

The **Caribbean** Outlook

2018



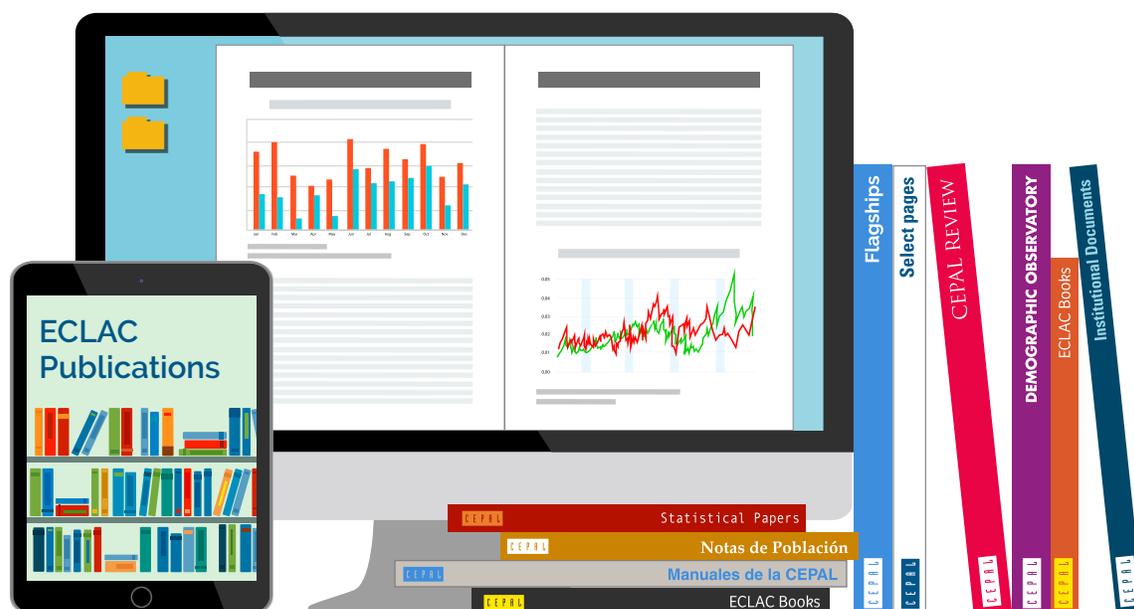
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DEVELOPMENT WITH EQUALITY

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Foreword

We are pleased to present this first issue of *The Caribbean Outlook*, a report prepared by the Economic Commission for Latin America and the Caribbean (ECLAC) subregional headquarters for the Caribbean with the support of the ECLAC Division for Economic Development, and a bold attempt to address the principal development challenges faced by the peoples of the subregion.

Over the past five decades, Caribbean small island developing States have made significant progress in both deepening and entrenching democratic traditions and norms, and in advancing human development. Despite such progress, the subregion's sustainable development trajectory has become increasingly uncertain. In recent years there has been a growing awareness that the subregion has persistently lagged behind comparable economies in the developing world—including many small economies—on the path to sustainable development.

The challenge facing the Caribbean is to identify paths to development that emphasize macroeconomic stability with growth, equality and environmental sustainability. This will provide a bulwark against external shocks and the protection necessary for those that are most vulnerable. Long-standing problems are now being aggravated by climate change, with the increasing frequency and intensity of extreme events which hamper sustainable economic growth of these island economies and undermine the security of their populations. It has also meant escalating costs related to damage and loss and a greater emphasis on disaster risk management.

There is an urgent need to identify strategies for redress that are within the reach of the leaders and decision makers of the subregion. It is necessary to look beyond the traditional arrangements by which the subregion once received support, with priority given to exploring meaningfully new and innovative partnerships which afford space for creative and durable solutions to be pursued, and for the resilience of the Caribbean to be strengthened. It is with such partnerships in mind that ECLAC has launched an initiative designed to bring the issues of the subregion into sharp focus under the dictum *Caribbean first*. This represents an enhanced strategic approach towards ensuring that the concerns of the subregion are given widest consideration both regionally and internationally, with a view to comprehensively advancing the Caribbean agenda for sustainable development. An example of this is the Debt for Climate Adaptation Swap Initiative proposed by ECLAC, which includes the creation of a resilience fund. This approach would include advocacy and increased technical cooperation. Every opportunity will be pursued to support the efforts of the subregion to build its resilience. The Caribbean first approach will also be advanced in all major intergovernmental engagements involving ECLAC, in order to continuously animate and give substance to the search for solutions to the development imperatives facing the Caribbean.

It is in this spirit that this publication has been crafted. It seeks to articulate, in a comprehensive manner, the challenges of the subregion and to identify opportunities for collaboration to help fulfill the subregional development agenda. A vision of what is not only possible, but attainable, for the Caribbean subregion inspires *The Caribbean Outlook*. It not only outlines some of the subregion's main challenges but, importantly, posits a future to be attained through a holistic and forward-looking response to these challenges. It is in this context that it identifies the pursuit of economic opportunities in emerging and new areas such as value chain participation, and the development of the blue economy and creative industries as subregional priorities.

While it is recognized that endogenous measures and actions—and especially sound policy choices—are essential to the future envisaged, domestic resource constraints in the subregion make the full and tangible support of bilateral partners and the multilateral community paramount and

necessary. It is considered imperative, in this regard, that the special and particular situation of small, middle- and upper-income developing countries in the Caribbean be fully recognized and given fair hearing—and a tangible response— by the global community. Specific measures such as the Debt for Climate Adaptation Swap Initiative proposed by ECLAC, the strengthening of long-standing relationships with traditional partners, as well as newer and emerging relationships and partnerships in the context of South-South and triangular cooperation, are important vehicles for support by the global community. This support will be critical for the implementation and achievement by the Caribbean subregion of the Sustainable Development Goals.

Heavy emphasis is placed on investment in youth and on the need for social protection for the most vulnerable. The importance of structural change to promote exports of goods and services is underscored. Given the diminished access to international financing, the diaspora communities are encouraged to participate in the development process. It is our hope that the Caribbean will use the perspectives and analysis offered in this publication to explore the new paths of potential and pursue the many opportunities for broader cooperation, including with the wider Latin America through trade, investment, knowledge-sharing and strategic partnerships. Strengthened regional integration and South-South and triangular cooperation must play an integral role in the Caribbean's search for solutions to the development challenges faced.

I believe that this *Outlook* not only offers perspective on the threats and challenges faced by the Caribbean, but also proposes a rich body of innovative solutions to issues which must be confronted resolutely if the subregion is to achieve a sustainable development path. In this regard, ECLAC is uniquely placed to offer research, data analysis and technical cooperation as necessary foundations for transforming thought and ideas into meaningful action, and advancing proposals for practical policy dialogue, development and implementation. I offer the unqualified support of this Organization to the countries of the Caribbean as they seek to build a resilient and prosperous community, in which all Caribbean people can fulfil their potential with dignity.

Alicia Bárcena

Executive Secretary
Economic Commission for Latin America
and the Caribbean (ECLAC)

Abstract

The fundamental premise of this first issue of *The Caribbean Outlook* is that in the pursuit of sustainable development with equality, no Caribbean citizen should be left behind. Taking as its point of departure the strong commitment made by Caribbean countries to implement the 2030 Agenda for Sustainable Development and the 17 Sustainable Development Goals (SDGs), and other relevant global frameworks, particularly the small island developing States (SIDS) sustainable development agenda and the Sendai Framework for Disaster Risk Reduction, this document makes a strong case for a reinvigorated Caribbean development strategy. These intergovernmental agreements provide a framework for policy consistency through time—a shortcoming in the subregion—and offer a foundation for strategies and priorities that consider a life cycle approach, intertemporal fairness and equity in development, protection, and use of natural, physical and human resources—which stands at the very core of sustainable development.

The *Outlook's* four chapters, all interlinked and embracing the major pillars of sustainable development in an integrated manner, identify the main issues affecting the Caribbean and its people and seek to advance innovative and practical solutions. The *Outlook* makes clear that economic challenges to the subregion are many, and some have been long-standing. The low growth experienced after the global crisis of 2008-2009 cannot be interpreted as a temporary setback, but rather reflects entrenched structural challenges which must be urgently addressed. The document calls for industrial restructuring to improve growth performance through the development of new activities and with a view to enhancing diversification. This process must increase productivity and, more importantly, expand export capacity to respond to existing foreign-exchange deficits.

Worthy of note are the fiscal challenges characterized by high debt burdens and debt servicing costs, constraints that are exacerbated by member States' inability to secure concessional financing, given their status as middle-income countries. Indeed, the Debt for Climate Adaptation Swap Initiative advanced by ECLAC to address these challenges is an innovative approach to unleashing climate finance, while at the same time allowing the region to jump-start growth. Meanwhile, there are other storm clouds which threaten not only the subregion's financial sector but its economy as a whole. These include de-risking, resulting in the loss of correspondent banking relationships, as well as new challenges to the offshore financial sector, which had been developing as an opportunity for economic diversification and economic resilience-building. Meaningfully addressing both these phenomena will require strong advocacy at the international level. ECLAC has called for a more enlightened approach to addressing these issues, which pose existential threats to the sustainable development of the subregion. This effort is consistent with the ECLAC Caribbean first strategy.

In discussions held at the fifth meeting of the Caribbean Development Roundtable of ECLAC, which took place in Saint Lucia in April 2018, member States reaffirmed that the challenges of debt and fiscal management, green investment for growth and the need for advocacy on behalf of their offshore financial centres and to address de-risking, were all issues that required urgent attention. ECLAC has sought to provide a solid foundation for an effective subregional response through the conduct of recent research and analysis, including *The Caribbean Outlook*.

The document is clear that, in the environmental sphere, public policy is important to provide the necessary sustainable infrastructure, to improve the environment for business and to increase the level and inclusiveness of public-private sector engagements. The document makes the case for new opportunities in sustainable energy, through innovative use of ocean resources, through greater investment in the creative industries and by developing the infrastructure and skills uniquely needed to allow the subregion to participate in the global value chains.

The social dimension is punctuated by the increasing prevalence of non-communicable diseases (NCDs) and by persistent challenges linked to poverty and inequality. These circumstances are exacerbated by rising citizen insecurity that the Caribbean must address as a matter of priority. The

need to build human capital for enhanced development opportunity is emphasized; there is real concern that the education system is failing to deliver the high-quality product needed to promote strong knowledge-based economies. Gender-based violence and youth unemployment continue to be matters of serious concern. The potential of young people and older persons should also be boosted to foster social cohesion and to strengthen solidarity between generations. While fiscal challenges have limited the capacity of governments to deliver social services, the document makes a strong case for the use of public expenditure reviews to integrate government priorities with government expenditure and to deliver social services in an efficient and equal manner to all.

In the environmental sphere, the recent devastation of numerous islands by Hurricanes Irma and Maria in 2017 makes it clear that the Caribbean will need to adjust to a new normal that may inevitably include increased frequency of category five tropical cyclones. The fallout from climate change and the lack of financing to address mitigation and adaptation needs are some of the more serious challenges to be faced. These are also complicated by issues of coastal protection, biodiversity, the lack of efficient transportation and the need to promote the energy transition owing to the excessive dependence on fossil fuels. This section discusses not only the challenges but the importance of institutional arrangements to properly address these threats.

In spotlighting the challenges, three primary cross-cutting issues are identified as being integral to multisectoral policy planning and decision-making. These are gender mainstreaming, the role of information and communications technologies (ICTs) for development and the importance of evidence-based decision-making to monitor performance and to entrench accountability and transparency. An effort is made to apply a gender lens to all aspects of the development framework to ensure that the challenges faced by both women and men are accommodated. Promoting gender equality in the subregion unquestionably promotes development that is sustainable, inclusive and people-centred. ICT plays a vital role in facilitating public services, in enhancing investment and business opportunities and in responding to challenges of scale in small economies. Evidence-based decision-making is fundamental to monitoring and measuring the impact of policies and programmes aimed at raising the quality of life of our people.

While it is recognized that endogenous measures and actions —and especially sound policy choices— are essential to the future envisaged, domestic resource constraints in the subregion make the full and tangible support of bilateral partners and the multilateral community paramount. For the Caribbean, the critical role of partnership and cooperation in meeting the fundamental challenge of structural change in an uncertain world economy cannot be overstated. It is imperative, in this regard, that the special and particular situation of small, middle-income developing countries in the Caribbean be fully recognized and given fair hearing —and a tangible response— by the global community. The document makes clear a renewed role for regional integration and underscores the value to be gained were the subregion to meaningfully embrace the wider Latin American regional family through more trade, investment and functional cooperation. It also promotes the strengthening of well-established relationships with traditional partners, and the nurturing of newer and emerging relationships and partnerships in the context of South-South and triangular cooperation, as important vehicles through which development support might be secured.

The Caribbean Outlook, in its first four chapters, provides a succinct overview of the subregion's main challenges, constraints and opportunities; it adumbrates a future consistent with the aspirations of the Caribbean people; and it identifies, in the process, key policies and priorities in the social, economic and environmental spheres that will serve to move the region —with the support of the global community— from reality to the fulfilment of the subregional vision. The fifth and final chapter offers conclusions and recommendations to achieve the future that the Caribbean needs in order to assure the well-being of all its citizens.

I. From vulnerability to resilience: creating the Caribbean future we want

A. Background

Over time, the global community has recognized the constraints and challenges that small States face in their pursuit of sustainable development, many of which are the source of their vulnerability. These include lack of economies of scale in production, proneness to external shocks, excessive reliance on external financial inflows and on few export/import markets, limited transport and communications, reduced scope for output diversification and limited human resources, compounded by high levels of migration of skilled individuals. Since the early 1990s, consistent with emerging global attention being given to the environment and sustainable development, the environmental vulnerability of small islands and low-lying coastal States —characteristics of the countries of the Caribbean— have come increasingly to the forefront. Agenda 21, an outcome document of the United Nations Conference on Environment and Development, held in Rio de Janeiro in 1992, better known as the Earth Summit, specifically declared that small island developing States (SIDS) “are a special case both for environment and development” support.

The unique challenges faced by these countries both define them as vulnerable members of the global community and establish the vital importance of resilience-building to their very survival. The Caribbean region is acutely aware of this imperative: at regional, subregional and national levels countries pursue policies and strategies intended to reduce vulnerabilities and strengthen resilience. Despite their efforts, the consolidation, as well as the deepening and broadening of the progress that has been achieved, is now at risk. Critical challenges across all pillars of the sustainable development agenda —economic, social and environmental— threaten to undermine and potentially reverse earlier gains made in the subregion.

Responding to the economic, social and environmental vulnerabilities of small island developing States (SIDS) demands an integrative, holistic approach to addressing these interdependent challenges. Countries in the subregion have developed or are in the process of developing comprehensive frameworks towards achieving sustainable development.¹ These instruments reflect and are informed by the Caribbean vision for a healthy, safe, prosperous and inclusive community of nations and people, and by the subregion’s key goals and aspirations, which include improved human development and well-being for all, reduced gender inequalities, strengthened and diversified economies, sustainable management and use of natural resources, and improved governance. Furthermore, they are based on national, subregional and regional realities, but reflect also global instruments that are focused on the concerns and priorities of small States, and on promoting resilience and sustainable development, such as the 2030 Agenda for Sustainable Development and the SIDS Accelerated Modalities of Action (SAMOA) Pathway (Samoa Pathway). The national and regional development frameworks in the Caribbean are being aligned closely with both the 2030 Agenda and the Samoa Pathway, to which the subregion is fully committed.

¹ Antigua and Barbuda: Medium-Term Strategic Development Plan 2016–2020; Aruba: Nos Aruba 2025; the Bahamas: National Development Plan (Vision 2040); Barbados: Medium-Term Growth and Development Strategy 2013–2020; Belize: Horizon 2030 National Development Framework; Dominica: Growth and Social Protection Strategy (GSPS) 2014–2018; Guyana: Green State Development Strategy (GSDS); Jamaica: Vision 2030 National Development Plan; Saint Lucia: Medium-Term Development and Strategic Plan; Saint Vincent and the Grenadines: National Economic and Social Development Plan 2013–2025; Suriname: Policy Development Plan 2017–2021; Trinidad and Tobago: National Development Strategy 2016–2030 (Vision 2030). Source: ECLAC Regional Observatory on Planning for Development in Latin America and the Caribbean [online] <https://observatorioplanificacion.cepal.org/en>.

An important strategy for realizing the Caribbean vision is deepening and widening the regional integration movement. This entails strengthened relations and active engagement with the wider Latin American and Caribbean region, with the hemisphere and with the global community.

The vital importance of partnerships is therefore emphasized. The developmental paradox facing Caribbean countries is that, even as their vulnerability is widely recognized, and at a time when the challenges have grown more acute, support from multilateral and bilateral partners has weakened. This is not the consequence of flagging commitment to development cooperation, but of shifting priorities, which has resulted in the ladder being pulled away prematurely from countries classified as middle-income, despite their vulnerabilities.

