, business or country has a comparative advantage when the person or entity is able to produce a given product with fewer resources than another person, business or country. This is one of the fundamental concepts of international trade, in which relative, rather than absolute, production costs are the decisive factor. In other words, countries that have a given comparative advantage can produce specific types of goods at a lower cost than the rest of the world can.</p>
Multilevel coordination	<p>The coordination of action at different governmental levels (from the supranational to the local) aimed at conducting the business of government in the interests of the population.</p>
Urban development	<p>Urban development involves the horizontal and vertical growth of a city. Use is made of technology, but social and environmental factors that will improve the quality of life of the city’s inhabitants should not be overlooked (Silveira, 2017, p. 128).</p> <p>Any effort to create, revitalize or develop cities or territories or to improve conditions in them or enhance them falls into this category. The same is true of action aimed at promoting polycentrism or inter-city integration.</p> <p>Polycentrism is associated with the idea that, within any metropolitan centre, a multi-nuclear structure takes shape based on peripheral urban sub-centres. In other words, a city usually has an identifiable main centre or downtown area, but there are also a number of urban sub-centres that complement or compete with it. The emergence of this multi-nuclear structure is chiefly due to the increasing distances and rapid expansion of the original centres of metropolitan complexes in terms of both employment and infrastructure (Richardson, 1988, cited in Becerril-Padua, 2000).</p> <p>These urban sub-centres develop their own growing economies, thereby contributing to the deconcentration of employment as they become a source of employment and sites of commercial and recreational activity. They then reproduce the pattern of concentration exhibited by the main centre or downtown area, but on a smaller scale (Becerril-Padua, 2000).</p>

Box III.A1.3 (concluded)

Category	Description
Rural development	<p>This concept is closely related to the development of the agricultural sector, but in recent years the term has come to refer to a larger process that also entails efforts to improve and enhance rural locations at the territorial level.</p> <p>Rural development is now defined as a process of social change focused on fostering coordinated, endogenous action at the local level in rural territories (Amaral, 2017, pp.118 a 120).</p> <p>It also relates to the revitalization, empowerment and development of rural territories and to the regularization of land titles.</p>
Territorial data	<p>These data are obtained from georeferencing systems designed to capture, store, analyse and deploy large volumes of information from different sources at different scales in a given area. The data are used to further a territory's development.</p> <p>All actions aimed at obtaining and/or processing statistics, other types of information or information systems for territorial development purposes fall into this category.</p>
Tourism	<p>When tourism is seen as a means of territorial development, the focus is on the territory rather than on the tourism sector as such. Examples include the promotion of agritourism or ecotourism.</p>
Intersectoral coordination	<p>This term refers to the coordination or interlinkage of action taken by different sectors at the same level or differing levels of the State (ranging from the supranational to the local level) to implement government measures that are in the interests of the population.</p>

Source: Latin American and Caribbean Institute for Economic and Social Planning (ILPES), on the basis of Pan American Health Organization (PAHO), "Curso de aprendizaje: gestión del riesgo de desastres en salud", 2016 [online] <https://cursospaíses.campusvirtualesp.org/course/view.php?id=166&lang=en>; P. Gallo, "Descentralización y desconcentración: ¿excepciones a la improrrogabilidad de la competencia?", *Revista de la Confederación Estudiantil de Derecho Administrativo Hispanoamericano*, No. 3, January-June 2011; R. Silveira, "Desenvolvimento urbano", *Dicionário de Desenvolvimento Regional e Temas Correlatos*, M. Dhein and M. Riedl (coords.), Porto Alegre, Editora Conceito, 2017; M. Becerril-Padua, "Policentrismo en las ciudades latinoamericanas: el caso de Santiago de Chile", paper presented at the XXII International Congress of the Latin American Studies Association (LASA), Miami, 16–18 March 2000; J. de Moraes, "Desenvolvimento rural", *Dicionário de Desenvolvimento Regional e Temas Correlatos*, M. Dhein and M. Riedl (coords.), Porto Alegre, Editora Conceito, 2017; R. Haesbaert, "Ordenamiento territorial", *Dicionário de Desenvolvimento Regional e Temas Correlatos*, M. Dhein and M. Riedl (coords.), Porto Alegre, Editora Conceito, 2017.

An abstract painting featuring three large, overlapping circles. The left circle is primarily blue and purple. The middle circle is a mix of yellow, orange, and red. The right circle is blue and green. The background is a warm, textured yellow and orange.

CHAPTER

IV

Information for territorial development

Introduction

- A. Information and territorial development: their role in society and current public policy
- B. The territorial dimension of information
- C. Information and national territorial development plans: the situation in Latin America and the Caribbean
- D. Conclusions

Bibliography

Annex IV.A1

Introduction

The quality of processes to design, implement, monitor and evaluate public policies depends largely on the information available for decision-making at each point in time. Such information must be relevant, timely and integrable, not only to provide the right inputs at each stage of public policy processes, but also to foster dialogue, interaction and synergies among these processes.

As in previous chapters, this chapter highlights the diversity and wealth of initiatives that countries have been implementing, to produce information for territorial development, decision-making, transparency and participation. If these many initiatives can overcome the challenges relating to knowledge, characterization and integrated management, they can help consolidate a territorial development policy ecosystem in the countries of the region. Section A discusses the key role of information in development processes and its links to public policy. Section B examines some specific issues relating to the territorial dimension of information and indicators, as well as some relevant international cases. Section C assesses where territorial information systems stand in Latin America and the Caribbean. Lastly, section D offers some conclusions and recommendations.

A. Information and territorial development: their role in society and current public policy

The world is at a new juncture in the history of its societies, one of tremendous opportunities, but also of great challenges. In addition to addressing the technological challenge itself, it is also important to seize upon the opportunity this moment offers to study and consolidate the social value of information. As Stiglitz, Fitoussi and Durand (2018) rightly stress, “what we measure affects what we do. If we measure the wrong thing, we will do the wrong thing. If we do not measure something, it becomes neglected, as if the problem did not exist”. If we do not measure inequality or environmental degradation, for example, we are less likely to address those concerns.

This new era of humanity should be used, in the context of a document such as this, to improve public and social conditions to respond to the challenges of territorial development, sustainability, transparency and participation. In the strictly territorial sphere, intrinsic, distinctive challenges arise that underscore the need to take stock of situations and to identify the challenges relating to collective action (public, private, citizen and joint action).

This section highlights some key elements of this general (social) and specific (territorial development) context and then uses these elements to analyse the issue of information as it relates to territorial development in the region.

The various dimensions of societies, economies and current public organizations, including the territorial dimension, are increasingly dependent upon on the availability, timeliness, quality and usage of information, which —as part of a variety of approaches— has become a strategic input for development processes. This has led to the emergence of concepts such as the information age (Castells, 2002) and the knowledge society (UNESCO, 2005), with a key challenge of exploiting their potential and minimizing their risks. Among other actions, to meet this challenge intelligent systems must be developed that can summarize information and inform analysis and decision-making (Innerarity, 2018).

As part of this process, new bodies of specialized information have appeared that enable a more comprehensive approach to the multiple challenges posed by the 2030 Agenda for Sustainable Development and the problems that must be addressed to achieve goals such as improving people’s quality of life, developing territories and cities, increasing the competitiveness of production systems and promoting the sustainability of ecosystems. In this regard, Stiglitz, Sen and Fitoussi (2009), referring to the growing

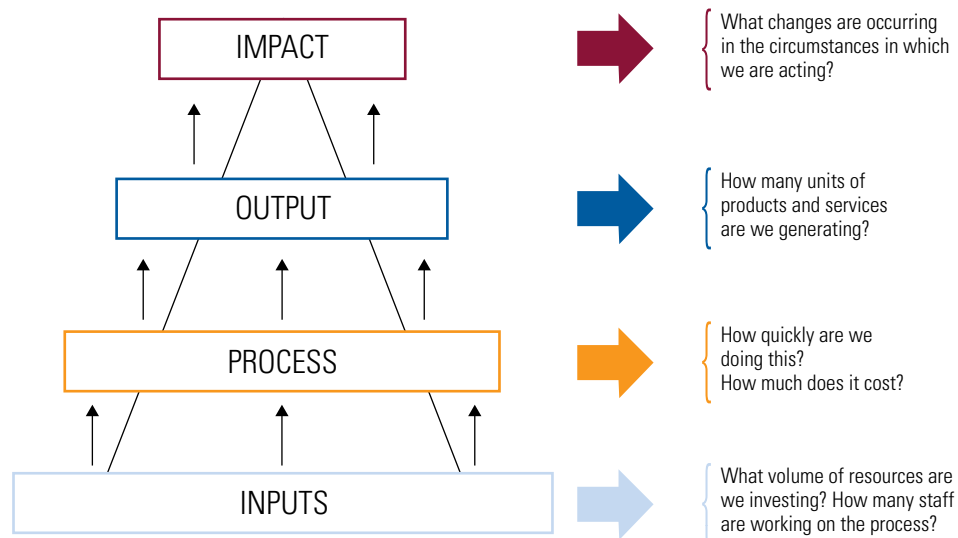
importance of statistical indicators in today's world, say that the role of such indicators "has increased significantly over the last two decades. This reflects improvements in the level of education in the population, increases in the complexity of modern economies and the widespread use of information technology. In the "information society," access to data, including statistical data, is much easier. More and more people look at statistics to be better informed or to make decisions. To respond to the growing demand for information, the supply of statistics has also increased considerably, covering new domains and phenomena."

In addition, the means of producing, gathering and using information are changing rapidly. New information and communication technologies (ICTs) have been crucial to the progress made in the capture, generation, analysis and dissemination of data, exponentially increasing access to and use of a wide array of data in the design, implementation, monitoring and evaluation of public policies (Naser and Concha, 2014). The response to the quantity and variety of information, and the speed at which it is generated, must be a strategic approach that encourages better use of information. Specialized literature supports this by affirming that information has no value in itself, but that its value is derived from the context in which it is used, that is to say, with respect to the goals or objectives that people and organizations pursue. Therefore, reflection on the quantity and type of information required should be based on a frame of reference that guides production, collection, systematization and analysis efforts (Stiglitz, Sen and Fitoussi, 2009; Wong, 2006).

As part of this push to define the context, purposes and expectations that determine the social utility of information, it is important to consider that different points in public policymaking processes may require different types of information. In this regard, diagram IV.1 and box IV.1 illustrate the specific nature of the information requirements, depending on the methodological approach adopted, the stages and the entire cycle. The impact indicators are particularly noteworthy, as they provide insight into whether or not policies are producing the desired effects.

Diagram IV.1

Measurement of each area of performance and questions addressed



Source: J. Bonnefoy and M. Armijo, "Indicadores de desempeño en el sector público", *Handbooks series*, No. 45 (LC/L.2416-P; LC/IP/L.263), Santiago, Economic Commission for Latin America and the Caribbean (ECLAC), 2005.

Box IV.1

Performance indicators in results chain approach

Input indicators

These indicators quantify the resources, whether physical, human or financial, used to produce goods and services.

Process/activity indicators

These indicators measure the performance of activities linked to implementation or the way work is carried out to produce goods and services, such as purchasing procedures (days of delay in the purchasing process) or technological processes (number of hours systems offline attributable to the support team).

Output indicators

These indicators quantify the goods and services produced and supplied by a public body or a government initiative. This is the result of a specific combination of inputs, meaning that outputs are directly related to inputs.

Outcome or impact indicators

These indicators measure outcomes in terms of ultimate expected goal through delivery of goods and services. The information they provide refers, for example, to improvements in the circumstances of the target population that are exclusively attributable to the goods in question.

Source: J. Bonnefoy and M. Armijo, "Indicadores de desempeño en el sector público", *Handbooks series*, No. 45 (LC/L.2416-P; LC/IP/L.263), Santiago, Economic Commission for Latin America and the Caribbean (ECLAC), 2005.

In the specifically territorial sphere, there have been swift advances in georeferencing and geospatial analysis technology, increasing the detail of knowledge of spatial dynamics to a high level (Fuenzalida and others, 2015). This is of great importance in a context of increasingly complex and rapid territorial dynamics, at both the urban and rural levels, affected by factors such as the vagaries of the world economy, phenomena linked to climate change, and internal and international migration patterns.

In addition, there is ever greater use of geospatial techniques and tools to achieve the Sustainable Development Goals (SDGs), as addressed at the High-level Forums on Global Geospatial Information Management.¹ As the availability of and speed of access to information sources improves, there is a growing risk of dispersion and a challenge in terms of integration and integrated management of the parts of such sources and their components and subsystems. Therefore, these meetings underscore the importance of integration between statistical and geospatial information, to support the following areas (Expert Group on the Integration of Statistical and Geospatial Information, 2018):

- Local, subnational, national, regional, and global decision-making processes.
- Measuring and monitoring the targets and global indicator framework for the Sustainable Development Goals (SDGs) of the 2030 Agenda for Sustainable Development.
- Supporting data sharing between institutions and enhancing the interoperability of geospatial and statistical information.
- Unlocking new insights and data relationships that would not have been possible by analysing socioeconomic, environmental or geospatial data in isolation.
- Promoting investment and capability building in geospatial and statistical information.
- Building institutional collaboration between geospatial and statistical communities.
- Examining new sources of data that includes geospatial information, for example mobile phone data.

¹ For more detailed information on the High-level Forums see [online] <http://ggim.un.org/meetings/2017-Mexico/>.

It is in this context, therefore, that the links between statistical and geospatial information and the design, implementation, monitoring and evaluation of territorial public policies must be analysed. That is to say, analysis that takes into account the complex relationship between what is desirable and what is possible, and that systematically and institutionally addresses existing divides or gaps, thus enabling progress to be made in this area—with a the medium- and long-term perspective— through robust and sustainable processes of modernization. It is therefore crucial to grasp the centrality of the challenge posed by the need to coherently combine and organize large volumes of data, generated according to a diversity of conceptual and operational criteria, by forming sound systemic approaches that are rational and relevant to decision-making.

To clarify the array of concepts relating to the subject of this section, which are often used interchangeably, some important definitions are given in box IV.2.

Box IV.2

Some basic definitions

Variable

A phenomenon that is studied and whose value varies over time or space. A variable is an operational representation of an attribute (quality, characteristic or property) of a system.

Data

A set of numerical values that are observed, recorded or estimated for a given variable at a point in space and time, usually resulting from some form of gathering of statistics (such as a survey) or of administrative records, field measurements, or from another form of measurement or observation.

Statistic

The specific measurement, value or result of variables at a point in time and space, which has been validated, structured and described statistically. Basic statistics are produced from data, using a predefined and standardized set of statistical procedures derived from national statistical standards and international statistical guidelines. Basic statistical series are therefore data sets that have undergone an exhaustive statistical validation process, have been appropriately classified and are presented to users in an orderly and appropriate framework.

Information

In its simplest conception, information comprises facts and data that do not necessarily have an immediate and clear meaning for all audiences. In a broader sense, information is data processed in a meaningful way, so that it can be used in decision-making, in the present or the future.

Indicators

Statistics that are selected for their ability to reflect an important phenomenon. Indicators are designed and produced for the purpose of tracking and monitoring certain phenomena or sets of patterns that require some type of intervention or programme. They are often presented in a contextualized form (explaining to users what the indicator shows, its importance and implications), represented in a way that is clear and easy to understand (using infographics, graphs and maps), and are generally published as indicator systems (for the subject in question), in printed and digital documents and on websites, to facilitate non-expert access.

Knowledge

The capacity to understand and act in a given domain. To know is to understand something at such a level that it is possible to evaluate and, therefore, to decide. Knowledge is generally recognized as a stage that follows raw information, whereby data and background information are processed according to pre-established criteria and needs.

Source: R. Quiroga Martínez, “Guía metodológica para desarrollar indicadores ambientales y de desarrollo sostenible en países de América Latina y el Caribe”, *Handbook series*, No. 61 (LC/L.3021-P), Santiago, Economic Commission for Latin America and the Caribbean (ECLAC).

B. The territorial dimension of information

It is widely known and accepted that national averages of any development indicator tend to conceal marked differences or inequalities between different subnational spaces. This is especially true in the case of Latin America and the Caribbean, where inequality in general, and territorial inequality in particular, have been highlighted by ECLAC as key challenges to be addressed by the countries of the region (Bárcena and Prado, 2016; ECLAC, 2010, 2012 and 2014; ECLAC, 2017).

Faced with the challenges of the 2030 Agenda, territorial inequalities, in their different manifestations (urban-rural, interregional, intra-urban and others), have become particularly important. This reflects the growing complexity of the environment in which territorial policies are developed and the greater effort required in terms of adequate, relevant and timely information.

Public policy in general, and territorial policy in particular, seeks to rise to these complex challenges. In this regard, in relation to planning processes (Máttar and Cuervo, 2017), the Latin American and Caribbean Institute for Economic and Social Planning (ILPES) considers that national territorial development policies should be organized to respond to four strategic challenges, taking into account this complexity and the different information requirements: multiscale; multiagent; intersectoral; and multiple time frames.

With respect to the first two requirements, the Organization for Economic Cooperation and Development (OECD, 2009) underscores two major challenges relating to effective achievement of territorial policy goals. The first challenge, which is vertical in nature, is the need to reduce or eliminate information gaps between actors at different levels of government, while the second, which is horizontal, is the need to capture, generate and distribute information through networks of actors, to improve formulation of goals and make strategies more effective.

With regard to multiscale questions, and to information requirements, two different areas of focus should be considered. Firstly, from a national-territorial perspective, comparable information is required for all territories, to provide a clear view of the degree to which inequalities have been reduced and dispersion has decreased with respect to national averages. The second area of focus, meanwhile, refers to the specific information needs or requirements of each territory, necessitating consideration of information that is relevant to some territories of a country, but not to all of them.

On the question of multiple time frames, it is known that many of the dimensions of territorial development such as economic structures, educational levels, health conditions or degrees of social inequality show great inertia over time. To take this into account, processes of change must be analysed with medium- or long-term perspectives that enable adequate comparison and evaluation of the trends and paces of change in countries' different territories. Information is therefore needed that is comparable over time.

Finally, cross-sectoral action is crucial for public policies in general (Cunill-Grau, 2014), and territorial policies in particular (Buitelaar and others, 2015), since much of governments' budget execution and institutional action is channelled through specific sectors. Consequently, proper structuring and coordination is needed to manage the generation, dissemination and use of territorial information.

1. Problems specifically relating to territorial information

In addition to the above-mentioned four challenges of structuring, integrating and achieving interoperability of territorial information, there are other challenges that are very specific to the territorial sphere. The first challenge relates to the type of spatial disaggregation and to the definition of spatial units for information gathering and processing. In this case there is a classic dilemma, or trade-off, between time frames and spatial scopes.

On one hand, statistical processes that allow for a high level of geographical disaggregation, such as population and housing censuses, are often carried out at distant intervals (generally every ten years). As a result, information is updated infrequently and not necessarily at the same pace as transformations in

countries. In the region, this problem is particularly visible in four countries that do not have recent censuses (El Salvador, Guatemala, Haiti and Nicaragua), as opposed to three others where censuses have recently been taken (Chile, Colombia and Peru) (see table IV.1).

Table IV.1

Most recent census year

Country	Year	Country	Year
Colombia	2018	Venezuela (Bolivarian Republic of)	2011
Chile	2017	Costa Rica	2011
Peru	2017	Bahamas	2010
Honduras	2013	Barbados	2010
Cuba	2012	Dominican Republic	2010
Saint Vincent and the Grenadines	2012	Saint Lucia	2010
Bolivia (Plurinational State of)	2012	Argentina	2010
Paraguay	2012	Brazil	2010
Guyana	2012	Ecuador	2010
Suriname	2012	Belize	2010
Antigua and Barbuda	2011	Mexico	2010
Dominica	2011	Panama	2010
Grenada	2011	El Salvador	2007
Jamaica	2011	Nicaragua	2005
Saint Kitts and Nevis	2011	Haiti	2003
Trinidad and Tobago	2011	Guatemala	2002
Uruguay	2011		

Source: Latin American and Caribbean Institute for Economic and Social Planning (ILPES), on the basis of official information from the countries.

In this respect, it is important to note that the region is preparing for the 2020 census round, which will make updated information available for adjustments or corrections to national territorial development plans and policies.

On the other hand, statistical processes that are carried out at shorter intervals, such as household surveys or regionalized national accounts, provide more up-to-date information and greater breadth in terms of variables consulted, but offer a lower level of geographical disaggregation of estimates (normally at intermediate levels, such as regions, departments, provinces or states). With this type of survey, consideration must be given to the vital methodological and operational fact that expanding sampling frames, with a view to obtaining estimates for small areas, usually results in a sharp increase in costs.

Attempts have been made to solve this problem, at least in part, by making greater use of information from administrative records (such as tax and social security records and vital statistics). This is a field in which there have been significant recent advances, but which requires great efforts in terms of methodology, institutions and resources.² One of the main difficulties is that this type of information is not generated through conventional statistical procedures, and therefore requires exhaustive methodological validation to ensure adequate quality standards.

A second difficulty relates to the type of geographical disaggregation required for territorial development policies, which are often based on geographical levels, meaning that the scales of their information requirements differ from official political-administrative divisions. Such is the case, for example, with national urban development policies, which often require information with a scale that differs from official city boundaries. This frequently occurs in large metropolitan areas, which are sometimes not officially defined and therefore tend to be defined for urban policy purposes, according to different functional criteria. Territorial planning policies are another example, where information is required for certain geographical areas, such as river basins, creating a need to re-scale official statistics.

² For more background on progress with the use of administrative records see the presentations given at the regional seminar on enhancing the use of administrative records for statistical purposes to follow up on the 2030 Agenda (see [online] <https://www.cepal.org/es/eventos/seminario-regional-potenciando-uso-registros-administrativos-fines-estadisticos-seguimiento>).

A third problem relates to the instability of political-administrative divisions over time, since some countries have undergone considerable changes in their territorial and political organization, including the creation of new territorial entities by merging or dividing existing entities. At times, this leads to significant discontinuity, affecting analysis of time trends in territorial dynamics. In Chile, for example, 11 new communes (municipal districts) were created between 1994 and 2004, and three new regions (intermediate entities) have been created since 2007 (SUBDERE, 2007). In Uruguay, 89 municipalities were established as a result of the creation of the third level of government in 2010, while in Colombia, between 1991 and 2011, 74 new municipalities were created (Chaparro, 2013). Normally, the solution to this problem must begin with an adjustment or reconstruction of information, based on the original political-administrative division and projected forward.

A fourth difficulty relates to the habitual use, by different State institutions, of different geographical disaggregations for generating and using information. This is usually because of the specific needs of the services provided by government agencies, but it creates a territorial development policy challenge of reconciling information based on different geographical representations. For example, the Dominican Republic's National Health Service (SNS) uses its own definitions of regions for which health statistics are produced, while the country's Ministry of Economic Affairs, Planning and Development's uses five provisional planning regions.

2. Territorial indicator systems

In recent international and regional practice (in some countries), territorial information has been comprehensively processed through two complementary channels: by constructing indicator systems and by building summary or composite indicators (Wong, 2006; OECD, 2009). Both approaches aim to generate comprehensive and integral frameworks on territorial development that make fundamental contributions to territorial analysis or assessment, to establishment of goals and targets, and to monitoring of the outcome or impact of national territorial development policies. This section will focus in particular on the option of building territorial indicator systems.

In this regard, as established by Stiglitz, Fitoussi and Durand (2018), indicator panels or dashboards can be created to give a comprehensive view of the state of countries' various dimensions: economic, social and environmental. As these authors stress, countries should move towards "a broader dashboard of indicators that would reflect the distribution of well-being in society and its sustainability across its social, economic and environmental dimensions. The challenge is to make the dashboard small enough to be easily comprehensible, but large enough to summarise what we care about the most."

In more general terms, construction of indicator systems requires, firstly, a carefully designed conceptual scheme or framework that organizes information according to the goals of territorial policies. The methodological perspective of Wong (2006) is useful in this respect, proposing four stages or phases.

The first stage should consist of clarification of the basic concepts that will be represented in the system and that underpin the political rationale for use of the indicators (such as territorial competitiveness, territorial inequalities, cohesion, sustainability and quality of life).

Once the key concepts to measure and analyse have been determined, the second step is to develop an analytical structure to select indicators. Within the structure the key dimensions are identified (such as economic development, education, health and safety), which can be determined in at least three ways. The first method is to use general theoretical frameworks that support the options, such as the DPSIR approach (Driving force-Pressure-State-Impact-Response) for sustainability indicators (Quiroga, 2009, p. 33). The second is to consult experts or, in a wider manner, civil society organizations. Finally, the third method consists of structuring the system around objectives or goals drawn from national territorial development policies or plans. In practice, however, what normally occurs is a combination of the three approaches.

The third stage, which concerns specific identification of indicators, poses several challenges, the first of which is determining the number of indicators to be used. In this regard, there is a risk of having a large number of indicators, potentially resulting in redundancy or underuse (conversely, a small number may omit important phenomena and limit analysis and action). In practice, however, selection is usually pragmatic, based on factors such as the availability, timeliness, validity and cost of information (see box IV.3).

Box IV.3

Criteria for selecting indicators

Faced with the large volume and variety of information available, various general methodological approaches and criteria have emerged to assess the quality of an indicator and its use for public policies. Three such criteria are presented below:

1. Criteria of the Social Protection Committee of the European Union (2015)

- They should capture the essence of the problem and have a clear and accepted normative interpretation;
- They should be robust and statistically validated;
- They should provide a sufficient level of cross country and cross territory comparability, as far as practicable with the use of internationally applied definitions and data collection standards;
- They should be responsive to policy interventions but not subject to manipulation;
- They should be built on available underlying data, and be timely and susceptible to revision;
- Each portfolio of indicators should be balanced across the different dimensions;
- Each portfolio of indicators should enable a synthetic and transparent assessment of a country's situation in relation to the proposed objectives;
- Each portfolio of indicators should be comprehensive and cover all key dimensions of the proposed objectives.

2. RACER Criteria (Better Regulation Toolbox, European Commission)

- Relevant;
- Accepted;
- Credible for non-experts, unambiguous and easy to interpret;
- Easy to monitor;
- Robust against manipulation.

3. Quality Assurance Framework approach (European Statistical System)

- **Relevance.** They must meet the needs of users and show unambiguously the "desirable" direction.
- **Accuracy and reliability.** They must accurately and reliably portray reality. An inaccurate indicator can lead to erroneous conclusions and put the public policy process on the wrong course.
- **Timeliness and punctuality.** They must be released at a time that is timely and punctual for users.
- **Coherence and comparability.** They must be consistent internally, over time and comparable among regions and countries.
- **Accessibility and clarity.** They must be presented in a clear and understandable form, released in a suitable and convenient manner, available and accessible on an impartial basis with supporting metadata and guidance.

Source: European Union *Portfolio of EU Social Indicators for the Monitoring of Progress towards the EU Objectives for Social Protection and Social Inclusion*, Brussels, 2015 and European Union (2017), "Towards a harmonised methodology for statistical indicators. Part 3: Relevance of indicators for policy making", *Manuals and Guidelines*, Eurostat, Luxembourg.

With regard to how many indicators a system should contain, one interesting example is the European Union's system of sustainable development indicators. In this system, indicators are available at different territorial levels. At the top level, there are 13 headline indicators, some of which can be disaggregated by gender. These indicators guide policy actions stemming from the Europe 2020 strategy and are complemented by a further set of operational, explanatory and context indicators.³

The fourth and final stage, completion of which depends on various factors, is development of composite indices, which aim to summarize in a single value the status of all the dimensions of development, or of subsets thereof. This option has generated growing interest, mainly owing to greater availability of information. For example, Yang (2014) produced an inventory of composite development indicators for the United Nations Development Programme (UNDP), identifying 101 indices in various fields which existed at that time.

However, the development of composite indices is subject to numerous methodological, operational and political considerations. Two of them are: weighting systems and standardization methods (Schuschny and Soto, 2009; OECD, 2008). In this respect, composite indices have been developed for various areas related to territorial policy, regarding the economic, social and environmental state of affairs and the performance of public services.

³ The indicators and methodological approach can be reviewed on Eurostat's website [online] <https://ec.europa.eu/eurostat/web/europe-2020-indicators/europe-2020-strategy/headline-indicators-scoreboard>.

3. Some international instances of territorial information systems or indicators

At the international level, there are noteworthy experiences relating to development indicator systems that incorporate the territorial dimension and that are also linked to comprehensive development strategies or agendas.

This section presents two interesting examples regarding methodological principles, similar to those examined in the preceding sections. They are cases in which indicators respond to clear policy goals or purposes, have a sound methodological basis, clearly summarize the problems addressed, and contribute to systematic monitoring of progress. In addition, in the case of Europe, a limited number of indicators are used to obtain a unified snapshot of progress, as suggested in the report by Stiglitz, Sen and Fitoussi (2009).

The first case relates to the indicators for the Europe 2020 Strategy and for European cohesion policy, which are both national and subnational in scope. The second case concerns the indicators for the Sustainable Development Goals of the 2030 Agenda, which form the most widely accepted global framework on development in the world.

(a) The European Union's system of sustainable development indicators and territorial cohesion indicators

At a European Council meeting in June 2010, the European Union defined its Europe 2020 Strategy, the successor of the Lisbon Strategy (see box IV.4) (European Commission, 2010). Its core priorities are:

- Smart growth: developing an economy based on knowledge, research and innovation.
- Sustainable growth: promoting a more resource efficient, greener and more competitive economy.
- Inclusive growth: fostering a high-employment economy delivering social and territorial cohesion.

Box IV.4

Cohesion indicators for European regions, 2014–2020

Smart growth

Research and development

1. Research and experimental development expenditure as a percentage of gross domestic product
2. Patent applications to the European Patent Office by priority year

Competitiveness and business environment

3. Regional gross domestic product in purchasing power standards (PPS)
4. Regional gross domestic product in purchasing power standards (PPS) per inhabitant
5. Regional unemployment by sex and age (*thousands*)
6. Regional unemployment rates by sex
7. Regional employment by sex and age (*thousands*)
8. Regional employment rates of the age group 20–64 by sex

Education

9. Tertiary educational attainment by sex, age group 30–34 (*percentage*)
10. Tertiary educational attainment by sex, age group 25–64 (*percentage*)
11. Early leavers from education and training by sex (*percentage*)

Sustainable growth

Transport

12. Victims in road accidents
13. Freight transported by road by region of loading

Environment

14. Population connected to wastewater collection and treatment systems (*percentage*)
15. Generation and treatment of municipal waste (*thousands of metric tons*)

Inclusive growth

Social inclusion, poverty and health

16. People at risk of poverty or social exclusion
17. Life expectancy at birth by sex

Source: Eurostat, Cohesion Indicators [online] <https://ec.europa.eu/eurostat/web/cohesion-policy-indicators/cohesion-indicators>.

Five thematic areas (employment, poverty and social exclusion, climate change and energy, research and development and innovation) and eight targets were defined for the above-mentioned priorities as follows.

1. Increase combined public and private investment in research and development to 3% of GDP.
2. Reduce the share of early school leavers to 10%.
3. Increase the share of the population aged 30–34 having completed tertiary education to at least 40%.
4. Reduce greenhouse gas emissions by at least 20% compared to 1990 levels.
5. Achieve a 20% increase in energy efficiency.
6. Increase the share of renewable energy in final energy consumption to 20%.
7. Raise the employment rate of the population aged 20–64 to at least 75%.
8. Lift at least 20 million people out of poverty.

For the purposes of follow-up and monitoring, Eurostat has designed a special site for accessing series, targets and related documentation including Europe 2020 Strategy progress reports.⁴ A set of indicators has also been defined, originating from social cohesion policy —linked to territorial cohesion— which are disaggregated primarily at level 2 of the NUTS common classification of territorial units for statistics.⁵

Both systems of indicators generally comply with the methodological characteristics described in box IV.3 and are made up of a limited system of key indicators that include “context” indicators, which make it possible to expand analysis.