Importantly, Caribbean countries must respond to these developments and the far-reaching implications for their development agenda at a time of unprecedented flux and changes in the global community. The global economic recovery over the past decade from the deep recession of 2008-2010, which had significant impacts on the countries of the subregion, has been weak. While there is growing recognition that climate change and frequent disasters related to natural phenomenon pose a major threat to, and impose a disproportionate burden on, small island and low-lying coastal States, the response of the global community has so far been inadequate. New challenges related to transnational crime, cybersecurity and illicit trafficking have grown, driven by the subregion's geographic location at the crossroads of the Americas. In the trade and economic sphere, the countries of the Caribbean have, in recent years, faced major production and market dislocation, and difficult and continuing adjustment. This has resulted from the concurrent elimination of trade preferences for their major commodity exports in leading markets and the liberalization of their own import regimes under the World Trade Organization (WTO) multilateral trade rules. This occurrence has changed competitive conditions simultaneously in both their export and domestic markets with major disruptive effects in fragile and undiversified regional economies. The recent decision by the United Kingdom to withdraw from the European Union (Brexit) has created new uncertainty for the subregion regarding future trade relations with a major economic partner, as well as potentially disturbing the balance of benefits obtainable under the Economic Partnership Agreement entered into with the European Union.

The main challenges faced by the subregion are identified below.

B. Main challenges

Realizing the Caribbean vision will require successfully addressing the main challenges facing Caribbean countries, manifest in all three dimensions of the sustainable development agenda.

Caribbean economies have continued to experience persistent low growth since the global crisis of 2008-2009. This is associated with fiscal challenges, especially the subregion's debt burden, which remains among the highest in the world relative to the size of its economies. In trade, deep-seated problems are reflected in chronic current account imbalances, which are the result of underlying problems, including lack of competitiveness, and a low level of diversification of markets and products. The skills level in the workforce is low and there is a mismatch between the output of the subregion's educational system and the requirements of the labour market, as well as technological inadequacy. Compounding this situation, the subregion has one of the world's highest levels of emigration of tertiary-educated and skilled individuals (Alleyne and Solan, 2018).

Caribbean small States have been classified as middle-income countries, which greatly limits their access to bilateral and multilateral grants and other concessional funding. At the same time, as small vulnerable economies, many Caribbean States have great difficulty accessing international capital markets and region forced to borrow on onerous terms.

The perception in the capital markets of SIDS as high-risk has recently spread to the international banking system with the termination or restriction of correspondent banking services to several Caribbean small States, threatening their exclusion from the global banking system.

In the social sphere, the subregion is losing momentum in the effort to improve human and social development with gender equality. Progress on people's well-being and enjoyment of their human rights are fundamental drivers of sustainable development. However, most Caribbean countries, although in general ranked in the upper half of the Human Development Index prepared by the United Nations Development Programme (UNDP),² have moved down several places in the Index in recent years. The subregion must improve the quality of, and access to, health and education, important goals in themselves, but vital to a resilient community.

In some countries in the subregion, youth unemployment is among the highest in the world. This is a serious challenge. So too are gender inequalities, which persist in Caribbean societies and limit the full human potential of all Caribbean men and women and their access to equal opportunities. Achieving gender equality and strengthening women's empowerment and their autonomy will be treated as a cross-cutting issue later in this chapter, since mainstreaming a gender perspective is central to obtaining a people-centred and holistic approach towards sustainable development.

The Caribbean subregion, notwithstanding decades of progress on human development, faces growing poverty and income inequality, a principal cause of social exclusion affecting vulnerable and marginalized groups and communities. These individuals include increasingly older persons, a growing age group in Caribbean society, whose challenges are exacerbated by weak social protection systems, inadequate access to care services and patterns of migration which disrupt family structure. Social protection is an effective instrument for protecting against shocks, reducing inequality and promoting inclusive development. Its strengthening and expansion in the subregion is a priority.

A final challenge in this area is insecurity and lack of safety: several countries in the subregion are affected by high rates of crime and violence, including gender-based violence. This is both a brake on development and antithetical to building peaceful and prosperous societies.

Sustainable development encompasses all pillars; therefore, building Caribbean resilience also entails meeting key challenges in the environmental sphere. Among the most pressing of these in the subregion are adapting to climate change, and reducing the impact of disasters through preparedness, recovery and sustainable reconstruction that considers the different needs of its population.

Caribbean resilience will depend on meeting all the foregoing challenges. This will require comprehensive and integrated policies implemented across the three sustainable development pillars and increased support from and collaboration with the international community as Caribbean countries seek to implement their national and regional development plans, in alignment with global frameworks.

² The Human Development Index measures average achievement in three basic dimensions of human development: a long and healthy life, knowledge, and a decent standard of living.

C. Towards sustainable development

1. Embedding development frameworks: congruence and challenges

Caribbean countries recognize that the development policies of the past will not serve to move the subregion towards resilience and sustainable development. The conditions that made certain policies viable have changed considerably. This is the case, for example, with multilateral trade rules and trade preferences, and regarding competitive conditions for low technology output in the global economy. A re-thinking of the subregion's development trajectory is reflected in emerging development frameworks that focus on skills development, greater technological sophistication, diversified production of goods and services, sustainable management of natural resources, improved governance, and people's well-being. They also encompass new areas such as the creative and blue economies. These priorities and the holistic approach in which they are increasingly being set result in a high degree of congruence and synergies between the subregion's national and regional strategies and the Samoa Pathway and the 2030 Agenda for Sustainable Development, both of which have helped to focus attention on the relationship between integrated approaches and sustainability.

The strategy being pursued in the subregion is the embedding, or mainstreaming, of these interrelated global frameworks into national and regional development strategies and programmes. This process has begun, but needs to be accelerated. This mainstreaming and embedding process is integral to the formulation and implementation of national development plans, such as Jamaica and Trinidad and Tobago's Vision 2030, Belize's Horizon 2030, the Bahama's Vision 2040 and Guyana's Green State Development Strategy, among others. This process has largely been implemented through the Rapid Integrated Assessment (RIA) and the Mainstreaming, Acceleration, and Policy Support (MAPS) tools of the United Nations Development Group (UNDG). A key factor hindering the acceleration of this process, however, is the lack of a long-term integrated national development plan in most Caribbean countries. ECLAC is currently implementing a project to address this challenge. The project, sponsored by the Federal Ministry for Economic Cooperation and Development of Germany (BMZ) through the German Agency for International Cooperation (GIZ), is aimed at enhancing the capacity of beneficiary countries³ to incorporate the Sustainable Development Goals (SDGs) in their planning, management and monitoring processes, in accordance with national and subregional priorities. To date, the lessons learned through the project suggest that Caribbean countries need to incorporate more evidence-based processes in crafting their national development plans. This includes having a monitoring and evaluation framework to accompany the plan, using planning tools to set realistic, achievable, and unambiguous national development targets and defining measurable indicators for the targets. However, for this to happen, the capacities of the subregion's national statistical systems to collect, process, produce and disseminate official statistics in a timely manner must be enhanced.

Notwithstanding, Caribbean countries are taking steps to create, at the national level, the required institutional frameworks needed for mainstreaming and implementing the SDGs and are participating actively in the regional and global processes that support and monitor their implementation⁴ but many constraints and challenges are evident. The *Annual report on regional progress and challenges in relation to the 2030 Agenda* (ECLAC, 2017b), prepared by ECLAC for the first meeting of the Forum of the Countries of Latin America and the Caribbean on Sustainable Development, for which it serves as

³ Aruba, the Bahamas, the British Virgin Islands, Grenada, Guyana, and Saint Kitts and Nevis are the six beneficiary countries of this project.

⁴ Belize participated in the 2017 voluntary national reviews held by the high-level political forum on sustainable development, under the auspices of the United Nations Economic and Social Council. The Bahamas and Jamaica will participate in 2018. Jamaica is a member of the Inter-Agency and Expert Group on Sustainable Development Goal Indicators, and the Bahamas and Saint Lucia are members of the High-level Group for Partnership, Coordination and Capacity-Building for Statistics for the 2030 Agenda.

technical secretariat, points to the “initial inequality” between Caribbean countries and the remainder of Latin America with regard to their ability to cope with the statistical challenges posed by SDG monitoring (ECLAC, 2017b, p. 74). Financing for development—including access by middle-income countries to concessional and grant resources—the strengthening of technical capabilities, especially for data generation, putting in place effective institutions and ensuring both increased political buy-in and greater public awareness, have been raised as key challenges by the Caribbean, both at the Forum of the Countries of Latin America and the Caribbean on Sustainable Development and the high-level political forum on sustainable development, as well as in their national reviews of the alignment of their national frameworks with the Samoa Pathway and the 2030 Agenda for Sustainable Development and the SDGs.

The integrated and inclusive nature of the development frameworks being developed in the subregion require—if they are to be successfully implemented—institutions, national ownership, and leadership mechanisms that are cross-cutting and multisectoral in character and structure. These have already begun to emerge in the Caribbean (ECLAC, 2017b, pp. 39-62), but need to become more widespread. They are defined by apex political drivers—the Presidency, the Office of the Prime Minister, the Cabinet—through cross-cutting and multisectoral structures; and with multi-stakeholder participatory and consultative mechanisms that engage with civil society organizations, women, youth and older persons’ associations, academia, other non-governmental actors and the private sector. Improved coordination, enhanced flows of information and greater capacity for outreach to all stakeholders, and especially to vulnerable and marginalized groups, are the objectives to be met from these continued efforts to break down the institutional silos that exist in the subregion.

Considering the fact that the Caribbean countries that have recorded early successes in mainstreaming and now starting to implement the SDGs are those that either already had a long-term national development plan in place or have just developed one, ECLAC places great importance on the power of an integrated national development plan to serve as the platform for pursuing the 2030 Agenda in synergy with other global agreements that are particularly relevant to SIDS, such as the Samoa Pathway and the Sendai Framework for Disaster Risk Reduction. To this end, ECLAC has just started to implement a Development Account project funded by the United Nations Department of Economic and Social Affairs to strengthen institutional frameworks in the Caribbean for an integrative approach to implementing the 2030 Agenda and the SIDS sustainable development agenda. Six additional Caribbean countries⁵ will receive technical assistance in drafting a long-term national development plan that adequately integrates the and SIDS agenda with the SDGs, in an inclusive and participatory manner, taking account of national development priorities.

2. Regional integration for sustainable development

Regional integration is an important pillar of the strategy to strengthen resilience and engender sustainable growth and development.

Given the lack of economies of scale and scope in many areas—for example, in industry, public administration and knowledge creation and dissemination—and given the breadth of global, regional, subregional and national development frameworks, sustainable development, especially in the case of small developing States, cannot be achieved solely through national initiatives and country-focused investment. For Caribbean countries, attainment of the SDGs calls for the allocation of significant financial

⁵ The beneficiary countries of the Development Account project are: Antigua and Barbuda, Barbados, Dominica, Saint Lucia, Saint Vincent and the Grenadines and Sint Maarten.

and technical resources to regional and subregional public goods that benefit all countries —goods which cannot realistically, or in a cost-effective manner, be undertaken by a single member State.⁶

Caribbean countries collectively are already engaged at the subregional level, through many institutions and agencies, in producing subregional public goods and services that are directly relevant to the SDGs. These are being delivered largely through functional cooperation in areas ranging from subregional security to health and education.

An extensive network of more than 25 Caribbean organizations, funds, programmes and regional organizations of the United Nations system such as ECLAC, is currently engaged in delivering these subregional public goods and services, including technical cooperation.

It is to be noted that both global and subregional public goods are underfunded. Funding from official development assistance (ODA) for public goods is estimated at only 10% of total ODA (Chibber, 2016) while multilateral development bank (MDB) financing and other development assistance underfund multi-country projects for addressing regional public goods.⁷ But the provision of regional public goods is even more crucial now in the case of the sustainable development agenda, which addresses economic, social and environmental challenges more fully.

The deepening —and widening— of the regional integration process will be essential to making the Caribbean vision a reality. Deepening entails realizing gains beyond functional cooperation, through the free movement of goods, people, services, capital and technology in the subregion under the Single Market and Economy (CSME) initiative.⁸ The Caribbean evidences a low level of both intra-industry and intraregional trade, which is the result of low levels of production integration and of trade complementarity in the subregion. There is also the need to strengthen trade and economic relations with the wider Latin American and Caribbean region as part of a strategy of trade and economic diversification, and of resilience-building, especially relevant in a global environment where regional value chains continue to be among the most dynamic components of international trade.

3. Cross-cutting issues: keys to implementing development frameworks

The 2030 Agenda for Sustainable Development is a transformative and holistic framework for development. Leaving no-one behind also requires that no SDG goal should be left behind either, although prioritization is necessary in a context of constrained resources. Measures that are catalytic in impact across a wide range of goals and objectives are therefore critical success factors for implementing the holistic frameworks that have been developed at the global, regional, subregional and national levels. Cross-cutting issues fulfil this role. Achieving gender equality, using ICTs for development and generating robust data for evidence-based decision making are three issues on which the Caribbean region must focus.

⁶ Public goods are variously defined: in principle and in pure form they are 'non-excludable' and 'non-rivalrous', i.e. they are available to all, and consumption does not diminish the availability of the good to others.

⁷ The Inter-American Development Bank (IDB), since 2004, has financed 140 projects under its Initiative for the Promotion of Regional Public Goods in Latin America and the Caribbean, at a total cost of more than US\$ 103 million. The Initiative is based on the premise that the countries of the subregion share challenges and opportunities that can be addressed more effectively and efficiently through collective action.

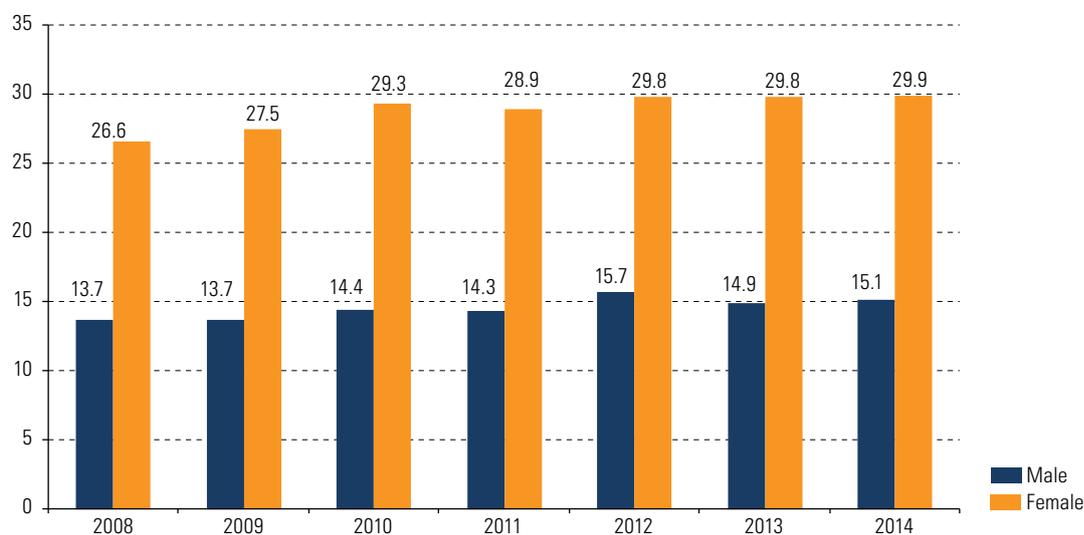
⁸ The Revised Treaty of Chaguaramas (2001) provides for the establishment of an economic union among Caribbean small States under the aegis of the CARICOM Single Market and Economy. CSME, initially to come into effect in 2008, was then targeted for full implementation by 2015. This deadline has been missed. At their thirty-eighth regular meeting, held in St. Georges, Grenada in 2017, the Conference of Heads of Government of the Caribbean Community (CARICOM) approved an implementation plan with the objective of accelerating full transition to a regional single market and economy, *Implementation Plan for the CSME 2017–2019*.

(a) Mainstreaming a gender perspective to achieve sustainable development with gender equality

Mainstreaming a gender perspective is “the process of assessing the implications for women and men of any planned action, including legislation, policies or programmes, in any area and at all levels. It is a strategy for making women’s as well as men’s concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and programmes in all political, economic, and societal spheres so that women and men benefit equally and inequality is not perpetuated. The ultimate goal is to achieve gender equality”.⁹ The ECLAC Gender Equality Observatory for Latin America and the Caribbean offers a cogent argument on the importance of mainstreaming gender in all development frameworks, since achieving gender equality is a fundamental cross-cutting factor in the achievement of all three dimensions of sustainable development.

In fact, in the Caribbean subregion more women are taking advantage of educational opportunities and are outperforming men at all educational levels. This gap increases as one moves upward in the educational system (see figure 1).

Figure 1
The Caribbean (10 countries):^a gross enrolment ratio, tertiary education, both sexes 2008-2014
(Percentages)



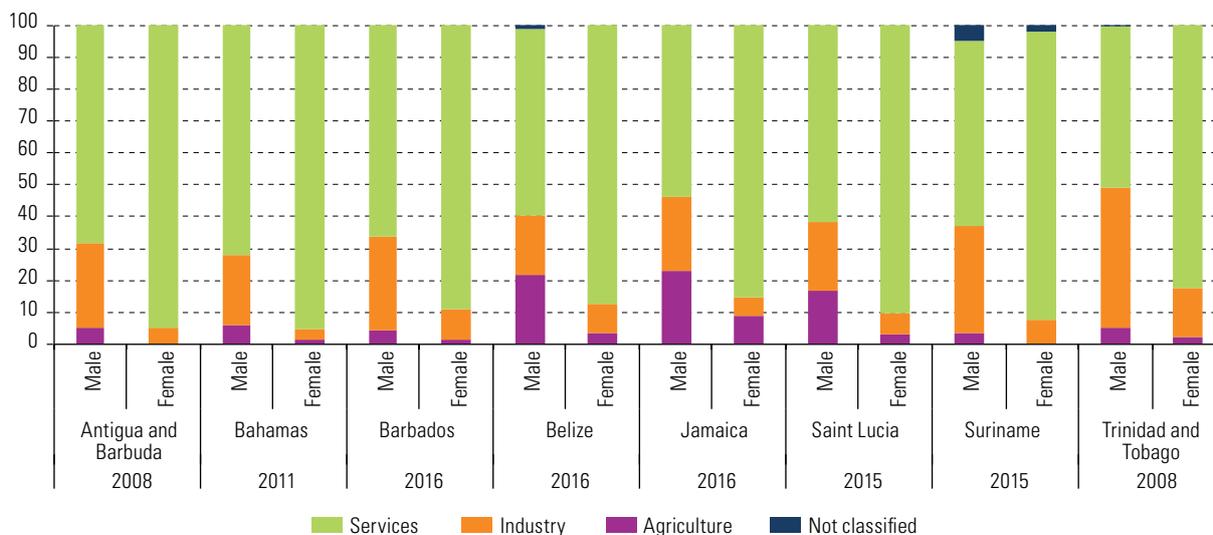
Source: World Bank and UNESCO Institute for Statistics, on the basis of data available for Antigua and Barbuda, Barbados, Belize, Grenada, Guyana, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines and Suriname.

Notwithstanding this important development, persistent gender inequalities are manifest in the household, at the workplace and labour market, and in wider Caribbean society (see figure 2). For example, in the subregion, women bear a disproportionate share of caregiving and domestic unpaid work in the household and face higher levels of unemployment (see figure 3) as well as a gender earnings gap in the workforce. They also lag behind the wider region and the world as regards their low level of participation in the political arena (see figure 4) (UNDP, 2016, pp. 58–65).

⁹ United Nations, *Report of the Economic and Social Council for 1997 (A/52/3)*, New York, 18 September 1997.

Figure 2

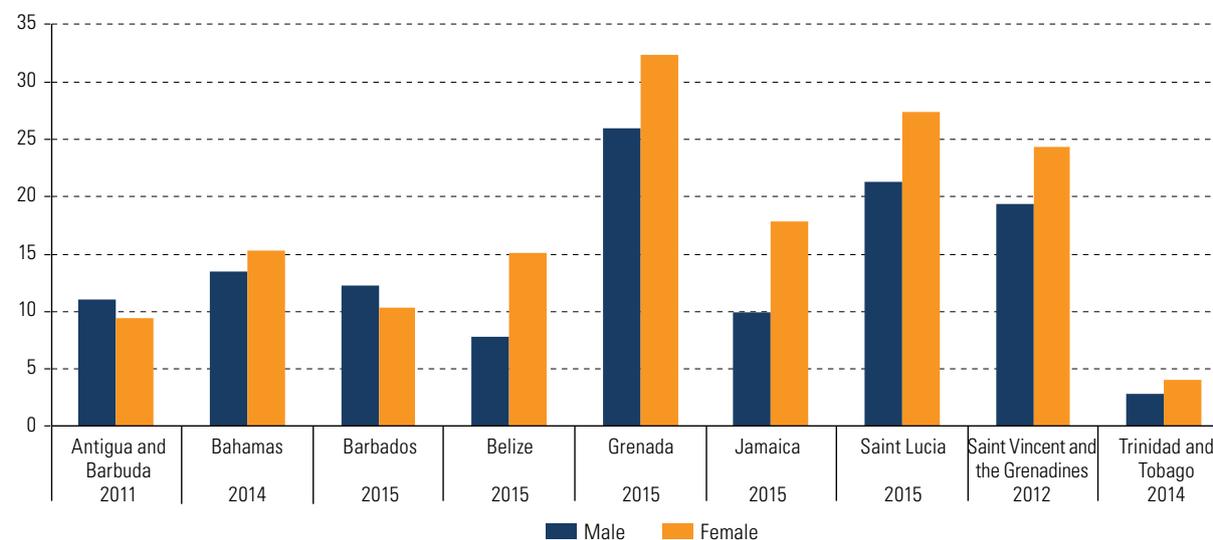
The Caribbean (8 countries): distribution of employed labour force by industry groups and sex, latest year available
(Percentages)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of S. Stuart, S., L. Gény and A. Abdulkadri, "Advancing the economic empowerment and autonomy of women in the Caribbean through the 2030 Agenda for Sustainable Development", *Studies and Perspectives series-ECLAC Subregional Headquarters for the Caribbean*, No. 60 (LC/TS.2017/128; LC/CAR/TS.2017/8), Santiago, Economic Commission for Latin America and the Caribbean (ECLAC), 2018.

Figure 3

The Caribbean (9 countries): unemployment rate by sex, latest year available
(Percentages of the economically active population)

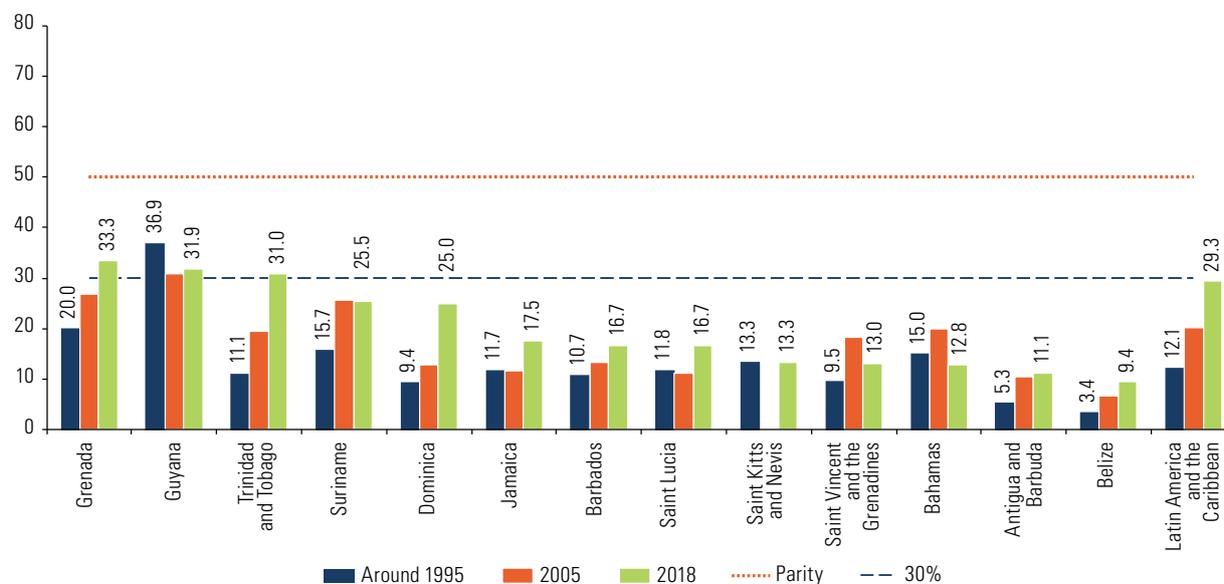


Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of S. Stuart, S., L. Gény and A. Abdulkadri, "Advancing the economic empowerment and autonomy of women in the Caribbean through the 2030 Agenda for Sustainable Development", *Studies and Perspectives series-ECLAC Subregional Headquarters for the Caribbean*, No. 60 (LC/TS.2017/128; LC/CAR/TS.2017/8), Santiago, Economic Commission for Latin America and the Caribbean (ECLAC), 2018.

These gender disparities reinforce inequalities and contribute to the marginalization of Caribbean women in many areas. Implementation of the SDGs, including Goal 5—to achieve gender equality and empower all women and girls—requires increased commitment in the subregion to policy measures that promote gender equality before the law, the adoption of national gender equality policies and the mainstreaming of a gender perspective in all legislation, policies, plans and programmes, and at all levels of government.

Figure 4

Caribbean (13 countries) and the Latin American and Caribbean region: evolution of women elected in national legislative body, around 1995, 2005 and 2018 (Percentages)



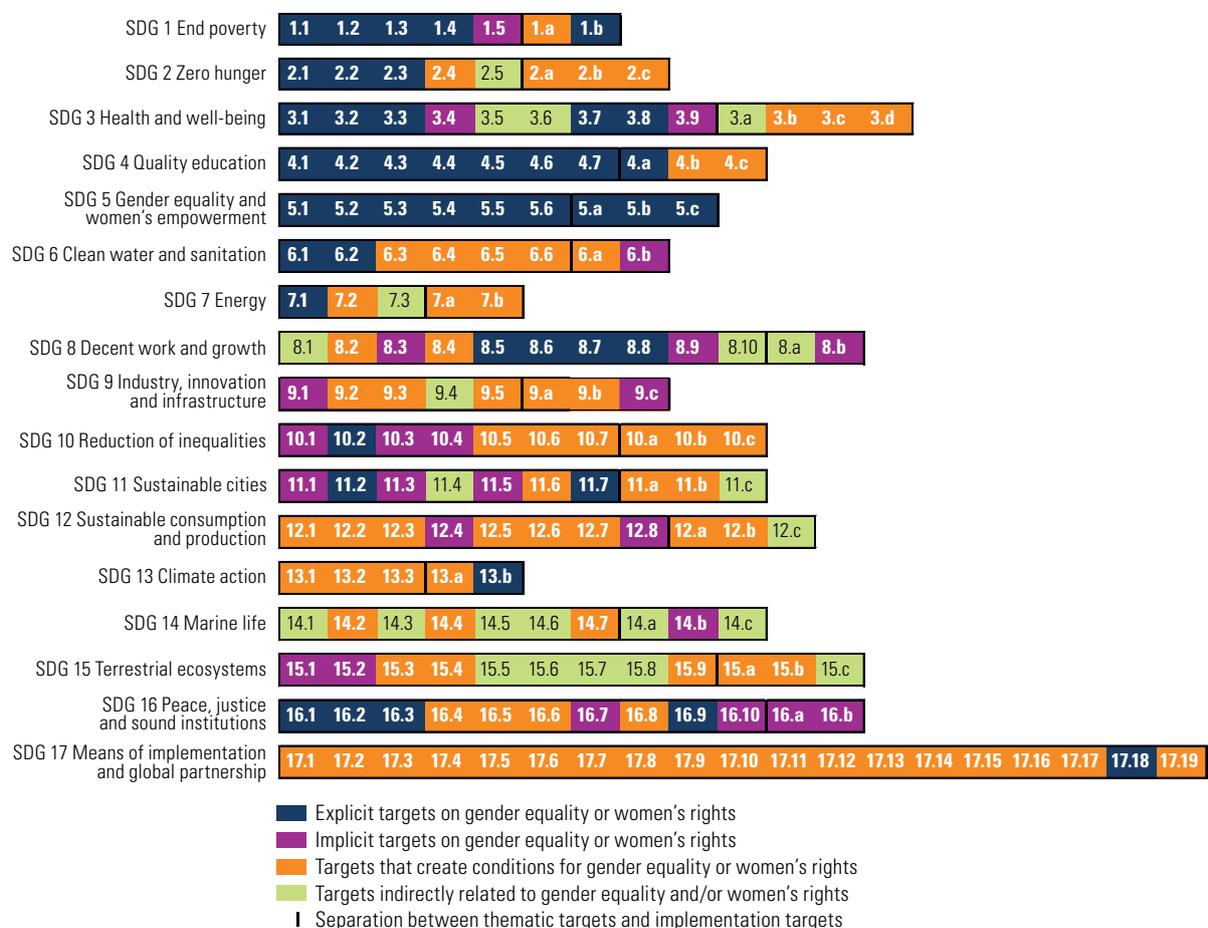
Source: Economic Commission for Latin America and the Caribbean (ECLAC), Gender Equality Observatory for Latin America and the Caribbean, on the basis of data from the Inter-Parliamentary Union (IPU).

The implementation of the Montevideo Strategy for Implementation of the Regional Gender Agenda within the Sustainable Development Framework by 2030,¹⁰ which is complemented by an ECLAC proposal for mainstreaming gender in all SDGs (see figure 5) should be a priority, reflecting the collective engagement of all Caribbean people to achieve sustainable development.

Mainstreaming gender in policymaking and development planning can bring several benefits to Caribbean governments through the requirement to foster intersectoral and inter-agency coordination. Since gender is a cross-cutting issue addressed by a range of development platforms, the inclusion of a gender perspective will promote coherence in attaining the SDGs in alignment with international and regional commitments. Mainstreaming gender in policies, strategies and national development plans will facilitate this paradigm shift and accelerate the pace towards achieving sustainable development in the Caribbean subregion by 2030 (ECLAC, 2017a, p. 6).

¹⁰ The year 2017 marked the fortieth anniversary of the regional gender agenda, since the first session of the Regional Conference on the Integration of Women into the Economic and Social Development of Latin America and the Caribbean—the predecessor of today's Regional Conference on Women in Latin America and the Caribbean—which took place in Havana in 1977.

Figure 5
ECLAC proposal for mainstreaming gender equality in the Sustainable Development Goals



Source: Economic Commission for Latin America and the Caribbean (ECLAC), *Equality and Women's Autonomy in the Sustainable Development Agenda* (LC/G.2686/Rev.1.), Santiago, 2016, figure I.1, updated at 8 March 2017.

(b) ICTs for development

Building technological resilience is a strategic priority for the Caribbean. The goal is to engender innovative, technology-driven economies and societies. This can be achieved primarily through the creation of a Single ICT Space in the subregion. The CARICOM Single ICT Space is envisioned as “an ICT-enabled borderless space that fosters economic, social and cultural integration for the betterment of Caribbean citizens” (CTU, 2017, p. 5).

Both the 2030 Agenda for Sustainable Development and the Samoa Pathway recognize the importance of ICTs for development.¹¹ Embracing the digital economy and digital connectivity is especially important for SIDS, with small populations and fragmented markets. While levels of Internet access and mobile penetration in the Caribbean subregion range from moderate to high, there are important hurdles to be

¹¹ Target 9c of the Sustainable Development Goals calls for significantly increasing access to ICTs, and for efforts to provide universal and affordable access to Internet in least developed countries by 2020. The SAMOA Pathway calls for support for the efforts of SIDS to promote and enhance the use of information communications technology for, inter alia, education, the creation of employment, in particular youth employment, and economic sustainability purposes (para. 27g).

overcome in strengthening the role of ICTs in the subregion. These include improvement in legal and regulatory frameworks; broadening and deepening of ICT training and skills for the subregion's population; and more robust and reliable national and regional broadband infrastructure, leading to both seamless connectivity and lowered costs. These areas that require strengthening are also important requirements for the creation of a Single ICT Space, which emphasizes common robustness of infrastructure, and harmonization of ICT frameworks, policies and legal and regulatory regimes.

Notably, Caribbean countries do not rank high either on the global Networked Readiness Index, or on the United Nations E-Government Development and E-Participation Indexes.¹²

The Bretton Woods institutions, the United Nations Conference on Trade and Development (UNCTAD) and the Organization for Economic Cooperation and Development (OECD) have all drawn attention to the importance of strengthening the “analog foundations” of regulations, skills and accountable institutions, and addressing physical connectivity constraints of air, maritime, road and rail transport so as to be able to benefit fully from ICTs and digital connectivity in trade and economic development. The creation of a Single ICT Space that is optimal for the Caribbean will therefore require an integrated approach to skills, technology and infrastructure development, both physical and digital, in the region.

This holistic approach is important to ensure that participation in the fourth industrial revolution does not deepen inequalities in the Caribbean subregion —the divide between women and men at all ages, those with appropriate technological skills and those without them, rural and urban communities and between larger and well-resourced enterprises and their smaller competitors.

It is important to note in this context that Caribbean women, although increasingly more successful in educational attainment than Caribbean men, continue to lag behind men in enrolment and matriculation in the science and technology fields. This situation, if not addressed, may foreshadow the marginalization of Caribbean women in the workplace of the future —the envisaged digital economy. To prevent this will require that more attention be given to addressing gender stereotypes regarding expected behaviours, roles, aptitudes and employment choice (Mondesire, 2015).