(b) The 2030 Agenda for Sustainable Development and the Sustainable Development Goals: the territorial dimension

The largest recent international example of a development indicator framework agreed by countries is the one derived from the 2030 Agenda and the Sustainable Development Goals (SDGs), which currently includes 232 indicators for the 17 SDGs.⁶ Despite this shared frame of reference, each country performs monitoring according to its priorities and the availability of information, meaning that there may be differences in the total number of indicators considered. In the case of the region, the Statistical Coordination Group for the 2030 Agenda in Latin America and the Caribbean of the Statistical Conference of the Americas of the Economic Commission for Latin America and the Caribbean (ECLAC) has identified a total of 154 priority indicators that cover the 17 SDGs and 94 of the 169 targets that form part of the global indicator framework for the SDGs (Statistical Coordination Group for the 2030 Agenda in Latin America and the Caribbean, 2018). A number of indicators —not all— allow for subnational disaggregation, depending on the availability of countries’ basic statistics. There are many national examples of significant progress in developing indicator systems for the SDGs with subnational disaggregation. Three examples are presented below: Peru, Mexico and Colombia.

⁴ See “Europe 2020: Headline Indicators: Scoreboard” [online] <https://ec.europa.eu/eurostat/web/europe-2020-indicators/europe-2020-strategy/headline-indicators-scoreboard>.

⁵ See “Regulation (EC) No 1059/2003 of the European Parliament and of the Council of 26 May 2003 on the establishment of a common classification of territorial units for statistics (NUTS)” [online] <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:02003R1059-20180118&from=EN>.

⁶ For a detailed review of SDG indicators see United Nations (2018).

(i) Peru: system for monitoring and following up SDG indicators⁷

In Peru, the SDG monitoring system is coordinated by the National Institute of Statistics and Informatics (INEI), as the governing body of the country's National Statistical System (SEN). Peru has established a set of 71 indicators for monitoring (ECLAC, 2018).

The SDG website (see diagram IV.2) is easy to use and clearly laid out. In addition to providing indicators at the national level, the site allows subnational information to be displayed, when available. Geographical coverage depends on the information available for each indicator. When possible, coverage is provided at the national level, for urban or rural areas, by natural region (coast, highlands, jungle), by geographical domain (urban coast, rural coast, urban highlands, rural highlands, urban jungle, rural jungle) or by department.

Diagram IV.2

Peru: website for the Sustainable Development Goal monitoring and follow-up system



Source: National Institute of Statistics and Informatics (INEI), "Perú: Sistema de Monitoreo y Seguimiento de los Indicadores de los Objetivos de Desarrollo Sostenible", May 2019 [online] ods.inei.gob.pe. <http://ods.inei.gob.pe/ods/objetivos-de-desarrollo-sostenible>.

(ii) Mexico: Sustainable Development Goal information system⁸

In Mexico (see diagram IV.3), the SDG indicator system is coordinated by the National Institute of Statistics and Geography (INEGI), which also has a special website on the Goals. The information can be consulted by indicator or by the states of Mexico. Mexico has established 80 indicators for monitoring the SDGs, and for each indicator, whenever possible, subnational information is provided up to the municipal level, which can be compared to national information.

⁷ The website is available at [online] <http://ods.inei.gob.pe/ods/objetivos-de-desarrollo-sostenible>.

⁸ The website is available at [online] <http://agenda2030.mx/index.html?lang=es#/home>.

Diagram IV.3
Mexico: website for the Sustainable Development Goal indicator system



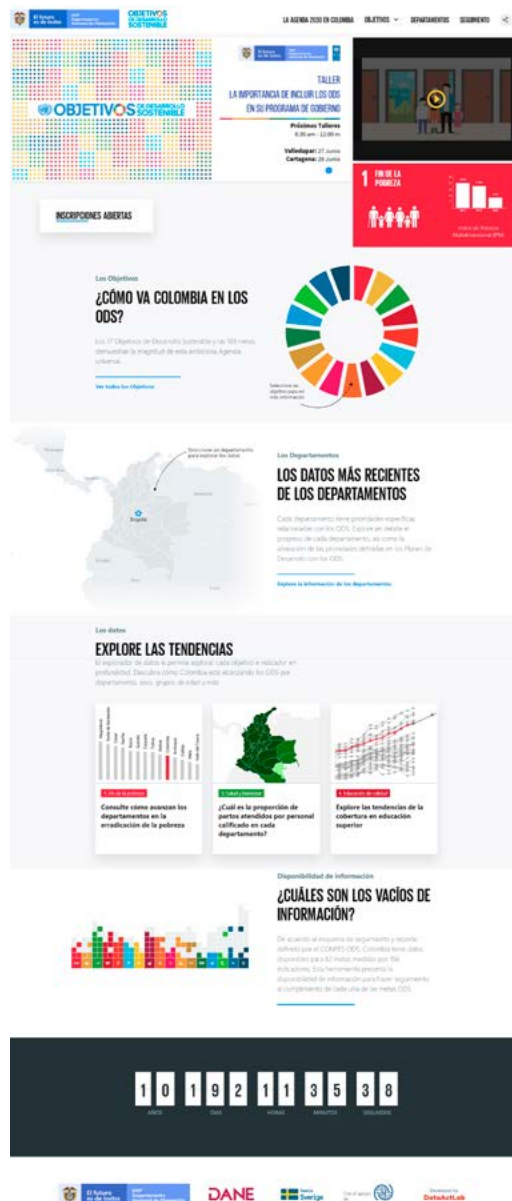
Source: National Institute of Statistics, Geography and Information (INEGI), “Sistema de Información de los Objetivos de Desarrollo Sostenible, México”, May 2019 [online] <http://agenda2030.mx/#/home>.

(iii) Colombia: National Administrative Department of Statistics (DANE)⁹

In Colombia, the National Administrative Department of Statistics (DANE) is responsible for constructing and monitoring SDG indicators, within the framework of the High-level Inter-Agency Commission for the Preparation and Effective Implementation of the Post-2015 Development Agenda and its Sustainable Development Goals, chaired by the National Planning Department (DNP).

In this case, 175 indicators have been examined and the results are presented at the national and departmental levels. The website (see diagram IV.4) contains a wide range of graphical representations that clearly show both the levels of the indicators and their variations over time, within a framework for relative comparison.

Diagram IV.4
Colombia: Sustainable Development Goal indicator system website



Source: National Planning Department (DNP), “Objetivos de Desarrollo Sostenible. Colombia”, May 2019 [online] <https://www.ods.gov.co/es>.

⁹ The website can be consulted at [online] <https://www.ods.gov.co/>.

C. Information and national territorial development plans: the situation in Latin America and the Caribbean

The quality, timeliness and relevance of information for territorial development is an exclusively technical issue. The way in which each country organizes and coordinates production and dissemination of information is particularly important. In addition, as will be seen throughout this section, progress in generation of this type of information has been accompanied by some degree of dispersion that must be properly characterized and managed. This comprehensive management can take a variety of forms, depending on the particularities of the countries, but it is always crucial to the process of building an ecosystem of territorial policies.

One key aspect of territorial information relates to countries' institutional architectures, which determine their production and use of statistics. It is especially important to examine the depth and coherence of the interrelationships between the different information-producing institutions and the bodies in charge of territorial planning.

Some of the areas that need to be suitably interrelated relate to institutionalized statistical classifications, geographical coverage and time frames.¹⁰ The classifications and criteria defined by official statistical bodies are generally somewhat misaligned with territorial planning requirements, which, in some areas, such as environmental sustainability or territorial resilience, require different conceptual approaches.

This section discusses the recent experience of countries in the region in use of indicators for national territorial development plans and for policy decision-making based on territorial information. The focus is on understanding the relationship between the different geographic information systems and the institutions involved in generating and using the data that are fed into territorial analyses.

For the purposes of the analysis, an inventory was prepared of many of the general territorial indicator systems of the countries of the region (see table IV.2) —which are normally linked to national territorial development policies— that were publicly available online. In particular, their geographical coverage, time frames, accessibility and usage were considered. Despite their importance, because of time limits and the scope of this work, a wide variety of other sector-specific indicator systems with territorial disaggregation developed in recent years were not examined (such as systems of urban, environmental, social and other indicators).

Table IV.2

Latin America and the Caribbean (16 countries): territorial information systems and spatial data infrastructure

Country	Territorial information system	Responsible agency	Spatial data infrastructure
Argentina	Atlas ID ^a Federal Urban Observatory	Secretariat of Territorial Planning and Coordination of Public Works (formerly the Office of the Under-Secretary of Territorial Planning of Public Investment)	Spatial Data Infrastructure of the Argentine Republic (IDERA)
Bolivia (Plurinational State of)	Indicators for Devolved Administrative Divisions	State Service for Devolved Administrative Divisions	Spatial Data Infrastructure of the Plurinational State of Bolivia (IDE-EPB) (Geo-Bolivia)
Brazil	Regional Development Observatory Atlas of Human Development in Brazil	Ministry of Regional Development	National Spatial Data Infrastructure (INDE)
Chile	Regional Observatory	Office of the Under-Secretary for Regional and Administrative Development (SUBDERE)	Spatial Data Infrastructure (IDE)
Colombia	TerriData National Management and Outcomes Evaluation System (SINERGIA)	National Planning Department (DNP)	Colombian Spatial Data Infrastructure (ICDE)
Costa Rica	Sustainable Development Indicator System (SIDES) National Territorial Information System (SNIT)	Ministry of National Planning and Economic Policy (MIDEPLAN)	Spatial Data Infrastructure of Costa Rica (IDECORI)
Dominican Republic	Territorial Statistical Information System (SIET) Public Administration Monitoring System (SISMAP)	National Statistics Office (ONE)	Spatial Data Infrastructure of the Dominican Republic (IDERD)
Ecuador	National Information System (SNI)	National Secretariat of Planning and Development (SENPLADES)	Spatial Data Infrastructure (IDE)
El Salvador	Territorial Observatory Territorial System for Strategic Information	Technical Secretariat of Planning of the Office of the President (SETEPLAN)	Spatial Data Infrastructure (IDE) ^b

¹⁰ Statistical classifications harmonize concepts and guide statistical collection processes (see [online] <https://unstats.un.org/unsd/classifications/>).

Table IV.2 (concluded)

Country	Territorial information system	Responsible agency	Spatial data infrastructure
Guatemala	National Territorial Information System (SINIT)	Secretariat for Planning and Programming of the Office of the President (SEGEPLAN)	Spatial Data Infrastructure of Guatemala (IDEG)
Honduras	National Territorial Information System (SINIT)	Secretariat of Planning and External Cooperation (SEPLAN)	National Spatial Data Infrastructure (INDES)
Mexico	Indicators by State of Mexico Catalogue of localities (Microregions)	National Institute of Statistics and Geography (INEGI) Social Development Secretariat (SEDESOL)	Spatial Data Infrastructure of Mexico (IDEMEX)
Paraguay	Carto-DB	Directorate General for Development and Territorial Planning (Technical Planning Secretariat for Economic and Social Development, STP)	Spatial Data Infrastructure of Paraguay (IDEP) ^b
Peru	Territorial gaps SDG Indicators	Centre for Strategic Planning (CEPLAN) National Institute of Statistics and Informatics (INEI)	Spatial Data Infrastructure of Peru (IDEP)
Trinidad and Tobago	Integrated Sustainability Appraisal (ISA)	Ministry of Planning and Development	
Uruguay	Territory Observatory Uruguay	Office of Planning and the Budget (OPP)	Spatial Data Infrastructure of Uruguay (IDEuy)

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official information from the respective countries.

^a Currently in the process of transferring information to the Federal Urban Observatory (OFU).

^b There are resources that indicate an intention to establish spatial data infrastructure, but no such infrastructure was found.

Recent experience in Latin America and the Caribbean shows that national statistical systems have been the natural space for coordination and standardization of how national and territorial information is generated and used, usually organized around national statistical offices.

In recent years, some countries have also worked on a second form of producing and structuring territorial—or, more specifically, geographical—information around geospatial data systems, or national spatial data infrastructure.¹¹ Such initiatives are an effort to standardize the type of geographic information available, to avoid duplicating efforts and to coordinate.¹² As shown in table IV.2, the affiliated institutions are of different territorial scales and include public and private entities, non-governmental organizations and international organizations. They also include different spatial data infrastructures with subnational or institutional scales and different geographic information systems.

Of the countries in the inventory, a more detailed description is presented below for Argentina, Colombia and Uruguay, which are of interest because of the explicit links with their national and territorial development plans.

1. Argentina

Several statistical subsystems were identified in Argentina that operate simultaneously and are relevant to territorial development issues.

(a) Spatial Data Infrastructure of the Argentine Republic (IDERA)¹³

The Spatial Data Infrastructure of the Argentine Republic (IDERA), which is overseen by the National Geographic Institute, does not produce information as an agency, but is a space for inter-agency integration of geospatial information. Its aim is to promote the publication of data, products and services as a key contribution to democratizing access to the information produced by the State and various other actors (such as federal councils, national and provincial infrastructure, local governments, universities, non-governmental organizations

¹¹ Spatial data infrastructures have been promoted since 1996 through the Global Spatial Data Infrastructure (GSDI) initiative, conceived as a global and open process that interconnects national and regional infrastructures to coordinate management and use of geospatial data, and decision-making, in the different territorial spheres (local, national, regional and global), through initiatives between governments, the private sector and academia.

¹² Geographic information is represented on maps, which are generally interactive.

¹³ See [online] <http://www.idera.gob.ar/>.

and businesses). IDERA is intended to support decision-making in different activities in the public, private, academic, non-governmental and civil society spheres.

It provides access to geospatial data, products and services, published online in accordance with defined standards and rules, to ensure that they are interoperable and are used correctly, as well as guaranteeing ownership of the information by the agencies that publish it and specifying their responsibility for updating the information.

As it is not a primary source of information, it is not mentioned as a data input for the different existing territorial development plans, but it is an excellent tool for reviewing available geographic information.

IDERA is divided by topics and offers data on agriculture, society, administrative boundaries, transport, health, household surveys, the economy, structures, the environment, geospatial information, communications, water, biodiversity and climatology.

(b) Indicator tracking systems: Atlas of Indicators (ATLAS ID)¹⁴

The Atlas was created under the supervision of the former Office of the Under-Secretary of Territorial Planning of Public Investment (now the Secretariat of Territorial Planning and Coordination of Public Works) and draws on different sources of information —mainly the National Institute of Statistics and Censuses of the Argentine Republic (INDEC) and different directorates, secretariats and thematic committee.

The system allows users to view the different processes and indicators related to territorial development, disaggregated at the provincial and departmental levels. It is only available in Spanish and although it has an institutional login, its features can be accessed without an account (so it is considered open access). It works in a standard web browser and can be viewed on mobile devices.

The system has divisions by dimension (sociodemographic, settlement and urbanization, mobility and connectivity, environmental, economic, institutional and public investment), and is updated to 2019. The analysed indicators have ten-year, five-year, annual, monthly, weekly and ad hoc intervals. It is very intuitive and easy to use, and the metadata include a detailed description of the indicators. All of the data can be downloaded and use of the graphs that can be viewed within the system is permitted. Georeferenced data can also be view in map form. Its features allow it to be used as an indicator tracking system.

The State, through the Institutional Strengthening Programme for Territorial Planning run by the Secretariat of Territorial Planning and Coordination of Public Works, provides assistance upon request to local and provincial governments in the development of their territorial plans, contributing to the strengthening of planning and generating an instrument to guide major strategic and priority projects. One of the resources available for preparation of these plans is information from Atlas ID.

Although the search process does not make the links between Atlas ID and IDERA apparent, the Secretariat of Territorial Planning and Coordination of Public Works is part of the IDERA network.

(c) The National Statistical System (SEN) and the National Institute of Statistics and Censuses (INDEC)

The National Institute of Statistics and Censuses (INDEC) participates in Atlas ID as a primary source of many indicators. It is also part of the IDERA network. It coordinates the work of the National Statistical System (SEN) in keeping with the principles of regulatory centralization and executive decentralization, prepares the Annual Statistics and Census Programme, and designs methodologies and standards that guarantee the comparability of information from different sources.

¹⁴ See [online] <https://atlasid.planificacion.gob.ar/atlas.aspx>. Currently being updated and migrated to the Federal Urban Observatory (a system that is not yet available and that will be overseen by the Secretariat of Territorial Planning and Coordination of Public Works).

Lastly, the National Institute of Statistics and Censuses also agrees the activities to be performed in the calendar year with the Provincial Directorate of Statistics (DPE) in each province, in order to organize and carry out national operations, in accordance with Argentina's federal structure.

2. Colombia

Several statistical subsystems were identified in Colombia that operate simultaneously and are relevant to territorial development issues.

(a) Colombian Spatial Data Infrastructure (ICDE)¹⁵

Colombian Spatial Data Infrastructure (ICDE) is overseen by the Agustín Codazzi Geographic Institute (IGAC), and its purpose is to design strategies to consolidate, structure and promote quality assurance of geographic information, with a view to its use as a management tool in public administration. The different public and private entities, non-governmental organizations, or non-profit entities that have local, regional or sectoral geographic information systems, and other web tools and sites with geographic services, are part of the infrastructure, with the aim of standardizing the processes of producing, accessing and using information. The quality of political decision-making is thus ensured, addressing the core problem identified by the ICDE: the lack of interconnections between State entities in data matters. In order to meet its core objective, the National Metadata Profile was created, enabling effective documentation of any type of geographic information. The metadata profiles therefore present detailed information, along with recommendations and examples.

The system includes the National Geographic Portal, its primary viewing tool, containing the different areas and institutions belonging to the various geoservices made available by affiliated entities.¹⁶ In the vast majority of cases a geographic information system (GIS) desktop program is required to view the layers that can be downloaded from the sites. Some institutions provide online viewing tools on their platforms and the National Geographic Portal itself allows some layers to be applied.

The affiliated entities are classified into the following segments, as is the information: environment, infrastructure, defence and seas, socioeconomic, territorial and borders.

(b) Indicator tracking systems: TerriData¹⁷

The TerriData system is managed by the Territorial Studies Group (GET) of the Decentralization and Regional Development Office (DDDR) of the National Planning Department (DNP), with the support of its sectoral technical directorates and entities that produce official information at the national level. The current coordination bodies are the territorial statistics committees of the Territorial Statistics System, with the National Planning Department as technical secretariat, whose official tool for supplying statistics is TerriData. There are also thematic technical committees in which all ministries participate, working with the technical directorates of the National Planning Department to: (i) validate the indicators contained in each of the dimensions of development presented in TerriData; (ii) construct, modify or expand the range of indicators for the dimensions; (iii) specify how systems interoperate, and; (iv) decide upon periodic submissions of information.

The aim of this system is to produce standardized and comparable indicators that reflect results in various socioeconomic dimensions of all the territorial entities in the country. It is updated to 2019 and the indicators analysed are generated at ten-year, biannual, annual, six-monthly, quarterly and monthly intervals. It is open access and is only available in Spanish. It works in a standard web browser and can be consulted from mobile devices through the browser or the official application. The information available can be disaggregated by regions,

¹⁵ See [online] <http://www.icde.org.co/>.

¹⁶ Geoservices are online tools for consultation or download of geographic information from remote sources.

¹⁷ See [online] <https://terridata.dnp.gov.co/>.

departments and municipalities. The thematic areas covered are: sociodemography, economy, environment, infrastructure, education, health, security, territorial organization and institutional planning.

Metadata are presented clearly, indicating the data source, with detailed, categorized information in a standardized Excel spreadsheet. The system, which was used as a source of information for the basis of the 2018–2022 National Development Plan, also allows various comparative graphs and tables to be downloaded, and the tab marked “Mapas” (Maps) contains a viewer of geotargeted data on some of the indicators.

The system includes a tab marked “Ficha PDET” that contains information on Development Programmes with a Territorial Approach (PDET), which were created for the implementation of the Comprehensive Rural Reform. This tab includes a dynamic worksheet for the 16 subregions that participate in the programmes. This worksheet contains information on: general characteristics, demographic composition and distribution, economic and production activity, opportunities for rural development, environment and sustainability, citizen participation, armed conflict and coca cultivation.

(c) Indicator tracking systems: National Management and Outcomes Evaluation System (SINERGIA)¹⁸

The National System for the Evaluation of Management and Results (SINERGIA) has a territorial module that supports monitoring of government targets from the 2014–2018 National Development Plan through department-level indicators. It includes departmental and municipal data sheets containing strategic information on territories.

Its governance structure differentiates between three types of actors: information providers, information managers and information users. The first group includes ministers, heads of department and public institutions. They are politically responsible for the information fed into the system. The head of each entity’s planning office is responsible for coordinating reporting and is also the liaison with the system administrators. The system administrators are the Office of the President of the Republic and the Directorate of Public Policy Monitoring and Evaluation (DSEPP) of the National Planning Department. The Office of the President coordinates policy and defines government priorities, and the Directorate is responsible for technical, operational and technological coordination of the system. Lastly, the users of the information are high-level government, the general public and supervisory bodies.

At the time of this review, the system was updated to 2018 and the indicators analysed are annual, half-yearly, quarterly and monthly. It is open access and is only available in Spanish. It works in a standard web browser and can be viewed on mobile devices. The indicators offer territorial disaggregation by regions and departments. The thematic areas covered are: environment, economy, education, society, health and infrastructure. The metadata indicates the source of the data and includes a detailed description. The specific periodicity is not indicated. The data tables can be downloaded, but not the graphs that the system generates.

Although there are territorial data, they are not yet georeferenced, so the link with the Colombian Spatial Data Infrastructure is not direct. However, according to consultations with the National Planning Department, under the new 2018–2022 National Development Plan: “A compact for Colombia, a compact for equity”, work is expected to start on including georeferenced information in SINERGIA, which in the near future could be shared with Colombian Spatial Data Infrastructure to strengthen the relationship of citizens with the State.

¹⁸ The National Management and Outcomes Evaluation System (SINERGIA) was created to monitor and evaluate the country’s strategic public policies, and especially those set down in the National Development Plan, [online] <https://sinergia.dnp.gov.co/Paginas/Internas/Sinergia.aspx>

(d) National Administrative Department of Statistics (DANE) and National Statistical System (SEN)

The information originating from the National Administrative Department of Statistics (DANE) is used by the various information systems, such as TerriData, and is generated during implementation of the institutional plans of the State entities, in accordance with the targets of the National Development Plans monitored through SINERGIA. The territorial statistics committees of the National Statistical System (SEN) are one of the main coordination mechanisms for TerriData.

The National Administrative Department of Statistics defines the National Statistical System as the structured set of components that, in an organized and systematic manner, guarantees the production and dissemination of the official national and territorial statistics required by the country. It comprises entities or organizations, users, processes and technical instruments for coordination, policies, principles, sources of information, technological infrastructure and human talent.

Its purpose is to provide society and the State—in a coordinated manner between the producing entities—with high-quality official national and territorial statistics, with common languages and procedures, pursuant to international statistical standards, which contribute to the transparency, relevance, interoperability, access, timeliness and coherence of statistics produced in the country.

3. Uruguay

Several statistical subsystems were identified in Uruguay that operate simultaneously and are relevant to territorial development issues.

(a) Spatial Data Infrastructure of Uruguay (IDEuy)¹⁹

Spatial Data Infrastructure of Uruguay (IDEuy) is a decentralized body of the Office of the President of the Republic. It is a set of policies, guidelines, standards, technologies and human resources; an inter-agency structure to organize production of information and facilitate the availability, access and use of the geographic information service products of the Uruguayan national territory, as well as supporting decision-making processes for sustainable development.

Its specific goals include coordinating, planning and promoting the production of geographic information, and issuing rules, standards and recommendations to ensure interoperability, quality and access to the information generated. To meet these and other objectives, IDEuy can communicate directly with the entire public administration and all public agencies and private entities.

It is made up of a Steering Committee and an Honorary National Council for Geographic Information. The Steering Committee, which comprises representatives of the Office of the President of the Republic, the Ministry of Economy and Finance and the Agency of Electronic Government and the Information and Knowledge Society (AGESIC), is responsible for the general management of IDEuy. The Honorary National Council is in charge of designing the general lines of action and comprises representatives from the Office of the President of the Republic, the Ministry of Economy and Finance, the Ministry of Transport and Public Works, the Ministry of National Defence, the Ministry of Housing, Regional Planning and Environment, the Ministry of Livestock, Agriculture and Fisheries, the Ministry of Industry, Energy and Mining, the Office of Planning and the Budget (OPP), the Congress of Departmental Governors and the Departmental Government of Montevideo (IMM).

¹⁹ See [online] <https://ide.gub.uy/>.

IDEuy is concerned with data, and particularly their quality and availability. This is why it affirms that spatial data infrastructure should be characterized by a high degree of technical and semantic interoperability. Technical interoperability is the ability of several systems to communicate in real time, while semantic interoperability is the ability of different systems to understand the content, quality and meaning of each other's data.

The system offers links to geoportals, metadata and geographic data viewers available from the affiliated nodes or institutions.²⁰ There is also a geographic data viewer which allows Web Map Service (WMS) layers to be added.²¹ Lastly, there is a geographic address service through which users can search for addresses by entering information such as street name, number, block, plot, locality, department, post code and geographic location.

The IDEuy does not have thematic nodes per se, but it does call the different affiliated institutions "nodes": the National Institute of Statistics (INE), the National Emergency System, the Road Safety Unit, the Military Geographic Institute (formerly the Military Geographic Service), the Ministry of Social Development, the National Cadastre Department of the Ministry of Economic Affairs and Finance, the Ministry of Education and Culture, the National Bureau of Mining and Geology of the Ministry of Industry, Energy and Mining, the National Topography Department of the Ministry of Transport and Public Works, the Ministry of Tourism, the National Department of the Environment and the National Regional Planning Department of the Ministry of Housing, Regional Planning and Environment, the National Public Education Administration (ANEP), the Geomatics Unit of the National Administration of the Postal Service, Agroclimatology and Information Systems (GRAS) of the National Institute of Agricultural Research, the Geographic Information System Unit of the Departmental Government of Maldonado, the Geomatics Service of the Departmental Government of Montevideo, and the Departmental Government of Rivera.

(b) Indicator tracking systems: Territory Observatory Uruguay (OTU)²²

Territory Observatory Uruguay (OTU) is run by the Office of Planning and the Budget (OPP), which reports to the Office of the President of the Republic. External bodies do not upload information or participate directly in the Observatory. Nor is there an inter-agency working group. However, the Observatory is in constant contact with different government organizations at the national, subnational and academic levels in order to update and expand the system's database.

It is a system for generating and delivering indicators with territorial disaggregation by regions, departments and municipalities. The Observatory also prepares and circulates studies relating to decentralization, territorial development and subnational finance, as well as publishing projects supported by the Office of Planning and the Budget. It is open access and is only available in Spanish. It works in a standard web browser and can be accessed from mobile devices, although the interactive maps are not optimized for mobile devices.

It is updated to 2018 and the indicators analysed are generated at ten-year and one-year intervals. The information is disaggregated by demography, education, health, environment, technology and communication, economic and production activity, labour market, institutions, income and welfare, generations, gender and race, housing and households, territorial cohesion, public safety, and social participation. The system is easy for users to understand. Metadata are clearly presented, with descriptions and indications of those responsible for data gathering and processing, among other information relevant to analysis. In addition, the system allows users to generate and download tables, graphs and series, and has a viewer for georeferenced data, which works properly and includes the option of downloading generated maps in pdf format.

Although there is no log of use of the system for updating or preparing territorial development policies, municipal governments are known to use it to prepare plans and projects. The "Mirador Ciudadano" section of the site displays the different projects financed by the Office of Planning and the Budget, including their location, progress, goals, beneficiaries, investment and the SDG to which they contribute.

²⁰ The definition of "geoportal" given by Spatial Data Infrastructure of Uruguay is: a type of specialized web portal whose purpose is to offer users access to a series of resources and services based on Geographic Information (GI).

²¹ The Web Map Service (WMS) protocol allows users to request georeferenced map images from one or more geographic databases that may be distributed over more than one server.

²² See [online] <http://otu.opp.gub.uy>.

(c) National Institute of Statistics (INE) and National Statistical System (SEN)

The National Institute of Statistics (INE) is a node of IDEuy and a fundamental database for monitoring indicators in Territory Observatory Uruguay. It also includes the National Statistical System (SEN), as well as the statistical offices of the executive, legislative and judicial branches, State comptroller agencies, autonomous entities, decentralized services and departmental governments. However, universities, non-governmental organizations and private entities also perform statistical activities that contribute to the system's production and analysis.

The system aims to regulate the planning, production and dissemination of statistics by its member agencies, based on different criteria. Its goals are: to contribute to the design and evaluation of evidence-based public development policies, and to provide citizens, researchers, institutions and private sector companies with statistical information for appropriate decision-making.

The National Statistical System's Inventory of Statistical Operations provides access to the various indicators available, as well as the corresponding metadata and microdata.²³

4. Summary

As shown, a number of countries in the region have two types of information systems for territorial development. On one hand, there is national spatial data infrastructure, usually run by the largest geographic institute in each country. These bodies attempt to integrate, systematize and standardize the geographic information available in the country, achieved by affiliating the different public and private institutions that have technological systems for georeferencing information through interactive maps, which allow different types of layers to be added (territorial information systems).

On the other hand, there are the indicator tracking systems, which offer information disaggregated by territory. Such systems are generally supervised by planning ministries or secretariats or similar bodies, and are mainly fed with data from statistical offices, which in some cases also act as a coordinating body. Some of these systems also have interactive map viewers, like those found in territorial information systems, but they do not belong to national spatial data infrastructure, despite the meeting the various criteria and standards established for such infrastructure.

Some administrators of indicator tracking systems have said that in the future they intend to include information that is not only disaggregated territorially, but that is intrinsically geographic. This will give rise to challenges relating to institutional capacity building and coordination of national statistical systems and spatial data infrastructure, as regards standardization, operation and updating of these systems, which are part of the ecosystem of territorial information tools for decision-making.

In addition to the trend towards including geographic information, there is also formation of different spatial data infrastructure at the subnational and local levels.

An important point is the limited reference made to indicator tracking systems and territorial information systems in the various national development plans (or territorial organization plans), which may indicate that in some countries these systems are still in the development phase or are for internal use by institutions.

²³ A statistical operation is considered to be the set of activities whose purpose is production of original data by means of data collection; the production of data on the basis of original administrative data; the preparation of results on the basis of secondary data and the collection of results and the preparation of analyses and summaries; and the development of methodological tools for statistical production, standardization work and statistical infrastructure.

D. Conclusions

Knowledge and interpretation of territorial problems, and implementation of effective public actions to solve them, require timely, relevant, reliable, continuous and accessible information that contributes to the diagnosis, design, implementation, monitoring and evaluation of territorial public plans, strategies and policies.

This chapter explored the status of territorial information for designing, implementing and monitoring national territorial development plans, policies and strategies. Significant progress was found to have been made by the countries of the region in this field, and some international experiences of interest were examined.

In general, the region has made great progress in the supply and use of territorial information, as shown by some of the cases analysed in this chapter. As a result, horizontal cooperation processes can be contemplated in this field, with ILPES acting as a catalyst for shared learning.

However, progress has been made in a wide variety of fields and institutions, posing a challenge of adequate integration and coordination to optimize contributions to national territorial planning processes. At least three pillars were identified for advances in production and use of information for territorial development. The first relates to the key work and functions of the planning ministries and secretariats, which have striven to improve their quality and timeliness, and to do so at the level of both intermediate and local jurisdictions. The second pillar is related to the production of geographic information, generally led by geography institutes and centres that have traditionally been in charge of this task in the countries of the region. Last but not least, there is what has been done in the framework of the SDG indicators, which has enabled countries to organize information and indicators in an integrated manner at both the national and subnational levels.

These three lines or pillars of information production for territorial development take different shapes in each country, and the supervising institutions are not necessarily analogous in all cases. Similarly, the mechanisms and degrees of interconnection between institutions are also very variable. This interconnection between lines or pillars is overlaid with another, between levels, since in each case there are global, national, intermediate and local initiatives and actors that participate in each body with different levels of cohesion.