(c) Data for evidence-based decision-making

A third and critical cross-cutting factor in sustainable development is the generation, dissemination and effective utilization of data. This is essential to sound evidence-based decision-making. It is also an essential pre-condition for the practice of governance virtues, such as transparency and accountability, which are rendered much less meaningful without data that allow for an informed citizenry.

Data play a vital role in mediating the relationship between people and their government: it is a common currency of both democracy and development in the modern polity. Mobilizing citizens and galvanizing their genuine participation and engagement at national and local levels, is easier when there is ample and relevant information and data publicly available to and understood by all.

The Caribbean has historically been a subregion with very uneven data availability and generally weak national capacity for data collection, analysis and dissemination. Initiatives to improve the scope, quality and timeliness of data have been given impetus by the earlier demands of the Millennium Development Goals, and more recently by the 2030 Agenda for Sustainable Development, whose implementation integrally involves the monitoring of 17 Sustainable Development Goals and numerous targets, as measured by a formidable set of indicators. Furthermore, the subregion's own vision of becoming a technology- and knowledge-driven society, inhabited by engaged and informed citizens,

¹² The Global Networked Readiness Index assesses factors, including infrastructure, policies, and institutions that contribute to a country's ability to leverage ICTs for increased competitiveness and well-being. Only four CARICOM member States are included in the 2016 iteration of the Index: Trinidad and Tobago ranked 67th of 139 countries; Jamaica, 83rd; Guyana, 100th; and Haiti, 137th. The United Nations E-Government Development Index (EGDI) ranks three dimensions of e-government: scope and quality of online services, status of telecommunications infrastructure; and quality of human capital. The E-Participation Index focuses on the capacity and quality of online services.

and undergirded by productive, environmentally sound economies, cannot be achieved without a giant leap forward, embracing timely, robust data gathering. Importantly, the relationship between technological development and the quality and quantity of data is a reciprocal and synergistic one: the availability of and access to data, which are disaggregated by sex, age, ethnicity, disability status, among other variables, correlate with technological resilience, which is also a priority of regional, subregional and national development plans.

Several important initiatives are under way to strengthen regional and national statistical capabilities. These include the seven-year Project for the Regional Advancement of Statistics in the Caribbean (PRASC), funded by the Government of Canada, and activities under the OECD Partnership for the Development of Statistics in the 21st Century (PARIS21). The CARICOM Secretariat's Regional Statistics Programme undertakes statistical capacity-building in member countries, aimed at enhancing the quality and availability of data.

An important initiative, supported by ECLAC, is the identification of core SDG indicators for effective monitoring of the SDGs in the region. This process includes assessing capacity constraints and establishing the linkages between indicators and the priorities in the Strategic Plan 2015–2025 of the Statistical Conference of the Americas of ECLAC and national development frameworks.¹³ In accordance with global instruments such as the Samoa Pathway,¹⁴ the strengthening of data and statistical capabilities in the Caribbean subregion requires robust support from development partners.

It should be emphasized that strengthening disaggregated data generation for evidence-based decision-making is not merely a technical undertaking, but inherently a broadly political and governance issue as well. As indicated earlier, data and statistical capability are at the heart of ensuring a transparent, informed and accountable relationship between governments and the Caribbean people.

4. Partnerships for sustainable development

A constantly changing and volatile global environment demands the development and maintenance of friendly and reliable partnerships for the benefit of the region.

Flows of official development assistance (ODA) to Caribbean SIDS have been relatively low, more volatile and declining in both multilateral and bilateral components since the global economic crisis of 2008–2010 (Bourne, 2015). It is noted that “while concessional flows have increased globally, including after the global economic crisis, Caribbean SIDS have become increasingly less successful in accessing international development assistance. In effect, they have been excluded from augmented flows which the international community approved as an urgent and warranted response to the effects of the crisis on developing countries” (Bourne, 2015, p. 26).

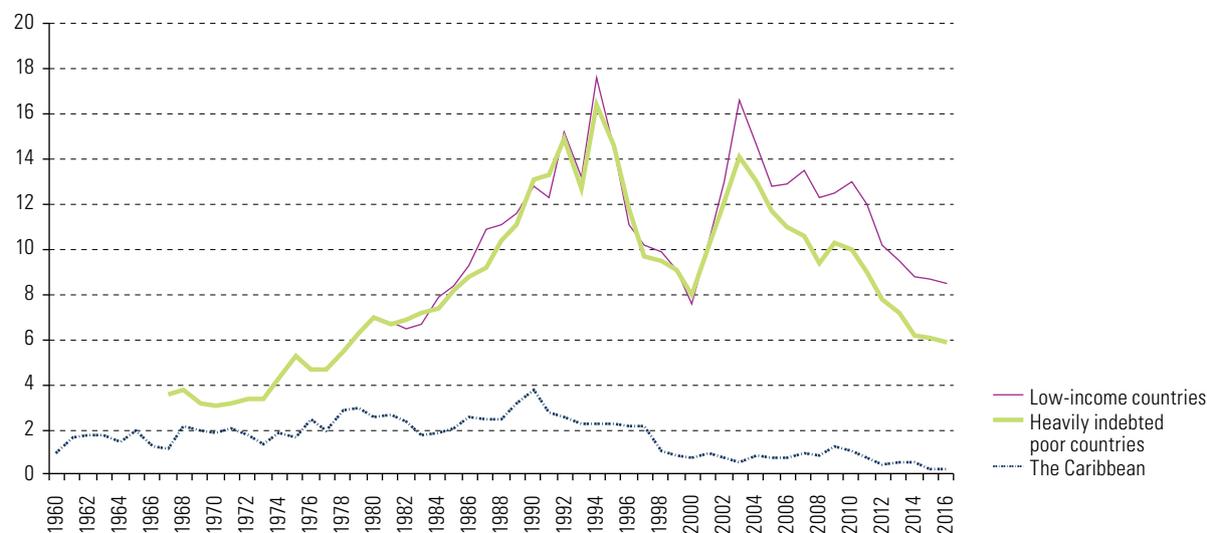
In 2015, Caribbean States received, on average, net ODA amounting to only 0.3% of gross national income (GNI), while low-income countries received flows at 8.7% of GNI; heavily indebted poor countries (HIPC), at 6.1% of GNI; and Pacific SIDS, at 10.8% (see figure 6).¹⁵

¹³ High-level political engagement on strengthening statistical capabilities in the region has increased. At their thirty-seventh regular meeting, held in Georgetown, Guyana, in 2016, the CARICOM Heads of Government endorsed an Action Plan for Statistics in the Caribbean developed by the Standing Committee of Caribbean Statisticians, and in 2017 they endorsed the preparation of a Regional Strategy for the Development of Statistics, a component of the Action Plan. Preparation of the Regional Strategy is funded by PARIS21.

¹⁴ It is important to recall that the Samoa Pathway calls attention to the role that data and statistics play in development planning in SIDS and that the global community, in this context, reaffirmed its commitment to support the efforts of SIDS to, inter alia, strengthen the availability and accessibility of their data and statistical systems (United Nations, 2014, paras. 112–115). In 2014 developing countries received US\$ 338 million in financial support for statistics, a modest increase over the amount received five years earlier. It is estimated that these countries require US\$ 1 billion in statistical support annually from domestic and donor sources. See “Progress towards the Sustainable Development Goals. Report of the Secretary-General”, May 2017 (E/2017/66*).

¹⁵ See World Bank, “World Bank Open Data” [online] data.worldbank.org.

Figure 6
The Caribbean (13 countries):^a net official development assistance received, 1960–2016
(Percentages of gross national income)



Source: World Bank database.

^a Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname and Trinidad and Tobago.

The CARICOM Secretariat drew attention some time ago to the increasing difficulty in mobilizing resources from established partners for financing the planned activities of the Community. It cited as constraining factors: (i) the perception that the member States of the Community are now middle-income countries, based on income per capita, and as such should be graduated from concessionary funding; and (ii) the fact that many of the traditional partners are yet to recover from the severe economic declines resulting from the financial and economic crisis which began in 2008. However, it should be noted, in this regard, that net ODA globally actually increased from US\$ 112 billion in 2008, when the crisis began, to US\$ 142 billion in 2016, representing a net increase in real terms of 27% since the global economic crisis (OECD, 2017).

The recent Joint Inspection Unit Report on the United Nations system support for SIDS (United Nations, 2016) stresses that access to financing for development and capacity-building are critical means of implementation if SIDS are to successfully achieve the SDGs. It notes that the Addis Ababa Action Agenda of the Third International Conference on Financing for Development calls for support in facilitating access to countries with special needs, a category which includes SIDS. The Joint Inspection Unit Report proposes the revision of eligibility criteria to soften conditions of access to concessional assistance for SIDS.¹⁶

The European Union, through the European Development Fund (EDF) under the Cotonou Agreement, is the largest provider of grant assistance to the Caribbean. The 10th EDF (2008–2013) provided approximately 1 billion euros (€) for the implementation of national and regional programmes in the Caribbean, including € 165 million specifically for regional programmes. The 11th EDF (2014–2020) substantially increases funding for regional programmes, with the Caribbean Regional Indicative Programme (CRIP) increasing to € 346 million.¹⁷ This is a welcome development. CRIP will address: (i) regional economic cooperation and

¹⁶ Recommendation 5: The executive heads of the United Nations system organizations should ensure the participation of their organizations in the process led by the Inter-Agency Task Force on Financing for Development to actively contribute to addressing the specificity of SIDS as a special case with tailor-made solutions, and should also ensure that new parameters of eligibility are designed for better access to financing for development for SIDS (United Nations, 2016).

¹⁷ The Programme also provides for a Caribbean Investment Facility (CIF), with an indicative allocation of € 135 million.

integration, (ii) climate change, environment, disaster management, sustainable energy, and (iii) citizen security. These are critical areas, important for resilience-building, and catalytic across the sustainable development pillars.

The historical and continuing support from traditional partners and the multilateral agencies should be acknowledged and appreciated. However, it is of great concern to the subregion that, at precisely the time when the challenges are greatest, the level of support being made available to Caribbean SIDS by development partners, with one or two notable exceptions, is on the decline. One response to this by the subregion might be for it to intensify its own efforts to mobilize external resources, and to continue to press the case —acknowledged but insufficiently acted upon by developed partners— that vulnerability is a defining characteristic of the subregion’s reality which must be reduced through resilience-building strategies if the modest and hard-earned progress achieved so far by Caribbean SIDS is not to be halted or even reversed.¹⁸

Such an undesirable outcome would almost certainly ensue if the subregional capacity to implement the SDGs remains at risk. Intensified efforts at resource mobilization by Caribbean countries should involve exploring new sources, such as South-South cooperation, and private and philanthropic funding, which are increasingly important in development cooperation,¹⁹ as well as new modalities, such as triangular delivery and the utilization of blended finance to lower costs. Several members of the Community of Latin American and Caribbean States (CELAC) are development partners of the Caribbean subregion: the organization therefore serves potentially not only as a forum for strengthening relations with traditional partners, such as the European Union, but for improving ties with new partners and promoting triangular and South-South cooperation.

Meeting the costs of implementing global, subregional and national development frameworks demands that the Caribbean embark on a process of strengthening traditional partnerships and developing new ones, with the objective of reversing the adverse trends in development assistance flows to the region.

D. Summary

This chapter has drawn attention to the main social, economic and environmental challenges faced by the SIDS of the Caribbean; challenges now exacerbated by adverse trends in the global economy, and by diminished support from external partners, whose shifting priorities have placed Caribbean countries at relative disadvantage as regards development cooperation. This has resulted in sharply reduced flows of both multilateral and bilateral assistance to the Caribbean subregion.

Significant efforts are being made by Caribbean countries to pursue development strategies that will reverse decades of low growth and stalling human development gains. This entails the implementation of holistic national, subregional and regional development agendas that are closely aligned with and reflect global frameworks for sustainable development with equality, such as the 2030 Agenda for Sustainable Development and the SIDS-specific Samoa Pathway. In this ambitious and important undertaking, Caribbean States face new and old challenges: on the outcome may hinge the success of the subregion’s transition from vulnerability to resilience —and to sustainable development with equality at its core. The support of both new and traditional partners is essential.

¹⁸ The World Bank Group, for example, notes that some small States are ineligible for concessional finance from major multilateral lenders because of their higher per capita income levels (IBRD/World Bank, 2017). The report suggests that “a policy consensus would therefore be welcome on factoring in multiple dimensions of vulnerability when apportioning development finance, exploring options for additional, tailored resilience financing, or lines of credit” (IBRD/World Bank, 2017, p. xv).

¹⁹ For example, in July 2017, at their thirty-eighth regular meeting, the CARICOM Heads of Government, on the tenth anniversary of the CARICOM Heads of Government Summit on Non-Communicable Diseases, welcomed in their communiqué the interest expressed by the Bloomberg Foundation in NCD prevention in the region.

II. The Caribbean economy: from constraints to opportunities

A. Growth performance

Caribbean countries have attained per capita income levels that rank them, based on the World Bank classification, as middle-income, upper-middle-income and high-income economies, the exception being Haiti.²⁰ But over an extended period the subregion has failed to keep pace with other developing countries, including SIDS, in growth performance. This suggests that while size and size-related constraints are indeed important considerations, Caribbean countries must do more to build resilience and strengthen adaptive capabilities through their policy choices, actions and strategies.

Since 2010, in the aftermath of the global recession, annual growth in the region has averaged only 0.8%, compared with 4.7% in other small States. According to ECLAC, the economies of Caribbean small States grew on average by 0.7% in 2016 (see figure 7).

Figure 7
The Caribbean (15 countries):^a average GDP growth, 2012-2017
(Percentages)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official figures.

^a Anguilla, Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, Montserrat, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago.

Critically, the evidence suggests that persistent weak growth has begun to undermine human development gains in the Caribbean region, confirming synergies between the social, economic and environmental pillars that underpin sustainable development. For example, since the global recession of 2008–2010, only three CARICOM member countries have shown positive, albeit modest, improvement in their Human Development Index rank. The Caribbean small States have fallen behind even the already highly developed OECD countries in Human Development Index gains since 2010 (see table 1).

²⁰ Upper-middle-income economies: Belize, Dominica, Grenada, Guyana, Jamaica, Saint Lucia, Saint Vincent and the Grenadines, and Suriname; high-income economies: Antigua and Barbuda, the Bahamas, Barbados, Saint Kitts and Nevis, and Trinidad and Tobago. Haiti is classified as a low-income economy.

Table 1

The Caribbean and selected regions and groupings: changes in Human Development Index ranking, 2010–2015

Country	Change in HDI rank	Region or grouping	Average annual HDI growth (percentage)
Barbados	2	Arab States	0.45
Bahamas	-6	East Asia and the Pacific	0.92
Antigua and Barbuda	-7	Europe and Central Asia	0.63
Trinidad and Tobago	-5	Latin America and the Caribbean	0.58
Saint Kitts and Nevis	2	South Asia	1.25
Grenada	-3	Sub-Saharan Africa	1.04
Saint Lucia	-8	Least developed countries	1.08
Jamaica	-6	Organization for Economic Cooperation and Development	0.33
Dominica	-8	World	0.61
Suriname	1	Caribbean small States	0.30
Saint Vincent and the Grenadines	-6		
Belize	-2		
Guyana	-2		
Haiti	-2		

Source: United Nations Development Programme, “Human Development Reports. Table 2: Trends in the Human Development Index, 1990–2015” [online] <http://hdr.undp.org/en/composite/trends>.

Persistent low growth in the Caribbean subregion has two leading sources: structural imbalances and lack of competitiveness (Alleyne, 2018). The two main imbalances in the region’s macroeconomy have been in trade —reflected in the persistent current account deficits— and in the fiscal accounts, reflected in very high levels of public debt.

B. Structural imbalances

1. Trade

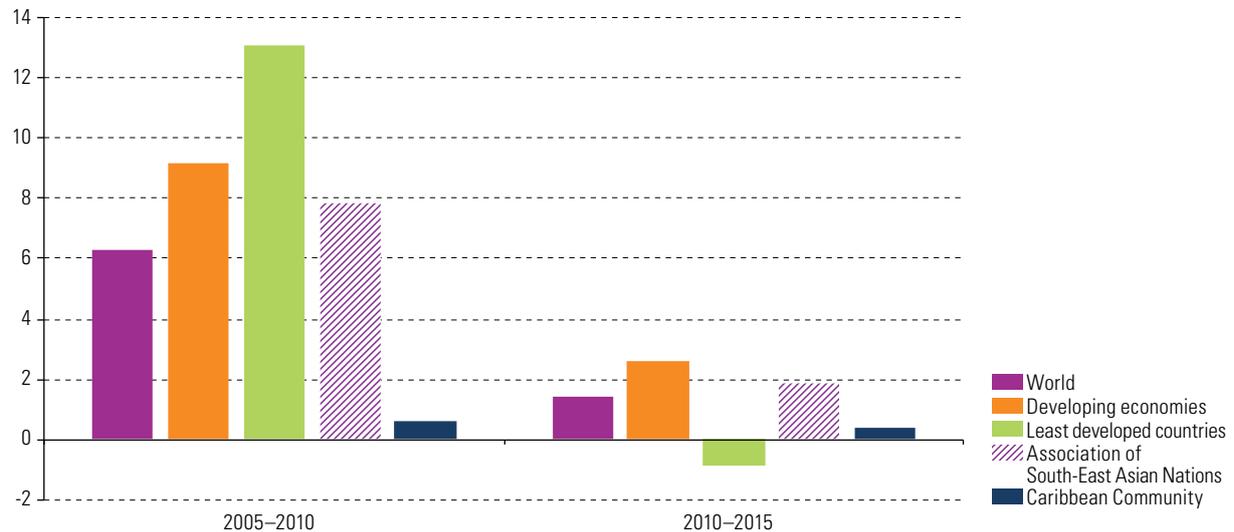
The World Trade Organization (WTO) noted in a recent report that from 1960 to the eve of the global financial crisis in 2007, global trade in goods and services had expanded at an average real rate of about 6% a year. Both trade and GDP growth in emerging and developing economies expanded even faster than the global averages. The Caribbean subregion was an outlier, however, underperforming on trade during the great expansion and falling into a deeper trough than most developing countries during the 2008–2010 great recession. Since then, the subregion has been recovering more slowly than almost all regions and groupings in both the developed and the developing world.

The data show that in the years immediately preceding and during the global financial crisis, the Caribbean subregion fell behind other developing countries, and the global economy, both in its goods and services exports. The subregion’s merchandise exports, grew by only 0.61% in the years 2005–2010, while the merchandise exports of the least developed countries grew by 13.07%, and those of the global economy as a whole by 6.27% (see figure 8). In the aftermath of the crisis, and in the modest recovery since then,²¹ between 2010 and 2015, the Caribbean countries’ merchandise exports grew annually by 0.36% on average; global exports grew substantially more quickly, by 1.45%, and the merchandise

²¹ Recent data indicate that the value of trade in both goods and services fell sharply in 2015. In the case of goods, even though trade volume increased nominally, the value of merchandise trade declined by 10%. The fall in commodity prices, the appreciation of the United States dollar, and incipient structural changes in world production and trade are among potential causes advanced by UNCTAD. See UNCTAD (2017).

exports of all developing countries by 2.61%. The subregion, except for Trinidad and Tobago, a major oil and natural gas producer, has historically maintained substantial deficits on its trade in goods and services with the rest of the world. In 2015, all the Caribbean economies recorded current account deficits (see figure 9). In this regard, while open economies will sustain some level of imbalance, over time, it is the persistence of deficits and sustainability of the current account that pose a challenge.

Figure 8
World and selected groupings: merchandise exports, 2005–2015
(Average annual growth rates)

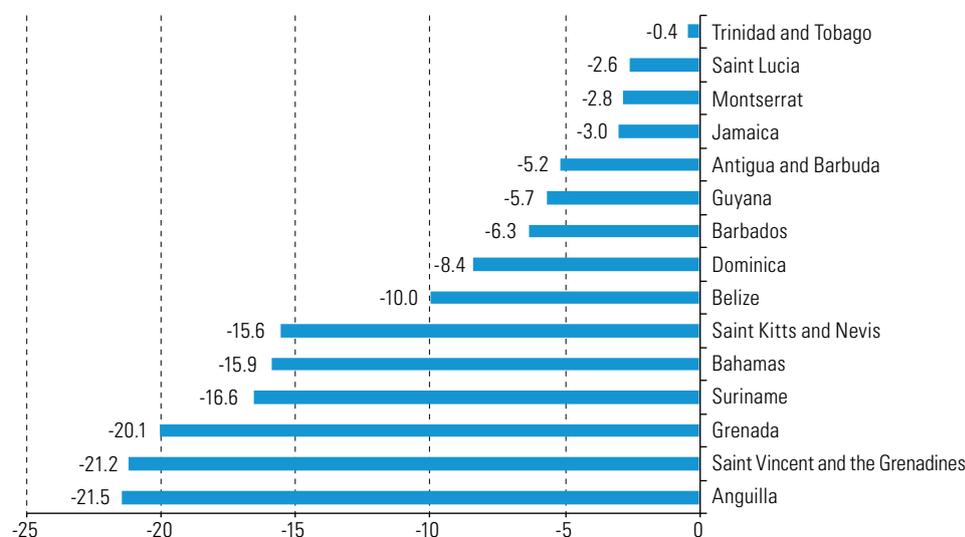


Source: United Nations Conference on Trade and Development (UNCTAD), UNCTADstat [online database] unctadstat.unctad.org.

World Bank and UNCTAD data also show that in both goods and services the subregion is failing to maintain its share of global markets, an indicator of declining competitiveness. Over three decades, the Caribbean subregion's share of global merchandise trade fell by a third from 0.14% in 1990 to 0.092% in 2016, and its share of global services trade dropped from 0.5% in 1990 to 0.4% in 2012. This reflects the failure of the subregion to participate in the rapid shift and growth that has been taking place in developing country trade which, in the case of the more dynamic economies, now increasingly comprises value added manufactures and medium-to-high technology products. The subregion's trade continues to be marked by low levels of product and market diversification, and products of low technological intensity. An important strategic thrust should be to create the basis for value chain participation, and for greater engagement in intraregional and wider hemispheric trade, through strengthened logistics, improved infrastructure and skills development.

The accumulation of current account deficits, as foreign direct investment and official development assistance inflows have declined in recent years, this exacerbated by post-disaster expenditures and lack of timely fiscal adjustment, have all contributed to the current highly indebted levels of the countries of the subregion.

Figure 9
The Caribbean (15 countries): current account balance, 2015
(Percentages of GDP)

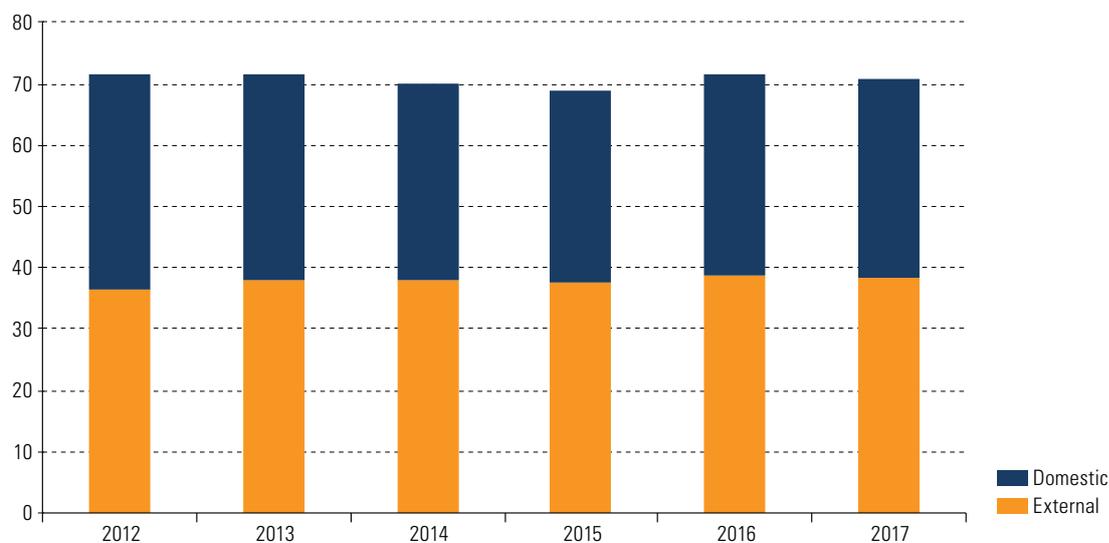


Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official figures.

2. Debt, de-risking and offshore financial centres

The Caribbean debt profile has shown modest improvement in the past two years —particularly in Jamaica and Grenada— but the debt situation remains very serious, all more so for being a “silent crisis” (Rustomjee, 2017). In 2016, two thirds of the CARICOM member countries had debt-to-GDP ratios above the 60% threshold generally regarded as the benchmark for debt sustainability (see figure 10).

Figure 10
The Caribbean (15 countries):^a average domestic and external debt
(Percentages of GDP)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official figures.

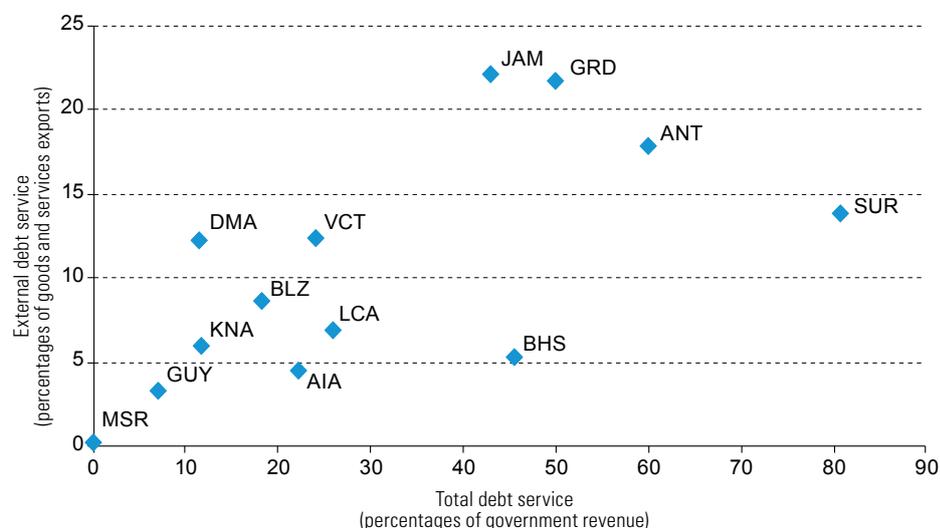
^a Anguilla, Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, Montserrat, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago.

Rustomjee focuses on what he terms the “silent crisis” in the Caribbean. It notes that, based on the standardized measures of debt and debt service sustainability used by the World Bank and the International Monetary Fund,²² most Caribbean small States record unsustainable debt levels, and perform far worse than small States in the Pacific and sub-Saharan Africa, and, indeed, worse than both low-income and middle-income countries globally. According to the study, projections for future debt sustainability in the subregion are bleak. “By 2020, debt will remain unsustainable in 11 of 13 Caribbean small States. And by 2030, when the United Nations’ 2030 Agenda for Sustainable Development has run its course, the majority of the region’s small States will face the predicament—for some even in context of having run continuous, large fiscal surpluses. Among small States, the prevalence of unsustainable debt is also becoming a largely Caribbean problem: in 2020, nearly three quarters of all small states with unsustainable debt levels will be Caribbean countries” (Rustomjee, 2017, p. 1).

The main drivers of Caribbean debt have been large primary and current account deficits, resulting from low growth and insufficient fiscal restraint; high financing costs that small States face in capital markets; climate change effects; and frequent disasters that reduce both output and government revenue, and that demand high levels of expenditures on disaster preparedness and reconstruction. In 2016, for example, growth slowed in both the Bahamas and Haiti, as the two countries were severely affected by Hurricane Matthew. Damage to infrastructure in Haiti, the poorest member country in the subregion, was estimated at US\$ 1.1 billion. The average annual loss attributable to hurricanes alone in the Caribbean is estimated at US\$ 835 million (IBRD/World Bank, 2016, p. 24). Notably, between 2000 and 2015, Caribbean member States suffered at least seven disasters in which the cost of damage ranged from 33% to 200% of the affected country’s GDP.²³ The year 2017 will almost certainly prove to be one of the worst on record when the extensive damage to life, property and infrastructure in the Caribbean by a succession of category five hurricanes is fully assessed.

In 2016, according to ECLAC, debt servicing as a percentage of government revenue accounted on average for 29.5% of government revenue in Caribbean small States, and in several countries the call on revenues was much higher: Suriname (80.7%), Antigua and Barbuda (60%), Grenada (50.1%), the Bahamas (45.5%) and Jamaica (43%) (see figure 11).

Figure 11
The Caribbean (13 countries):^a ratios of total debt service to government revenue and external debt services to goods and services exports
(Percentages)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official figures.

²² IMF and the World Bank assess the present value of debt as a percentage of GDP, exports and revenue, and debt servicing costs as a percentage of exports and revenue.

²³ Belize: 33% in 2000; Grenada: 200% in 2004; Guyana: 36% in 2005; Dominica: 35% in 2005; Haiti: 121% in 2010; Saint Lucia: 34% in 2011; Dominica: 96% in 2015 (IMF, 2016, p. 53).

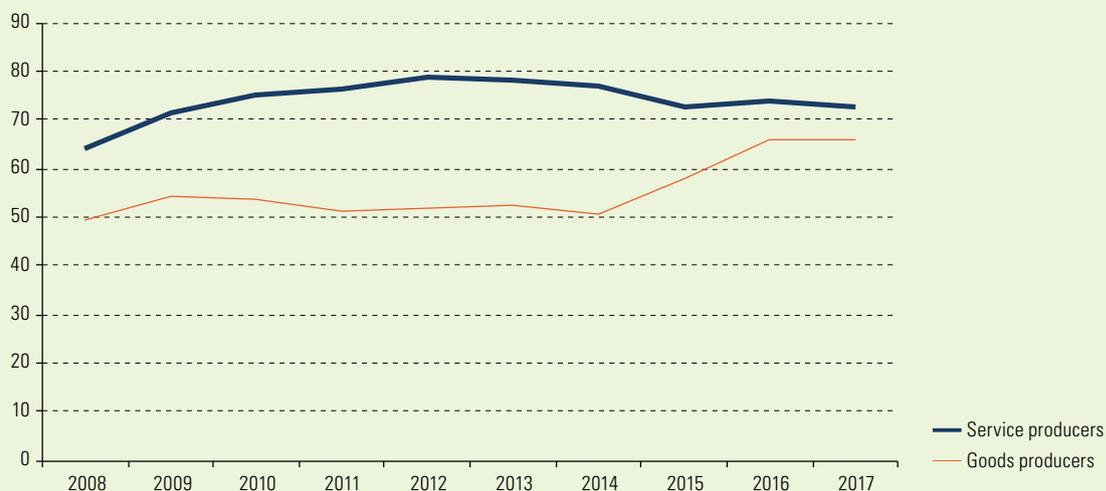
An important proposal has been put forward by ECLAC to reduce public debt in Caribbean SIDS and to facilitate their implementation of the SDGs. The ECLAC Debt for Climate Adaptation Swap Initiative (see box 1) is based on the creation of a Caribbean Resilience Fund (CRF) which is expected to provide financing for investment in climate resilience, green growth and structural transformation in the economies of the subregion, as noted in chapter I. The ECLAC proposal was endorsed at the twenty-sixth meeting of the Caribbean Development and Cooperation Committee (CDCC), the ECLAC subsidiary body for the Caribbean, on 22 April 2016 in Saint Kitts and Nevis, by virtue of resolution 93(XXVI) Advancing a debt relief initiative for the Caribbean. At the core of this proposed strategy is building a strong case to highlight the debt challenges faced by small vulnerable Caribbean economies, which will be presented to donors such as the Green Climate Fund. More recently, ECLAC has also formed a task force to address this question strategically, focusing on advocacy to raise broader support. The ECLAC Debt for Climate Adaptation Swap Initiative deserves the full support of the hemisphere and the global community.

Two additional challenges have arisen which add to the vulnerability of many Caribbean economies: the emergence of de-risking leading to the loss of correspondent banking relations with international banks (see box 2), and renewed challenges to the offshore financial centres despite considerable efforts to ensure compliance with international financial standards (see box 3). Both these challenges require urgent policy interventions if the financial sector is to remain viable and offshore centres are to continue to provide a viable option for economic diversification.

Box 1
Impact of debt on growth

Caribbean countries are among the most highly indebted in the world; indeed, the unsustainably high levels of debt accumulated across the economies of the subregion are acknowledged as the most critical issue it must address. Excessive public debt places a burden on government finances and excessive external debt strains foreign-exchange reserves. High debt can also hinder economic growth. The figures below illustrate the persistent debt levels after the economic crisis.

The Caribbean (15 countries):^a average total public debt for goods and service producers
(Percentages of GDP)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official figures.
^a Anguilla, Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, Montserrat, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago.

Box 1 (concluded)

In 2017, ECLAC conducted empirical analysis of the influence of debt on growth in the Caribbean. The analysis took the form of a panel data regression, with economic growth specified as the dependent variable, and public debt, a dummy for financial crises, real per capita income, inflation and fiscal balance as the explanatory variables. The panel included Antigua and Barbuda, Belize, Dominica, Grenada, Guyana, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname and Trinidad and Tobago, over the period 2000–2015.

The results from the model suggested that debt does have an impact on GDP growth in the Caribbean. Specifically, it was found that a 1% increase in the debt-to-GDP ratio would cause a 0.015% decline in real GDP growth. The financial crisis was found to have a negative impact on growth, while a 1% increase in the fiscal balance caused a 0.19% increase in GDP growth. In addition, a 1% increase in inflation was found to result in a 0.05% decrease in real economic growth.