All of the above means that there is a need to analyse and understand this institutional framework in greater detail, and thus identify complementarities, overlaps, possible incongruities and gaps. Thus, similarly to the process described in chapter III, there must be shift from a conglomerate of information systems for territorial development to an ecosystem. For such a construction to take place, each country must identify and design the most suitable institutional spaces for interconnecting or coordinating producers and users of territorial information.

This process of interconnecting systems requires proper organization and integration of each component part. For information to be used correctly in all stages of territorial policy, comprehensive systems of indicators must be developed, directing efforts coherently and in a wider manner. To this end, the number of indicators must remain reasonably limited, as proposed by Stiglitz, Sen and Fitoussi (2009), enabling informed follow-up, monitoring and evaluation.

The use of new information technology to generate, analyse and access territorial information is a great opportunity that should not be missed. This requires simultaneous advances in the capacity for social, political and institutional reflection, allowing the great progress being made in statistical and geospatial information to be integrated technically and institutionally.

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Annex IV.A1

Latin America and the Caribbean: territorial data

Table IV.A1.1

Systems of territorial indicators

Country	System of indicators		
Argentina	Atlas of indicators (ATLAS ID)	Responsible entity	Secretariat of Territorial Planning and Coordination of Public Works (formerly Office of the Under-Secretary of Territorial Planning of Public Investment)
		Thematic areas covered	Sociodemographic, environmental, economic, transport, land use, institutional
		Spatial coverage	National, provincial, departmental
		Frequency and most recent update	Ten-year and five-year periods, annual, monthly, weekly, ad hoc, updated to 2019
	Federal Urban Observatory ^a	Responsible entity	Secretariat of Territorial Planning and Coordination of Public Works (formerly Office of the Under-Secretary of Territorial Planning of Public Investment)
		Thematic areas covered	Sociodemographic, environmental, economic, transport, land use, institutional
		Spatial coverage	National, provincial, departmental, local government
		Frequency and most recent update	Ten-year and five-year periods, annual, monthly, weekly, ad hoc, updated to 2019
Bolivia (Plurinational State of)	Datasheets and Indicators for Devolved Administrative Divisions	Responsible entity	State Service for Devolved Administrative Divisions
		Thematic areas covered	Sociodemographic, economic, environmental
		Spatial coverage	National, municipal, departmental, regional
		Frequency and most recent update	Annual, updated to 2018
Brazil	Regional Development Observatory (ODR)	Responsible entity	Ministry of Regional Development (MDR)
		Thematic areas covered	Sociodemographic, educational, economic, science, technology and innovation, infrastructure, environmental
		Spatial coverage	Municipal, microregional, mesoregional, state, macroregional
		Frequency and most recent update	Unspecified frequency, updated to 2014. The Observatory is in the process of being moved to a portal where it will have more up-to-date data
Chile	Regional Observatory	Responsible entity	Office of the Under-Secretary for Regional and Administrative Development (SUBDERE)
		Thematic areas covered	Sociodemographic, economic, environmental
		Spatial coverage	National, regional
		Frequency and most recent update	Annual, quarterly, rolling quarterly, monthly, weekly, daily, updated to 2019
Colombia	TerriData	Responsible entity	National Planning Department (DNP)
		Thematic areas covered	Sociodemographic, economic, environmental, infrastructure, educational, health, security, land use, institutional
		Spatial coverage	Regional, departmental, municipal
		Frequency and most recent update	Ten-year period, biennial, annual, half-yearly, quarterly, monthly, updated to 2019
	National Management and Outcomes Evaluation System (SINERGIA)	Responsible entity	National Planning Department (DNP)
		Thematic areas covered	Environmental, economic, educational, social, health, infrastructure
		Spatial coverage	Regional, departmental
		Frequency and most recent update	Annual, half-yearly, quarterly, monthly, updated to 2018
Costa Rica	Sustainable Development Indicator System (SIDES)	Responsible entity	Ministry of National Planning and Economic Policy (MIDEPLAN)
		Thematic areas covered	Sociodemographic, security, environmental, economic, institutional
		Spatial coverage	Cantonal, parish, district, circuit
		Frequency and most recent update	Annual, updated to 2017
	National Territorial Information System (SNIT)	Responsible entity	National Geographic Institute (IGN)
		Thematic areas covered	Sociodemographic, environmental, geographical, educational, cultural
		Spatial coverage	National, regional, local
		Frequency and most recent update	Annual, updated to 2019
Website	http://www.snitcr.go.cr/about		

Table IV.A1.1 (concluded)

Country	System of indicators		
Dominican Republic	Territorial Statistical Information System (SIET)	Responsible entity	National Statistics Office (ONE)
		Thematic areas covered	Sociodemographic, economic, educational, institutional, geographic, environmental, political participation, security, health
		Spatial coverage	Provincial, regional, municipal, district
		Frequency and most recent update	Ten-year period, rolling ten-year period, four-year period, annual, quarterly, monthly, ad hoc, updated to 2015
		Website	http://siet.one.gob.do/
Ecuador	National Information System (SNI)	Responsible entity	National Secretariat of Planning and Development (SENPLADES)
		Thematic areas covered	Sociodemographic, educational, health, economic, institutional, agricultural, infrastructure
		Spatial coverage	National, provincial, local
		Frequency and most recent update	Ten-year and five-year periods, annual, monthly, updated to 2018
		Website	http://sni.gob.ec/inicio
Guatemala	National Territorial Information System (SINIT)	Responsible entity	Secretariat for Planning and Programming (SEGEPLAN)
		Thematic areas covered	Geographic, hydrographical, services, demographic, institutional, environmental
		Spatial coverage	Municipal, departmental
		Frequency and most recent update	Updated to 2018
		Website	http://www.segeplan.gob.gt/nportal/index.php/servicios/sistemas-en-linea/sinit
Honduras	National Territorial Information System (SINIT)	Responsible entity	Secretariat of Planning and External Cooperation (SEPLAN)
		Thematic areas covered	Sociodemographic, economic, geographical, environmental, infrastructure
		Spatial coverage	National, departmental, municipal
		Frequency and most recent update	Updated to 2011
		Website	http://www.sinit.hn/
Paraguay	Technical Planning Secretariat (STP)	Responsible entity	Directorate General for Development and Territorial Planning
		Thematic areas covered	Includes development plans by municipality and department, as well as poverty by locality (2012)
		Spatial coverage	Municipal, departmental
		Frequency and most recent update	Plans updated to 2019
		Website	http://geo.stp.gov.py/user/stp/maps
Peru	Territorial gaps	Responsible entity	Centre for Strategic Planning (CEPLAN)
		Thematic areas covered	Health, educational, transport, infrastructure
		Spatial coverage	National, departmental, provincial, district
		Frequency and most recent update	Annual, monthly, updated to 2018
		Website	https://www.ceplan.gob.pe/informacion-de-brechas-territoriales/
	SDG indicators	Responsible entity	National Institute of Statistics and Informatics (INEI)
		Thematic areas covered	Sociodemographic, economic, environmental
		Spatial coverage	National, regional, departmental, bays
		Frequency and most recent update	Five-year period, biennial, annual, ad hoc
		Website	https://ods.inei.gob.pe/ods/
Uruguay	Territory Observatory Uruguay (OTU)	Responsible entity	Office of Planning and the Budget (OPP)
		Thematic areas covered	Sociodemographic, educational, health, environmental, economic, technology and communication, infrastructure, security, political participation
		Spatial coverage	Regional, departmental, municipal, local
		Frequency and most recent update	Ten-year period and annual, updated to 2018
		Website	http://otu.opp.gub.uy/filtros/buscar_indicadores

Source: Latin American and Caribbean Institute for Economic and Social Planning (ILPES), on the basis of the respective web sites.

Note: Where too many areas are covered, they have been regrouped at the author's discretion.

^a Still under construction at the time of writing. Data from official documents and publications.

Table IV.A1.2
Spatial data infrastructures

Country	National spatial data infrastructure	Description
Argentina	IDERA	A geospatial information community aimed at fostering the publication of data, products and services, in an efficient and timely manner, as a fundamental contribution to the democratization of access to the information produced by the State and diverse stakeholders, and to support decision-making in the various activities in the public, private, academic, non-governmental and civil society spheres.
Bolivia (Plurinational State of)	IDE-EPB	Initiative of the Office of the Vice-President of the Plurinational State of Bolivia that seeks to provide institutions and users in general with geographical information of interest, regardless of the device used to access it, to provide relevant, harmonized and good-quality geographical data, to support the country's social, economic and environmental development.
Brazil	INDE	Intended to catalogue, integrate and harmonize geospatial data from Brazilian government institutions that produce and store such data, so that they can be easily located and used for the most diverse purposes, by any client with an Internet connection. Geospatial data will be catalogued by the respective metadata published by the data producers and custodians.
Chile	IDE	A network of public institutions working in a coordinated and collaborative manner to make available to the entire community updated and reliable geospatial information that will be useful for public and private management and meet the needs of citizens.
Colombia	ICDE	Understood as an ecosystem that enables collective policymaking and policy implementation and facilitates the management of geographical resources, including data, information and knowledge, for their harmonization, use and reuse by government and civil society, as a basis for governance and decision-making.
Cuba	IDERC	Enables sharing of geographical data in a cooperative interinstitutional environment to support social, economic and environment decision-making. Encompasses the policies, technologies, standards and human resources needed for the effective collection, administration, access to and delivery and use of spatial data at the national level to support economic, political, social and sustainable-development-related decision-making.
Dominican Republic	IDERD	Will support public policies to drive development and an open public network with standardized data (under construction).
Guatemala	IDE	Offers aerial orthophotography, statistical databases, other layers of geographical information produced in the country and specific territorial indicators to support decision-making at the territorial level. It enables geospatial information to be consulted, located, searched, connected and measured without the need for specialized software.
Jamaica	LICJ	Seeks to develop a policy framework and guidelines for the development and growth of geographical information, create a framework to facilitate and provide access to geospatial data among all stakeholders, create and manage a national geospatial information portal, adopt, adapt, create and maintain national standards for the compilation of spatial data, discovery and exchange, and promoting and facilitating the creation and maintenance of digital spatial datasets.
Panama	IPDE	Seeks to foster rules, standards and the coordination of resources to support a policy of spatial data management that encompasses production, use, access to and sharing of such data, as well as ensuring interoperability between the different institutions involved in the spatial data infrastructure. The national geographic information system will publish the official information from the institutions that make up the country's spatial data infrastructure.
Peru	IDEP	A joined-up set of policies, standards, organizations, human resources and technologies aimed at facilitating the production, use of and access to government geographic information, in order to support socioeconomic development and favour timely decision-making.
Trinidad and Tobago	NSDI	Integrated information infrastructure that provides geographic and other types of data to various users. It provides government agencies with access to broad data and tools to support decision-making and policymaking.
Uruguay	IDEUY	A deconcentrated, technically independent body of the Office of the President of the Republic, whose purpose is to organize production of national geographical information products and services and facilitate their availability, including access and use, to support decision-making for sustainable development.
Venezuela (Bolivarian Republic of)	IDEVEN	Responsible for facilitating availability, access to and use of geographical data, metadata, services and information to the entire public administration, the production sector, the education sector and the organized community, offering the possibility of adding information to the platform. This is intended to promote the social, economic and environmental development of the national territory, through the participation of all sectors of Venezuelan society.

Source: Latin American and Caribbean Institute for Economic and Social Planning (ILPES), on the basis of the respective web sites.



CHAPTER

V

Implementation and financing of territorial development policies

Introduction

- A. The 2030 Agenda for Sustainable Development, the Sustainable Development Goals and the challenges of financing for development
- B. Decentralization and the conditions for territorial development financing in Latin America and the Caribbean
- C. Development banks and financing of territorial development in Latin America and the Caribbean
- D. Territorial development policies in Latin America and the Caribbean and their financing strategies
- E. Conclusions

Bibliography

Introduction

Implementation is understood to mean the set of actions that must be carried out to create the conditions and generate the outputs that are needed to achieve the objectives set forth in plans and policies. Implementation poses highly complex challenges. The nexus between the design of policies and plans and the conditions for their execution creates tensions in many aspects of the relationships between individuals, institutions and tiers within organizations; it also challenges the capacity to creatively manage communication, cultural diversity and even personal expectations, fears and apprehensions.¹ Aside from these overarching challenges, implementation has been identified as a weakness in Latin America and the Caribbean, so it is an important matter to be addressed in the region.²

Owing to considerations of space and the scope of this work, and although all these aspects are relevant and important, only one will be explored here. It is, however, a very crucial one: financing and resources.³ Financing and resources will be addressed from the perspective of the national level⁴ in a series of stages that give rise to two main outcomes: first, an approach to the main challenges of managing the financing of territorial development policies (both structural challenges and those arising from the implementation of the 2030 Agenda for Sustainable Development) and, second, defining a set of criteria to be borne in mind when designing and implementing financial instruments for these purposes (Territorial PlanBarometer).

Although global agendas are the fruit of initiatives and agreements drawn up by the countries, they are taken here as the starting point in order to provide context and guidance for the measures that are needed. Accordingly, the first section of this chapter places the challenge of financing in the contemporary global context, with the horizon of the 2030 Agenda and the Sustainable Development Goals (SDGs) and in particular conditions of access to development resources. The second and third sections give an overview of decentralization and development banks, which both figure prominently in the recent history of financing for territorial development policies in the region. The fourth section explores the situation at present, as touched upon in chapter III, identifying the main territorial development policies mentioned in the countries of the region and how they define the availability of financial resources for their implementation. In this section and in the conclusions, some basic criteria are proposed for consideration in designing types and mechanisms of financing for territorial development policies (Territorial PlanBarometer).

A. The 2030 Agenda for Sustainable Development, the Sustainable Development Goals and the challenges of financing for development

Territorial development policies (ECLAC, 2017a) must form part of the means of implementation of the 2030 Agenda and the Sustainable Development Goals (United Nations, 2015b), the *New Urban Agenda. Habitat III* (United Nations, 2017), the Montevideo Consensus on Population and Development (ECLAC, 2013 and 2015c) and the Sendai Framework for Disaster Risk Reduction 2015–2030 (United Nations, 2015a). The reflection here must therefore be framed within the considerations that both ECLAC (2015a) and the United Nations (2019) have put forth with respect to developing financing, challenges and contemporary constraints.

¹ *The Oxford Handbook of Public Policy* makes a number of statements in this regard, including the following: policy is not only about arguing, but is also about bargaining; governing is less and less a matter of ruling through hierarchical authority structures, and more and more a matter of negotiating through a decentralized series of floating alliances; it can never be taken for granted that policies will be implemented on the ground as intended: usually they will not; policy makers can never be sure exactly what resources are, or will be, available for pursuing any set of aims (Goodin, Rein and Moran, 2006, pp. 7, 8, 12, 14 and 19).

² A report by the Inter-American Development Bank (IDB) notes that, as regards policy implementation, Latin America and the Caribbean ranks fifth out of seven regions, with only Africa and South Asia doing worse (Franco Chuaire and Scartascini, 2014, p. 12).

³ When a draft of this document was presented to the Presiding Officers of the Regional Council on Planning at their twenty-seventh meeting, held in Santo Domingo on 30 August 2018, they drew particular attention to the need to address the issue of financing.

⁴ The challenges of financing are understood to have particular nuances at the subnational government level; these will not be addressed here.

Given the characteristics, breadth and duration of the respective challenges, the post-2015 development agenda requires resource mobilization on a massive scale, and a change in the way resources are financed, organized and allocated. As a collective challenge, this implies mobilizing public and private funds jointly, and taking into consideration the fact that the countries of the region have very different capacities for accessing private financing, whose flows are, moreover, volatile, asymmetric and limited in their impact on development. For this reason, governments must act effectively and selectively to leverage markets and private flows in order to achieve the SDGs. It must also be borne in mind that the more traditional forms of development financing—such as official development assistance (ODA)—are waning. Accordingly, innovative financing mechanisms and new forms of cooperation must form significant components of the development financing architecture: while traditional forms of cooperation afford great importance to poverty reduction as a main aim, South-South cooperation looks more to growth based on the development of infrastructure, technical cooperation and knowledge-sharing. As such, it is essential to improve capacities to mobilize domestic fiscal resources, tackle illicit financial flows—which represent an enormous drain on resources—and, in some cases, take steps to restructure sovereign debt (for example, in the Caribbean countries). Lastly, the fiscal route to domestic resource mobilization must be complemented with a stronger role for development banks⁵ (ECLAC, 2015b, pp. 5–10).

The task of national governments should be directed in a similar manner to the work set forth in this document: integrate, organize and jointly manage efforts which most often tend to be dispersed, fragmented and uncoordinated. In these conditions, the aim should be to devise an ecosystem of policies geared towards territorial development, in this case, an ecosystem of policies and instruments for the financing aspect of territorial development.

Indeed, both ECLAC (2015b, p. 15) and the Inter-Agency Task Force on Financing for Development (United Nations, 2019, xviii and ch. II) insist on the need for integrated financial frameworks. As the Task Force argues, “The integrated financing framework will not need to reinvent the wheel; it is a tool to identify and implement targeted policies and reforms to increase their effectiveness, coherence and alignment with sustainable development” (United Nations, 2019, p. 11). With that in mind, a four-stage process is recommended: (i) diagnostics; (ii) design of the financing strategy; (iii) identification of mechanisms for monitoring, review and accountability; and (iv) governance and coordination mechanisms.

The national development plan or strategy lays out what is to be financed, and the integrated financing framework spell out the resources with which this is to be achieved. The number of development plans formulated worldwide almost doubled between 2006 and 2016, and they are increasingly well aligned with the 2030 Agenda. However, as will be demonstrated later, financing is often the weakest component of these plans: 79 of 107 plans analysed did not specify either costing or their sources of financing, and those that did most often focused on the government budget (United Nations, 2019, p. 12).

Integrated financing frameworks must include both financial and non-financial means of implementation, the financing strategy must bring together various financing policies and instrument, and the contributions of the different institutions and stakeholders must be spelled out (United Nations, 2019, p. 12). The global financing landscape is complex: for example, there are around 1,000 instruments available in the development assistance arena. Without clear-cut national strategies it will be very difficult to seize opportunities and mitigate risks.

Apart from these strategies, the criteria for allocating and mobilizing financial resources needs to be changed. Here, both development banks and the fiscal component of decentralization have a crucial role to play. As ECLAC has argued (2015b, p. 36): “The global architecture for climate change finance needs more than streamlining: it needs a change in the whole logic behind development financing, with recognition that social and environmental criteria—not only economic criteria—should form the guiding principles for the provision of development finance. Accordingly, a better, standardized methodology is needed to gauge the environmental dimensions of every activity, such that these dimensions can be included in the cost-benefit analysis determining financing provision”.

⁵ “Regional, subregional and national development banks have proven to be a successful source of medium- and long-term resources through investment finance for infrastructure, productive and social development, and for climate change mitigation” (ECLAC, 2015b, p. 9).

B. Decentralization and the conditions for territorial development financing in Latin America and the Caribbean

As noted above, devising an integrated financing framework for territorial development policies does not mean reinventing the wheel. For this reason, two components warrant revisiting in view of their history (institutions and policies at least four decades old), nature (having mobilized large volumes of resources) and future impact: decentralization, in this case its fiscal component, and development banks. This section looks at the first of these.

Given the long history of decentralization, coupled with the deep transformation it has wrought in territorial intergovernmental relations and the economic effort it has represented, it is worth asking what lessons it has left and what impact it may have had on territorial inequalities.

As noted above, decentralization has a long and globally significant record.⁶ According to Rodríguez-Pose and Ezcurra (2009, p. 3), “Over the last forty years a decentralizing wave has swept the world. Whereas in the early 1970s the number of truly decentralized countries —not including those that were only decentralized on paper— was rather limited, decentralization is now an essential feature of political regimes the world over. It has been at the centre of policy transformations not only in developed countries, but also in many developing and transition economies in Asia, Latin America, and Africa”

Decentralization has had a marked impact on territorial intergovernmental relations. In Latin America and the Caribbean it gained traction as of the 1980s; it coincided with the wave of democratization in the countries of the region and, for that reason, its motivations were very varied and highly significant. In the political arena, decentralization was associated with the need to revitalize democracy and participation and bring government responses closer to citizens’ demands. This, it was thought, would also help achieve better, more relevant and efficient services, at a lower cost. In the territorial sphere, political and administrative autonomy, the revitalization of democracy and broader access to resources were expected to reinvigorate the economy and society and thus offset the region’s endemic centralism and reduce inequalities. This section will look specifically at the last of these.

The fiscal component of decentralization takes the form of increasing devolution to subnational (intermediate and local) levels of responsibilities for the provision of public goods and services financed from different sources, such local resources, government transfers and borrowing. Around 2015, transfers were substantial in volume but varied a great deal from one country to another: around 8 GDP points in Mexico, Argentina and the Plurinational State of Bolivia; between 2 and 4 GDP points in Ecuador, Brazil and Colombia; and between 0.5 and 1 GDP point in Peru, Uruguay and Chile (ECLAC, 2017b, p. 99, figure IV.7). Also around 2015, the weight of subnational government in spending was even greater, but just as uneven, varying between 15 GDP points in Argentina and 3 points in Uruguay (ECLAC, 2017b, p. 93, table IV.1).

In terms of responsibility for service delivery, national systems are also highly varied and their operation is quite complex (Galilea, Letelier and Ross, 2011, and Letelier, 2012). Nevertheless, the prevailing trend has been to strengthen the role of subnational governments in social and local service provision. Although spending responsibilities vary from one country to another and by level of government, in general in Latin America and the Caribbean decentralization has extended to the delivery and financing of education and public health in the social services, as well as infrastructure for basic services such as drinking water and sanitation. Other subnational government functions include waste collection, street sweeping and cleaning, local transport, maintenance of parks and gardens, public lighting and the issue of building and operating permits (IDB, 2015; Equino and others, 2010, cited in Muñoz, Pineda and Radics, 2017, p. 9).

Has this significant and prolonged effort then reduced territorial inequalities? What lessons have emerged in terms of financing for territorial development. These questions will be addressed in stages, considering complementary aspects and drawing upon different sources of information.

⁶ For an account of the process of reallocation of functions between levels of government in the region by period, see Rezende and Veloso (2012).

1. Decentralization and territorial inequalities from the global perspective

The results of empirical research at the international level do not agree on a particular impact of decentralization on social territorial inequalities. Nevertheless, despite the ambiguities, there are meaningful trends and lessons to be extracted. Rodríguez-Pose and Ezcurra (2009) investigated the link between political and fiscal decentralization between 1990 and 2006 in 26 countries with different levels of development and in different world regions: 19 developed and 7 developing countries, including only two in Latin America. “The results of the paper highlight that the question of whether decentralization matters for territorial disparities may not be the most pertinent, but rather under which circumstances is decentralization likely to enhance or reduce regional inequality” (Rodríguez-Pose and Ezcurra, 2009, p. 34).

In their conclusions, these authors thus draw a clear distinction between developed and developing countries. In developed countries, fiscal decentralization helps to reduce territorial gaps, while in developing countries it widens them. This discrepancy occurs because “the transfer of powers and resources to subnational tiers of government disproportionately benefits those regions with a greater capacity to really fulfil allocative and productive efficiency” (Rodríguez-Pose and Ezcurra, 2009, p. 9). “In most other cases, weaker and often times more corrupt institutions, lower access to capital, smaller tax bases, and weaker infrastructural, educational, and technological endowments represent a serious handicap for poorer regions within any given country in order to deliver greater allocative and productive efficiency through decentralization” (Rodríguez-Pose and Ezcurra, 2009, p. 10).

This observation has several interesting implications. First, it is important to clarify that, where inequalities have widened, the cause is not decentralization, but asymmetry in institutional, social and economic capacities.⁷ Decentralization is a necessary but not a sufficient condition for reducing territorial gaps. Economic and fiscal efforts are not enough: rather, especially in less developed territories: as well as decentralizing, countries need to establish, consolidate and build public and institutional capacities at the local and territorial level.

Secondly, this last point gives rise to an important implication for financing: investment financing must increase in step with the physical equipment and resources to implement and manage it. In other words, financing strategies must recognize the difference between the institutional capacities of the different territories and manage different combinations of financing for investment and for operations,⁸ so that less developed territories can advance in simultaneously establishing and consolidating the institutional capacities to make the best possible use of the opportunities that decentralization creates.

2. Decentralization and territorial fiscal disparities in Latin America and the Caribbean

This section goes on to examine the impact of decentralization on territorial inequalities in terms of per capita spending capacity. Although the emphasis is on the effect of transfers, the fact remains that these occur in a context of very limited collection by subnational governments of their own revenues,⁹ and in fact transfers have been used chiefly to cover vertical disequilibria. The adoption of compensatory mechanisms (equalization transfers) to address horizontal disequilibria will be examined later.

⁷ As Rodden (2003) argued, the effects of decentralization are conditioned by the nature of the process, so that the potential benefits of decentralization do not derive from decentralization per se, but rather from the specific institutional characteristics of the process (Pinilla, Jiménez and Montero, 2014).

⁸ A stable system of fiscal relations and a successful decentralization process require a proper system of financing so that each level of government can properly perform the functions allocated to it. However, it is not only the level of financing for each government level that matters, but also the mix of financing, which in the case of subnational governments is a combination of their own tax and non-tax income, transfers from central government and, in some cases, the option of borrowing (Gómez Sabaini and Jiménez, 2011, p. 39).

⁹ For information regarding the limited subnational tax autonomy in the region and its measurement, see Brosio, Jiménez and Ruelas (2018). Regarding low collection of property tax, see OECD and others (2019).

Large and persistent territorial inequalities are a hallmark of the region, and this is especially true in the fiscal sphere. These disparities are the results of a particular, perverse combination of vertical and horizontal fiscal imbalances.¹⁰

Muñoz, Pineda and Radics examine the capacity of transfer systems to lessen fiscal disparities between subnational governments in the region, looking in detail at the cases of Colombia, Ecuador, Mexico, Peru and Uruguay. These disparities are due to a combination of factors. On the one hand, subnational governments have very different sources from which to generate income of their own, owing to inequalities in the territorial distribution of wealth and economic activity.¹¹ On the other hand, service delivery costs tend to be much higher in areas with low population density and greater land extent, which tend to also be the poorer areas (Muñoz, Pineda and Radics, 2017, pp. 5 and 8). Lastly, territories' have very different institutional capacities and thus highly uneven abilities to collect and use their own resources,¹² raise external resources and deliver services efficiently.

Having considered the different transfer mechanisms, formulas and funds between central and subnational governments in the countries of the region, Muñoz, Pineda and Radics (2017, p. 50) conclude that, although the fiscal capacity of subnational governments in Latin America and the Caribbean is very unequal, on average fiscal transfers do reduce these disparities by around a third. For example, based solely on their own resources, the per capita spending capacities of local government in Peru and Colombia are highly unequal, with Gini coefficients of 0.65 and 0.467, respectively. By contrast, once the various types of transfers are factored in, these inequalities fall to 0.49 in Peru and 0.22 in Colombia (see table V.1).

Table V.1

Latin America (8 countries): equalization effect by component of transfer systems, 2009–2014
(Population-weighted Gini coefficient)

Country	Year	Cumulative effect by component						
		Own income	1 + Tax sharing	2 + Discretionary transfers	3 + Royalties	4 + Co-financing/ capital transfers	5 + Conditional transfers	6 + Total income
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
Regional governments								
Argentina	2010	0.3125	0.2097	0.2088	0.2269			0.22698
Brazil	2011	0.2158	0.1440		0.1424			0.1609
Colombia	2009	0.2734	0.1784		0.2215	0.2215		0.2201
Mexico	2013	0.2277	0.1192		0.1264		0.1864	0.1528
Peru	2014	0.3186	0.1414		0.1396			0.1396
Uruguay	2012	0.2550	0.1541				0.2050	0.1541
Local governments								
Chile	2013	0.4410	0.1940			0.2200		0.2730
Colombia	2009	0.4670	0.2147		0.2245	0.2181		0.2266
Ecuador	2014	0.2956	0.2022		0.2176			0.1630
Peru	2014	0.6540	0.4060		0.4800			0.4980

Source: A. Muñoz, E. Pineda and A. Radics, *Descentralización fiscal y disparidades regionales en América Latina: el potencial de las transferencias de igualación*, Inter-American Development Bank (IDB), 2017 and J. Díaz-Cassou and H. Viscarra, "Transferencias intergubernamentales y disparidades fiscales a nivel subnacional en Ecuador", Reporte preliminar, Washington, D.C., Inter-American Development Bank (IDB), 2016.

¹⁰ Vertical fiscal disequilibria occur when the resources allocated by law to each jurisdictional level are insufficient to cover that level's spending responsibilities. Horizontal disequilibria derive from the fact that not all subnational levels are equal, they have different needs and capacities and they must accordingly provide their inhabitants with services that differ in quantity and quality from one entity to another (Wiesner, 1992).

¹¹ For example: in Argentina, 62% of provincial tax collection is accounted for by the City and Province of Buenos Aires; in Brazil, a third of state collection is in São Paulo; 46% of land tax in Mexico is collected in the Federal District; and in Colombia, 30% of property tax is collected in Bogotá (Gómez Sabaini and Jiménez, 2011, p. 40).

¹² Property tax is the most suitable tool for raising tax revenue at the local level, but its collection is low in all the countries. The main failings in this regard are property register issues, valuation below market value, lack of automated management processes and lack of political will to levy property tax (Gómez Sabaini and Jiménez, 2011, p. 40).

Two cases merit special attention, however, as they clearly diverge from the general trend described: one concerns transfers originating in the payment of royalties from the use of non-renewable natural resources and the other relates to competitive funds. In the first case, the studies and research conducted by Jiménez (2019) and Muñoz, Pineda and Radics (2017, p. 60) conclude that royalties tend to be regressive and to sharpen per capita income inequalities between regions. In Peru and Colombia and, to a lesser extent, in Mexico, royalties notably widen these disparities. In cumulative terms, the introduction of royalties significantly reverses the equalizing effect of Foncomún at the municipal level in Peru, of tax-sharing at the state level in Mexico, and of the general system of tax sharing at both these levels in Colombia. This is because they represent compensation for the right to exploit a resource, and thus benefit only a minority of territorial entities bordering the areas where extractive activity is carried out.

With regard to competitive funds, in line with the arguments set forth concerning the impact of differences in institutional capacities at the territorial level, systems in which funds are allocated by arrangement or by competition contribute to fiscal disequilibria. In this regard, Muñoz, Pineda and Radics (2017, p. 60) note that for Colombia and Brazil, co-financing and transfer agreements, respectively, have regressive effects on the distribution of fiscal capacity. Similarly, in Chile it has been documented that capital transfers, mostly through the National Regional Development Fund (FNDR), increase disparities in public income. This is likely because the most developed territorial entities are also the most capable, technically and administratively speaking, of complying with the technical guidelines for having projects endorsed under public investment systems, or are better positioned from the financial point of view to co-finance projects on an equal footing with central government or to access credit.

3. Decentralization and territorial socioeconomic inequalities in Latin America and the Caribbean

The most recent stocktakings suggest that perseverance with decentralization efforts —as responses have been devised to the obstacles encountered— has contributed to improving living standards, and has even lessened differences in this regard between territories. After a phase of effervescence in the 1980s and 1990s, the decentralization process generated severe fiscal misalignments (Gómez Sabaini, Jiménez and Martner, 2017) which had to be corrected and gave rise to a new, apparently positive, epoch. In this regard, towards the late 1990s, a more cautious approach was adopted to decentralizing reforms, imposing stricter regulatory frameworks and development follow-up and evaluation systems for subnational entities (Daughters and Harper, 2007, cited in Pinilla, Jiménez and Montero, 2014, p. 84).

This adds weight to the idea that positive social and economic outcomes are not the result of decentralization itself, but the specific conditions under which it is pursued. It may be, then, that it is a certain (much more complex) type of decentralization that has been capable of driving efficient provision and fulfilment of social rights in Latin America. A type of decentralization that supports the autonomy and fiscal (especially tax) strength of subnational entities and that provides an effective institutional framework, with monitoring, follow-up and oversight systems. The conditions and managerial capacities under which the process unfolds are also fundamental (Pinilla, Jiménez and Montero, 2014, p. 84).

In 2014, research was conducted into the social impact of decentralization in numerous countries in the region,¹³ and the empirical results suggest that the impact was positive. In general, the models were found to be well adjusted and the significance of the different variables was always high, confirming the relationship between them. Notably, the impact of decentralization was always positive and significant for all the social outcomes analysed and factors included; with variation only in the strength of the effect (measured by the absolute value of the coefficients). In terms of health conditions (infant mortality) the study found evidence of a positive and significant correlation, which was higher in more rural, higher-income countries, with more

¹³ Argentina, Bolivarian Republic of Venezuela, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Plurinational State of Bolivia and Uruguay.

democratic institutions the central government playing a stronger role. In education (literacy rate), the correlation with decentralization was also positive and significant, especially in lower-income countries whose tax systems had a higher percentage of direct taxes. With regard to social infrastructure (percentage of the population with access to drinking water) the impact of decentralization rose with higher levels of subnational government income, independently of environmental factors considered (Pinilla, Jiménez and Montero, 2014, pp. 103 and 104).

These results converge with the measurements carried out by ECLAC (2015a and 2017a) using the regional development index (RDI), whose methodology is described in box V.1.

Box V.1

Methodology for construction of the regional development index

The purpose of the regional development index (RDI) is to measure economic and social dimensions of relative development. On the basis of different methodological criteria proposed in the literature, indicators were sought to express synthetically certain relevant phenomena; there also needed a comparable data framework. In order to retain almost all the information obtained in 2010 (see ECLAC, 2015), the indicators selected were those that most countries collect regularly at the national and subnational levels, and whose conceptual definitions were relatively similar from one country to another. The only indicator excluded was the employment rate, because it was not available at the subnational level in all the countries. As in 2010 (ECLAC, 2015), per capita GDP excluded mining, because a strong mining presence in some territorial entities in the region causes significant distortions. In these cases, it is known that a high level of per capita GDP does not necessarily imply better development, since most of the wealth generated tends to be transferred out of the producing territories. For that reason, per capita GDP excluding the mining industry is deemed to be closer to what may be considered truly territorial income.

On the basis of these criteria, the RDI indicators for 2015 are as follows:

- (i) Percentage of the population that is rural.
- (ii) Per capita GDP, excluding extractive mining.
- (iii) Illiteracy rate.
- (iv) Population with tertiary education.
- (v) Infant mortality rate.
- (vi) Life expectancy.
- (vii) Homicide rate.
- (viii) Dwellings without inside water supply.
- (ix) Households or dwellings with a computer.
- (x) Employment rate.

In order to calculate the composite result, rescaled data were normalized for these 10 indicators. The resulting distributions fluctuate between values of 0 and 1. The scores obtained were then added on the basis of a system of homogeneous weightings:

$$IDR_t = \frac{\sum_{i=1}^N w_i y_{it}^t}{\sum_{i=1}^N w_i} \quad \text{where} \quad y_{it}^t = \frac{x_{ir}^t - \min(x_r^t)}{\max_r(x_q^t) - \min_r(x_q^t)}$$

The final distribution of RDI was ordered from greatest to least, then divided by quintiles, to yield the following ranges: high, medium-high, medium, medium-low and low.

Source: Economic Commission for Latin America and the Caribbean (ECLAC), "Panorama del desarrollo territorial en América Latina y el Caribe, 2015: pactos para la igualdad territorial", *Project Documents* (LC/TS.2017/120), Santiago, 2015.

Table V.2 shows the variation in the 10 variables of RDI between 2010 and 2015. The evidence obtained coincides with the findings presented by Rodríguez-Pose and Ezcurra (2009) and Muñoz, Pineda and Radics (2017), which pointed to a decline in territorial inequalities. Comparison of the values of each variable in the highest and lowest quintile yields ratios that proxy for the magnitude of territorial inequalities (see the last column of table V.2). The extreme cases help to understand this measurement: while life expectancy is almost identical in the poorest and richest territories (ratios of 1.09 and 1.08 in 2010 and 2015), the illiteracy rate is almost five times higher in poor territories (4.74 and 4.96 in 2010 and 2015).

Table V.2

Latin America: territorial inequalities according to the average of the variables of the regional development index, by quintile, 2010 and 2015

Variable	Year	High quintile	Medium-high quintile	Medium quintile	Medium-low quintile	Low quintile	Ratio
Life expectancy (years)	2010	76.29	75.63	74.30	72.67	69.90	1.09
	2015	77.55	76.28	75.28	73.64	72.09	1.08
Infant mortality (deaths per 1,000 live births)	2010	10.74	12.25	15.23	18.33	31.49	2.93
	2015	9.65	11.23	13.22	17.35	21.72	2.25
Illiteracy rate (percentages)	2010	3.08	5.76	7.57	11.30	14.62	4.74
	2015	2.52	4.96	7.27	8.86	12.49	4.96
Population aged over 25 with tertiary education (percentages)	2010	16.15	14.11	12.69	10.60	9.26	1.74
	2015	23.87	22.26	21.61	19.33	17.17	1.39
Rural population (percentages)	2010	10.05	18.86	28.64	37.41	45.38	4.51
	2015	11.37	19.42	26.85	36.52	41.61	3.66
Dwellings without inside water supply (percentages)	2010	11.90	18.79	31.37	44.28	59.75	5.02
	2015	9.30	11.88	17.38	23.99	34.35	3.70
Employment rate (percentages)	2010	45.77	42.62	38.98	38.13	33.74	1.36
	2015	44.84	43.19	42.22	42.76	43.90	1.02
Per capita GDP, excluding extractive mining (thousands of dollars)	2010	11.10	7.28	5.05	4.02	2.43	4.58
	2015	12.27	8.12	5.81	4.06	3.41	3.59
Households or dwellings with a computer (percentages)	2010	43.81	31.57	24.92	19.46	13.97	3.14
	2015	51.16	41.88	35.93	27.40	22.42	2.28
Homicide rate (number per 100,000 inhabitants)	2010	11.30	16.73	25.49	23.55	23.74	2.10
	2015	7.12	12.23	15.20	14.05	21.88	3.07

Source: Economic Commission for Latin America and the Caribbean (ECLAC), "Panorama del desarrollo territorial en América Latina y el Caribe, 2017: agendas globales de desarrollo y planificación multinivel", *Project Documents* (LC/TS.2017/120), Santiago and, *Panorama del desarrollo territorial en América Latina y el Caribe, 2015* (LC/W.671), Santiago, 2015.

The evolution observed has indeed been positive. Between 2010 and 2015 territorial inequalities have followed a downward trend in the region. Comparison of the value of inequalities between 2010 and 2015 shows a reduction across almost all the variables. Of the total 10, there were only 3 exceptions in which inequality rose: the illiteracy rate, the homicide rate and, albeit only slightly, life expectancy.

C. Development banks and financing of territorial development in Latin America and the Caribbean

Given the characteristics, trajectory and possibilities of development banks, an integrated financing framework for territorial development requires a review of their current and future contribution. Taking a global view of their characteristics and potential, based on research on 64 development banks around the world (World

Bank, 2018), the development banking sector may be described as follows: there are development banks in almost all countries, regardless of their level of development; they tend to be small in terms of assets, but very important insofar as governments use them to provide financial services in sectors or regions not adequately served by private financial intermediaries; they are highly diverse in terms of size, financial performance, development objectives, business models, governance practices and funding arrangements; and, lastly, they serve mainly the private sector, with 87% targeting small and medium-sized enterprises (SMEs), 78% serving large corporations and 64% working with private financial intermediaries (World Bank, 2018, pp. 6 and 9).

The development banking sector is aware of the great challenges ahead, one of which is global and strategic: to serve the aim of sustainable development. At its meeting in 2015, the International Development Finance Club declared its firm belief that the role of development banks was “crucial to promote sustainable development and help transition to low-carbon climate-resilient development pathways” (IDFC, 2015, p. 1). Accordingly, development banks are aware of the need to mobilize a vast quantity of resources, and of the importance of leveraging all types of funding arrangements: local, international, public and private (ALIDE, 2018b, p. 2).

Development banks are in a position to make an effective contribution thanks to their particular ability to mobilize and scale-up resources through co-investment by private entities and institutional investors, while recognizing the particular risk contexts and adopting the long-term vision that sustainable development investments require (IDFC, 2015). According to ALIDE (2018b, p. 2), these are all challenges for States and government institutions, including development banks, which by nature are called upon to finance long-maturity and higher-risk projects: smaller firms, new activities or products not familiar to the financial market, and remote localities or territories which lack other access to funding. In general, they meet demand for financing in activities, sectors, territories that have the potential to be economically and socially profitable, and identify business opportunities and provide governments with policy guidance on development financing.

Development banks also play a notable countercyclical role (World Bank, 2018, p. 22) in buffering the impact of the macroeconomic cycle. They are also strategic in opening up space for financial innovations to adapt to sustainable development challenges, and they send signals and create incentives for private banks and funding systems to follow a similar route. One of the most powerful *raison d'être* of development banks is thus their capacity to innovate and channel resources towards activities that can shift the development path and drive processes of structural change in the economies (Além and Ferreira, 2015).

In these tasks, the development banks in the region have been adapting their instruments and stances. This is evident in the role that they play in building urban and territorial resilience, something which is at very different states of maturity and implementation: some offer long-term loans and capitalization adapted to project timescales and risk profiles, provide specific credit lines for environmental and energy efficiency investments, and finance projects to reduce, reuse and recycle material and solid waste and manage water resources, to mention some of the most significant (ALIDE, 2018b, p. 35).

For the purposes of this work, an especially important and relevant aspect of the work of development banks is the improvement of financial inclusion in territories which are excluded from more conventional finance and commerce owing to geographical, social or infrastructural factors. A number of experiences illustrate the concrete strategies development banks use to enhance territorial accessibility to credit (see box V.2): reducing financial risk; shifting investment towards projects that increase sustainability in cities and territories; offering flexible funding criteria to adapt to the great variety of credit seekers; and improving institutional capacities to access credit and manage it properly.

Box V.2

Cases of financing through development banks

Public Trust for Procurement (FPC), National Bank for Public Works and Services (BANOBAS), Mexico: This initiative aims to facilitate subnational governments' access to long-term borrowing, reduce costs and broaden sources of financing. It is supervised by the National Bank for Public Works and Services, which was established in 1933 as a development bank for Mexico. It is implemented through a trust that improves risk perception and lowers financial costs by obtaining interest rates appropriate to the Public Trust for Procurement's credit rating. This encourages commercial banks to contribute to the financing of infrastructure projects and strengthens the Mexican states both financially and institutionally. Repayments are made with resources from federal transfers to subnational governments, with the trust acting as the borrower in place of the governments. The Public Trust for Procurement therefore puts local public finances on a more comfortable footing and allows subnational governments to allocate more resources to other infrastructure projects, as well as to social programmes that benefit inhabitants and address their unmet needs.

Territorial Development Programme (Prodetex), Bank of North-West Brazil (BNB), Brazil: This programme is run by the Bank of North-West Brazil, which was established in 1952 and represents the country's federal government in implementation of public policies and development programmes by offering financing at competitive interest rates to entrepreneurs, regardless of the size of the business. Its competences also include administering the North-East Constitutional Fund for Financing (FNE) and the North-East Investment Fund (Finor). The Territorial Development Programme has 19 stages, beginning with selection of municipalities, training of assigned personnel and formulation and implementation of territorial action plans. From meetings with local production actors and political actors, coordinated by a development agent, local and territorial stakeholders choose an economic activity that should be prioritized, identify a related problem or bottleneck, and set general and specific goals, targets and actions to mitigate its effects. These stakeholders are also responsible, together with the development agent, for managing the plan and evaluating the expected accomplishments. The Territorial Development Programme thus contributes to territorial and local development by strengthening organization, increasing the competitiveness of the region and its production chains, incorporating technological innovations and improving living conditions. In this way, it contributes to synergies between traditional knowledge and knowledge generated by research centres, teaching institutions and bodies that disseminate technical knowledge. In its first phase, in 2016, the Territorial Development Programme prepared 21 territorial action plans in 21 territories, involving around 2,000 producers from 150 different municipalities. In the first half of 2017, 50 new territories were included. The resources mobilized in the first year of financing totalled 1,949,281.31 dollars.

Strengthening the Local Economy and Low-Carbon Growth programme, Institute for the Development of Antioquia (IDEA), Colombia: The programme entitled Strengthening the Local Economy and Low Carbon Growth aims to finance sustainable projects through mechanisms that correct market failures, preserving the environment and its resources, and generating sustained income for municipalities. The programme is managed by the Institute for the Development of Antioquia, which was created in 1964 to promote regional development in Colombia. The Institute established a new financing facility for small hydropower plants (SHP), capitalizing projects and filling funding gaps to enable financing to be finalized by factoring the future flows from energy sales agreements. Through this mechanism, local governments participate as partners in and owners of small hydropower plants, receiving 3% of their profits, thus enabling them to finance public works and reduce their dependence on the central government. This promotes sustained, inclusive and responsible economic growth in subregions, without undermining the sustainability of vital ecosystems. Integrated water resources management is promoted through coordinated use and management of water, land and other resources related to micro-catchments. The Institute for the Development of Antioquia is thus able to structure and manage strategic investments that generate value and contribute to financial sustainability, reductions in greenhouse gases, coordinated use of water and other micro-catchment resources, and social well-being. Gen+ (a technical body created by the Institute for the Development of Antioquia in 2008 in response to a joint public-private effort) runs the programme and participates in all stages of the projects, providing a long-term strategic perspective. At present, the non-conventional renewable generation projects in operation and under construction comprise five small hydropower plants: Generadora Alejandría, San José, Juan García, Penderisco 1 and Conde. The total investment is 132 million dollars, of which 88 million dollars is being financed by the Institute for the Development of Antioquia. These projects generate 1.7 times fewer metric tons of CO₂ per year than the projects financed between 2008 and 2015. All programme projects are registered with the country's Strategic Mining Planning Unit (UPME). There are currently 43 registered projects.

Box V.2 (concluded)

Eco.business Fund, Kreditanstalt für Wiederaufbau (KfW), Germany: The eco.business Fund was established in Luxembourg as an open-ended investment company and specialized investment fund (SICAV-SIF) to promote protection of the environment through the business sector. The Fund finances its activities through a partnership of public and private investors and promotes the financing of enterprises that adopt sustainable means of production and technologies in agriculture, forestry, fishery and tourism. Investments are channelled through local financial institutions, which the fund offers long-term debt solutions. In the medium term, local financial intermediaries are expected to invest in the sustainable sector without the support of the eco.business Fund. This promotes business practices that contribute to conserving biodiversity, making sustainable use of natural resources, mitigating climate change and adapting to its consequences. The eco.business Fund is run by KfW (a development bank of the Federal Republic of Germany), whose mission is to focus on cooperation with Latin American and Caribbean countries in the areas of socioeconomic development, infrastructure, renewable energy, climate change, environmental protection and sustainable use of natural resources. The Fund also provides technical support to financial intermediaries and their clients to facilitate implementation of clients' products and increase their impact. Since its creation it has mobilized 213.5 million dollars in capital, 38 million dollars of which came from the private sector. At the end of the first quarter of 2018, the Fund had distributed 170.4 million dollars to ten financial institutions in 6 countries, resulting in loans to more than 950 local businesses. It currently operates in Latin America and the Caribbean and plans to replicate the model in other regions in the coming years.

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of Latin American Association of Development Financing Institutions (ALIDE), *Innovación financiera para el desarrollo local y territorial*, Premios ALIDE, December 2018.

In sum, the experience of development banking on the ground offers reflections and lessons for addressing the challenge described in this chapter: it is not enough to place financial resources at the disposal of territories; this effort must be coupled with improvement of institutional conditions at the level of the territories, so that they can make good use of the opportunities these resources represent.

In this regard, development banks recognize and stress something that is paramount for building integrated financing frameworks for territorial development—that their ability to meet their goals depends on broad convergence with public policy (sectoral, macroeconomic and territorial) and the creation of an ecosystem of financial institutions (World Bank, 2018, p. 7).

D. Territorial development policies in Latin America and the Caribbean and their financing strategies

Thus far, this chapter has examined complex processes such as global challenges regarding financing and decentralization, and the major financial institution of developing banking. From these processes and institutions may be drawn significant lessons and recommendations that in this section will be applied as factors for characterizing financial instruments. These factors will then be tested, first by applying them to the same documentary sources analysed in chapter III, but now in relation to financing instruments. Then, in chapter VI, these factors are translated into criteria for the Territorial PlanBarometer tool.

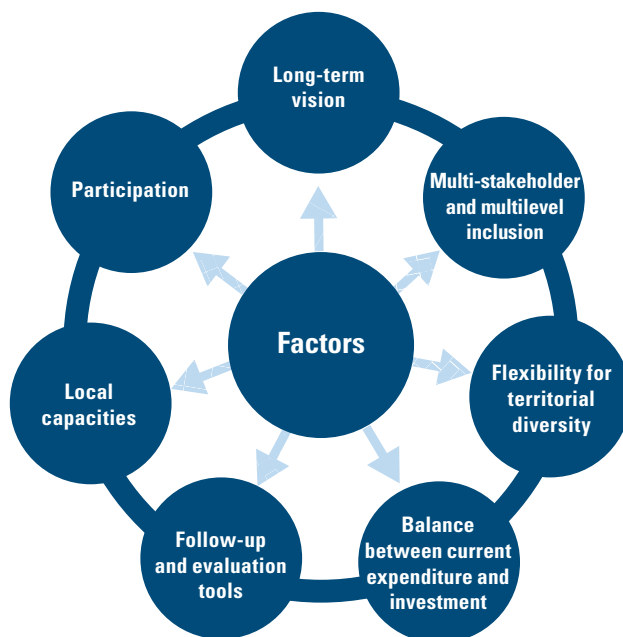
Seven factors are proposed, as shown in diagram V.1. These are:

- (i) Long-term vision: the factors that determine territorial development inequalities are resistant to change and show great inertia; accordingly, interventions must take place over long timescales in order to have a significant impact.
- (ii) Local capacities: financing, especially for less developed subnational governments, has a greater impact if it helps to consolidate local or subnational development management capacities, especially in relation to the management of financial resources.

- (iii) Multi-stakeholder and multilevel inclusion: while needs and financing possibilities is determined largely in the territory, this process involves a large range of stakeholders, levels and sectors. For that reason, multiple stakeholders (internal and external) and levels of government need to be included when considering financial resources. The impact may be expected to increase as initiatives arise at different levels and accommodations are discussed and reached between them.
- (iv) Balance between current expenditure and investment:¹⁴ resources have to be properly allocated to defray the costs of the territorial development interventions devised. Advances in physical infrastructure need to occur in step with progress in subnational governments' capacity to manage and make use of it. Financing will be more likely to have a lasting impact if it strikes the right balance between operating expenditure and investment, with appropriate combinations between the two.
- (v) Flexibility for territorial diversity: territory is by nature diverse. Instruments must therefore be adaptable to heterogeneous territorial development conditions, and have flexibility components to cater to these conditions.
- (vi) Follow-up and evaluation tools: good management, efficiency and probity in the use of resources depends on proper functioning of follow-up and evaluation systems. It is thus key to establish whether such mechanisms are in place.
- (vii) Participation: understood as public or community participation, this is important because it has a bearing on transparency in the management of resources.

Diagram V.1

Factors for characterizing financing



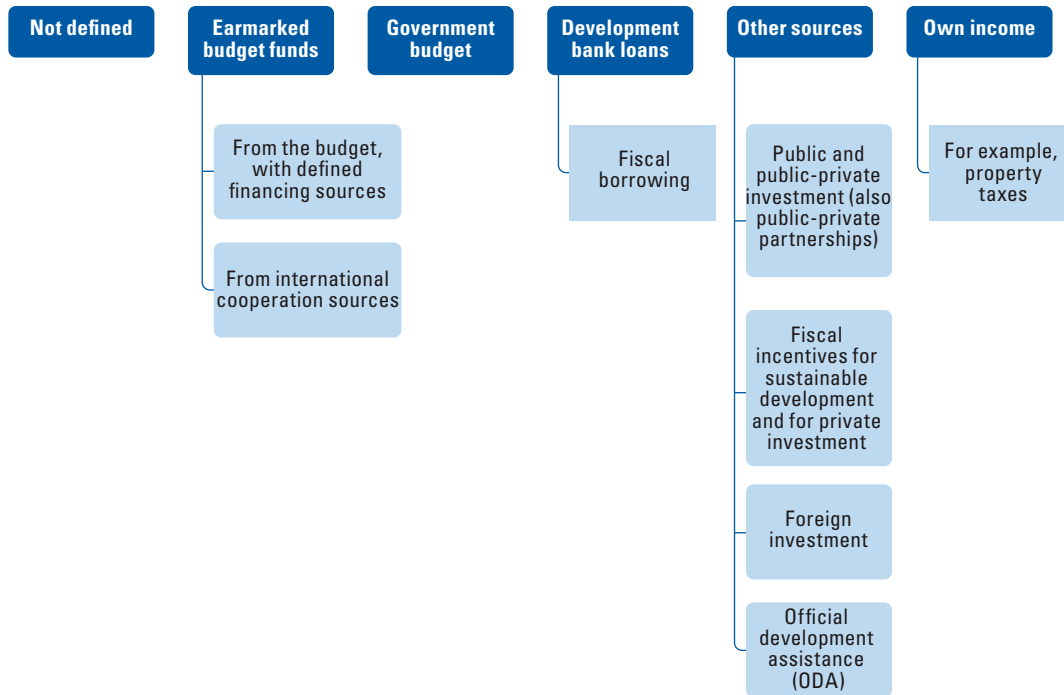
Source: Economic Commission for Latin America and the Caribbean (ECLAC).

¹⁴ This factor signals a very important aspect of territorial development: the role of financing design in generating local capacities. However, it must be treated with caution and examined in light of the outcomes yielded by Territorial PlanBarometer, because it depends on how expenditure responsibilities are distributed between levels of government. If infrastructure provision is not decentralized, for example, the argument for balance between current expenditure and investment may not be relevant.

Territorial development policies were examined to identify their sources of financing (see annex V.A1) and a classification, illustrated in diagram V.2, was drawn up accordingly.

Diagram V.2

Types of financing source



Source: Economic Commission for Latin America and the Caribbean (ECLAC).

Within the above classification, the following sources of financing—which are illustrated with examples in table V.3—are identified:

- **Not defined.** This first group includes policies whose sources of financing are not defined or consist of no more than a statement of intention.
- **Earmarked budget funds.** In this second group are policies that make use of a determined fund. This means that policies have a legal budgetary basis, sometimes in the form of source with a specific destination (a rate, tax or share in a royalty, for example), sometimes not. If not, policies are subject to what is decided when the annual budget is adopted.
- **Government budget.** This category includes policies that refer to the public or government budget without specifying a particular origin.
- **Development bank loans.** These cases refer to the use of credit from this type of institution.
- **Other sources.** In some cases, the idea is to use mechanisms to attract other sources of funding, but it is not necessarily specified in detail how this will be done or how much is expected to be raised. There is mention of using incentives or attracting public, private, domestic or foreign investors. Sometimes international cooperation agencies or official development assistance (ODA) are cited as sources for these funds.
- **Own income.** Lastly, these are cases where policies are financed from subnational governments' own fiscal resources.

Table V.3

Illustrative examples of information contained in each type of financing source

Not defined	<ul style="list-style-type: none"> – Brazil’s National Policy for the Sustainable Development of Traditional Peoples and Communities (2006) establishes that the policy’s principal aim is to promote the sustainable development of traditional peoples and communities, including by facilitating their access to and management of financial resources from different government bodies. – El Salvador’s National Environment Policy mentions that the National Plan for Adaptation to Climate Change must ensure financing for services and priority investments aimed at reducing vulnerabilities and that the priority is to raise external non-refundable climate financing.
Earmarked budget funds	<ul style="list-style-type: none"> – El Salvador’s national policy on associative territorial administration (p. 23) proposes promoting the allocation of a percentage of the general budget to the creation of a fund for project financing; advancing the proposal for a land tax and other innovative fiscal instruments; and supporting the creation of a regional territorial compensation fund. – Page 29 of the Disaster Risk Management Act of Jamaica establishes the National Disaster Fund, which is to consist of an amount equivalent to 1% or such other prescribed percentage of the sum paid annually to each local authority as building fees. – The General Human Settlements, Land Use Planning and Urban Development Act (2016) of Mexico establishes that resources will be managed through a public trust fund known as the Metropolitan Fund, set up by the Ministry of Finance and Public Credit.
International cooperation funds	<ul style="list-style-type: none"> – The National Strategic Biodiversity Action Plan 2014–2020 of Antigua and Barbuda provides for the establishment of the Sustainable Island Resource Fund (SIRF) to attract the funds needed to achieve the country’s environmental targets. It operates as a government department, and the resources come from national and international sources, park entry fees, pollution charges, carbon taxes and other levies. International bilateral agreements have been signed with the Green Climate Fund (GCF), the European Union, the United States Agency for International Development (USAID) and the Global Environment Facility (GEF). The greatest source of financing is estimated to be wind power generation. – Eighteen Caribbean countries⁹ participate in the Caribbean Disaster Emergency Management Agency (CDEMA). The Agreement Establishing the Caribbean Disaster Emergency Response Agency provides for an administrative budget (art. 24) and an Emergency Assistance Fund (art. 25). Both are funded by contributions from participating States and, in the latter case, the Agreement states that contributions to the Fund may be accepted “from sources external to the Agency on such conditions as may be prescribed by them and agreed by the Board of Directors but without discrimination as to the Participating States to receive such assistance.” – The document National Strategic Biodiversity Action Plan 2014–2020 of Antigua and Barbuda includes provision for the creation of an assistance fund to attract financing to care for protected areas and reduce fossil fuel consumption in the country. It also indicates that the largest sources of funding for the country are the Global Environment Facility (GEF), the United States Agency for International Development (USAID), the Organization of American States (OAS) and the European Union. Up till 2015, the Environmental Division had raised funding of up to US\$ 3 million.
Government budget	<ul style="list-style-type: none"> – The National Development and Land Use Policy of Argentina (p.33) provides that the idea is not to create a new fund, but to coordinate existing budgets and redirect budget income to sustain the process. It refers to the possibility of seeking non-reimbursable external funds and to the need for intelligent coordination between provincial, national and local funds to achieve the objectives proposed. – The methodological guidelines for the formulation of comprehensive territorial development plans for living well of the Plurinational State of Bolivia establish that the main sources of financing for such plans—and for all plans, subsystems, platforms and instruments of the Comprehensive State Planning System—come, under Law 777, from the National Treasury, loans, foreign grants, or other resources. – Law 777 on the Comprehensive State Planning System of 2016 (p. 9) provides that resources for the implementation plans, subsystems, platforms and instruments of the Comprehensive State Planning System may come from the National Treasury, loans, national and/or foreign grants. – Article 59 of the National Land Use and Territorial Development Act of El Salvador (p. 34) provides that financing for institutional operation at the national and departmental levels for fulfilment of the responsibilities allocated them under the Act will be included in the General Budget. Article 60 establishes that financing for the territorial investment envisaged in territorial development plans is to be secured by coordination of the budgets of the national and municipal governments.
Private and development bank loans	<ul style="list-style-type: none"> – The National Urban Development Plan and Plan of Action 2018–2030 of Costa Rica (pp. 110–112) provides, in relation to urban development financing, that opportunities and conditions are to be created to include commercial and development banks, multilateral agencies and national and foreign private firms. – Costa Rica’s framework law on the environment (Law 7554) of 1995 provides for the establishment of the National Environment Fund, whose resources will come from legacies and grants, contributions from public or private national and international agencies, executed collateral, funds held in trusts from international loans, and income from the sale of environmental impact evaluation guides. Article 13 of the same law provides that the national banking system may open an environmental loan portfolio to finance the de-pollution of productive processes via loans at preferential rates to be set by the central bank.

Table V.3 (concluded)

Other sources: fiscal incentives and other funds	<ul style="list-style-type: none"> - The Policy of State for Rural Territorial Development 2015–2030 of Costa Rica provides (p. 15), under services infrastructure for rural development, that investment is to be promoted in basic goods and services to enable economic and social development of the population, with an emphasis on territories with the greatest unmet basic needs. Government institutions are to channel public investment in a coordinated manner and private investment is to be encouraged in territories with the greatest lags in goods and services, infrastructure in general, energy resources, health and sanitation, transport, education and housing, among others. - That same policy of Costa Rica makes reference, in relation to the management of resources and financing mechanisms for territorial projects, to resources from the development banking system, the national banking system, the non-bank financial system (such as rural microcredits), community banks, NGOs, international cooperation, trust funds, and so forth. - El Salvador's national policy on associative territorial administration (p. 24) refers to management and modernization to decentralize national government functions and assign them to municipalities, and provides that the infrastructure and equipment conditions are to be created to stimulate private investment at the territorial level. The policy also mentions (p.28) that territorial management models are to be coordinated or linked with public and private investment. - The Policy of State for Rural Territorial Development 2015–2030 of Costa Rica provides that public-private partnerships may be considered as a strategy to finance the development of infrastructure and services. Other relevant measures include strengthening local governments in terms of management of financial resources and infrastructure investment, facilitating communication between municipalities and public institutions that have overlapping functions, and encouraging public institutions involved in decentralized public works to use special contributions to finance these. - The National Regional Development Policy (PNDR I and II) of Brazil states that fiscal incentives are instruments of the Policy. - In its policy guidelines for land use planning (ministerial resolution no. 026 of 2010), Peru establishes that incentives are economic, legal or institutional measures designed to stimulate activities that will contribute to orderly and sustainable use of the territory. In this approach there are three basic types of incentive: (a) monetary incentives, which use funds to reward outcomes that promote favourable land use planning. Example are: financial awards, renewable funds, international incentives, including from cooperation agencies, and public investment in infrastructure; (b) disincentives, such as tariffs, fees and fines; and (c) non-monetary incentives, such as the provision of education, training or research services, social programmes, awards and prizes, market creation, facilitation of certification, and so on.
Own income	<ul style="list-style-type: none"> - Colombia's Territorial Land Use Act No. 1454 of 2011, in addition to providing for the establishment of a National Land Use Policy, mentions that financing for administrative and planning regions will draw upon the resources and contributions of the respective constituent territorial entities and incentives provided by the national government; the budget will not come from the national government budget, the general revenue-sharing system or the national royalties system. - Paraguay's National Framework Plan for Development and Land Use Planning (p. 173) refers to municipal budgetary autonomy in the following terms: unlike other government entities, municipalities have greater budget autonomy as they receive lump sums for the discharge of their functions. Municipalities also have the capacity to generate their own resources, which are spent or invested as a function of local demands.

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of the plans, strategies and laws consulted.

^a The 18 countries currently participating in CDEMA are: Anguilla, Antigua and Barbuda, Bahamas, Barbados, Belize, British Virgin Islands, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, and Turks and Caicos Islands.

Lastly, each of these policies was placed within one of the thematic emphases described in chapter III:

1. Environmental management
2. Disaster risk management and resilience
3. Decentralization
4. Local capacities
5. Multilevel coordination
6. Intersectoral coordination
7. Urban development
8. Land use planning
9. Rural development
10. Infrastructure
11. Cultural diversity
12. Tourism
13. Local-economy potential
14. Territorial data
15. Digital connectivity/technology

As explained earlier, a first finding from analysis of the information compiled and classified coincides with the global diagnostic mentioned at the beginning of this chapter, to the effect that a large percentage of policies do not identify funding sources (see annex V.A1) or do so only vaguely.¹⁵ The review of policies for territorial development (154 in total) showed that not all them contain a financing-related component in their description. In fact, in 58 policies —38% of all those reviewed— financing sources came into the category of “not defined.” This include policies which barely mentioned an intention of establishing financing instruments and provided no further details on the type of resources, how they would be applied or their sources.