Given the slow-growth outlook, the Caribbean's debt overhang is likely to persist, undermining the subregion's efforts to improve its economic, social and environmental resilience. This is because high debt restricts the fiscal space, making it impossible for policymakers to maintain social protection programmes or invest in vital climate-resilient infrastructure, especially since capital spending bears the brunt of the fiscal adjustment. The Caribbean subregion's debt dilemma should therefore be addressed by means of a sustainable approach that will reduce the debt while fostering economic diversification. In short, the ECLAC initiative shifts the focus from mere debt sustainability to embrace growth-enhancing investment and better fiscal management. The evidence is clear that, although several Caribbean countries have employed traditional debt restructuring exercises, the debt burden remains stubbornly high and what is required is a comprehensive approach that recognizes that the debt accumulation is also linked to the subregion's vulnerability arising from responses to natural disasters, climate change effects and negative external shocks.

The approach being advocated by ECLAC is based on a recognition that different Caribbean countries have widely varying debt levels and profiles and different mixes of multilateral, bilateral and private debt. This approach provides a mechanism for addressing the debt overhang while emphasizing investment in debt servicing funds, managed through a Caribbean Resilience Fund (CRF), to support green industrial development.

The establishment of CRF is a key element of this initiative. The Fund is expected to provide financing for a balanced mix of public and private projects in green industries that meet the high standards of the Green Climate Fund and that will work to develop a green industrial value chain. It is hoped that this Fund will also be attractive to bilateral donors who will further invest in its capitalization.

Another defining feature of the initiative is the requirement that member States who decide to join must move forward with structural reforms that are agreed upon by the parties. Debt relief would therefore be contingent on member States' fulfilment of the obligations they will have assumed in implementing sustainable fiscal consolidation programmes and conducting public expenditure reviews (PERs). The conditions to be established will be based on agreements reached between creditors and debtors. ECLAC also believes that countries should demonstrate a desire to pursue a sound fiscal administration programme in order to forestall future debt problems.

A task force composed of key regional institutions has been established to deal with the technical details and disbursement modalities, project proposals, selection of priority sectors for investment, and accountability and information requirements. Implementation of the ECLAC proposal, together with the resilience-building initiative, has thus already begun. The first of the four phases of implementation involved the creation of a working group to outline various aspects of the initiative.

The second phase will focus on developing debt profiles for up to three Caribbean countries that agree to participate in this phase of the project. The third phase will require an ongoing commitment with creditor countries and institutions as work proceeds on the determination of how best to move the initiative forward with their support. Finally, the fourth phase will involve an assessment of the operational feasibility of the initiative and, in anticipation of its success, its expansion to include other member States. This initiative is a central element of the Caribbean first initiative, as ECLAC seeks to enhance the economic, social and environmental resilience of the subregion.

Source: Economic Commission for Latin America and the Caribbean (ECLAC).

Box 2

De-risking and its impact in the Caribbean

In many Caribbean economies, the financial sector has emerged as a significant contributor to GDP, playing a central role in the region's efforts at economic diversification and resilience-building. For this reason, the strategy of "de-risking" being adopted by many large global banks, which serve as correspondent banks to local financial institutions (respondent banks), presents a significant threat to a number of Caribbean economies. This practice has the potential to cripple investment, remittance flows and economic growth in the region.

Correspondent banking relationships (CBRs) are important because they allow domestic banks access to the international payments system. CBRs facilitate several financial transactions, including international wire transfers, cheque clearing, foreign-exchange (forex) trade and remittance transfers. In the absence of CBRs, businesses operating domestically are cut off from the financial transactions that facilitate international trade; people are unable to receive remittances; multinational investors are unable to repatriate their profits; donor-dependent non-governmental organizations (NGOs) are unable to receive aid; and governments and the private sector are unable to earn foreign exchange. De-risking takes many forms, including the termination of CBRs with local banks, withdrawal from selected markets and closure of the accounts of selected clients or categories of clients.

Why have international financial institutions adopted a de-risking approach?

While a partial answer lies in the heavy penalties arising from deficiencies identified within the frameworks of the international financial institutions in relation to anti-money laundering (AML) and counter-terrorist financing (CFT), there is a more important reason.

In light of the decline in global interest returns, transnational banks have been seeking higher returns. In restructuring their portfolios, they have been abandoning low-return, high-risk operations. In this new business model, correspondent banking is a casualty, especially when the scale of operations is small.

An important point to note is that Caribbean banks and financial institutions have been compliant with the requisite international legislation. That includes the regulatory oversight processes of the Basel Committee; the anti-money laundering peer reviews in the framework of the Financial Action Task Force (FATF) and the Caribbean Financial Action Task Force (CFATF); the standards of the Global Forum on Transparency and Exchange of Tax Information of the Organization for Economic Cooperation and Development (OECD) (OECD Global Forum); the international certification process of the Financial Sector Assessment Program (FSAP) of the International Monetary Fund (IMF) and the World Bank; and the provisions of the Foreign Account Tax Compliance Act (FATCA) under United States federal law. It is to be noted that while other jurisdictions around the world have also lost such relationships, the Caribbean has been the most affected.

The impact of the loss of CBRs has varied across Caribbean countries. In Jamaica, the money services business (MSB) has been negatively affected, as a leading local bank no longer accepts foreign instruments and remittances. The Bahamas, the Cayman Islands and the Turks and Caicos Islands have lost their money transfer functions. The largest bank in Belize lost some of its CBRs and resorted to asking the Central Bank of Belize to assist with foreign payments.

Barbados and the Eastern Caribbean Currency Union (ECCU) have experienced stringent regulatory controls on the part of the Office of the Superintendent of Financial Institutions (OSFI) of Canada, which require correspondent banks to know their customers' customers. In the Eastern Caribbean, correspondent banks have closed entire business lines and terminated or placed onerous restrictions on accounts of former prime-rated customers.

The main CBR providers in the Caribbean are located in the United States, Canada and Europe. Several financial institutions located in Barbados, the Bahamas, the Eastern Caribbean Currency Union, Guyana, Haiti, Jamaica and Trinidad and Tobago have experienced a termination of their CBRs (Erbenová and others, 2016). However, many of the domestic banks have been able to find replacement CBRs which entails additional costs.

What is the potential impact of continued loss of CBRs?

CBRs offer small Caribbean banks access to international finance, in particular, and their customers access to the wider global economy, in general. The possible loss of these relationships has led to speculation on the potential impacts. The complete loss of CBRs would make it impossible to conduct any international transactions, which would impact trade, remittances and investment:

- **Trade.** Without CBRs—and thus the ability to process cross-border payments—domestic buyers would be unable to purchase foreign goods and vice versa. In small open economies such as the Caribbean, this would be devastating: no medicine, reduced food, no capital goods and limited inputs for local manufacturing. Merchants would be unable to bring in goods to sell.

- **Remittances.** CBRs allow migrant workers to send money back to relatives in their home country. For many Caribbean countries, remittances are a major source of household income and foreign-exchange inflows and contribute to consumption and investment. Remittances also contribute to poverty alleviation, insofar as lower-income households are the most likely to receive such monies. In Jamaica, remittances accounted for 16.6% of GDP in 2015. The loss of CBRs would thus remove a main source of countercyclical income flows.
- **FDI.** As with trade in goods and services, trade in capital cannot take place without the use of CBRs. FDI inflows represent investments made in an economy by a company or entity based outside the economy. In addition to income flows, FDI supports the transfer of technology and human capital development. Without CBRs, the country loses a source of development financing, as well as tax revenue for the state.
- **Account costs.** The cost of holding a bank account has risen and this may have increased the number of unbanked individuals in the Caribbean. This may push up levels of informal financial transactions, presenting more opportunities for illegal financing.

The termination of CBRs would reduce cash flows from the aforementioned economic activities. De-risking could also undermine trade facilitation and prevent countries from importing basic goods (e.g. food and medicine), which could destabilize regional economies.

Another potential impact is the creation of underground markets. If clients of domestic banks become unable to send money and conduct transactions overseas, this may lead to the creation of an underground, unregulated market to replace these services. These underground services will be even more susceptible to money laundering and financing of terrorism.

While the fallout from de-risking has not matched the most extreme predictions, the impact has still been significant. Following the disruption in services from correspondent banks, many respondent banks in the Caribbean have found different ways to cope. Some have secured replacement CBRs with other international banks, some have obtained assistance from central banks for foreign payments, and some have had to close the accounts of high-risk customers. The replacement CBRs, however, have come at higher monetary and time costs to the banks.

Banks now also face higher due diligence costs and increased service fees, which are in turn passed on to customers. They have had to institute increased minimum thresholds and place restrictions on certain clients.

It is crucial that the international community fully appreciate the subregion's disproportionate dependence on CBRs to facilitate international transactions, and therefore the importance of working hand in hand with Caribbean economies to amicably resolve what is slowly becoming a regional crisis and a constraint to development.

Accordingly, it is important to create a mechanism for closer dialogue between regional respondent banks and global correspondent banks, which allows for a better understanding of the concerns and prudential requirements of the latter. It is equally important for the international community to provide assistance to Caribbean economies as they redouble their efforts to achieve full compliance with international standards set by the Financial Action Task Force (FATF), the Financial Stability Board (FSB) and the OECD Global Forum; as well as strengthen their financial reporting systems and improve transparency, all of which would go a long way to easing lingering concerns on the part of correspondent banks with respect to their AML and CFT frameworks.

Advocacy should also be extended to:

- Actively encouraging regional banks to strengthen mechanisms for correspondent banks to conduct effective customer due diligence.
- Sensitizing correspondent banks to the need, when treating with regional respondent banks, to consider making use of credit and other limits or conditions, instead of terminating CBRs.
- Advancing the notion that, in instances where Caribbean banks are de-risked, more time should be given to establish replacement CBRs and the reasons for the severing of the relationship provided.
- Given the observation that de-risking reflects the operation of a new business model by transnational banks, over the long run the Caribbean should contemplate setting up a reputable bank abroad that will address its own challenges.
- As an integral part of its Caribbean first strategy, ECLAC will use the results of its research on this issue to guide its engagement with regional governments and international development partners in a strategy of advocacy that highlights the devastating effects that de-risking can have on Caribbean economies, and explores means of redress.

Source: Economic Commission for Latin America and the Caribbean (ECLAC).

Box 3

Offshore financial centres in the Caribbean

Offshore financial centres (OFCs), often also referred to as international financial centres (IFCs), are a significant part of the Caribbean financial landscape. They are defined as countries or jurisdictions with specialized financial regimes, which facilitate investment flows of capital internationally. Regional financial centres (RFCs) are groups or blocs of countries viewed as IFCs that have specialties in the offshore financial business sector. The International Monetary Fund (IMF) notes that to qualify as an OFC jurisdiction, there must be a large number of financial institutions functioning in a simplified regulatory environment, with low or no tax, with the majority of its transactions initiated offshore.

While public officials and government publications have noted a crucial link between the offshore sector, employment creation and economic viability, limited data have created some difficulty in measuring the sector's economic contribution. The economies of the subregion have benefited from the capital flows of OFCs, in addition to the development of more sophisticated capital markets and financial structures. In fact, regulatory standards in some of the subregion's OFCs are compliant with international standards and, in some cases, go beyond the basic requirements in attempts to reduce their chances of being negatively listed.

The Caribbean OFCs are located mostly in the islands of the Organisation of Eastern Caribbean States (OECS), Aruba, the Bahamas, Barbados and the Cayman Islands. The more established OFCs in the Caribbean contribute significantly to employment, both directly and through other ancillary services. The Caribbean islands are small and vulnerable, with limited negotiating or strategic power. This size limitation has affected the region; they are impacted by their vulnerability to natural disasters and in terms of business competitiveness.

The shifting regulatory frameworks of the Organization for Economic Cooperation and Development (OECD) and the Financial Action Task Force (FATF), as well as the legislation of developed countries such as the United States (Foreign Account Tax Compliance Act, FATCA) and the United Kingdom (Crown Dependencies the Overseas Territories International Tax Compliance Regulations, CDOT), have placed a significant financial burden on small Caribbean islands, at both the regulatory and market levels.

The regional financial sector is under threat. Some of the more vocal regional advocates have categorized these threats as unfair; they have rationalized that the small size and small portfolio of regional OFCs present a significantly smaller probability of contravention of anti-money laundering (AML) or counter-terrorist financing (CFT) rules than many larger global financial institutions. Moreover, there seems to be a one-policy-fits-all approach for the Caribbean. If one jurisdiction offends, the domino effect appears inevitable.

An examination of Swiss banking rules and privacy laws show no similar sanctions. Switzerland has been given several extensions to adjust its disclosure rules in the exchange of financial information across Europe and started collecting data only in January 2017 to begin information exchange in 2018. Deutsche Bank, which has been and continues to be fined in the United States for acts ranging from contributing to the financial crisis to reputational risks from its clientele, is still operational in the United States. It was also one of the banks which terminated correspondent banking relationships with Caribbean financial institutions, perhaps fearing further sanctions by United States federal agencies. In 2014, Credit Suisse was fined after admitting to playing a role in the false tax-filings of American taxpayers, and J.P. Morgan was fined for its role as banker to Bernard Madoff. Very few financial practice infringements and breaches have occurred in the Caribbean OFCs, and certainly not in the dollar value of those cited above.

Clearly, the playing field appears uneven for those with limited size and political weight. An aggressive, cohesive response from the subregion is justified; indeed overdue. The challenges present an opportunity for the Caribbean countries to take a unified and resolute stand, and to seek the solidarity and support of countries of the wider Latin American region in advancing their cause. The Caribbean first strategy includes this as an issue for intervention. Caribbean States will, however, need to be more cooperative and proactive in data release to facilitate the advancement of these matters.

Source: Economic Commission for Latin America and the Caribbean (ECLAC).

3. Fiscal situation

Debt servicing obligations, frequent disasters and diseconomies related to “sticky” costs of government, such as wage bills and the provision of essential services, have heightened fiscal pressures and eroded fiscal space in the Caribbean. This has now reduced public investments in some countries and is crowding out spending on health, education and other areas of human development including citizen security. Given their high levels of debt and despite low growth, Caribbean countries have had to pursue restrictive fiscal policies in recessionary circumstances. In 2016, fiscal deficits in the subregion averaged an estimated 0.7%, falling from an average of 2.6% of GDP in 2015 (ECLAC, 2017c).

ECLAC recently noted that fiscal vulnerability in the wider region has resulted in public spending retrenchment: this has been reflected in public investment cuts as an adjustment strategy. In the Caribbean, for example, public capital expenditures (including that of public enterprises) rose on average by only one percentage point to 5.7% of GDP in the period between 2000 and 2015.

ECLAC observes that some countries, such as Barbados, Guyana, Grenada and Saint Vincent and the Grenadines, have seen a sharp reduction in public investment in recent years (ECLAC, 2017c).

It should be emphasized that many Caribbean governments have been making significant efforts both to contain expenditures and to raise revenues. In order to bring down their debt-to-GDP ratios, for example, both Jamaica and Grenada achieved primary surpluses of 7% of GDP in 2016, among the highest in the world. As regards revenue, ECLAC notes that in the English- and Dutch-speaking Caribbean total revenue, comprising tax and other revenues, rose substantially in the subregion in the two years to 2016, to reach 28.8% of GDP. This level exceeds by several percentage points the average receipts for Latin America that year, which stood at 18.4% of GDP (ECLAC, 2017c).²⁴ Nevertheless, most Caribbean governments' current revenues have not been able to keep pace with current expenditures (see table 2).

Table 2
The Caribbean (15 countries): fiscal balance
(Percentages of GDP)

	2011	2012	2013	2014	2015	2016
Anguilla	2.7	1.5	0.7	2.5	0.5	-0.3
Antigua and Barbuda	-5.2	-1.3	-4.5	-2.7	0.1	1.1
Bahamas	-4.1	-4.4	-5.6	-4.5	-4.6	-4.6
Barbados	-7.1	-6.0	-11.1	-8.7	-7.3	-6.1
Belize	-0.8	-0.8	-1.1	-2.9	-8.0	-3.4
Dominica	-8.4	-9.2	-9.4	-1.3	-1.8	11.5
Grenada	-3.2	-5.5	-6.5	-4.1	-1.2	2.4
Guyana	-3.1	-4.7	-4.4	-5.5	-1.4	-4.5
Jamaica	-6.4	-4.1	-0.7	-0.5	4.7	-2.5
Montserrat	7.7	-7.0	-17.0	-6.2	21.6	-0.3
Saint Kitts and Nevis	2.4	11.2	13.2	10.5	6.2	5.0
Saint Lucia	-4.7	-6.5	-6.8	-3.7	-2.4	-0.6
Saint Vincent and the Grenadines	-0.2	0.3	-3.9	-3.2	-2.1	0.6
Suriname	-2.9	-0.1	-2.3	-4.5	-4.7	-9.6
Trinidad and Tobago	-0.7	-1.3	-2.9	-2.6	-1.8	-5.4
The Caribbean	-2.3	-2.5	-4.2	-2.5	-0.1	-1.1
Goods producers	-1.9	-1.7	-2.7	-3.9	-4.0	-5.7
Service producers	-2.4	-2.8	-4.7	-2.0	1.2	0.6

Source: Economic Commission of Latin America and the Caribbean (ECLAC), on the basis of official figures.