A second finding coincides again with the global review (United Nations, 2019, p. 12). Most policies that did contain a financing component (see table V.4) referred to the government budget in general, followed by earmarked budget funds.

Table V.4

Proportion of territorial policies by type of financing source
(Percentages)

Type of financing source	Proportion of policies
Earmarked budget funds	31
International cooperation funds	13
Government budget	43
Development bank loans	11
Public and public-private investment	22
Fiscal incentives	8
Own income	15
Official development assistance	3

Source: Economic Commission for Latin America and the Caribbean (ECLAC).

A third observation, as also seen at the global level (United Nations, 2019), refers to the need to use the widest possible range of financing, not solely fiscal resources. As shown in table V.4, 41% of the policies reviewed alluded to the possibility of working jointly with the private sector through public-private investment, fiscal incentives or credit from development banks. Although the means by which access to these types of funds will be secured is not always specified, some policies suggest making use of fiscal incentives, which may be monetary, non-monetary or dissuasive (disincentives). International sources are also relevant in this regard; these sometimes appear through earmarked extrabudgetary funds and sometimes in the form of official development assistance. Although this is important to consider in a broad view of types of source from which —not only public— financing is to be mobilized, in table V.3 it is apparent that these are not identified with the degree of precision that would be desirable.

Finally, annex V.A1 shows the results of applying the financial instrument characterization factors to each of the policies and types of financing analysed. This exercise yields some useful observations; these are captured in table V.5, which includes only those policies in which financing is mentioned. In these cases, two modalities are distinguished: (a) those where financing is mentioned in the policy and a specific instrument is identified, and (b) those where financing is simply mentioned in the policy. In the first category, the most commonly occurring factor is multi-stakeholder inclusion (47%), followed by flexibility for territorial diversity (17%); in the second category the distribution is more even, with limited occurrence of the flexibility factor (9%) and none of the factor of spending-investment balance factor (0%).

¹⁵ Seventy-nine of 107 plans analysed did not provide specific costings or details about how they would be financed and those that did focused most often on the government budget (United Nations, 2019, p. 12).

Table V.5

Territorial development policies that set out financing strategies: characteristics of the strategies by factor

Factors present in the financing strategy	Policies that define a financing strategy and a financial instrument			Policies that define only a financing strategy			Total	
	Number	Vertical percentage	Horizontal percentage	Number	Vertical percentage	Horizontal percentage	Number	Percentage
Long-term vision	14	12.5	36	25	20.32	64	39	100
Local capacities	7	6.25	26	20	16.26	74	27	100
Multi-stakeholder and multilevel inclusion	53	47.32	70	23	18.69	30	76	100
Balance between current spending and investment	9	8.03	100	0	0	0	9	100
Flexibility for territorial diversity	19	16.96	63	11	8.94	37	30	100
Follow-up and evaluation tools	6	5.35	22	21	17.07	78	27	100
Participation	4	3.57	15	23	18.69	85	27	100
Total	112	100		123	100		235	100

Source: Economic Commission for Latin American and the Caribbean (ECLAC).

By factor, in modality (a), balance between current spending and investment is the most common (100%), followed by multi-stakeholder participation (70%) and flexibility (63%). By contrast, in modality (b), the most frequent factors are participation (85%), follow-up and evaluation tools (78%) and local capacities (74%).

E. Conclusions

National governments' approach to financing for territorial development should be similar to that set out in this document: integrating, organizing and jointly managing efforts, which today are often dispersed, fragmented and uncoordinated. The aim must be to build an ecosystem of public policies for territorial development, taking the form in this case of an ecosystem of policies and instruments for the financing of territorial development.

Indeed, both ECLAC (2015a, p. 15) and the Inter-Agency Task Force on Financing for Development (United Nations, 2019, xviii and chapter II) emphasize the need for integrated financial frameworks. Such frameworks are important not only to improve the use of resources, but also to secure better-quality access to existing ones. The global financing landscape is complex: for example, there are around 1,000 instruments available in the development assistance arena. Without clear-cut national strategies it will be very difficult to seize opportunities and mitigate risks.

In addition to clear strategies, a transformation is needed in the rationale of resource allocation and mobilization; here, development banks and the fiscal component of decentralization play a crucial role. In this regard, the various sources consulted insisted that the question of whether decentralization matters for territorial disparities may not be the most pertinent, but rather under which circumstances decentralization is likely to enhance or reduce regional inequality (Rodríguez-Pose and Ezcurra 2009, p. 34). Therefore, in addition to decentralizing, institutional capacities must be built, consolidated and extended at the local and territorial levels. In financial terms, this should entail different means of financing investment and day-to-day operations, so that less developed territories can advance in simultaneously establishing and consolidating the institutional capacities to make the best possible use of the opportunities that decentralization creates.

Various sources and considerable evidence indicate that decentralization contributes to reducing territorial inequalities. For example, after examining the different mechanisms, formulas and funds for transfers between central and subnational governments in the countries of the region, it may be concluded that, although the fiscal capacity of subnational governments in Latin America and the Caribbean is very varied, on average fiscal transfers reduce these disparities by around a third (Muñoz, Pineda and Radics, 2017, p. 50). However, two special cases are exceptions to this pattern: transfers originating from payment of royalties for exploitation of non-renewable natural resources, and competitive funds. In terms of impact, the most recent assessments suggest that decentralization contributes to improving and even to reducing territorial disparities in standards of living.

Although development banks tend to be small in terms of assets, their role is crucial, because governments use them to provide financial services in sectors or regions where the supply from private financial intermediaries is insufficient. In this regard, the region's development banks have adapted their tools and approaches: first, with regard to building urban and territorial resilience, by designing specific instruments and special financing facilities; and, second, through efforts to improve financial inclusion of territories whose geographical, social or infrastructural characteristics exclude them from the commercial and more conventional financial channels. This is particularly important for the purposes of this study. In addition, the experience built up by development banks reaffirms a key conclusion: it is not enough to merely put financial resources within territories' reach, this effort must be coupled with improvement of institutional conditions at the level of the territories, so that they can make good use of opportunities and tackle challenges.

A review of these experiences and processes yields crucial lessons and recommendations that, in this section, are employed to identify factors that characterize financial instruments. These factors were first tested by applying them to the documentary sources discussed in chapter III. They will then be included in the Territorial PlanBarometer in chapter VI. The seven proposed factors are: a long-term perspective; local capacities; multi-stakeholder and multilevel inclusion; a balance between current expenditure and investment; flexibility for face of territorial diversity; follow-up and evaluation tools; and participation.

A first finding from analysis of the information compiled and classified coincides with the global diagnostic mentioned at the beginning of this chapter, to the effect that a large percentage of policies do not identify funding sources or do so only vaguely. The second finding also echoes the conclusions at the global level (United Nations, 2019, p. 12). Most policies that do define financing instruments focus on the government budget, followed by earmarked budget funds. The third conclusion is again linked to trends worldwide (United Nations, 2019) and relates to the need to make use of a broad variety of sources of financing, not purely fiscal resources. In the instruments analysed, such non-fiscal resources are employed in 41% of cases, comprising public-private investment, fiscal incentives and development bank loans.

Lastly, annex V.A1 shows the results of applying the characterization factors of financial instruments, providing some useful insights. The factor most commonly found in territorial development policies was multi-stakeholder and multilevel inclusion, which appeared in 47% of cases. Another factor was a long-term perspective to the source of financing used, which was mentioned in 12.5% of the policies analysed; however, within this group, in 64% of the cases there was no explicit reference to it in the financial section component. Where financing took a long-term perspective, it tended to rely on the general government budget or earmarked budget funds.

A concern for building local capacities was expressed in only 6% of cases, with the government budget mentioned as the means of financing in all of these. Balance between current expenditure and investment was the least frequently observed factor, followed by follow-up and evaluation tools, and participation. The lack of follow-up and evaluation systems in the financial component of policies is worrying and poses significant challenges. It would also be beneficial to enhance civil society participation in these processes, to make them more transparent and to include another element of oversight, resulting in more thorough and rigorous monitoring of financing for territorial development policies.

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Annex V.A1

List of territorial development policies by country

Table V.A1.1

Latin America and the Caribbean: reviewed territorial development policies

Country	Name of policy, strategy, regulation or plan and year	Thematic emphasis	Type of financing	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Antigua and Barbuda	Antigua and Barbuda National Strategic Biodiversity Action Plan, 2014–2020	Environmental management, local capacities	Earmarked budget funds and international cooperation funds			X		X'		
	Sustainable Island Resource Management Zoning Plan (SIRMZP), 2012	Environmental management, local-economy potential	Not defined							
	The Physical Planning Act No. 6, 2003	Land use planning	Not included in the analysis of financing							
Argentina	Plan Estratégico Territorial (PET), 2018	Land use planning, infrastructure	Other sources: public, public-private, private			X				
	Política y Estrategia Nacional de Desarrollo y Ordenamiento Territorial, 2016	Land use planning	Government budget	X'	X'	X'				X'
Bahamas	SMART Bahamas Master Plan	Territorial data, digital connectivity/technology	Not defined							
	National Policy for the Adaptation to Climate Change, 2005	Disaster risk management and resilience, environmental management	Not defined							
	Disaster Preparedness and Response, 2006 (modificada en 2011)	Disaster risk management and resilience	International cooperation funds			X				
	Planning and Subdivision Act No. 4, 2010	Land use planning	Not defined							
Barbados	Integrated Coastal Zone Management Plan	Land use planning	Government budget and international cooperation funds			X				
	Physical Development Plan Amended, 2017	Land use planning	Not defined							
	Town and Country Planning Act, chapter 240, 1998.	Land use planning	Not defined							
Belize	National Environmental Policy and Strategy, 2014-2024	Environmental management	Earmarked budget funds							
	Disaster Preparedness and Response Act, 2000	Disaster risk management and resilience	International cooperation funds			X				
	Land Utilization Act, chapter 188, 2000	Land use planning	Not defined							
	Housing and Town Planning Act, chapter 182, 2000.	Land use planning	Not defined							
Bolivia (Plurinational State of)	Planes Territoriales de Desarrollo Integral para Vivir Bien (PTDI)	Multilevel coordination	Government budget	X		X	X		X'	
	Ley de Ordenamiento Territorial	Land use planning	Not defined							
	Programa Nacional de Gestión de Riesgos, 2017	Disaster risk management and resilience	International cooperation funds and government budget		X'	X			X'	X'
	Plan Sectorial de Desarrollo Agropecuario, 2009-2019	Environmental management, rural development, local-economy potential	Government budget and other sources: public, public-private, private	X	X'	X'		X'	X'	
	Ley Marco de la Madre Tierra y Desarrollo Integral para Vivir Bien, 2012		Government budget and other sources: public, public-private, private		X'	X			X'	X'
	Ley del Sistema de Planificación Integral del Estado (SPIE), núm. 777, 2016.		Government budget	X		X			X	X

Table V A1.1 (continued)

Country	Name of policy, strategy, regulation or plan and year	Thematic emphasis	Type of financing	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Brazil	Política Nacional de Desenvolvimento Regional (PNDR) I, II Instrumento: incentivos fiscales, 2004		Government budget and other sources: tax incentives			X				
	Política Nacional de Desenvolvimento Regional (PNDR) I, II Instrumento: fondos de desarrollo regional y constitucionales de desarrollo, 2004		Earmarked budget funds	X		X	X	X	X	X
	Política Nacional de Desenvolvimento Sustentável dos Povos e Comunidades Tradicionais (PNPCT), 2007	Environmental management, cultural diversity, local-economy potential	Not defined							
	Política Nacional sobre Mudança do Clima, 2009	Environmental management, disaster risk management and resilience	Earmarked budget funds (United Nations Green Climate Fund)			X'				
	Ley n° 6.938 sobre a Política Nacional do Meio Ambiente, 1981	Environmental management, local-economy potential	Not defined							
	Decreto 4.297 sobre Zoneamento Ecológico-Econômico, 2002	Environmental management, local-economy potential, Land use planning	Not defined							
Chile	Plan de Acción Nacional de Cambio Climático (PANCC-II), 2017–2022	Environmental management, disaster risk management and resilience, local capacities	Earmarked budget funds and international cooperation funds	X		X				
	Política Nacional de Desarrollo Urbano, 2014	Urban development	Other sources: public, public-private, private and tax incentives							
	Política Nacional de Desarrollo Rural, 2014–2024	Rural development	Government budget and other sources: public, public-private, private	X		X				
	Política Nacional de Localidades Aisladas, 2010	Urban development, rural development	Not defined							
	Plan Director de Infraestructura, 2009	Infrastructure	Other sources: public, public-private, private			X		X		
Colombia	Contratos Plan	Decentralization	Government budget	X'		X'		X		
	Ley Orgánica de Ordenamiento Territorial núm.1454, 2011	Land use planning	Own income			X		X		
	Plan Binacional de Integración Fronteriza Ecuador-Colombia, 2014–2022	Environmental management, local-economy potential, cultural diversity	Government budget and other sources: public, public-private, private	X'		X'				X'
	Política Nacional de Gestión del Riesgo de Desastres, 2012	Disaster risk management and resilience	Earmarked budget funds and own income (territorial funds)					X		
	Programa Integral de Desarrollo Rural con Enfoque Territorial, 2014	Rural development	Earmarked budget funds	X	X'	X'				X'
	Política Pública para la Agricultura Campesina, Familiar y Comunitaria, 2017	Rural development	Development bank loans		X'	X		X		X'
	Política Nacional de Cambio Climático, 2017	Environmental management	Earmarked budget funds, international cooperation funds and other sources: public, public-private, private and tax incentives	X'	X'	X				X'

Table V A1.1 (continued)

Country	Name of policy, strategy, regulation or plan and year	Thematic emphasis	Type of financing	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Costa Rica	Plan Nacional de Desarrollo Rural Territorial (PNDRT), 2017–2022	Rural development	Government budget			X		X		
	Política Nacional de Desarrollo Urbano, 2018–2030 (and Plan de Acción, 2018–2022)	Urban development	Government budget and international cooperation funds, development bank loans and other sources: public, public-private, private (public-private partnerships)	X'	X	X				
	Política Nacional de Ordenamiento Territorial, 2012–2040 ^a	Land use planning	Other sources: public, public-private, private and tax incentives	X'	X'	X		X'		
	Ley Orgánica del Ambiente, núm. 7554, 1995	Environmental management	Government budget, development bank loans and joint funds (earmarked budget funds and international cooperation funds)			X				
	Política de Estado para el Desarrollo Rural Territorial Costarricense (PEDRT), 2015–2030	Rural development	Development bank loans and other sources: public, public-private, private	X'		X'		X'	X'	
	Estrategia Nacional de Cambio Climático, 2008	Environmental management	Earmarked budget funds and other sources: public, public-private, private							
	Plan Sectorial de Desarrollo Agropecuario y Rural, 2015–2018	Local-economy potential	Government budget, development bank loans, international cooperation funds and other sources: public, public-private, private			X			X'	
	Política de Estado para el Sector Agroalimentario y el Desarrollo Rural Costarricense, 2010–2021	Rural development	Development bank loans and government budget	X'		X		X	X'	
Cuba	Ley del Medio Ambiente, núm. 81, 1997	Environmental management	Earmarked budget funds					X'		
	Plan General de Ordenamiento Territorial y Urbanismo, 1997	Land use planning	Not defined							
	Decreto Ley núm. 331 de las Zonas con Regulaciones Especiales, 2015	Environmental management, cultural diversity, local-economy potential	Not included in the analysis of financing							
Dominica	National Land Use Policy (NLUP)	Land use planning	Not defined							
	National Biodiversity Strategy and Action Plan, 2014–2020	Environmental management	Government budget and other sources: official development assistance (ODA)			X'			X'	X'
	National Physical Development Plan (NPDP), 2016	Land use planning, cultural diversity	Not defined							
	Physical Planning Act, 2002	Land use planning	Not defined							
	National Strategy for Climate Change Adaptation in Agriculture, 2014–2020	Rural development	Not defined							
Dominican Republic	Plan Nacional de Ordenamiento Territorial (PNOT), 2015–2030	Land use planning	Not defined							
	Plan Estratégico Sectorial de Desarrollo Agropecuario, 2010–2020	Rural development, infrastructure, local-economy potential	Development bank loans	X'		X				
	Estrategia Nacional de Adaptación al Cambio Climático en el Sector Agropecuario, 2014–2020	Disaster risk management and resilience, rural development	Government budget and international cooperation funds	X'		X				
	Plan Estratégico para el Cambio Climático, 2011–2030	Disaster risk management and resilience	Not defined							

Table V A1.1 (continued)

Country	Name of policy, strategy, regulation or plan and year	Thematic emphasis	Type of financing	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Dominican Republic	Política Nacional de Cambio Climático (PNCC), 2016–2030	Disaster risk management and resilience	Not defined							
Ecuador	Plan Nacional de Descentralización, 2012–2015	Decentralization	Government budget and own income	X'	X'	X	X	X		
	Código Orgánico de Organización Territorial, Autonomías y Descentralización, 2010	Land use planning, decentralization	Government budget and own income	X'	X	X		X		X'
	Agendas zonales, 2008	Decentralization	Not defined							
	Estrategia Nacional para el Buen Vivir Rural, 2012	Rural development	Development bank loans and international cooperation funds	X'		X		X	X'	X'
	Estrategia Nacional de Cambio Climático del Ecuador (ENCC), 2012–2025	Environmental management, disaster risk management and resilience	International cooperation funds	X'	X'	X			X'	X'
	Gran Minga Nacional Agropecuaria, 2017–2021	Rural development, multilevel coordination	Development bank loans			X		X'		
	Ley Orgánica de Ordenamiento Territorial, Uso y Gestión de Suelo, 2016	Land use planning	Own income	X'		X'			X'	X'
El Salvador	Plan Trifinio, 2014–2018	Environmental management, local-economy potential	Government budget and international cooperation funds			X				
	Política Nacional para la Gestión Asociada de los Territorios, 2015	Decentralization	Earmarked budget funds and other sources: public, public-private, private	X	X'	X'		X	X'	
	Plan Nacional de Ordenamiento y Desarrollo Territorial	Land use planning	Not defined							
	Estrategia Ambiental de Adaptación y Mitigación al Cambio Climático del Sector Agropecuario, Forestal, Pesquero y Acuícola, 2011	Disaster risk management and resilience	Government budget	X'	X'	X'				X'
	Política Nacional del Medio Ambiente, 2012	Environmental management	Not defined							
	Plan Nacional de Cambio Climático, 2017	Disaster risk management and resilience	Earmarked budget funds (United Nations Green Climate Fund) and international cooperation funds			X				X'
	Estrategia Nacional del Medio Ambiente, 2013	Environmental management	Earmarked budget funds	X						X'
	Ley Nacional de Ordenamiento y Desarrollo Territorial	Land use planning	Government budget		X	X'		X'	X'	X'
Grenada	Physical Planning and Development Control Act, 2002	Land use planning, cultural diversity	Not defined							
	Grenada National Land Policy	Land use planning	Not defined							
Guatemala	Política Nacional de Desarrollo Rural Integral (PNDRI), 2009	Rural development	Government budget			X'				
	Política Nacional de Descentralización del Organismo Ejecutivo, 2004	Decentralization	Government budget, own income and other sources: public, public-private, private	X'	X	X			X'	
	Política Nacional de Cambio Climático, 2009	Disaster risk management and resilience	Earmarked budget funds and other sources: public, public-private, private	X		X				
	Agenda Rural, 2016–2020	Rural development	Government budget			X	X	X	X	
	Programa de Agricultura Familiar para el Fortalecimiento de la Economía Campesina, 2016–2020	Rural development, local-economy potential	Government budget							
	Política de Fortalecimiento de las Municipalidades	Decentralization	Government budget		X	X		X		

Table V A1.1 (continued)

Country	Name of policy, strategy, regulation or plan and year	Thematic emphasis	Type of financing	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Guyana	Town and Country Planning Act, chapter 20:01	Land use planning	Not defined							
Haiti	Décret portant sur la gestion de l'environnement et de régulation de la conduite des citoyens et citoyennes pour un développement durable, 2005	Land use planning, environmental management	Earmarked budget funds	X'						
	Plan d'action pour le relèvement et le développement national d'Haïti (PARDN) ^a	Disaster risk management and resilience	Government budget and other sources: official development assistance (ODA)			X				
	Plan national de réponse aux urgences (PNRU)	Disaster risk management and resilience	Government budget and other sources: official development assistance (ODA)			X				
	Loi sur la régionalisation et l'aménagement du territoire, 1982	Land use planning, environmental management	Not defined							
Honduras	Ley de Ordenamiento Territorial. Decreto núm. 180, 2003	Land use planning	Government budget	X		X'		X'	X'	X'
	Reglamento General de la Ley de Ordenamiento Territorial. Acuerdo núm. 25, 2004	Land use planning	Other sources: public, public-private, private	X		X			X'	X'
	Estrategia Nacional de Cambio Climático Honduras, 2010	Disaster risk management and resilience	Not defined							
	Política de Estado para el Sector Agroalimentario y el Medio Rural de Honduras, 2003–2020	Rural development, local-economy potential	Not defined							
	Política de Estado para la Gestión Integral del Riesgo en Honduras, 2010–2022	Disaster risk management and resilience	Government budget	X'	X'	X	X	X'	X'	X'
	Estrategia Nacional de Adaptación al Cambio Climático para el Sector Agroalimentario, 2015–2025	Disaster risk management and resilience, local-economy potential	Not defined							
	Plan Nacional de Ordenamiento Territorial	Land use planning	Not defined							
Jamaica	National Land Policy, 1997	Land use planning, infrastructure	Own income and other sources: tax incentives		X'					X'
	National Disaster Risk Management Act, 1993 (actualizada en 2015)	Disaster risk management and resilience	Earmarked budget funds			X'				
	The Land Development and Utilization Act de 1997	Land use planning, infrastructure	Not defined							
	The Town and Country Planning Act, 1999	Land use planning, infrastructure	Not defined							
Mexico	Ley General de Asentamientos Humanos, Ordenamiento Territorial y Desarrollo Urbano, 2016	Land use planning, multilevel coordination	Earmarked budget funds	X'		X'				
	Programa Nacional de Desarrollo Urbano, 2014-2018	Land use planning, urban development	Government budget, earmarked budget funds and development bank loans		X	X				
	Programa Regional de Desarrollo del Norte, Programa Regional de Desarrollo del Centro, Programa Regional de Desarrollo del Sur-Sureste, 2014–2018	None	Earmarked budget funds			X		X		
	Estrategia Nacional de Cambio Climático (ENCC), 2013	Disaster risk management and resilience	Earmarked budget funds (United Nations Green Climate Fund)	X'						

Table V A1.1 (continued)

Country	Name of policy, strategy, regulation or plan and year	Thematic emphasis	Type of financing	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Nicaragua	Plan Nacional de Respuesta ante Desastres (PNRDN), 2001	Disaster risk management and resilience	Government budget			X'		X'		
	Plan Nacional de Ordenamiento y Desarrollo Territorial (PNOOT), 2001	Land use planning, disaster risk management and resilience, decentralization	Not defined							
	Política Nacional de Desarrollo Sostenible del Sector Forestal de Nicaragua, 2008	Territorial planning, local-economy potential, environmental management	Earmarked budget funds		X'	X'		X'		
	Política Sectorial Agropecuaria de Nicaragua, 2002–2020	Rural development, local-economy potential	Not defined							
	Ley General del Medio Ambiente y los Recursos Naturales, núm. 217, 1996	Environmental management	Earmarked budget funds (extraordinary income)			X				
	Decreto núm. 9-96 de Reglamento de la Ley General del Medio Ambiente y los Recursos Naturales	Environmental management	Earmarked budget funds			X'				X'
Panama	Plan de Desarrollo Urbano de las Áreas Metropolitanas del Pacífico y del Atlántico, 1997 (actualizado en 2016)	Urban development	Other sources: public, public-private, private	X						
	Plan Quinquenal de Inversiones de Ordenamiento Territorial para el Desarrollo Sostenible, 2015–2019	Land use planning	Own income and earmarked budget funds		X'	X			X	X
	Ley de Ordenamiento Territorial para el Desarrollo Urbano núm. 6, 2006	Land use planning, urban development	Government budget		X	X	X			X'
	Política Nacional de Cambio Climático, 2007	Disaster risk management and resilience	Not defined							
	Estrategia Nacional de Cambio Climático, 2015	Disaster risk management and resilience	Earmarked budget funds (United Nations Green Climate Fund)		X'					
	Plan de Desarrollo Integral para los Pueblos Indígenas, 2014	Local-economy potential, cultural diversity	Not defined							
	Plan Nacional de Ordenamiento Territorial para el Desarrollo Urbano, 2006	Land use planning, urban development, rural development	Not defined							
Paraguay	Plan Marco Nacional de Desarrollo y Ordenamiento Territorial del Paraguay, 2012	Land use planning, infrastructure, local-economy potential	Own income	X'					X'	
	Política Ambiental Nacional del Paraguay, 2005	Environmental management	Earmarked budget funds		X'	X'			X'	X'
	Plan Nacional de Adaptación al Cambio Climático, 2017	Disaster risk management and resilience	Not defined							
	Plan Nacional de Desarrollo de la Acuicultura Sostenible de Paraguay, 2010–2020	Local-economy potential	Government budget and development bank loans	X'		X				
Peru	Lineamientos de Política para el Ordenamiento Territorial (resolución ministerial núm. 026), 2010	Land use planning	Other sources: public, public-private, private and tax incentives	X'	X'			X		
	Plan de Acondicionamiento Territorial y Plan de Desarrollo Urbano	Land use planning	Own income and other sources: public, public-private, private and tax incentives	X		X	X			
	Zonificación Económica y Ecológica (ZEE)	Land use planning, local-economy potential	Not defined							
	Plan Nacional de Descentralización, 2012–2016	Decentralization	Earmarked budget funds			X	X	X	X	

Table V A1.1 (continued)

Country	Name of policy, strategy, regulation or plan and year	Thematic emphasis	Type of financing	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Peru	Plan Nacional de Fortalecimiento de Competencias para la Gestión Descentralizada, 2014–2018	Local capacities, decentralization	Government budget							
	Plan Nacional de Desarrollo Urbano, 2006–2015	Urban development	Not defined							
	Plan Especial Territorial (PET)	Land use planning	Not defined							
	Política Nacional del Ambiente, 2009	Environmental management	Other sources: public, public-private, private			X				
	Estrategia Nacional ante el Cambio Climático, 2015	Disaster risk management and resilience	Not defined							
	Política Nacional Agraria, 2016	Rural development, local-economy potential	Government budget							
	Plan Nacional de Acción Ambiental (PLANAA), 2011–2021	Environmental management	Not defined							
	Plan de Gestión de Riesgos y Adaptación al Cambio Climático en el Sector Agrario, 2012–2021	Disaster risk management and resilience	Own income and international cooperation funds			X	X			
	Estrategia Nacional de Agricultura Familiar, 2015–2021	Rural development, environmental management	Other sources: public, public-private, private			X				
Ley General del Ambiente, núm. 28611, 2005	Environmental management	Government budget and tax incentives			X					
Saint Kitts and Nevis	National Biodiversity Strategy and Action Plan, 2014-2020	Environmental management, disaster risk management and resilience, land use planning	Not defined							
	National Physical Development Plan (NPDP), 2005	Land use planning	Not defined							
	Development Control and Planning Act, chapter 20.07, 2002	Land use planning, environmental management	Not defined							
Saint Lucia	Saint Lucia: Country Document for Disaster Risk Reduction, 2014 ^a	Disaster risk management and resilience	Government budget							
	National Land Policy, 2007	Land use planning, disaster risk management and resilience, environmental management	Government budget and own income			X				X
	National Environment Policy (NEP), National Environmental Management Strategy (NEMS) for Saint Lucia, 2004	Environmental management	Other sources: public, public-private, private; earmarked budget funds; own income and international cooperation funds	X	X	X				
	Chapter 5.12 Physical Planning and Development Act, 2005	Land use planning	Not defined							
Saint Vincent and the Grenadines	Town and Country Planning Act No. 45, 1992	Rural development, urban development, Land use planning	Not defined							
	National Land Policy, 2014	Land use planning, environmental management, rural development	Not defined							
	Environmental Management Act, 2009	Environmental management	Earmarked budget funds						X	

Table V A1.1 (concluded)

Country	Name of policy, strategy, regulation or plan and year	Thematic emphasis	Type of financing	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Suriname	Landsverordening van 13 juni 1973 houdende regelen betreffende de nationale en regionale planning (ordenanza nacional del 13 de junio de 1973 sobre las regulaciones en materia de planificación nacional y regional), 1973	Land use planning, environmental management	Not defined							
Trinidad and Tobago	Town and Country Planning Act, chapter 35:01 (actualizado en 2015)	Land use planning, urban development, rural development	Not defined							
	National Spatial Development Strategy (NSDS), 2013–2023	Land use planning, urban development, rural development	Not defined							
	Environmental Management Act (EM Act), chapter 35:05, 2000	Environmental management	Earmarked budget funds							
	National Environmental Policy (third revised draft), 2018	Environmental management	Not defined							
Uruguay	Sistema Nacional de Áreas Protegidas (SNAP) ^a	Environmental management	Earmarked budget funds			X'		X		X'
	Ley de Ordenamiento Territorial y Desarrollo Sostenible, 2008	Land use planning	Not defined							
	Directrices Nacionales de Ordenamiento Territorial y Desarrollo Sostenible	Land use planning	Not defined							
	Programa de Desarrollo y Gestión Subnacional I y II	Infrastructure	Not included in the analysis of financing							
Venezuela (Bolivarian Republic of)	Plan Nacional de Ordenación del Territorio, 1998	Land use planning	Not defined							
	Ley Orgánica para la Ordenación del Territorio, 1983	Land use planning	Government budget					X		X

Source: Economic Commission for Latin America and the Caribbean (ECLAC).

Note: Columns (1) to (7) refer to the implementation criteria, namely: (1) Long-term vision; (2) Local capacities; (3) Multi-stakeholder and multilevel inclusion; (4) Balance between current expenditure and investment; (5) Flexibility for territorial diversity; (6) Follow-up and evaluation tools; (7) Participation. An X indicates that the criterion was present and linked to financing, X' indicates that the criterion was present in the policy, but not in its financing. If a policy's financing type is marked as "Not defined", its implementation criteria were not determined.

^a Policies not included in the chapter III review that were included in the chapter V review.



CHAPTER

VI

A model for characterization of territorial development policies: the territorial PlanBarometer

Introduction

- A. Background to the Territorial PlanBarometer
- B. Overview: application of the Territorial PlanBarometer
- C. Stage one: identification of the family of territorial development policies and analysis of proximity
- D. Stage two: the family of territorial development policies and analysis of its structure
- E. Stage three, step one: dimensions, criteria and subregional weightings for the model for characterization of territorial development policies
- F. Stage three, step two: components of the dimensions of analysis of the model for characterization of territorial development policies
- G. Stage four: interpretation of results
- H. Conclusions: use of the territorial PlanBarometer model and closing remarks

Bibliography

Introduction

This chapter concludes the document by proposing a model that governments in the region —especially national governments— can use to identify a cluster or family of territorial development policies, characterize its structure and obtain key inputs to build territorial development policy ecosystems. Each of the preceding chapters proposes the building blocks of the model and provides information to identify its crucial components, stages, dimensions and other more specific criteria. As an ensemble, the model is a set of questions that policy designers, implementers and evaluators must ask about their practices, to identify strengths, weaknesses, gaps and challenges.

The analysis performed has shown that the countries of the region have a deep interest in promoting territorial development —understood as a reduction in territorial inequalities— and a variety of related institutional practices. This interest has led to the formation of a profuse, but somewhat disparate, body of plans, policies, information systems and financing mechanisms for territorial development. As proposed in previous chapters, there should be a transition to an ecosystem.

An ecosystem of territorial development policies is a set of policies, plans and regulations that have a territorial impact. These policies, plans and regulations must interact synergistically, so that public actions are designed, implemented and evaluated to contribute more significantly to reducing territorial inequalities and to building the capacities of territories and stakeholders.

Section A of this chapter describes the background of the territorial PlanBarometer model. Section B provides an overview of the exercise to be performed: its inputs and suggested operating and working requirements and its four key stages, each containing several steps. These stages and steps are described in sections C to F. Section G offers some possible strategies for interpreting results, in a way intended to be useful in decision-making. The last section offers some conclusions and final considerations.

A. Background to the Territorial PlanBarometer

For around five years, and especially since the 2030 Agenda for Sustainable Development was adopted in 2015, the Latin American and Caribbean Institute for Economic and Social Planning (ILPES) has focused on understanding and improving the processes and procedures linked to development planning (Cuervo and Máttar, 2017). A comprehensive approach to the 2030 Agenda, and to any aligned planning processes, requires appropriate management of interactions between sectors, levels, stakeholders and timescales. A number of challenges have therefore been identified, which must be addressed so that planning can facilitate this comprehensive approach:

- **Multiple scales:** Different levels of the State must participate in the design and implementation of territorial development policies, with actions at different scales (overall, central, intermediate, local and neighbourhood). Coordination of action between these levels and scales is a crucial component of effective territorial development policies, and of successful identification of problems and potential.
- **Multiple time frames:** There are very diverse approaches and rationales for the time frames of public and private actions to promote territorial development, which may be short-, medium- or long-term. These methods are not necessarily aligned or consistent with each other; proper links must therefore be formed between them. It is also crucial to be mindful of the importance of balancing longer-term efforts to address structural problems with the need to update responses or respond appropriately to existing circumstances.
- **Intersectoral collaboration:** The perspectives, tools and approaches of territorial policies also vary according to the sector from which they originate. This, too, must be taken into account when formulating a comprehensive approach to the issues. There are also specific dynamics and approaches within the territorial sphere itself, owing to the idiosyncrasies, locations and proximity of the elements for analysis in a territory.
- **Stakeholders and power:** this dimension relates to how different contributors to implementation of territorial development policies participate and exercise their power and influence to fulfil their

own interests or, alternatively, to negotiate and harmonize with other stakeholders to achieve policy goals. It is the social stakeholders who perform actions to coordinate the different levels of the State, and to coordinate institutions and sectors, whilst also linking the different time frames through long-, medium- and short-term perspectives. This is why this dimension is understood to link up the other three in a dynamic manner.

To address these challenges in practice, ILPES has designed tools to characterize countries' planning systems and identify their strengths, gaps and challenges. This is the purpose and essence of PlanBarometer, which ILPES has offered to planning ministers in the region since 2017. The model presented in this chapter builds on the original methodology, extending it by focusing on territorial development policies. It was constructed based on the conceptual, regulatory and procedural underpinnings identified in the countries, a survey of experts from the region, and a practical validation performed for several countries.

Different territorial planning instruments and methodologies for policy analysis, with a broad variety of approaches, were reviewed to design the Territorial PlanBarometer. Some approaches focus on the design of public policies in general and others go into greater detail regarding policy implementation specifically in the sphere of territorial development. A limited number of methods centre on initiatives to assess the territorial impact of policies and plans. With all this in mind, the model offered here is intended to be a condensed structure that retains the key features of PlanBarometer, namely: simple application, easy interpretation and creation of an environment that is conducive to collective and institutional analysis.

This model also incorporates some key contributions from the territorial sphere:

- The public policy management and quality approach: Scartascini, Stein and Tommasi (2009); State Agency for Evaluation of Public Policy and Service Quality (AEVAL) (2009); Chuaire and Scartascini (2014), and Niven (2003).
- Evaluation of policy quality and territorial planning (DNP, 2017).
- The international guidelines on local and urban governments (Guidelines on Decentralization and Strengthening of Local Authorities and the Guidelines on Access to Basic Services for All,¹ the International Guidelines on Urban and Territorial Planning² and the New Urban Agenda).³

In spite of the depth of these works and the contributions they make, little has been done to examine, in detail, the challenges inherent in formulation and implementation of territorial development policies. One important contribution in this respect is the balanced scorecard, whose purpose is to effectively link formulation and implementation, identifying diverse barriers, such as: difficulties experienced by those responsible for implementing strategies in understanding and taking ownership of the instruments they provide; lack of the proper and necessary incentives or disincentives for people to move towards achieving strategies; lack of mechanisms to monitor implementation; and lastly, a disconnect between such policies and determination of the resources needed for implementation (mainly from budgets and investment plans) (Niven, 2003).

This model focuses on the processes for implementing territorial development policy at the central government level, although in some cases it could be extended to the intermediate level. In fact, territorial development policies may be said to be designed and implemented at the intermediate level of government in several countries of the region. By nature, the states of federal nations (for example Argentina, Brazil and Mexico) have the powers to implement such policy; however, some unitary States, such as Chile (SUBDERE, 2009) and Guatemala (SEGEPLAN, 2015) also have decentralized mechanisms for designing and implementing territorial development policies.

¹ Adopted by the Governing Council of the United Nations Human Settlements Programme (UN-Habitat) in resolutions 21/3, of 20 April 2007, and 22/8, of 3 April 2009.

² See UN-Habitat (2015).

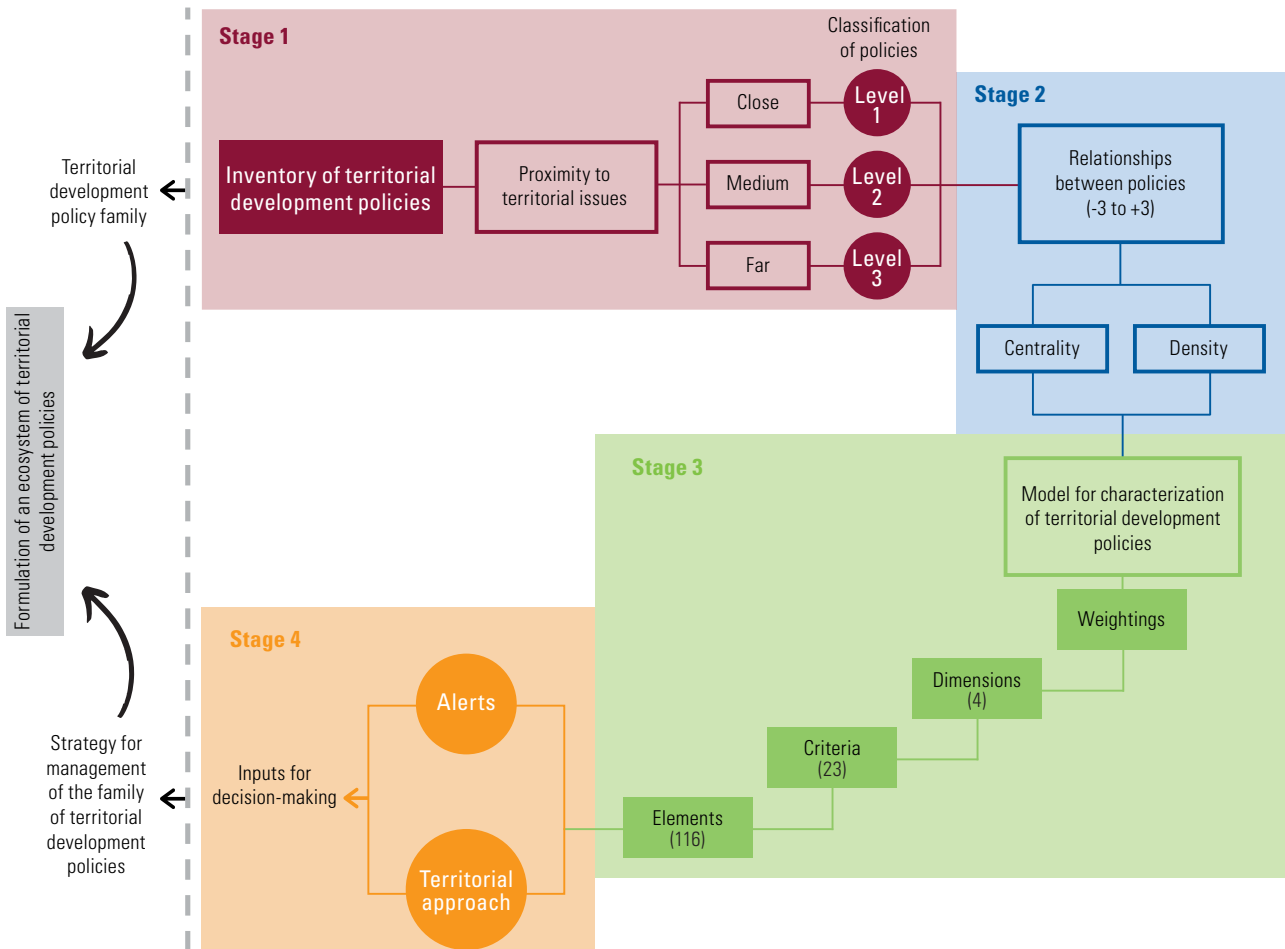
³ Adopted at the United Nations Conference on Housing and Sustainable Urban Development (Habitat III) in 2016.

B. Overview: application of the Territorial PlanBarometer

This section provides an overview of the entire procedure (see diagram VI.1). The rest of the chapter details each of the steps and suggests tools for analysis.

Diagram VI.1

The Territorial PlanBarometer model



Source: Latin American and Caribbean Institute of Economic and Social Planning (ILPES).

The Territorial PlanBarometer tool is intended to be used by national or intermediate governments in the region to characterize the situation of their territorial development policies, and to identify gaps, inconsistencies and possible incongruities (as described to the right of the grey dotted line in diagram VI.1). After applying PlanBarometer and characterizing the situation, policymakers would then adopt the institutional management, regulatory or policy-guiding measures to move from a family of policies to an ecosystem of territorial development policies (as shown to the left of the grey dotted line in diagram VI.1). The tools for this transition fall outside the scope of Territorial PlanBarometer, which is intended as a first step in this direction: providing inputs, raising awareness and generating spaces for dialogue and deliberation that help to create conditions for teamwork to foster such a change.

The starting point for all this is the different territorial development policies in the countries of the region, as identified in chapter III (the policy inventory in diagram VI.1). A broad set of territory-related policies was identified, i.e. policies that aim to reduce inequalities or build territorial capacities. The main purpose of Territorial PlanBarometer is to analyse the characteristics of this family of territorial policies (inputs for decision-making in diagram VI.1). This is

done not only by correctly applying the proposed techniques, but also through team-based institutional self-analysis (potentially intersectoral and multilevel), looking at a set of criteria that coalesce in the challenges of multilevel planning, namely: multiple time frames, intersectoral collaboration, and stakeholders and power. For this reason, it is preferable that the instigators of the application of the Territorial PlanBarometer model be the authorities that govern planning or territorial development at the different levels. This is because those involved need to be properly familiar with the different components, actors and processes involved and, at the same time, have the power to make improvements.

The analysis should be carried out in groups, for example through workshops of experts or officials involved in territorial development, fostering participatory discussion, with group structures that enable reflection, deliberation and mutual learning. As the composition of discussion groups determines the output from the tool, special care must be taken to identify or reduce bias that could stem from participants' different profiles (plurality in the group is an asset).

The procedure must guarantee considered and participatory analysis at each stage of the model, seeking agreement on the categories to be assigned. Knowledge of the entire family of territorial development policies is therefore required—it is not enough to analyse each of them individually. This analysis aims to improve knowledge in this sphere, in order to bolster capacities to meet territorial development policy goals, and thus reduce territorial inequalities.

The sequence of practical activities to be applied is described in more detail below.

1. Compilation of policies and supporting documents

Before holding a workshop on application of the Territorial PlanBarometer, it is necessary to assemble the information needed to support the decisions and assessments of the working group. The activity coordinator will be responsible for organizing this stage and for sharing the results with the participants prior to the workshop. It is suggested that each of the chapters in this document be used as a reference for this collation exercise: chapter I, to understand the different policy approaches; chapter III to inventory and characterize territorial development policies and plans; chapter IV, to track the lines for generating and consuming information for territorial development, and; chapter V, to identify and characterize financing instruments for territorial development. In the case of the Caribbean countries, the general model will be of use, but it is suggested that it be adapted as per the analyses and recommendations in chapter II.

As noted earlier, this process should be participatory, taking the form of working groups of officials or social stakeholders involved in territorial issues, with no need to set up face-to-face meetings. The information should be systematized as per the formats shown in table VI.4.

The key sources of information that need to be systematized include:

- An inventory of territory-related development policies.
- A list of main territorial development plans.
- Prevailing regulations or laws that have territorial impacts.
- Documents that analyse or evaluate the design and implementation of territorial development policies.
- Information on projects, activities and budgets linked to the policies identified in the inventory.

2. Convening and organizing discussion groups

The suggested composition of the groups is as follows:

- Two representatives of the development planning authority
- Two representatives of the territorial policy authority

- One representative of the association of municipalities
- One representative of the association of intermediate governments
- Two representatives of the subnational governing body, elected by public vote (entity comprising elected representatives that jointly govern with the highest authority at the subnational level)
- Two representatives of a board or participatory body at the subnational level, specialized in territorial development
- Two representatives of civil society organizations linked to planning instruments (for example, that have participated in the development of a plan or are implementing one)
- One representative of national or, if applied locally, state-level authorities
- One expert in territorial development from a university or research centre

Two groups of 7 should then be formed from the proposed 14 participants. Each group must include at least three public officials and two representatives of the organizations or entities mentioned. If this is not possible, the exercise should be carried out with no less than eight people in one or two groups, always bearing in mind that discussion and group reflection are vital; hence, under no circumstances should the exercise be performed individually. The composition of the groups and the number of people suggested are justified by the breadth of information and topics that must be covered.

The activities for applying the Territorial PlanBarometer model are designed to include a set of roles, which may be structured as follows:

- **Activity coordinator:** A group coordinator is needed to run the workshops and oversee the overall process. An expert in development planning from a planning authority would be ideal.
- **Assistant:** It is important to record the responses and discussions that arise in the workshops. If there are too many participants for the coordinator to do this, another person will need to assume the role of secretary to record all group discussions.
- **Participants:** The tool is applied through discussion groups in which participants share all their knowledge of development planning and discuss the key variables presented in the tool and their status in the territory analysed.

There are two alternatives for organizing discussion groups. A first option is balanced distribution of participants. Based on the number of participants in the workshop, the aim would therefore be even representation of institutions between groups. The second means of distribution is to divide the groups by participating institution, which serves to identify the different perspectives on implementation of territorial development policies in the recording and interpretation of results.

The methodology is thus applied through a workshop, in which experts or those involved in the design and implementation of territorial development policies agree on a set of criteria. These data are processed and then interpreted by workshop participants.

3. Identification of the family of territorial development policies and characterization of its structure

Before characterizing each of the territorial development policies, there must be an understanding of the entire body or family of policies, to then propose management strategies to reconfigure it as an ecosystem. Therefore, at this stage the suggested first step is to identify and analyse the cluster of policies that are in some way linked to territorial development. After organizing this inventory, the second step is to understand the structure of the policy set in terms of the proximity of each policy —close, medium or far— to the accepted goals or aims of territorial development.

The territorial development policies are thus categorized according to their goals, identifying their positions and roles within the family of policies and providing criteria to build an ecosystem of territorial development policies.

4. The family of territorial development policies and the extent of their coordination

Continuing with the process, the third step is to prepare a matrix linking policies with identified goals, governing bodies, proximity to territorial development objectives, and the extent to which the topic is formalized in their territorial perspectives and approaches (see chapter III).

This step comprises assessment of the coordination (interaction) between components. To this end, a characterization and diagnostic method is suggested that extends the factors used to analyse the relationship between development plans and territorial development policies —goals, time frames, identification of spaces or territories, use of information, and reference. This enables the construction of a summary indicator to guide reflection on the level of coordination of the cluster of territorial development policies.

Each factor is evaluated according to the proposed levels, resulting in a value between +3 and -3, where a negative value denotes a discordant relationship and a positive value a high degree of complementarity. The values for the relationships are presented both in a matrix and in diagrams. Thus, at this stage it is possible to test and review the relationships between territorial development policies, using this analysis to determine whether the degree of centrality⁴ and the previously calculated values for the territorial development goals agree. This exercise provides important information on the stability of the system since a lack of alignment is a warning sign that must be considered. In addition, it is possible to review the density of the relations, giving an idea of the system's capacity to respond to territorial development policy goals in a coordinated manner.

Lastly, these exercises enable classification of territorial development policies into levels, based on their degree of interaction. With this information, users can proceed to the next step, which is characterization of policies.

5. Workshop on characterization of territorial development policies (model for characterization of territorial development policies)

At this stage of the process it is suggested that users decide whether to analyse the entire family of territorial development policies or a selection. This decision will depend on the results of the analysis of the family of territorial development policies, as well as the size of the policy cluster. Once this has been decided, the territorial development policy characterization model is applied to each of the selected policies.

There are several options for compiling the information arising from the discussion, enabling the outcome to be viewed. A spreadsheet, an online version and a printed text are available. The printed version requires participants to manually perform calculations and prepare radar charts.⁵

The coordinator of Territorial PlanBarometer application may decide whether to use the model's general weightings (see section E) or to apply differentiated weightings as a result of the responses to consultations with experts in the region. The available options are: the general model, the model for Brazil or the model for Caribbean countries.

In order to gather the required information, during the face-to-face workshop, participants are asked to identify whether each of the elements linked to the proposed territorial development policy characterization model are present (see table VI.1). The filled-out data indicates whether, in the opinion of the group, the element described for each of the criteria is present. If the answer is affirmative, that is to say the element is present and a value of x has been entered into the spreadsheet, it is important to document the basis for the group's decision. The data entry form therefore has a space for recording the rationale after the column that identifies each element.

⁴ The centrality of a policy is understood as the degree of interrelation with other planning or policy instruments. The greater the centrality, the more influential the policy within an ecosystem of territorial development policies. The density of relationships between policies is calculated as the sum of the effective links identified between the set of policies as a percentage of the maximum possible links; the maximum value is 100%, when all policies are linked to each other within the set.

⁵ Formats for filling out the matrices can be found at [online]: <https://www.cepal.org/es/notas/planbarometro> or <http://bit.do/planbarometro>.

Each group must apply this procedure, that is to say, tick the checkboxes in the “Value” column. Once the group has agreed whether the element is present in the criteria of the policy set, the reasons for their conclusions must be given, indicating a means of verification of said rationale (see table VI.1). This means of verification is understood to be a source of information which allows the presence or absence of the element to be followed up, for example, a database, report or administrative record. If no elements of a criterion are present, they may be left unticked.

Table VI.1
Supporting reasons for given assessment of the criteria

Criterion	Dimension	Description	Value	Elements	Rationale	Means of verification
1. The goal of reducing inequalities between territories is explicitly declared.	Intersectoral collaboration		<input type="checkbox"/>	Defined as a single goal.		
			<input type="checkbox"/>	Defined as a single goal and detailed in strategies.		
			<input type="checkbox"/>	Reducing territorial inequalities is defined at the intermediate and local levels.		
2. Multilevel or multiscale coordination mechanisms (vertical) are included.	Multiple scales		<input type="checkbox"/>	The different realities of each territory are taken into account to establish goals and strategies.		
			<input type="checkbox"/>	Explicit coordination mechanisms are defined between levels of the State for implementation of the territorial development policy.		
			<input type="checkbox"/>	There are institutional strengthening programmes or resources at the subnational level, as part of implementation of the territorial development policy.		
			<input type="checkbox"/>	At the subnational level the goals of the territorial development policy can be adapted to the local reality.		
3. Mechanisms for sectoral or inter-institutional coordination are included.	Intersectoral collaboration		<input type="checkbox"/>	There are no overlapping functions or duplication.		
			<input type="checkbox"/>	There are goals agreed upon between institutions.		
			<input type="checkbox"/>	There are clear mechanisms for communication between institutions.		
			<input type="checkbox"/>	There are specific decision-making groups of public institutions.		
			<input type="checkbox"/>	There are mechanisms for synchronizing timing (priorities) between public institutions.		
			<input type="checkbox"/>	There are mechanisms for coordinating available resources between institutions (such as personnel, financial resources or infrastructure).		
4. It is possible to establish a shared long-term perspective or transcend political cycles.	Multiple time frames		<input type="checkbox"/>	A time horizon is set.		
			<input type="checkbox"/>	A significant time horizon is set.		
			<input type="checkbox"/>	The time horizon is consistent with other policies or planning instruments.		
5. Implementation includes instruments for participation.	Stakeholders and power		<input type="checkbox"/>	Participants are convened following known and validated criteria.		
			<input type="checkbox"/>	A variety of sectors, groups or types of stakeholders are included.		
			<input type="checkbox"/>	There are mechanisms for consulting civil society, and they are applied.		
			<input type="checkbox"/>	Public-private partnerships are used to implement the policy.		
			<input type="checkbox"/>	Formal mechanisms exist for including initiatives arising from civil society, and they are applied.		
			<input type="checkbox"/>	There are mechanisms for citizen oversight.		
			<input type="checkbox"/>	Mechanisms exist for endorsement by civil society of the territorial development policy, and they are applied.		
6. Territorial diversity is taken into account in implementation.	Multiple scales		<input type="checkbox"/>	Specific territories are defined.		
			<input type="checkbox"/>	Territorial function is recognized.		
			<input type="checkbox"/>	A classification of types of territories is included.		
			<input type="checkbox"/>	Interplay of effects or impacts between territories is identified.		
			<input type="checkbox"/>	Instruments are created to adapt policies to the reality of the territory.		

Source: Latin American and Caribbean Institute of Economic and Social Planning (ILPES).

As each checkbox is ticked, the data will be processed automatically, showing percentage achievement of the criterion in the “Processing” worksheet (see table VI.2). The worksheet also shows the results obtained from the weightings used when the tool is applied to the Caribbean.

Table VI.2

Example of processing of information on territorial development policies
(Percentages)

Criterion	Dimension	Gross percentage	General percentage	Percentage for the Caribbean
1. Reduction in inequalities	Intersectoral collaboration	33.33	14.5	28
2. Vertical coordination	Multiple scales	25.00	9.3	0
3. Horizontal coordination	Intersectoral collaboration	83.33	28.1	28
4. Long-term perspective	Multiple time frames	0.00	0.0	0
5. Participation	Actors and power	57.14	24.1	29
6. Territorial diversity	Multiple scales	60.00	21.7	20
7. Use of territorial information	Multiple time frames	46.15	15.0	15
8. Financing	Multiple time frames	54.55	19.7	45
9. Coordination with national plan	Intersectoral collaboration	60.00	16.6	40
10. Variety of instruments	Intersectoral collaboration	33.33	8.0	17
11. Territorialization of national policies	Multiple scales	33.33	7.6	0
12. Outcome evaluation	Multiple time frames	100.00	24.1	67
13. Updating	Multiple time frames	80.00	5.8	27
14. Subsidiarity	Multiple scales	66.67	6.4	22
15. Leadership	Actors and power	50.00	6.6	17
16. Identities	Actors and power	33.33	5.2	11
17. Addressing corruption	Actors and power	50.00	14.0	22
18. Accountability	Actors and power	77.78	5.6	26
19. Stability	Multiple time frames	33.33	9.3	14
20. Efficiency	Actors and power	75.00	21.0	32
21. Formality	Actors and power	66.67	18.7	29
22. Credibility	Actors and power	75.00	21.0	32

Source: Latin American and Caribbean Institute of Economic and Social Planning (ILPES).

The third worksheet in the workbook, labelled “Charts”, contains a general radar chart and one chart for each dimension of the tool, providing visual representations of the percentage results.

6. Interpretation of results and formulation of strategies for improvement

The results of the exercise allow users to identify aspects of how policies are implemented, offering a framework with which to build an ecosystem of territorial development policies. As diagram VI.1 shows, this task follows and is separate from design and application of the Territorial PlanBarometer model presented herein. The spreadsheet for the exercise also includes a tool for analysing links between territorial development policies. The territorial development policy network graph provides an overview of the relationships between policies and highlights gaps linked to the existence of certain instruments and their relationship with others in the ecosystem. In addition, the density of links and centrality of policies with goals that are closer to the core goals of a level 1 territorial development policy suggest a situation of equilibrium of policy levels.

Lastly, once step-by-step analyses have been performed and interrelations have been examined, it is essential to then formulate strategies for improvement. These strategies will involve very varied paths of marginal, incremental or even radical change and will thus require policy decisions.

Following this explanation of how the Territorial PlanBarometer tool is applied, its steps or stages are each described below.

C. Stage one: identification of the family of territorial development policies and analysis of proximity

The research and analysis carried out for this work showed that, today, it would be inaccurate to speak of a single territorial development policy. As has been emphasized, the situation rather reflects a family of territorial policies, which have different names and approaches, but are united by their interest in promoting territorial development and reducing inequalities, as set out in chapters I and III. Therefore, before characterizing each of the territorial development policies, there must be an understanding of the entire set of policies, to then propose management strategies to reconfigure it as an ecosystem.

The policy inventory table is used to facilitate collation, processing and interpretation of the different policies existing. An example is given in table VI.3. It identifies each of the policies that can be associated with territorial links or impacts. It is important to include policies that may be expressed in different types of instruments, such as laws or technical rules or even part of a plan, agenda or strategy. In table VI.3, this information is recorded in the column "Type (2)". The "Policy goals (3)" column is used to list the core goals of the policy. These will later be integrated with the standardized goals described in column 4, which are ordered according to their linkage with territorial development policies. By establishing relationships between goals and aggregating them, it is possible to characterize the set of policy goals and assign it a policy level, which is recorded in column 5. The remaining columns in table VI.3 allow complementary information to be gathered for each policy, providing an overview of the different instruments and policies.

Secondly, it is proposed that the structure of the set of territorial development policies be understood through analysis of proximity, centrality and density. Understanding of the proximity of the family of territorial development policies is based on how close each policy is to the accepted goals or purposes of territorial development. In practice, although the name of a policy may formally link it with territorial issues, its general and specific goals may be directly or only indirectly related to territorial development.

The proposed method for determining this proximity or closeness rating uses the result obtained in chapter III and applies the following procedure. Table VI.4 shows the result of the chapter III analysis, identifying the general goals of the territorial development policies (around 150 policies were reviewed). These goals were grouped under 40 headings, as listed in the right-hand column. Through a series of consultations and workshops, these 40 goal headings were ranked by their proximity to territorial development, as defined in chapter I.⁶ The values in the left column were thus obtained, with 1 representing the goal that is closest to territorial development goals and 40 the furthest.

⁶ The goals were ranked by breaking down the components of the definitions of territorial development policies and assessing their proximity to the topic in different workshops held with public officials from the region who have participated in ILPES courses, as well as through technical cooperation processes and consultation with experts from the region.

Table VI.3

Example inventory table of policies, plans and regulations

Policy name (1)	Type (2)	Policy goals (3)	Equivalence to standardized goals and ranking of goals ^a (4)	Policy level (5)	Authority (6)	Formality (7)	Topics (8)	Policy perspective (9)	Territorial approach (10)
Regional convergence policy	Policy	<ul style="list-style-type: none"> - Improve living conditions in the poorest regions - Improve connectivity of the most isolated areas 	<ul style="list-style-type: none"> Reduce territorial inequalities (1st) Integrate the most isolated territories (3rd) 	I	Ministry of the Interior	Explicit	Urban development	Thematic	Sectoral
Land Management Law	Law	<ul style="list-style-type: none"> - Promote local culture - Identify potential of farming land - Strengthen regulatory mechanisms 	<ul style="list-style-type: none"> Enhance or strengthen territorial identity (10th) Use land more efficiently (12th) Define regulatory frameworks (24th) 	II	Ministry of Housing	Explicit	Urban development	Thematic	Sectoral
National rural development policy	Policy	<ul style="list-style-type: none"> - Definition of new rural planning instruments - Recovery of the country's livestock production - Improve rural living conditions 	<ul style="list-style-type: none"> Strengthen territorial planning (14th) Improve rural production (17th) Improve quality of life of rural population (18th) 	II	Ministry of Agriculture	Explicit	Rural and agricultural development	Cross-cutting	Sectoral
Urban policy	Policy	<ul style="list-style-type: none"> - Identify metropolitan areas and areas of urban expansion - Promote use of reconverted industrial land for housing - Establish protection mechanisms for historic areas 	<ul style="list-style-type: none"> Shape or strengthen city system (27th) Use land more efficiently (12th) Protect heritage (34th) 	II	Ministry of Housing	Explicit	Integration or synergy between territories	Thematic	Multisectoral, focused on one territory
Urban development plan	Plan	<ul style="list-style-type: none"> - Expand urbanization into areas with housing deficits - Promote electro-mobility 	<ul style="list-style-type: none"> Promote environmental conservation of endangered areas (9th) Tackle climate change (11th) 	II	Ministry of Housing	Explicit	Infrastructure (other than essential amenities)	Thematic	Sectoral
National climate change strategy	Plan	<ul style="list-style-type: none"> - Reconvert fossil fuels 	<ul style="list-style-type: none"> Tackle climate change (11th) 	III	Ministry of the Environment	Explicit	Infrastructure (other than essential amenities)	Thematic	Sectoral

Source: Latin American and Caribbean Institute of Economic and Social Planning (ILPES).

^a These values are related to the data in table VI.4.

Table VI.4

Standardization of the identified general goals of territorial development policies and rating of the link with definition of these policies

Link rating	Degree of linkage	Goal
1	Near	Reduce territorial inequalities (more balanced development)
2	Near	Strengthen territorial leadership
3	Near	Integrate the most isolated territories (territorial integration)
4	Near	Improve access and transport
5	Near	Increase financial resources available to territories
6	Near	Improve territorial public management (including coordination and strengthening of territorial entities)
7	Near	Promote territorial democratization
8	Near	Promote coordination between public bodies
9	Near	Promote environmental conservation of endangered areas
10	Near	Enhance or strengthen territorial identity
11	Medium	Tackle climate change (includes reducing pollution and emissions)
12	Medium	Use land more efficiently
13	Medium	Use land in a less unequal manner
14	Medium	Strengthen territorial planning
15	Medium	Increase territories' competitiveness (potential and production activities)
16	Medium	Improve quality of life
17	Medium	Improve rural production
18	Medium	Improve quality of life of the rural population
19	Medium	Increase citizen participation
20	Medium	Reduce poverty and extreme poverty
21	Medium	Curb urban expansion and territorial occupation
22	Medium	Create polycentric human settlements systems
23	Medium	Improve disaster preparedness (resilience)
24	Far	Define regulatory frameworks
25	Far	Territorialize national public policies
26	Far	Promote territorial governance
27	Far	Shape or strengthen city system (human settlements)
28	Far	Improve territorial planning (including zoning, subdivision and sustainability, among other areas)
29	Far	Improve infrastructure
30	Far	Foster economic growth of regions or territories
31	Far	Bolster employment
32	Far	Deepen decentralization processes (including deconcentration and relocation)
33	Far	Combat corruption
34	Far	Protect heritage
35	Far	Harness natural resources
36	Far	Strengthen public use of land
37	Far	Define or implement new planning instruments or policies
38	Far	Maintain territorial integrity
39	Far	Promote territorial sovereignty
40	Far	Increase food security

Source: Latin American and Caribbean Institute for Economic and Social Planning (ILPES), on the basis of analysis of country policies.