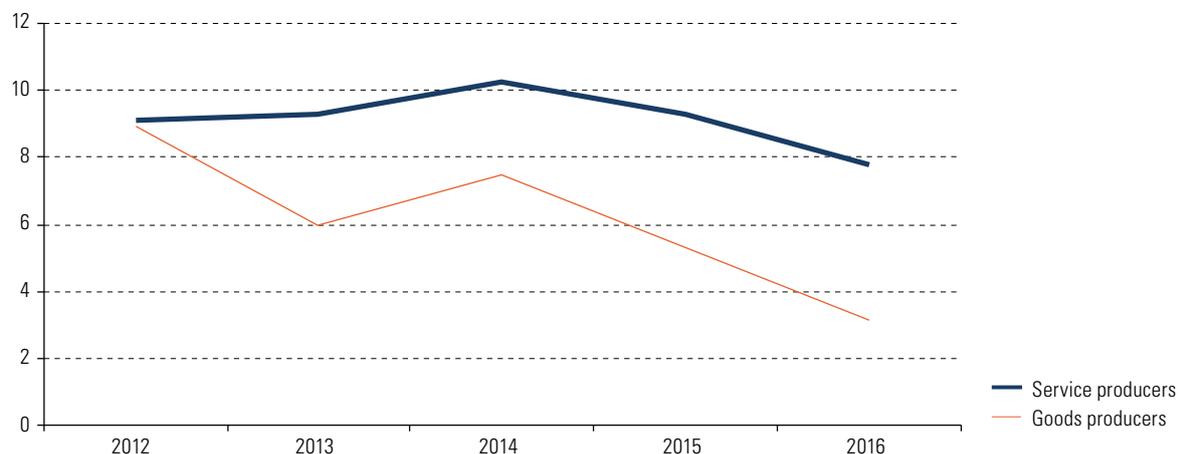
²⁴ It may be noted that total tax revenues in OECD averaged 34.2% of GDP in 2015.

This is compounded by the fact that gross domestic savings fell precipitously from an average level as high as 30% just before the global economic crisis, to current levels of around 14% of GDP on average. In the decade and a half between 2000 and 2016, gross domestic savings as a percentage of GDP have fallen in Dominica from 8.34% to 1.31%; in Grenada, from 25.4 to 0.84%; in Haiti, from 6.62 to -0.41%; in Saint Vincent and the Grenadines, from 18.1 to 1.12%; and in Trinidad and Tobago, from 30.6 to 6.28%. Other countries have seen more moderate declines, while Suriname, Guyana and, to lesser extent, the Dominican Republic have seen increases.

ECLAC has commented on the fiscal challenges facing the Caribbean subregion—including expenditure compression—and the implications of this for growth.

The financing of these deficits crowd out private investment. This is of even more serious concern in the Caribbean, given that the subregion has also experienced a substantial fall in foreign direct investment (FDI); a fall which coincided with the onset of the global recession, and from which the subregion has yet to recover. The trend in FDI inflows to the Caribbean has mirrored ODA flows, increasing in the years before 2008 and decreasing substantially since then. FDI inflows to the region, at about US\$ 4.27 billion in 2015, were 43% lower than the peak of US\$ 7.5 billion in 2008 (see figure 12).

Figure 12
The Caribbean (15 countries):^a foreign direct investment inflows
(Percentages of GDP)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official figures.

^a Anguilla, Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, Montserrat, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago.

C. Competitiveness and the Caribbean

While important initiatives such as the ECLAC Debt for Climate Adaptation Swap Initiative must be actively pursued to provide essential breathing space for the highly indebted subregional economies, the structural imbalances and low growth cited earlier are essentially symptoms of an underlying lack of export competitiveness in the subregion. This also must be addressed by an industrial policy supported by a range of endogenously driven policy measures, complemented by support from bilateral and multilateral partners. The new generation of development frameworks that are emerging in the subregion, focused, as they are, on strengthened resilience and sustainable development with equality, and aligned with the 2030 Agenda for Sustainable Development and the Samoa Pathway, provide a new and consensual context for pursuing the changes that are required. Foremost among these is addressing export competitiveness, which can be viewed as the key to unravelling the Gordian knot of

poor Caribbean growth performance and to ensuring the strengthened fiscal capacity that is required to address more effectively the subregion's interrelated social, economic and environmental challenges.

The Caribbean economy will remain in the middle-income trap where it has been for several years unless it becomes more competitive. This is the indispensable condition for the subregion to sustain and improve existing standards of living. Enhanced competitiveness will mean lowered costs and increased productivity. To achieve this requires priority attention to at least four enabling factors: (i) skills development, which will also be addressed in-depth in chapter III; (ii) sustainable energy; (iii) infrastructure, both physical and digital; and (iv) private sector development, especially for micro, small and medium enterprises (MSMEs) and trade facilitation, in order to develop new export activities and improve access to financing.

Escaping the middle-income trap will oblige the subregion to cease to pursue development strategies more relevant to countries with low costs and abundant labour. The four areas cited above are essential to making this transition. The Caribbean subregion must now focus on an industrial strategy aimed at structural transformation underpinned by skills-intensive, creative and technology-driven areas of goods and services production. This entails three overarching strategic focuses: (i) value chain production and engagement, (ii) development of the blue economy, and (iii) strengthening the region's creative industries.

1. Skills development

A major weakness in the Caribbean is the small pool of tertiary educated individuals from which the productive economy and society²⁵ must draw. A second is the disjuncture between the educational system and the labour market, impeding realization of the full potential of both women and men. A third is the high level of migration of tertiary educated and skilled persons from the subregion who are thus no longer part of domestic human capital formation in the Caribbean subregion, notwithstanding the fact that they are the source of substantial annual remittances and constitute important diaspora markets in their host countries, as well as providing other important links.

Despite good progress in some areas—for example, in levels of primary and secondary school enrolment, years of education and relatively high levels of budgetary expenditures devoted to education—there are still major deficiencies in education and training that need to be remedied if the skills level of the subregion's population and workforce is to be significantly improved. These deficiencies include low school performance, especially in mathematics and English language,²⁶ and a low pass-through rate from secondary to tertiary education; a rate that, at about 15%, is much less than half the OECD average.²⁷ The recently adopted CARICOM Human Resource Development 2030 Strategy²⁸ notes that, despite significant accomplishments, “member States recognise that severe systemic and cultural deficiencies threaten the ability of the Region to address future needs and the contribution of their respective [human resource development] sectors to national and regional development.”

²⁵ The World Economic Forum's *Global Human Capital Report 2017* makes the obvious, but undervalued point, that human capital is critical not only to the productivity of society, but also to the functioning of its political, social and civic institutions (WEF, 2017).

²⁶ Only 25% of students sitting the Caribbean Secondary Examination Certificate (CSEC) achieve five passes or more, including in mathematics and English language.

²⁷ Enrolment across the subregion varies: in Jamaica post-secondary enrolment now approaches 30% and is even higher in Barbados, while in some countries, such as Guyana and Saint. Lucia, it is much lower. An average of 36% of young adults across OECD countries are expected to graduate from tertiary education at least once before the age of 30. See [online] www.oecd.org/education/education-at-a-glance-19991487.htm.

²⁸ Endorsed at the thirty-eighth Regular Meeting of the Conference of Heads of Government of the Caribbean Community (CARICOM), held in Grand Anse, Grenada, in July 2017.

Especially from the point of view of building a more competitive subregional economy, there is an inadequate —though growing— focus on science, technology, engineering and mathematics in the educational system. In 2015/2016, across all campuses of the University of the West Indies (Mona in Jamaica, Cave Hill in Barbados and St. Augustine in Trinidad and Tobago, as well as the Open Campus), more than a third of students were enrolled in science, technology, engineering and mathematics (STEM) courses such as science and technology, food and agriculture, engineering and medical sciences, but notably only 5% in engineering and 15% in science and technology. In a positive development that needs to be intensified, over the five year period 2011/2012 to 2015/2016, STEM enrolment at the the University of the West Indies increased from 33.5% of the student population to 38.7%. Nevertheless, in the 2015/2016 academic year 43% of students across all campuses were enrolled in social sciences (University of the West Indies, 2016).

Several studies since the 1990s have pointed to a mismatch between the skillsets acquired by those preparing to enter the workforce and labour market needs. In addition to deficiencies in literacy and numeracy among job-seekers who have had as much as 11 years of formal education, inadequate behavioural life skills and lack of professional skills linked to specific careers or technical demands, such as ICTs, have been cited (CDB, 2015b). The *Global Human Capital Report 2017* (WEF, 2017) notes that constructing ‘future ready’ curricula to meet the demands of the wider economy and society requires appropriate attention to core linguistic, mathematical and technological literacies, sufficient attention to digital fluency, and the creation of an ecosystem for lifelong learning. In the Report’s key development subindex, which measures countries’ current success in building the human capital of the next generation as well as in continually upgrading the human capital of those already in the workforce through lifelong learning, Barbados ranks 49th of 130 countries; Trinidad and Tobago, 64th; Guyana, 83rd; Dominican Republic, 105th; and Jamaica, 106th.²⁹

This points to the importance of aligning education and training with the requirements of the modern knowledge economy to which the subregion aspires, and related skills and competencies. This process of adaptation has been given impetus by the adoption in mid-2017 of the CARICOM Human Resource Development 2030 Strategy aimed at contributing to education and training reform in the subregion and embedding skills and competencies appropriate to globally competitive twenty-first century economies and society.³⁰ This Strategy sets out priorities and an Action Plan to be pursued across the spectrum of sectors: basic education, skills for lifelong learning, and tertiary education. The effective preparation of its limited human capital through relevant education and training that adopt a gender lens to meet the requirements of a competitive and inclusive twenty-first century economy and society is the most urgent and compelling task facing the Caribbean subregion. This crucial aspect of human development and capacity building will be further developed as a central pillar of social inclusion and progress towards equality in chapter III.

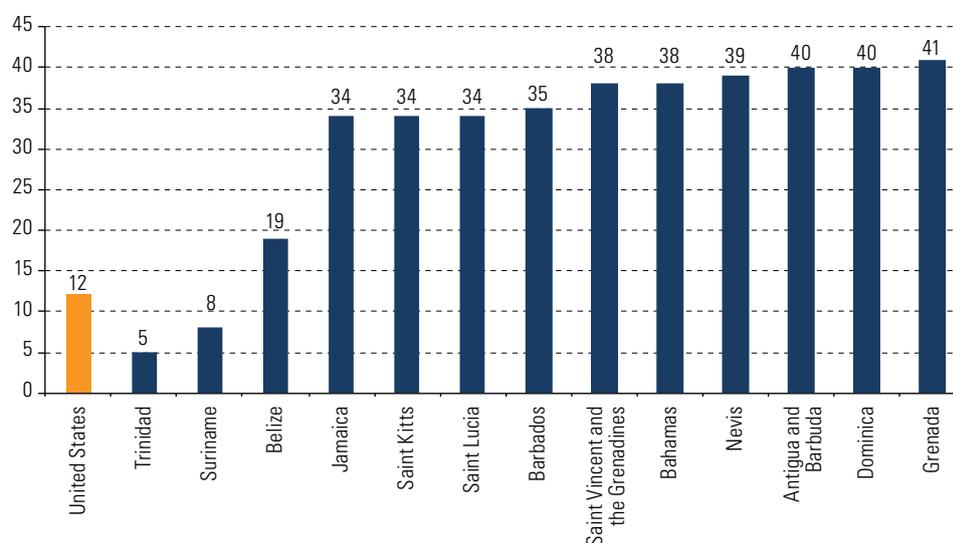
²⁹ The overall rank is measured across four subindexes: capacity, which measures human capital built up through past educational investments; deployment, which measures the extent to which countries deploy their human capital in labour markets; know-how, which captures the quality and skill-intensity of the workforce; and development index. Overall rankings for the Caribbean are: Trinidad and Tobago, 59th; Barbados, 79th; Jamaica, 83rd; Guyana, 88th; and Dominican Republic, 93rd.

³⁰ The CARICOM Human Resource Development 2030 Strategy sets out a number of priority actions to be implemented in respect of basic education, skills for lifelong learning, and tertiary education. The Strategy is intended to serve as a blueprint for member States to draft sector strategy and implementation plans.

2. Sustainable energy

The Caribbean relies on imported fossil fuel for more than 90% of its energy needs.³¹ There is widespread recognition that the high cost of energy is undermining the subregion's competitiveness and growth. The World Bank cites energy costs in the subregion as being among the highest in the world (PPIAF, 2014, p. 7). For many countries in the subregion, energy prices are three times as high as those in the United States, the subregion's major trading partner (see figure 13).

Figure 13
United States and the Caribbean (13 countries): domestic electricity tariffs, 2012
(United States cents per kWh)



Source: A. McIntyre and others, "Caribbean energy: macro-related challenges", IMF Working Paper, No. WP/16/53. Washington, D.C., International Monetary Fund (IMF), 2016.

Consequently, several regional institutions have acknowledged sustainable energy as vital to increasing productivity and enhancing competitiveness, while promoting gender equality and poverty reduction. CARICOM, under its Caribbean Sustainable Energy RoadMap and Strategy (C-SERMS), has established regional targets for the contribution of renewable energy to total electricity generation: 20% by 2017, 28% by 2022, and 47% by 2027. However, in 2012 this contribution was only around 8%, less than half the 22% of electricity generation attributed to renewables globally (REN, 2014). This figure has risen to 9.7% of installed capacity for all CARICOM member countries in 2017, but much more substantially to 18%, when oil and natural gas producer Trinidad and Tobago is excluded (CDB, 2017).

Although the Caribbean is rich in potential renewable energy sources, there are several factors that have impeded the development of renewables. A critical barrier to expanding the renewable energy sector in the Caribbean subregion is small project size, which can be an impediment to investment, including competitive tenders for project implementation. Small economies in the subregion have considerable difficulty in financing renewable energy projects that typically require high upfront financial capital. Innovative financing instruments, such as combining loans and grants in blended financing, is an option to address the constraints of size and risk that append to renewable energy projects in the

³¹ All members of CARICOM, except Trinidad and Tobago, are net energy importers. Suriname, Belize and Barbados are limited producers of oil and/or natural gas.

subregion. These constraints also make renewable energy projects potential candidates for public-private partnerships (PPP). In this regard, a Regional PPP Support Facility has been established by the World Bank, the Inter-American Development Bank (IDB) and the Caribbean Development Bank (CDB) to build capacity and support the development of PPP projects.

Among CARICOM members, Belize, which has promulgated a comprehensive renewable energy and energy efficiency strategy, has a uniquely diversified energy mix. Renewable energy, largely derived from abundant hydro-resources and bioenergy—utilizing bagasse from the sugar industry—accounts for 57% of Belize's electricity generation.³² Saint Lucia has embarked on a sustainable energy programme, with targets of 35% renewable energy generation and 20% reduction in public sector energy consumption by 2020. The National Strategic Plan of Barbados 2006–2025 is designed to increase the renewable energy supply, with a focus on raising the number of household solar water heaters by 50% by 2025.

Tourism, the major export earner in the subregion, is highly energy-intensive, as are the mineral and mining industries. The region's thousands of MSMEs are also faced with disproportionately high overhead costs and thin operating margins. These enterprises, which are the backbone of the Caribbean economy and actual or potential providers of livelihoods for a high proportion of women and youth, will be rendered much more viable by the reduction in the cost of doing business resulting from sustained and meaningful improvements in energy efficiency and by access to reliable and affordable energy.

The long-term potential gains from energy efficiency and renewable energy in the subregion are high. Meeting its renewable energy target could lead to an almost 50% reduction in Grenada's oil import bill, while the implied effect of Jamaica's energy efficiency target³³ on long-term GDP is estimated by one study at 14% (McIntyre and others, 2016). The diversification of the subregion's energy mix into geothermal, solar, wind, biomass, hydropower and other green electricity resources is among the most urgent challenges facing the Caribbean. This will help to conserve the environment, improve the lives of the poor, and strengthen economic competitiveness. Moreover, sustainable energy provision responds directly to SDGs 7 and 8,³⁴ and has positive synergistic impacts on several other goals. However, at an estimated cost of about 7% of GDP over the five-year period between 2018 and 2023 (McIntyre and others, 2016), energy sector investments in the Caribbean are substantial, and will require significant private sector involvement, innovative financing, and external support.³⁵

3. Infrastructure

The heavy reliance of Caribbean economies on public investment to fund infrastructural development has meant that with the subregion's reduced fiscal space, investment in key infrastructure linked directly to productivity and competitiveness has not kept pace with subregional needs. The Caribbean occupies a geospatial area covering 2.75 million square kilometres, to which transportation and other infrastructure and connectivity are critical for social, cultural and economic development. In this context, addressing infrastructural deficiencies related to the subregion's port, air, maritime, road, rail, irrigation and drainage, energy and gas pipelines, and public service facilities (hospitals and

³² The country's goal is to have 80% of its energy consumption provided by renewable sources by 2020, and 95% by 2030.