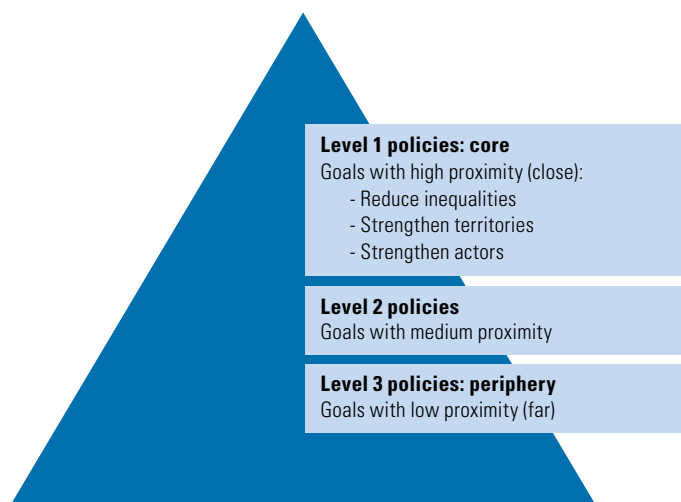
The procedure is as follows: The core goals of each territorial development policy are identified and linked to one of the 40 goals in the list. This linkage will enable identification of the proximity of the policy goals —close, medium or far— to territorial development goals so they can be rated (from 1 to 40). The ratings are taken as proxies. A simple average of positions is calculated, and the closer the average is to 1, the closer the policy is considered to be; conversely, the closer the average is to 40 the further away the policy is considered to be.

Given that policies' goals are their defining core, by analysing and categorizing goals it is possible to characterize their closeness or proximity to territorial development issues. These ratings also classify the different policies into three levels and identify their positions and roles within the family of territorial development

policies. Understanding this component of the family's structure will provide criteria for constructing an ecosystem of territorial policies. The family of territorial development policies has a centre, comprising level one or core policies, consisting mostly of "close" goals. These policies refer explicitly to reducing territorial inequalities in the economic, demographic and social spheres and to strengthening the capacities and assets of territories and their stakeholders, to address development challenges. At the second level are policies and instruments that address territorial issues, mainly comprising goals with a medium degree of linkage (possibly corresponding to policies that address territorial issues specific to different elements of the territory). The third level, which may be referred to as the periphery of the family, is where the policies linked primarily to goals that are far from the definition of a territorial development policy can be found. This level of policy has mainly more indirectly defined territorial goals (such as sectoral goals with a territorial or multi-scale approach). Diagram VI.2 provides a visual summary of the results of this proximity analysis.

Diagram VI.2

Degrees of proximity of policies to territorial development



Source: Latin American and Caribbean Institute of Economic and Social Planning (ILPES).

The policy inventory and categorization exercise is an initial step in analysing how these policies are implemented and how they are interrelated, in order to understand the structure and functions of a policy family. These elements will be used in the subsequent steps of the Territorial PlanBarometer to identify strategies for improving or updating ecosystems.

D. Stage two: the family of territorial development policies and analysis of its structure

This multi-step stage comprises further analysis of the family of territorial development policies, to assess aspects related to coordination and interlinkage between the components of the family. A characterization and diagnosis method is proposed for this purpose.

As underscored throughout this document, it is fundamental to interlink and coordinate policies in order to reduce inequalities, to achieve a transition from a family of policies to an ecosystem. Although this coordination can be understood in different ways, the most practical means of observing it is the degree of interlinkage of the family of territorial development policies. This form of analysis is based on the principles of the policy network approach (Klijn, 1998), which highlights complementarities and the positions of different policies in the set of instruments.

In the proposed methodology, the factors used in chapter III to analyse the relationship between development plans and territorial development policies are again used and extended, in order to build a summary indicator to guide examination of the degree of coordination of the ecosystem of territorial development policies. The following factors are taken into consideration:

- Goals: this factor relates to convergence of the goals of different policies.
- Time frames: this relates to the time frames of the goals and strategies of each policy.
- Identification of spaces or territories: this focuses on whether there is convergence in prioritization of territories with specific characteristics.
- Use of information: this focuses on (cross-sectoral) construction, use and updating of the information required for policy implementation.
- Reference: indicates whether policies identify each other in some way.

The use of these factors can yield very important information, which can be interpreted as illustrated below:

- Potential imbalances between territorial development policy and decentralization policy: such a relationship may indicate that special care is needed, because the instruments identified in policies may mean that greater decentralization could fuel territorial inequalities.
- Complementarity between territorial planning policy and urban policy: the territorial planning policy indicates the key elements identified in the urban-rural relationship.
- Determination between public infrastructure policy and territorial development policy: public investment has a significant impact on creating conditions to foster territorial development. In most cases, infrastructure is concentrated in locations with larger populations, giving rise to inequalities.
- Potential contradictions between urban policy and territorial development policy: the fostering and creation of incentives for rendering services in urban areas further concentrates populations in cities, resulting in a decline in the quality of rural coverage.

Table VI.5 lists the described factors and their possible ratings. This exercise requires analysis of policies in pairs, examining each of the factors and arriving at a consensus on the value to be assigned. These values range from -3 to +3, with a negative value denoting a discordant relationship and values close to +3 indicating relations with a high degree of complementarity.

Table VI.5

Factors for analysis of relationships between policies and interpretation thereof

Factor	Interpretation	Level	Value
Goals	Identification of the main goals of each policy in their mutual relationship.	Different and contradictory goals	-3
		Similar goals	0
		Different but complimentary goals	3
Time frames	Analysis of the time frames defined in each policy for achieving goals.	Different time frames, e.g. short-, médium- or long term (or if there are no time frames defined between policies)	-3
		Similar time frames, but without mutual significance	0
		Similar time horizons with shared significance	3
Identification of territories	Geographical or territorial spaces are identified as priorities in policies or in implementing interventions.	Different territories are prioritized	-3
		Some shared territories are prioritized	0
		Similar territories are prioritized	3
Use of information	Data and information sources or processes for policy implementation.	Each policy builds and systematizes its own data sources	-3
		Some sources of information are shared	0
		The two policies use the same database	3
Reference	Identification of shared elements related to implementation of the policies.	Implementation of policy A hinders policy B	-3
		The policies do not refer to each other	0
		Policy A precedes or is needed to achieve the goals of policy B	3

Source: Latin American and Caribbean Institute of Economic and Social Planning (ILPES).

This information is organized in a matrix, as shown in table VI.6, which contains hypothetical values. The matrix compares each policy with the others, in terms of each factor of analysis. It is only necessary to fill out the top half of the matrix, since it takes a symmetrical form; that is to say, in the interest of simplicity the direction of the links is not displayed.

Table VI.6

Example of filled-out policy analysis matrix and degrees of interlinkage

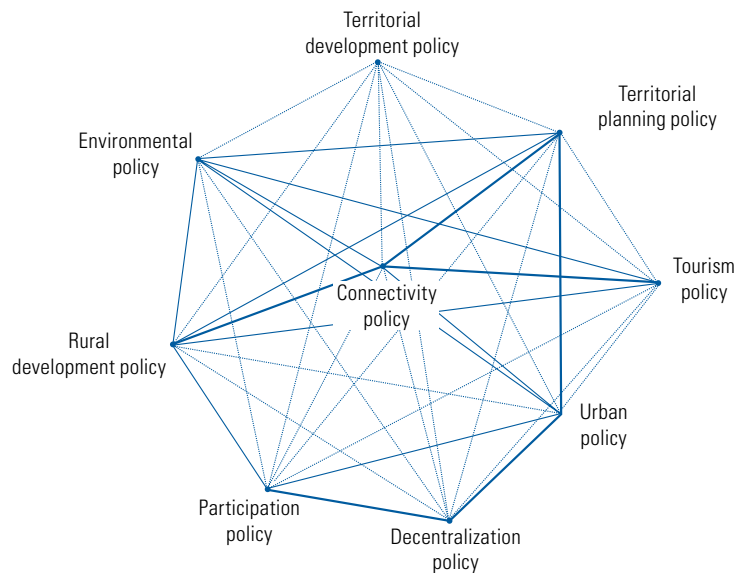
		Territorial development policy	Urban policy	Territorial planning policy	Decentralization policy	Rural policy	Environmental policy	Participation policy	Tourism policy	Total influence
Connectivity policy	Goals	2	2	1	2	1	2	3	2	15
	Time frames	1	2	-2	2	-2	0	1	0	2
	Territories	1	3	2	2	-2	-1	3	2	10
	Information	1	2	-3	2	2	-1	1	2	6
	Reference	-2	-1	1	2	2	-2	2	1	3
	Total	0,6	1,6	-0,2	2,0	0,2	-0,4	2,0	1,4	7,2
Tourism policy	Goals	-3	-3	-1	1	-1	2	-2		-7
	Time frames	0	-2	-2	0	-1	-2	0		-7
	Territories	2	2	2	0	2	-1	-2		5
	Information	2	-2	0	-2	2	1	-3		-2
	Reference	-2	-2	0	-1	-1	2	2		-2
	Total	-0,2	-1,4	-0,2	-0,4	0,2	0,4	-1,0		-2,6
Participation policy	Goals	-3	-1	0	3	1	1			1
	Time frames	0	0	-2	0	-1	-2			-5
	Territories	2	0	-2	2	0	-3			-1
	Information	2	2	-2	1	2	-2			3
	Reference	-2	2	1	2	1	-1			3
	Total	-0,2	0,6	-1,0	1,6	0,6	-1,4			0,2
Environmental policy	Goals	-3	-1	2	-1	1				-2
	Time frames	0	-1	2	0	-2				-1
	Territories	2	0	2	-1	1				4
	Information	2	2	2	-2	0				4
	Reference	-2	2	-2	-1	1				-2
	Total	-0,2	0,4	1,2	-1,0	0,2				0,6
Rural development policy	Goals	-3	-2	2	2					-1
	Time frames	0	-2	-2	-1					-5
	Territories	2	-3	2	-2					-1
	Information	2	3	2	-2					5
	Reference	-2	3	-3	0					-2
	Total	-0,2	-0,2	0,2	-0,6					-0,8
Decentralization policy	Goals	-3	2	-3						-4
	Time frames	0	1	0						1
	Territories	2	3	2						7
	Information	2	3	2						7
	Reference	-2	-1	-2						-5
	Total	-0,2	1,6	-0,2						1,2
Territorial planning policy	Goals	-3	2							-1
	Time frames	0	1							1
	Territories	2	0							2
	Information	2	2							4
	Reference	-2	3							1
	Total	-0,2	1,6							1,4
Urban policy	Goals	-3								-3
	Time frames	0								0
	Territories	2								2
	Information	2								2
	Reference	-2								-2
	Total	-0,2								-0,2
Total dependency		-0,8	4,2	-0,2	1,6	1,2	-1,4	1,0	1,4	

Source: Latin American and Caribbean Institute of Economic and Social Planning (ILPES).

This matrix can also be presented visually, graphically representing the values assigned to coordination links between policies.⁷ This form of presentation makes it possible to identify policies that are central (influential) in the policy set, as well as those that are positioned peripherally. Territorial development policies would be expected to be positioned most centrally, but this is not necessarily the case. As shown in the example in diagram VI.3, connectivity policy can potentially play a central role within the whole, despite not being a territorial development policy, formally speaking. As noted earlier, territorial issues are played out across a much broader field than in territorial policies per se. Moreover, as the example aims to illustrate, other policy classes can have more interconnections and a more widespread effect on the whole family of territorial policies than policies that are explicitly territorial. Naturally, this information will be strategic when making decisions that will amplify the territorial impact of policies, looking at them as a whole rather than as individual policies. Specifically, the centrality of policies is calculated by degree (Freeman, Borgatti and White, 1991), i.e. the number of links that a policy has with other policies.

Diagram VI.3

Visual representation of relationships between policies



Source: Latin American and Caribbean Institute of Economic and Social Planning (ILPES).

Note: The relationships between policies were processed graphically using the Excel program and the NodeXL plugin (see [online] <https://archive.codeplex.com/?p=nodexl>).

In the example constructed in table VI.6, connectivity policy plays a central role, as shown in diagram VI.3. Its degree of centrality is eight, equivalent to eight links with other policies. However, the goals of this policy (better access and transport; improved levels of infrastructure and harnessing of natural resources) are relatively distant from territorial development; its rating is 22, based on the average position of its component goals, placing it far from the core (see table VI.4 for ratings of goals in relation to the central theme of territorial development policies). The fact that a policy is highly central and is also largely unconnected to territorial development goals is crucial to understanding the real practical configuration of the system—the family of territorial policies. In this fictitious example, public policy would have a territorial impact through policies that are far removed from territorial issues. Overlooking this discrepancy would give rise to unexpected and unintended impacts. Conversely, once it is acknowledged, it can be properly examined, and the necessary measures can be taken to prevent unintentional outcomes and achieve desired outcomes.

⁷ In this case, “coordination” is understood as the volume of interconnections between policies. The higher the volume, the greater the coordination is assumed to be.

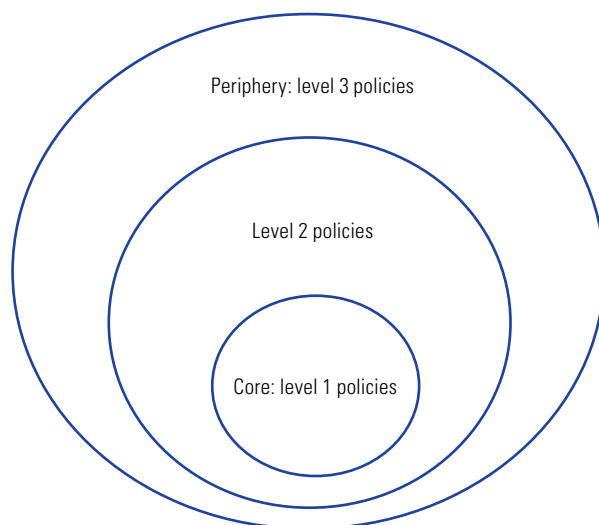
A second dimension, or step in the analysis, relates to the density of the relationships. A denser system is expected to show greater cohesion and integration between components. It will also probably be a more complex system. The density indicator is presented as a percentage: the closer it is to 100%, the greater the integration and cohesion between system components. A denser system is therefore expected to have more capacities and resources to address territorial development policy goals in a coordinated manner. The formula for calculation of these densities is as follows:

$$\text{Density} = \frac{\text{existing relationships}}{\text{maximum amount of relationships}}$$

A balanced territorial development policy ecosystem is expected to be organized around the policy levels determined in the analysis of proximity to territorial development. Characterization of a policy set using concentric levels enables users to determine the level of concentration (levels 1, 2 or 3) and the instruments needed to build an ecosystem. Level 1 policies should be located at the centre of the ecosystem, and those with more indirect levels, 2 and 3, should be located on the periphery (see diagram VI.4).

Diagram VI.4

The structure that a territorial development policy ecosystem should have, by policy level



Source: Latin American and Caribbean Institute of Economic and Social Planning (ILPES).

Analysing the centrality of policies that have a direct impact on reducing inequalities, the density of the interconnections between instruments and the proximity of policies, plans and regulations provides information on the configuration of the territorial development policy family. It also provides indications of the lines of action to take to consolidate the policy family as an ecosystem, with the aim of improving implementation and achieving significant impacts at the territorial scale. There is no single method to this process; instead, it offers strategies based on each reality and complemented by other tools that enable specific aspects of public management to be addressed, such as results-based management or public finances.

This instrument for characterization and diagnosis determines whether there is a high, moderate or low degree of interlinkage between territorial policies. It provides suggestions on action and management strategies to improve interlinkage: the centrality of the policies and the density of their relations are both very useful criteria. Lastly, it allows users to identify real or potential discrepancies between goals and outcomes and to raise red flags to be considered in policy implementation and evaluation. Although these actions are beyond the scope of the proposed model, identifying and implementing such measures gives meaning to application of the Territorial PlanBarometer.

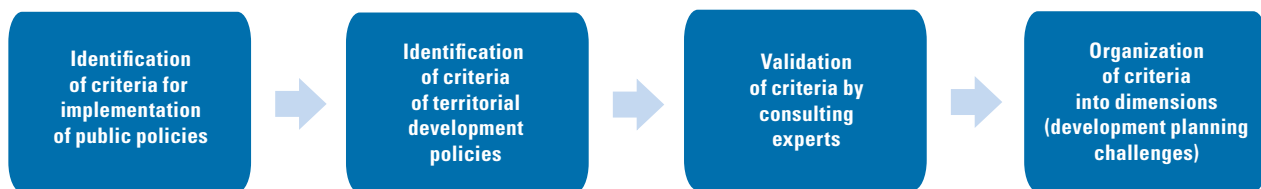
E. Stage three, step one: dimensions, criteria and subregional weightings for the model for characterization of territorial development policies

Once the family or cluster of territorial development policies has been analysed, the recommended next step is to characterize each policy identified. The results of the preceding analysis may indicate which policies are strategic, whether they are worthwhile, and whether the conditions are right to examine them as a whole or just a selection of them. For example, if a policy clearly geared towards territorial development occupies a peripheral position in the system and has low-density relationships, it should be examined to determine how to strengthen its role within the system. Similarly, if there are policies that are less aligned with territorial issues, but which have core positions in the system, they should be examined and steps taken to realign them with territorial development goals. The following tools generate meaningful and precise information, but do not provide answers to these questions. The answers are of an institutional and political nature and will require additional considerations and working instruments that complement this model.

Diagram VI.5 summarizes the suggested process for characterization of territorial development policies: the model for characterization of territorial development policies.

Diagram VI.5

Process for selecting criteria for analysis of territorial development policies



Source: Latin American and Caribbean Institute of Economic and Social Planning (ILPES).

With a view to generating guidance and useful considerations for improving the quality and design of territorial development policies, a set of criteria were identified to characterize them. This characterization will provide basic information for the working group to interpret the results and deliberate on the strategies to follow to propose improvements.

The criteria for analysis are those questions and issues that must necessarily be addressed and settled when designing and rolling out a policy for territorial development. To design this model, 18 criteria or topics were taken as a basis, and were validated and examined in depth. This initial set of criteria is a result of studying existing literature on design and implementation of the territorial development policies presented above. Additionally, experts in the subject were consulted, enabling criteria to be weighted and examination of which aspects of analysis to include.

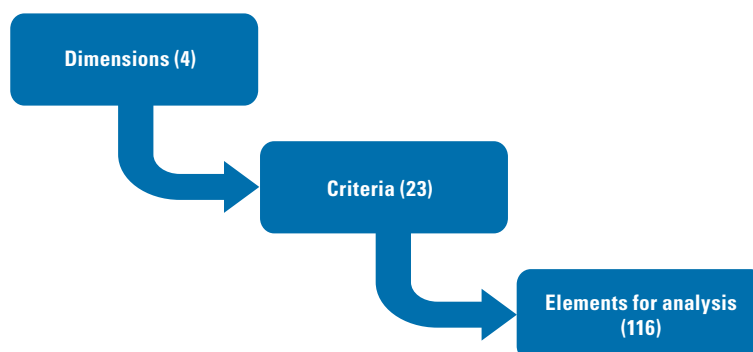
The consultation on territorial development policies was performed in January 2019. Four groups of responses were identified, according to the segment of experts consulted:

- (i) Experts appointed by national planning authorities (country experts): 111 responses;
- (ii) Experts or specialists in territorial development, mainly alumni who have participated in ILPES training activities (ILPES experts): 1,069 responses;
- (iii) Brazil experts, appointed by national planning authorities (Brazil experts): 23 responses;
- (iv) Caribbean experts, appointees or representatives of planning authorities from English-speaking Caribbean countries. (Caribbean experts) 32 responses.

Through the consultations and review, a structure of the Territorial PlanBarometer model was formed, organized by dimensions, criteria and elements, as represented graphically in diagram VI.6.

Diagram VI.6

Structure of the Territorial PlanBarometer model



Source: Latin American and Caribbean Institute of Economic and Social Planning (ILPES).

During the consultation, the experts were asked which criteria should be considered to facilitate or improve territorial development policies. The main question asked was: “Based on your experience of your country’s reality, which criteria best characterize territorial development policies that have a high capacity to bring about territorial development?” The experts were also asked to assess which criteria were most important. Therefore, the results of this exercise also helped to rank the criteria that facilitate or improve implementation of territorial development policies.

The assessment and ranking of these criteria need not be uniform or identical for all countries. Table VI.7 recognizes the diversity of the region and presents the experts’ assessments by population groups consulted and by subregional scope.

Table VI.7

Criteria that characterize territorial development policies: proportion of experts consulted who consider them relevant to ensuring adequate implementation (Percentages)

Criterion	Country experts	ILPES experts	Brazil experts	Caribbean experts
Territorial diversity is taken into account in implementation.	36,14	36,45	(1) 57,14	33,3
Subsidiarity between levels of the State is taken into account in implementation.	9,64	7,54	7,14	33,33
State multilevel or multiscale coordination mechanisms (vertical) are included.	37,35	29,54	21,43	0
Accountability mechanisms are included.	7,23	23,15	14,29	33,3
Mechanisms for sectoral or inter-institutional coordination are included.	33,73	36,19	21,43	33,33
Mechanisms for updating are included.	7,23	5,63	0	33,33
A variety of policy instruments are included (such as laws, incentives, plans or projects).	24,10	23,40	21,43	50
A goal of reducing inequalities between territories is explicitly declared.	(2) 43,37	(2) 39,77	(1) 57,14	(1) 83,33
Implementation includes instruments for participation.	(3) 42,17	38,62	50	50,00
Financing mechanisms for territorial development are included.	36,14	34,02	35,71	(1) 83,33
Mechanisms for evaluating outcomes are included.	24,10	28,77	21,43	66,67
It is possible to establish a It is possible to establish a shared long-term perspective or transcend political cycles.	(1) 54,22	(1) 49,10	(1) 57,14	(2) 66,67
Territorial identities are fostered.	15,66	17,65	7,14	33,33
Territorial leadership is fostered.	13,25	16,11	24,43	33,33
There are interconnections with the national development plan.	27,71	(3) 37,34	14,29	(2) 66,67
National sectoral policies are territorialized.	22,89	23,66	14,29	0
Territorial information is used for monitoring and follow-up.	32,53	30,56	(2) 42,86	33,3
Other (specify)	1,20	2,17	0	0

Source: Latin American and Caribbean Institute of Economic and Social Planning (ILPES).

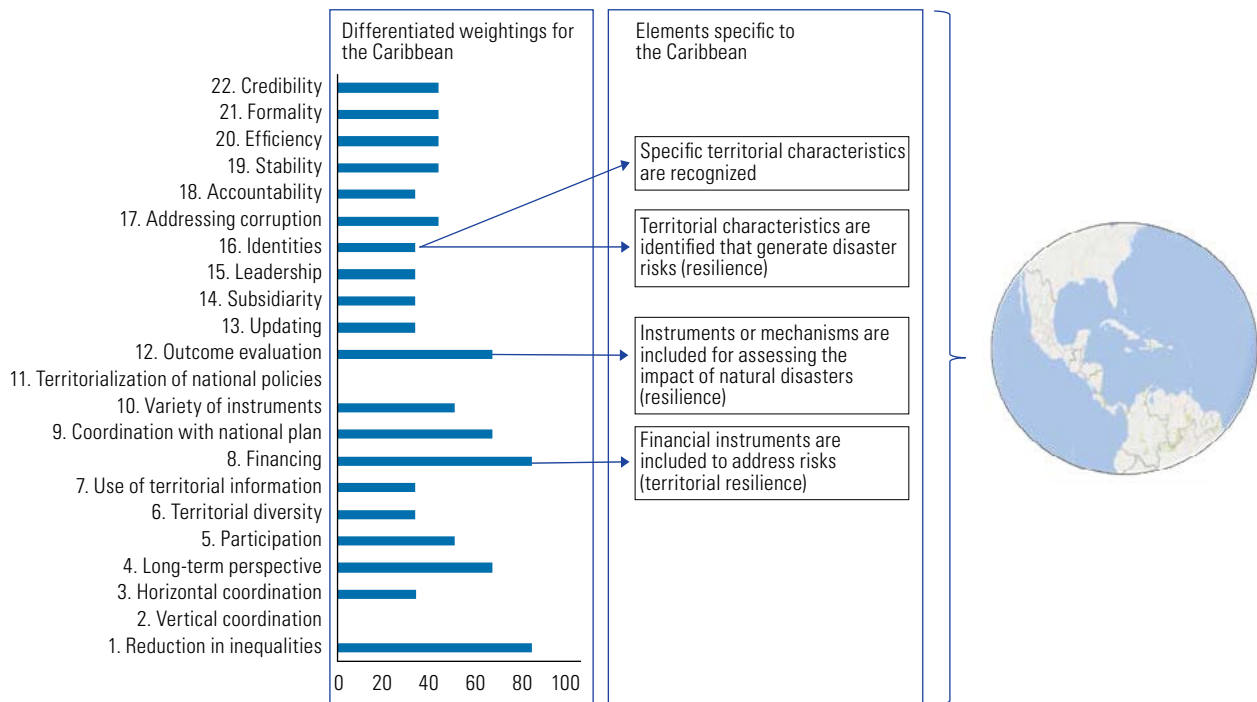
Once the answers had been reviewed, three new criteria were added to the initial set, which were also supported by literature (Chuaire and Scartascini, 2014):

- Stability in public policies
- Efficient implementation
- Credibility

These overall weightings (first column) may be used to apply to model, or alternatively others specific to each subregion may be selected. For the English-speaking Caribbean, two mechanisms were established to create an ad hoc version of PlanBarometer that would capture the distinctive characteristics of the region, as well as highlighting some of the most important factors presented in chapter II that are more directly linked to implementation of territorial development policies. The structure of this ad hoc model was based on the differentiated weighting of the analysis criteria and inclusion of analysed elements that are more closely related to the reality of the Caribbean. This is shown in diagram VI.7.

Diagram VI.7

An example of adaptation of the model to the Caribbean subregion
(Percentages)



Source: Latin American and Caribbean Institute of Economic and Social Planning (ILPES).

As noted in chapter I, the purpose of territorial development policies can be to reduce territorial inequalities or to promote territorial equity in the provision of goods and services. However, these purposes may vary depending on the approach of each country and even the periods in which the policies were formulated. Indeed, as seen in chapter III, a cluster of territorial development policies forms in each country, with multiple goals. Each country must be cognizant of its own situation and employ its capacities to capture and translate these differences into a tool that is flexible enough to reflect its specificities.

The selected criteria are organized into dimensions of analysis that reflect the presence of common themes or dynamics (see table VI.8). These dimensions, as discussed above, correspond to the major challenges of development planning (Cuervo and Máttar, 2017).

Table VI.8
Dimensions and criteria included in the Territorial PlanBarometer

Dimension	Criteria
Multiple time frames	<ul style="list-style-type: none"> 4. It is possible to form a shared long-term perspective or transcend political cycles 7. Territorial information is used for monitoring and follow-up 8. Financing mechanisms for territorial development are included 12. Mechanisms for evaluating outcomes are included 13. Mechanisms for updating are included 19. Stability
Intersectoral collaboration	<ul style="list-style-type: none"> 1. A goal of reducing inequalities between territories is explicitly declared 3. Mechanisms for sectoral or inter-institutional coordination are included 9. There is coordination with the national development plan 10. A variety of policy instruments are included (such as laws, incentives, plans or projects) 23. Formation of an ecosystem of territorial development policies
Multiple scales	<ul style="list-style-type: none"> 2. Multilevel or multiscale coordination mechanisms (vertical) are included 6. Territorial diversity is taken into account in implementation 11. National sectoral policies are territorialized 14. Subsidiarity between levels of the State is taken into account in implementation
Stakeholders and power	<ul style="list-style-type: none"> 5. Implementation includes instruments for participation 15. Territorial leadership is fostered 16. Territorial identities are fostered 17. Mechanisms to prevent or address corruption and dishonesty are included 18. Accountability mechanisms are included 20. Efficiency 21. Formality 22. Credibility

Source: Latin American and Caribbean Institute of Economic and Social Planning (ILPES).

F. Stage three, step two: components of the dimensions of analysis of the model for characterization of territorial development policies

In addition to understanding and characterizing the family of territorial development policies, each individual policy must be analysed in depth. To do this, and to conclude whether a criterion is met, each criterion must be described in greater detail and the elements analysed must be presented (see table VI.9). Each criterion comprises a set of elements related to a theme. The higher the number of criteria met by the policy set, the greater the probability of linking their implementation to achievement of outcomes and subsequent impacts on goals. The elements are based on the PlanBarometer national development planning model (ECLAC, 2017), the literature reviewed, the practices that have become systematized in the region's countries and the results of the 2019 consultation of experts, among other sources.

The reference point for the analysis is the set of policies, plans and regulations identified in table VI.9, not just those whose specific title relates to territorial development (whether local or regional).

Table VI.9
Elements of the territorial development policy analysis model

Criterion	Description	Elements
1. The goal of reducing inequalities between territories is explicitly declared. ^a	According to the definition of a territorial development policy, reducing inequalities is a core condition.	<p>Defined as a single goal.</p> <p>Defined as a single goal and detailed in strategies.</p> <p>Reducing territorial inequalities is defined at the intermediate and local levels.</p>
2. Multilevel or multiscale coordination mechanisms (vertical) are included.	This criterion describes elements that allow for analysis of the interconnections and links between the levels of the State and observation of how problems are addressed when the territorial scale is key to explaining the occurrences analysed.	<p>The different realities of each territory are taken into account to establish goals and strategies.</p> <p>Explicit coordination mechanisms are defined between levels of the State for implementation of the territorial development policy.</p> <p>There are institutional strengthening programmes or resources at the subnational level, as part of implementation of the territorial development policy.</p> <p>At the subnational level the goals of the territorial development policy can be adapted to the local reality.</p> <p>Explicit coordination mechanisms are defined between levels of the State for implementation of the territorial development policy.</p>
3. Mechanisms for sectoral or inter-institutional coordination are included.	This criterion describes elements that enable analysis of the interconnections and links between governmental institutions at the same level of government (horizontal or intersectoral coordination).	<p>There are no overlapping functions or duplication between institutions responsible for the territorial development policy.</p> <p>There are goals agreed upon by the institutions responsible for the territorial development policy.</p> <p>There are formal mechanisms for coordination between the institutions responsible for the territorial development policy.</p> <p>There are informal mechanisms for coordination between the institutions responsible for the territorial development policy.</p> <p>There are specific decision-making groups among the public institutions.</p> <p>There are mechanisms for synchronizing timing (priorities) between public institutions.</p> <p>There are mechanisms for coordinating available resources between institutions (such as personnel, financial resources or infrastructure).</p>
4. It is possible to establish a shared long-term perspective or transcend political cycles.	Construction of a consensus-based vision of future society based on the different perspectives and interests of social stakeholders is one of the criteria that indicate better implementation of territorial development policies. This is based on the idea of reducing inequalities and the perspective of building capacities to promote development at the territorial level.	<p>A long-term time horizon is set (more than one government term of office).</p> <p>A significant time horizon is set.</p> <p>Implementation of policies explicitly involves organizations from the State judiciary and legislature.</p> <p>Territorial policies are being implemented that originated in previous terms of office.</p> <p>The principles and values that guide policies are explicitly defined.</p> <p>The time horizon is consistent with other policies or planning instruments.</p>
5. Implementation includes instruments for participation.	Mechanisms for participation by society that are integrated throughout the processes for implementation of the territorial development policies. "Society" refers to all stakeholders, such as the private sector, academia, experts, non-governmental organizations, research centres and social organizations.	<p>Participants are convened following known and validated criteria.</p> <p>A variety of sectors, groups or types of stakeholders are included.</p> <p>There are mechanisms for consulting civil society, and they are applied.</p> <p>Public-private partnerships are used to implement the policy.</p> <p>Formal mechanisms exist for including initiatives arising from civil society, and they are applied.</p> <p>There are mechanisms for citizen oversight.</p> <p>Mechanisms exist for endorsement by civil society of the lines of action of the territorial development policy, and they are applied.</p>
6. Territorial diversity is taken into account in implementation.	The different territories in a nation (such as municipalities, departments, provinces or states) share characteristics but also have differences that determine how territorial development policies are implemented. When territorial development policies acknowledge these differences, they can seize upon them to reach territories with responses to their specific problems, aspirations and limitations.	<p>Specific territories are defined.</p> <p>Territorial function is recognized.</p> <p>Interplay of effects or impacts between territories is identified.</p> <p>Strategies are included to strengthen formation of partnerships between municipalities or entities at the intermediate level of the State.</p> <p>A classification of types of territories is included.</p> <p>Instruments are created to adapt policies to the reality of the territory.</p>
7. Territorial information is used for monitoring and follow-up.	Territorial information is the basis for decision-making and for the evaluation of policy implementation.	<p>Timelines are constructed to show performance of indicators.</p> <p>Gaps in the information required for analysis are identified.</p> <p>A variety of data sources are used.</p> <p>Indicators are monitored for plans and policies in different periods.</p> <p>Only quantitative indicators are identified, and no qualitative elements are included in the analysis.</p> <p>Those responsible for collecting and systematizing the data to construct the indicators are identified.</p> <p>Quantitative indicators are identified, and no qualitative elements are included in analysis.</p> <p>Baselines are established for the indicators.</p> <p>Indicators are designed based on goals.</p> <p>The formulae for calculating the indicators are designed.</p> <p>Targets are set in relation to the goals.</p> <p>Data collection mechanisms are established for calculation of the indicators.</p> <p>The information obtained from the tracking and monitoring system is used to make corrections, updates or adjustments needed to meet policy goals or to reflect policy changes.</p>

Table VI.9 (continued)

Criterion	Description	Elements
8. Financing mechanisms for territorial development are included.	This is one of the main ways of determining the level of implementation of territorial development policies. Emphasis is placed on budgetary resources and funds earmarked for implementation. These resources can come explicitly from formulation of policies or they can be pre-established funds that share territorial development goals.	<p>Consideration is given to the possibility of establishing or expanding resource generation at the central level.</p> <p>It is possible to establish or expand generation of own resources.</p> <p>It is possible to modify management of existing financing instruments.</p> <p>There is technical support for formulation of projects to be financed.</p> <p>The resources or sources of financing created require co-financing (from other sources or own resources).</p> <p>The resources enable projects to be financed at the pre-investment level.</p> <p>Invitations to apply for financing are clear and simple.</p> <p>Invitations to apply for financing are widely known.</p> <p>Invitations to apply for financing are regular over time.</p> <p>Minimum volumes are included for resources that must be allocated to regional development funds.</p> <p>Territorial rebalancing funds are established.</p> <p>Financial instruments are included to address risks (territorial resilience).</p>
9. There are interconnections with the national development plan.	Territorial development policies should be coordinated with planning instruments through their building blocks, policy focus, themes and thematic focus.	<p>Polices are linked up in terms of time frames.</p> <p>Polices are linked up in terms of goals.</p> <p>Polices are linked up in terms of prioritization of territories.</p> <p>Polices are linked up in terms of principles or values.</p> <p>Polices are linked up in terms of short-term priorities.</p>
10. A variety of policy instruments are included (such as laws, incentives, plans or projects).	Well-implemented territorial development policies use a wide range of instruments to meet their goals. This provides policies with alternative means and greater flexibility to address issues during implementation.	<p>Regulatory instruments are used.</p> <p>Planning instruments are used.</p> <p>Internal rules or guidelines are defined.</p>
11. National sectoral policies are territorialized.	Strategies and mechanisms for implementation of territorial development policies must be flexible to reflect the realities of territories and to capitalize on their strengths, as well as on opportunities to develop territories' capacities.	<p>National sectoral policy goals are identified.</p> <p>Specific characteristics are defined for sectoral policy goals in specific territories.</p> <p>Prerequisites to be met are defined, or preliminary stages to be completed, to meet sectoral policy goals in specific territories.</p>
12. Mechanisms for evaluating outcomes are included.	The creation of mechanisms that enable assessment of the quality of outcomes and the impacts of territorial development policies is at the heart of the recommendations made in literature to improve policy implementation.	<p>Budget implementation is evaluated</p> <p>Evaluation considers fulfilment of targets.</p> <p>Outcomes are assessed.</p> <p>The impact of policies is assessed.</p> <p>Instruments or mechanisms are included for assessing the impact of natural disasters (resilience).</p>
13. Mechanisms for updating are included.	There are mechanisms for feedback and explicit means of updating policies.	<p>The recommendations or suggestions made after policy assessment are taken into account when making decisions.</p> <p>It has been determined who is responsible for updating the policy.</p> <p>Updating is established at specific intervals.</p> <p>Mechanisms are established for updating the policy.</p> <p>There is a knowledge management system that systematizes information and experience gathered from policy implementation, structuring them clearly for the purpose of decision-making.</p>
14. Subsidiarity between levels of the State is taken into account in implementation. ^b	The territorial development policies acknowledge the role that each level of the State plays in their design and implementation. It is assumed that a well implemented ecosystem is based on the principle of subsidiarity between levels of the State.	<p>There are mechanisms for deconcentrating powers or responsibilities and assigning them to subnational levels.</p> <p>There is a diagnosis of the institutional capacities of the subnational levels of the State for implementation of territorial development policies.</p> <p>Programmes or projects are implemented through partnerships or private institutions (non-governmental organizations).</p>
15. Territorial leadership is fostered.	Positive leadership at the territorial level bolsters participation in implementation of territorial development policies. Leadership channels the interests of territories and enables policy networks to be formed.	<p>Territorial stakeholders are recognized.</p> <p>Strategies are defined to involve territorial stakeholders.</p> <p>Mechanisms are included for strengthening territorial stakeholders.</p> <p>Strategies are defined to address disagreements between territorial stakeholders.</p>
16. Territorial identities are fostered.	Recognition of the diversity of cultural assets is one of the factors that helps territorial development policies achieve their goals.	<p>Specific territorial characteristics are recognized.</p> <p>The language is appropriate to local realities.</p> <p>There are strategies or projects in accordance with territorial characteristics.</p> <p>Territorial characteristics are identified that give rise to disaster risks (resilience).</p>

Table VI.9 (concluded)

Criterion	Description	Elements
17. Mechanisms to prevent or address corruption and dishonesty are included.	Territorial development policies have goals that bring about major changes in relative conditions between territories, potentially creating spaces for misuse of resources. At the same time, efficient and transparent whistle-blowing and investigation mechanisms help to foster involvement in implementation.	<p>There are transparency mechanisms specific to the territorial development policy.</p> <p>There are specific whistle-blowing mechanisms that are different from normal mechanisms.</p> <p>There are a variety of different whistle-blowing mechanisms.</p> <p>There are mechanisms for citizen oversight of the territorial development policy.</p>
18. Accountability mechanisms are included.	Accountability can be understood and applied in different areas, such as the capacity to generate mechanisms for participation and to provide transparency in the implementation of policies.	<p>There is an explicit statement of the responsibilities of public bodies in relation to the impacts of the territorial development policy instruments.</p> <p>The invitation to participants is made in a balanced, representative, open way, following known criteria.</p> <p>Information on progress in implementation of the territorial development policy is readily accessible to society.</p> <p>There are mechanisms for citizen oversight of policy implementation processes.</p> <p>Transparency is regulated by law.</p> <p>Data sources are known and available to the community, pursuant to the principles of open government (established by the Open Government Partnership).</p> <p>The responsibilities and competences of the different stakeholders involved in the implementation of the territorial development policy are clearly defined in each of the institutions.</p> <p>The responsibilities of each party are defined in relation to the goals of the territorial development policy instruments.</p> <p>There are group mechanisms to incentivize achievement of the goals of the territorial development policy instruments.</p>
19. Stability ^c	It takes time for policies to have an impact and for conditions to change at the territorial level; efforts must therefore be sustained over time. Conditions must be established that have the potential to be stable over time and between government terms of office.	<p>Aims and goals are maintained over more than one government term of office.</p> <p>Political parties and legislature have specialized technical staff who analyse the progress of territorial development policies.</p> <p>There are formal mechanisms for amending the territorial development policy.</p>
20. Efficiency	The capacity must exist to achieve territorial development policy goals making the best use of available resources (such as financial, institutional or human resources).	<p>Resources are reallocated from other sources to finance the territorial development policy.</p> <p>There are impact assessment mechanisms.</p> <p>The territorial development policy is managed by existing institutions.</p> <p>There is a specialized and regularly trained civil service.</p>
21. Formality	Territorial development policies require a set of formal and explicit elements that enables them to be interpreted homogeneously whilst also facilitating dissemination, distribution of public resources and coordination with other policies. Formalization of territorial development policies contributes to successful implementation through the commitment of public institutions and the community.	<p>The policy is described explicitly in a document.</p> <p>There is general recognition of the existence of the policy.</p> <p>The territorial development policy is identified or recognized in other policies.</p>
22. Credibility	Territorial development policies must be reliable and valid. The community and public and private entities must be certain that territorial development policies have been designed and implemented for the common good.	<p>The territorial development policies are interlinked (they are recognized or identified in each other).</p> <p>The territorial development policies were designed and implemented primarily with territorial development in mind, not the interests of pressure groups.</p> <p>There are clear and efficient mechanisms for implementing the territorial development policies.</p> <p>Territorial development policies are recognized as valid reference points in planning instruments at intermediate and local levels.</p>
23. Formation of an ecosystem of territorial development policies	This criterion aims to comprehensively combine the analysis of indicators of interlinkage, density and centrality of policies, to assess the structure and dynamics of the ecosystem.	<p>Policies have defined roles within the ecosystem.</p> <p>There are relationships between policies (high density).</p> <p>There are policies at every level of the ecosystem.</p>

Source: Latin American and Caribbean Institute of Economic and Social Planning (ILPES).

^a If no territorial development policy is formally defined, the analysis is carried out on the basis of the policy set.

^b Under the principle of subsidiarity, in areas which do not fall within its exclusive competence, the Union shall act only if and insofar as the objectives of the proposed action cannot be sufficiently achieved by the Member States, either at central level or at regional and local level, but can rather, by reason of the scale or effects of the proposed action, be better achieved at Union level" (European Union, Treaty establishing a Constitution for Europe, 2004, Title III, Art. I-11, paragraph 3).

^c The study carried out by Chuaire and Scartascini (2014) defines the following criteria: stability, adaptability, coherence and coordination, implementation and enforcement, public regardness and efficiency.

G. Stage four: interpretation of results

This section proposes and recommends some possible ways of interpreting the results of the model for characterizing territorial development policies.

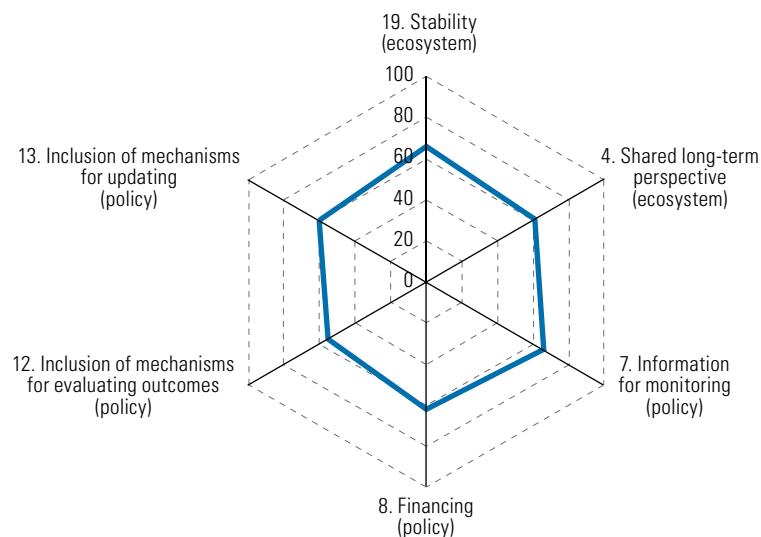
1. Possible results and their implications: analysis by dimensions

Application of the criteria described in table VI.9 yields graphical results of different natures, which may be more general or more detailed. One of the alternatives is to take the dimensions as the unit of analysis and observe the structure of the components. The layout of radar charts makes it possible to identify key characteristics of the whole or of its components. For example, the criteria and values processed in the multiple time frames dimension yield different configurations of results, which are more easily interpreted through the graphical representations in the radar charts.

One configuration is balanced criteria. This occurs when most of the criteria present equally in the radar chart (see figure VI.1). This situation indicates that there is a minimum set of conditions with no large differences between criteria. In this case, there would be no urgent priorities to close gaps.

Figure VI.1

Analysis of the multiple time frames dimension: case with a balanced structure
(Percentages)

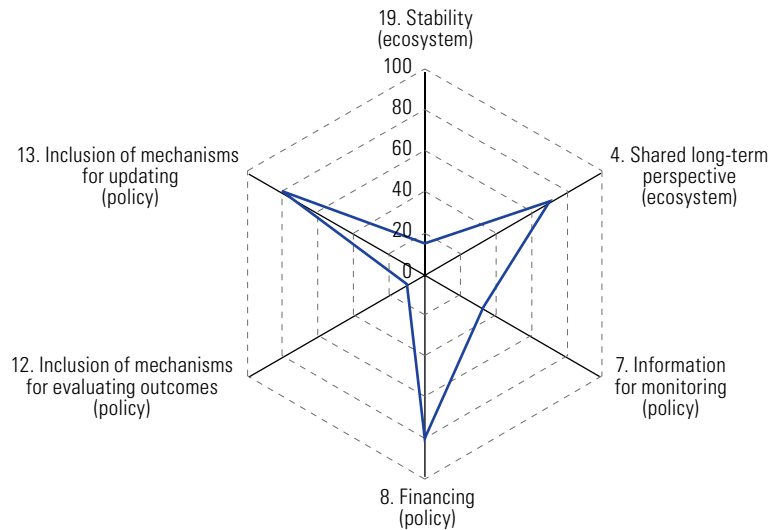


Source: Latin American and Caribbean Institute of Economic and Social Planning (ILPES).

A second possible situation is heterogeneity. This occurs when there are differences between criteria (see figure VI.2). Some are very far from the centre of the radar chart (higher level of achievement of the criterion) and others are closer to it (lower level of achievement). Here, it is possible to identify elements that clearly need to be refined as a basis for improvement or to close gaps.

Figure VI.2

Analysis of the multiple time frames dimension: case with a heterogeneous structure
(Percentages)

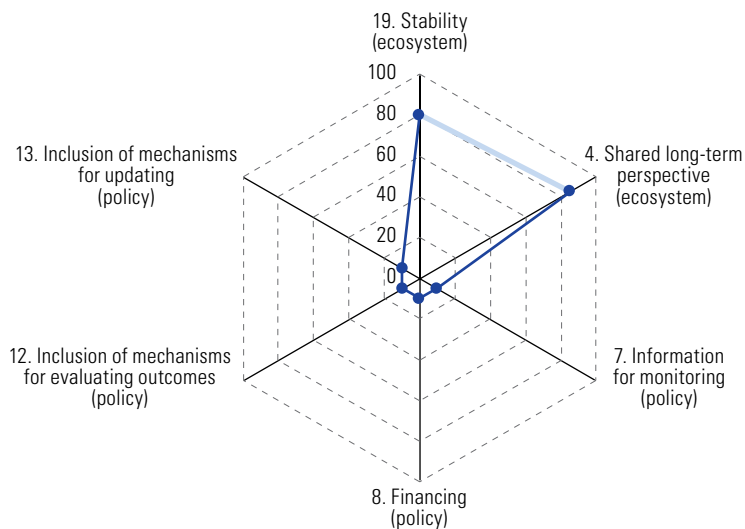


Source: Latin American and Caribbean Institute of Economic and Social Planning (ILPES).

A third possible situation is bias towards areas or subjects. In this case there is a concentration in certain areas of the dimension (see figure VI.3). This configuration identifies a specific pattern of behaviour in the criteria, such as in the following radar chart, showing that implementation of territorial development policies is most successful in criteria linked to the ecosystem, rather than to individual policies.

Figure VI.3

Analysis of the multiple time frames dimension: case with bias or concentration
(Percentages)



Source: Latin American and Caribbean Institute of Economic and Social Planning (ILPES).

2. Possible results and their implications: alerts or significant interdimensional combinations

A second means of organizing the results to facilitate interpretation is to use a system of alerts. These are warning signs or events that highlight the possibility of factors that are undesirable or that hamper policies' capacities to achieve goals. These signs can be used as a basis for proposing strategies for improvement in the near term, since they must be understood as indicators of situational risks with impacts on the future.

Alerts are understood as a particular combination of elements that produce a significant situation closely related to one or more strategic aspects of territorial development policies. These alerts can also be understood as critical messages that require special attention and that are likely to point to actions to address the situation. These messages are constructed from the strategic elements that define territorial policies, identified throughout this work.

As will be seen, each alert is the result of consideration of a very specific set of criteria that can emit direct and explicit signals in relation to a very precise area. The alerts relate to the following aspects: capacity to reduce inequalities; capacity to strengthen territories; capacity to strengthen territorial leadership; focus on public interest; capacity to implement territorial development policies; the role of technocracy, or the degree of centralization of the system. These configurations are described below.

Alert 1: Capacity to reduce inequalities. Considered the mainstay of territorial development policies, the alert for this capacity is constructed with the following configuration of criteria:

- Criterion 1: The goal of reducing inequalities between territories is explicitly declared.
- Criterion 6: Territorial diversity is taken into account in implementation.
- Criterion 7: Territorial information is used for monitoring and follow-up.
- Criterion 8: Financing mechanisms for territorial development are included.
- Criterion 23: Formation of an ecosystem of territorial development policies.

Alert 2: Capacity to foster development of territories. This alert is constructed with the following configuration of criteria:

- Criterion 2: Multilevel or multiscale coordination mechanisms (vertical) are included.
- Criterion 3: Mechanisms for sectoral or inter-institutional coordination are included.
- Criterion 7: Territorial information is used for monitoring and follow-up.
- Criterion 8: Financing mechanisms for territorial development are included.
- Criterion 10: A variety of policy instruments are included (such as laws, incentives, plans, subsidies or projects).
- Criterion 20: Efficiency.

Alert 3: Capacity to foster development of territorial leadership. This alert is constructed with the following configuration of criteria:

- Criterion 4: It is possible to establish a shared long-term perspective or transcend political cycles.
- Criterion 5: Implementation includes instruments for participation.
- Criterion 14: Subsidiarity between levels of the State is taken into account in implementation.
- Criterion 15: Territorial leadership is fostered.
- Criterion 16: Territorial identities are fostered.
- Criterion 17: Mechanisms to prevent or address corruption and dishonesty are included.
- Criterion 22: Credibility.

Alert 4: Implementation of territorial development policies in the public interest. Although a much clearer view of this aspect may be obtained in the design phase of territorial development policies, in the implementation phase there may be deviations from these policies' focus on solving problems of public interest rather than responding to pressure groups. This alert is constructed with the following configuration of criteria:

- Criterion 4: It is possible to establish a shared long-term perspective or transcend political cycles.
- Criterion 5: Implementation includes instruments for participation.
- Criterion 12: Mechanisms for evaluating outcomes are included.
- Criterion 17: Mechanisms to prevent or address corruption and dishonesty are included.
- Criterion 18: Accountability mechanisms are included.

Alert 5: Government capacity to implement territorial development policies. This alert identifies the most relevant criteria that reflect the capacity of public bodies to implement territorial development policies. This alert is constructed with the following configuration of criteria:

- Criterion 2: Multilevel or multiscale coordination mechanisms (vertical) are included.
- Criterion 3: Mechanisms for sectoral or inter-institutional coordination are included.
- Criterion 7: Territorial information is used for monitoring and follow-up.
- Criterion 8: Financing mechanisms for territorial development are included.
- Criterion 17: Mechanisms to prevent or address corruption and dishonesty are included.
- Criterion 20: Efficiency.

Alert 6: Excessive technocracy. The influence that social stakeholders and public institutions have on successful policy implementation may be underestimated. The criteria that form this alert are as follows:

- Criterion 5: Implementation includes instruments for participation.
- Criterion 15: Territorial leadership is fostered.
- Criterion 16: Territorial identities are fostered.

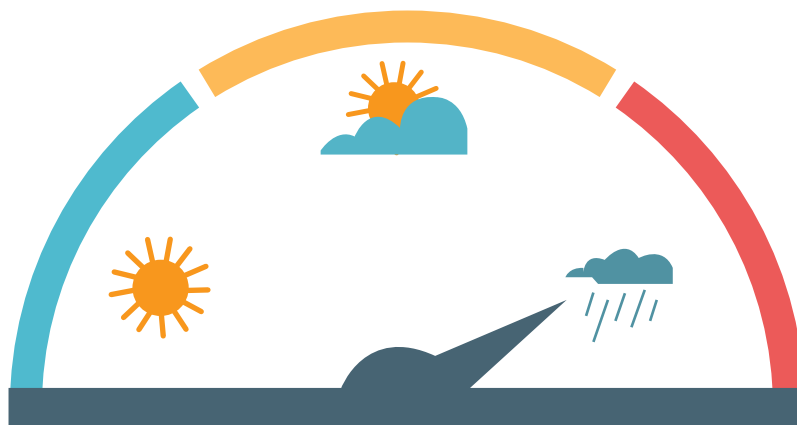
Alert 7: Centralized policies. Policy implementation can be concentrated at the national level, greatly reducing the capacity of policies to generate impacts. The criteria that form this alert are as follows:

- Criterion 2: Multilevel or multiscale coordination mechanisms (vertical) are included.
- Criterion 6: Territorial diversity is taken into account in implementation.
- Criterion 11: National sectoral policies are territorialized.
- Criterion 14: Subsidiarity between levels of the State is taken into account in implementation.
- Criterion 15: Territorial leadership is fostered.
- Criterion 16: Territorial identities are fostered.

Alerts are automatically calculated when performing the spreadsheet-based or online analysis (see diagram VI.8). The ratings (red, yellow or green) are set based on the degree to which the value obtained for each criterion deviates from its established minimum standards.

Diagram VI.8

Example of a PlanBarometer alert



Source: Latin American and Caribbean Institute of Economic and Social Planning (ILPES).

A red alert appears when the event is very likely to occur. The interpretation or impact of this alert is negative in relation to implementation of territorial development policies. The alert appears if the value obtained from the analysis is twice the standard deviation.

A yellow alert appears when the probability of the situation occurring is moderate. The alert appears if the value obtained from the analysis is between one and two standard deviations.

The green alert appears when the probability that the described circumstance will occur is low. This alert appears if the value obtained from the analysis is less than one standard deviation from the standard for the criterion.

3. Possible results and their implications: concentration of the policy family in terms of territorial approach

Another possible outcome or result of applying and analysing the criteria is identification of the level of concentration or focus in the system as a whole on territorial issues (proximity to territorial issues). The calculation formula is presented according to the criteria weightings shown in table VI.10.

Table VI.10

Concentration of the ecosystem in terms of territorial approach

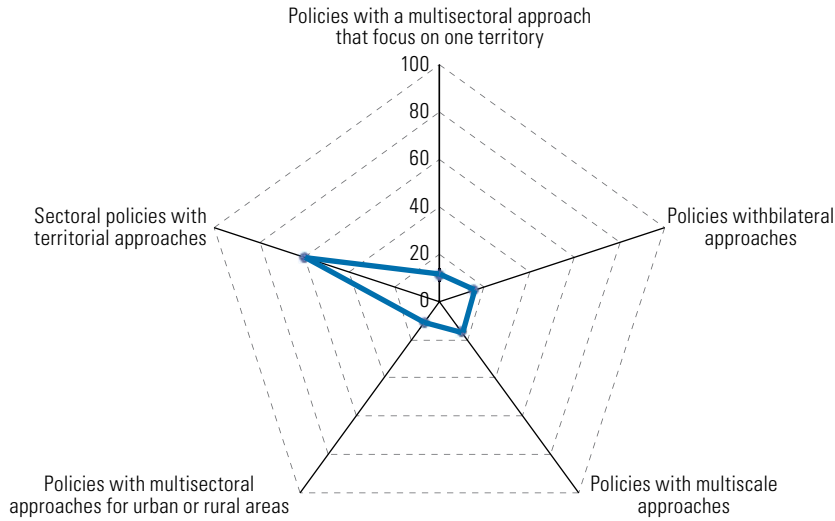
(Percentages)

Type of territorial approach	Criteria	Weighting
Policies with a multisectoral approach that focus on one territory	1. A goal of reducing inequalities between territories is explicitly declared.	33
	3. Mechanisms for sectoral or inter-institutional coordination are included.	66
Policies with bilateral approaches	2. Multilevel or multiscale coordination mechanisms (vertical) are included.	33
	22. Credibility.	66
Policies with multiscale approaches	2. Multilevel or multiscale coordination mechanisms (vertical) are included.	33
	14. Subsidiarity between levels of the State is taken into account in implementation.	66
Policies with multisectoral approaches for urban or rural areas	2. Multilevel or multiscale coordination mechanisms (vertical) are included.	30
	3. Mechanisms for sectoral or inter-institutional coordination are included.	30
	6. Territorial diversity is taken into account in implementation.	30
	16. Territorial identities are fostered.	10
Sectoral policies with territorial approaches	3. Mechanisms for sectoral or inter-institutional coordination are included.	33
	11. National sectoral policies are territorialized.	66

Source: Latin American and Caribbean Institute of Economic and Social Planning (ILPES).

These values are automatically calculated by the web application and by the spreadsheet. Figure VI.4 shows how the results are displayed visually.

Figure VI.4
Sample visual representation of concentration of the territorial approach
(Percentages)



Source: Latin American and Caribbean Institute of Economic and Social Planning (ILPES).

4. Designing strategies for improvement

One means of systematizing the insight drawn from the work of the groups is to use the matrix shown in table VI.11, which organizes the most important characteristics of the ecosystem and structures different alternatives aimed at resolving the difficulties found. This matrix includes a column to identify the stakeholders that might be involved in implementation.

Table VI.11
Sample summary matrix of group discussions

Identified characteristic	Alert	Possible alternatives for improvement	Stakeholders involved
Limited interlinkage between policies	Red alert 2	- Establish or improve coordination mechanisms between implementing institutions - Design new interlinking instruments	- Ministry of the Interior - Departmental governments
Policies that do not identify reducing inequalities as a goal	Yellow alert 1	- Strengthen statistical system to accurately identify inequalities	- Institute of Statistics - Departmental governments
Policies that focus on the short term	Red alert 3 Yellow alert 1	- Connect policies with long-term plans	- National Development Council
Low level of participation	Yellow alert 1 Red alert 3	- Create dissemination mechanisms - Invite broader range of participants to prioritization meetings	- Ministry of the Interior - Association of municipalities - Municipalities
Concentration of territorial development policies in sectoral policies	Policy concentration matrix	- Improve mechanisms for updating outdated policies	- Ministry of the Interior - Departmental governments

Source: Latin American and Caribbean Institute of Economic and Social Planning (ILPES).

H. Conclusions: use of the Territorial PlanBarometer model and closing remarks

The Territorial PlanBarometer model developed throughout this document and described in this chapter is based on general reference points that are valid regionally, that is to say for Latin America and the Caribbean as a whole, and with a specific focus: development with equality, as proposed by ECLAC in its documents for its sessions from 2010 to 2018.

The stages, steps and sequence of the model are designed to make the procedure broadly applicable and relevant. However, some of its content, categories, criteria and weightings may need to be adapted to the specific national or subnational levels. Each country must choose whether and how to adapt the model, depending on whether the approach it offers is appropriate or requires adjustments. Adaptations should be made at the discretion of the group applying the model but, as noted earlier, this is without prejudice to the process, its sequence or the proposed procedures.

This chapter revisits the contributions and lessons learned from the analysis offered in previous chapters. These contributions and lessons are organized and summarized by building a model, that is to say, a characterization and analysis process, which generates information that can later be used to define strategies that enable a transition from a family of territorial policies to an ecosystem.

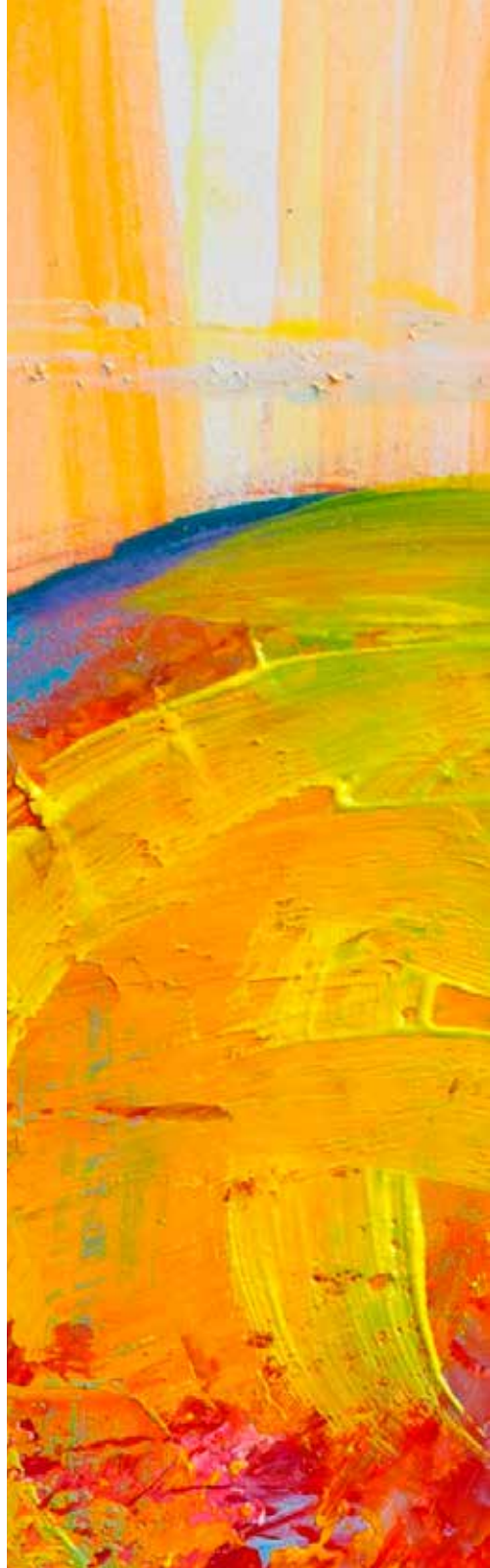
Territorial issues are not played out in the territorial sphere alone. This is perhaps one of the most important lessons of the work presented in this document. Commitment to and concern for territorial development is expressed in a cluster of territory-related policies. However, in most cases, this does not take the form of a coherent and structured system of policies with convergent efforts and directions.

Commitment to territorial issues is broad and varied, but also disjointed. The second key lesson is also the starting point for subsequent institutional action. The structure, the components and the attributes of each component must be understood and characterized, to lay the foundations for subsequent action: identifying management strategies for the family of territorial policies that will make it possible to move towards an ecosystem, addressing the greatest coherence problems and improving the conditions in which synergic interactions take place, thus reducing inequalities and building territorial capacities.

The next step is, for the time being, not part of the model. Countries must design their own transition strategies on a case-by-case basis. They must define priorities and, based on their institutional realities and policy priorities, trace the path, long or short, that will bring them closer to a public policy ambition: the formation of an ecosystem of territorial policies. The tool presented in this chapter also provides an analysis framework with a shared standard, offering the possibility of comparing and differentiating institutional structures and frameworks linked to territorial development policies.

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Territory is understood as a human community with a sense of belonging, future and ownership of a physical, natural or artificial space. It is a social construct nourished by culture, politics, technology and infrastructure, which serves to address the challenges of development, sustainability and equality. It is within this complex construct that territorial development policies in the countries of Latin America and the Caribbean need to be examined and improved, in order to reduce inequalities and build capacities.

This work gauges the state of the art and examines the variety and breadth of policy interest in the territorial sphere. The outcome indicates that, rather than policies, the appropriate term is a cluster or family of territorial development policies. In practice, however, this family lacks the desirable cohesion and coordination, and thus needs to be consolidated into an ecosystem. A model for analysis –Territorial PlanBarometer– is presented as a first step towards achieving this.