³³ Reduce energy intensity from 22 million to 6.3 million joules per US\$ of GDP by 2030.

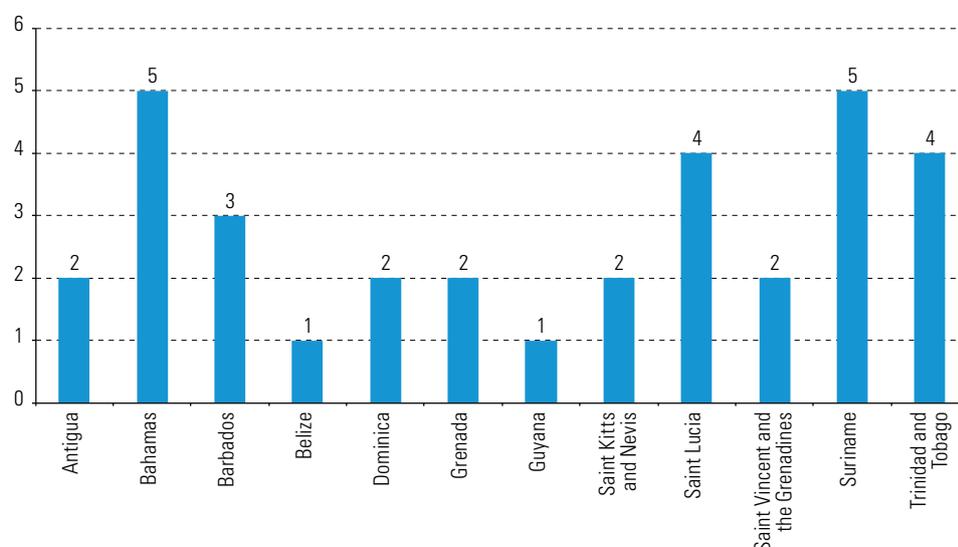
³⁴ Goal 7—Ensure access to affordable, reliable, sustainable and modern energy for all; Goal 8—Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.

³⁵ At their thirty-eighth regular meeting in July 2017, the CARICOM Heads of Government adopted and opened for signature the Agreement Establishing the Caribbean Centre for Renewable Energy and Energy Efficiency (CCREEE). The Centre is providing coordination and implementation support for subregional and regional renewable energy and energy efficiency programmes, projects and activities and is being established with assistance from the United Nations Industrial Organization (UNIDO), the Government of Austria and SIDS DOCK support programme for small island developing States.

schools) will be critical to reducing the costs of commerce, making service delivery efficient and improving productivity and competitiveness.

According to the CARICOM Strategic Plan 2015–2019, the development of the subregion’s air and maritime infrastructure and services will be vital for improving the accessibility and mobility of people and goods and for enhancing competitiveness. A recent Caribbean Development Bank study, which assessed a cross section of Caribbean ports, found that only 4 of 12 countries had port infrastructure that was adequate, or better. The others were either in a poor state with immediate need of reinvestment or were ports with poor layout of their infrastructure (see figure 14) (CDB, 2016b, p. 34).

Figure 14
The Caribbean (12 countries): quality of port infrastructure, 2016
(Score)^a



Source: Caribbean Development Bank (CDB), *Transforming the Caribbean Port Services Industry: Towards the Efficiency Frontier*, St. Michael, 2016 [online] http://www.caribank.org/wp-content/uploads/2016/05/Study_Transformation-of-Caribbean-Maritime-Port-Services-Industry.pdf.

^a The scores represent: 1: a poor state with immediate need for investment; 2: poor layout of infrastructure; 3: adequate state of infrastructure; 4: adequate infrastructure, no need for investment; 5: brand new infrastructure.

A recent assessment of digital connectivity covering a cross section of Caribbean countries and territories—the Bahamas, Barbados, British Virgin Islands, Curaçao, Dominica, Grenada, Haiti, Sint Maarten, Suriname and Trinidad and Tobago—notes that most countries have at least two independent submarine cable systems providing connectivity regionally and to global Internet networks (ISOC, 2017). In addition, Internet services are delivered in-country via a combination of fibre-optic, coaxial and copper cables, and fixed or mobile wireless networks. Second generation mobile/cellular networks cover most of the subregional population, providing basic telecommunications (voice and text messaging) services and, also increasingly, newer third generation, fourth generation, and long-term evolution (LTE) mobile technologies that support mobile broadband Internet are being deployed. The ISOC study found that, with some exceptions, such as Haiti and the Bahamas, the coverage of Internet infrastructure is relatively good, but there is still room for improvement (ISOC, 2017).

The survey of the subregion's telecommunications infrastructure using various global indices, such as the United Nations Telecommunication Infrastructure Index³⁶ shows that while there has been progress, and despite several recent and ongoing initiatives,³⁷ there is more to be done to attain infrastructure standards associated with digitally-driven and globally competitive economic development. The International Telecommunication Union's ICT Development Index captures meaningful progress in access and usage in the subregion and has almost all Caribbean countries currently ranked in the top third or half of 175 countries, with Saint Kitts and Nevis acknowledged as showing the strongest improvement on the Index in 2016, moving from fifty-fourth place in 2015 to thirty-fourth in 2016.³⁸

Data on mobile subscription and Internet use indicate increasing availability and access to digital services in the subregion, especially with the promotion of mobile broadband services. In most countries, more than half of the population now use the Internet, with the Bahamas and Barbados frontrunners at 78% and 76%, respectively. A frequently cited issue is the need for an appropriate policy environment to promote the development and use of Internet infrastructure, with the policy and legal frameworks in some countries still more relevant to basic voice communications. Importantly, as well, e-government has been a key driver of Internet use in many countries and is essential to harnessing the development potential of the medium; this area is particularly poorly developed in the subregion with the rank of countries on the United Nations E-Participation Index ranging between Trinidad and Tobago and Haiti, ranked 101st and 164th, respectively, to a median rank among CARICOM member States of 133 among 193 countries.³⁹ This serves to highlight two key challenges facing the Caribbean: first, the need to increase adoption and use of the Internet, particularly given the prevalence of mobile telephony, via mobile/cellular broadband and Wi-Fi, and second, to promote the use of digital media by governments, the private sector and citizens, in order to enhance productivity and strengthen subregional competitiveness.

In 2014, the Caribbean Development Bank estimated that over the following 10 years the subregion would require US\$ 30 billion to modernize its power, transportation, telecommunications, and water and wastewater sectors.⁴⁰ This underscores once again the importance to the Caribbean of engaging external partners, new and old, and of mobilizing financing innovatively, through engagement of private funding, to address infrastructural needs. It should be emphasized that, given the subregion's proneness to disasters and its full commitment to sustainable development and to the 2030 Agenda, modernization of its infrastructure must take fully into account—in design, construction, and maintenance—the principles of greening of the economy, climate resilience and hazard mitigation.

³⁶ This index measures basic infrastructural indicators which define a country's ICT infrastructure capacity.

³⁷ The Caribbean Regional Communications Infrastructure Program (CARCIP), a World Bank project, coordinated by the Caribbean Telecommunications Union (CTU), is designed to bridge gaps in the region's infrastructure and foster the involvement of government and non-government stakeholders in ICTs. Other recent initiatives have included the IDB-funded Broadband Infrastructure Inventory and Public Awareness in the Caribbean (BIIPAC) project, and the European Union-funded HIPCAR project "Enhancing Competitiveness in the Caribbean through the Harmonization of ICT Policies, Legislation and Regulatory Procedures".

³⁸ The ICT Development Index captures ICT readiness, including infrastructure, through its access subindex; intensity and usage, through its use subindex; and capabilities and skills important for ICTs, through its skills subindex; in order to provide an overall ICT development rank. In 2016, other Caribbean countries were ranked as follows among a total of 175 countries: Barbados, 35th; Bahamas, 64th; Trinidad and Tobago, 67th; Dominica, 69th; Grenada, 74th; Antigua and Barbuda, 75th; Saint Vincent and the Grenadines, 78th; Suriname, 84th; Saint Lucia, 94th; Jamaica, 99th; Dominican Republic, 104th; Belize, 119th; Guyana, 121st; Cuba, 135th.

³⁹ The E-Participation Index assesses the quality and use of on-line services in government and citizen interaction, in stakeholder engagement, and in decision-making processes.

⁴⁰ See W. Smith, "Economic prospects for the Caribbean", document presented at the UK-Caribbean Business Conference, London, 17 June 2014 [online] <http://www.caribank.org/uploads/2012/05/UK-Caribbean-Business-Conference-June-2014.pdf>.

4. Private sector development

Rethinking Caribbean development strategy must include a recasting of the role of the private sector, while strengthening the role of government as facilitator, regulator and partner. The objectives should be efficient government and a competitive and proactive private sector. In both areas, several global indices and recent studies have pointed to the need for improvement.

The World Bank's ease of doing business index identifies bureaucratic and regulatory impediments—as opposed to structural factors—affecting the private sector. Most countries in the subregion have slid down this index over the past 10 years (see table 3).⁴¹ The Caribbean subregion should address as a priority the legal and institutional conditions that are detracting from the business environment, in areas such as registering property, getting credit, paying taxes, enforcing contracts and trading across borders. This is very important not only for domestic investment, but also for attracting FDI into the subregional economy in sectors outside the traditional areas dominated by natural resources and tourism.

Table 3
The Caribbean (14 countries): rank in World Bank ease of doing business index, 2007, 2015 and 2016

Countries	2007	2015	2016
Antigua and Barbuda	33	104	113
Bahamas		106	121
Barbados		119	117
Belize	56	120	112
Dominica	72	91	101
Guyana	136	137	124
Grenada	73	135	138
Haiti	139	182	181
Jamaica	50	64	67
Saint Kitts and Nevis	85	124	134
Saint Lucia	27	77	86
Saint Vincent and the Grenadines	44	111	125
Suriname	122	156	158
Trinidad and Tobago	59	88	96

Source: World Bank, *Doing Business 2017: Equal Opportunity for All*, Washington, D.C., 2017.

Special attention should be paid to strengthening MSMEs, which constitute between 70% and 85% of enterprises in the Caribbean, contribute between 60% and 70% of GDP and account for about 50% of employment.⁴² These enterprises are usually faced with disproportionately high overhead costs and thin operating margins. At the same time, they are providers of livelihood for a high proportion of women and youth.

Available data on women's participation in entrepreneurship activities show variations across Caribbean countries. For example, the World Bank's 2010 enterprise surveys (see table 4) show that female ownership of small firms was uneven, ranging from 76% in Saint Vincent and the Grenadines to 58% in the Bahamas and Guyana, 38% in Jamaica, 41% in Dominica and only 18% in Suriname. Up-to-date disaggregated data are needed to identify the number of businesses owned by women and to tackle the financial, educational and intrahousehold responsibilities they face in caregiving activities.⁴³

⁴¹ By comparison, Rwanda moved from a rank of 158 to 56 over this period.

⁴² See CDB (2016c). The study covered eight countries: Antigua and Barbuda, Barbados, Belize, Guyana, Jamaica, Saint Lucia, Suriname, and Trinidad and Tobago.

⁴³ See Stuart, Gény and Abdulkadri (2018, p. 38).

Table 4
The Caribbean (13 countries): women in business, 2010
(Percentages)

Countries	Firms with female participation in ownership	Firms with a female top manager	Proportion of Permanent full-time workers that are female
Antigua and Barbuda	21.3	17.5	44.6
Bahamas	58.3	33.2	44.3
Barbados	43.5	25.4	48.2
Belize	30.4	25.5	47.2
Dominica	41.0	23.6	32.1
Grenada	57.3	24.0	45.9
Guyana	58.3	17.7	39.1
Jamaica	38.2	24.1	44.5
Saint Kitts and Nevis	57.8	21.1	43.3
Saint Lucia	32.1	23.7	41.5
Saint Vincent and the Grenadines	76.0	38.6	49.3
Suriname	18.3	15.0	34.1
Trinidad and Tobago	45.1	20.8	41.6

Source: S. Stuart, L. Gény, A. Abdulkadri, "Advancing the economic empowerment and autonomy of women in the Caribbean through the 2030 Agenda for Sustainable Development", *Studies and Perspectives series-ECLAC Subregional Headquarters for the Caribbean*, No. 60 (LC/TS.2017/128; LC/CAR/TS.2017/8), Santiago, Economic Commission for Latin America and the Caribbean (ECLAC), 2018, on the basis of World Bank Group, "Gender" [online] <http://www.enterprisesurveys.org/data/explore/topics/gender>.

MSMEs are inherently resilient, as this sector has continued to create and expand employment, foster entrepreneurial skills, utilize local raw materials and expand markets, with only a low level of support from the formal sector. In 2016, only Belize, Jamaica and Trinidad and Tobago had Cabinet-approved MSME policies in place and only Trinidad and Tobago, Antigua and Barbuda, and Guyana had legislated fiscal, monetary and developmental benefits specifically for the sector during the past decade. The study finds significant weaknesses in financing, especially life cycle financing for MSMEs; gaps in policy and regulatory frameworks, some of which have not been reviewed for more than a decade; weak technical support and inadequate outreach that captures only a small percentage of formal and informal MSMEs; and weakness in subregional innovation systems which results in limited scope of support to help MSMEs become more competitive, and capable of growing through productivity and innovation.

Among the recommendations to strengthen the sector are the provision of better access to financing, strengthened business support services, and improved gathering and disaggregation of data on MSMEs to enhance evidence-based policymaking in respect of the sector.⁴⁴ These are catalytic measures that will contribute to poverty reduction, gender equality and inclusive growth and development.

D. Value chains: forging regional links

The emergence of regional and global value chains presents an opportunity for engagement in global commerce that is especially beneficial for small developing economies lacking economies of scale in production.

UNCTAD data show that developing countries increased their share in world merchandise exports from 24% in 1990 to 43% in 2016. In the case of services exports, the developing country share rose from 23% in 2000 to 26% in 2016.⁴⁵ This increasing participation of developing countries in global trade is primarily attributable to their growing engagement in the export of manufactures, particularly

⁴⁴ See Stuart, Gény and Abdulkadri (2018, p. 14–16).

⁴⁵ See United Nations Conference on Trade and Development (UNCTAD), UNCTADStat [online database] <http://unctadstat.unctad.org/EN/>.

intermediate goods such as parts and components. Significant growth in developing country trade has also taken place in non-traditional services such as those relating to computer, business and ICT services. Regional and global value chains are central to this development, benefitting from and promoting these trends. East Asia has been the locus of these developments and production integration has been a principal modality.⁴⁶

ECLAC has noted that the rise of value chains in the global economy has brought renewed attention to the centrality of the regional space, since the main global production networks are structured around specific regions. However, that the differing experiences of North America, Europe and East Asia show that geographic proximity is a necessary but not sufficient condition for the development of modern production networks: the complex flow of goods, investment, services and people that is involved also requires common legal frameworks, explicit policies to support production integration, and adequate transport, logistics, energy and telecommunication infrastructure.⁴⁷

The emergence of value chains would appear to be especially relevant for small, developing economies, such as small Caribbean States, seeking to stimulate growth and diversify their economies away from reliance on tourism and mineral or oil and gas exports. This is so because the decomposition of the production process into defined steps, and their spatial dispersion, opens the door to potential participation in industrial processes by a wider group of countries, including those with relatively small markets and limited human resource pools. However, WTO has observed that unlocking the potential of global value chains can pose a series of challenges: a country wanting to integrate effectively into production chains will need to be already at the cusp of producing at globally competitive levels of quality and efficiency since competition to carry out low-skilled tasks is intense, while the capability to carry out higher value added tasks —although difficult and costly to achieve— will enable countries to capture more benefits from global value chains.⁴⁸

In this context, a very important nexus exists between global value chains and services. The role of services is twofold. Those services termed producer or infrastructural services —such as transport and telecommunications— are essential to the competitiveness of economies and to the efficiency and productivity of factors of production. Process services, such as engineering, design, market research, logistics, finance, insurance, and advertising, are critical to knowledge-intensive goods production, and are embedded in traded goods as constituent parts of their value. Along the length of the value chain an entire range of services are important to the development, manufacture, distribution, sales and after-sales treatment of products. One consequence of this is the relatively high share of services value added in manufactured exports,⁴⁹ especially in the case of knowledge-intensive output. This, in turn, points to the vital role of high-quality and efficient services as a determinant of export competitiveness, not only of manufacturing, but of all production sectors in the modern economy. This has important implications for the potential of Caribbean countries to successfully and meaningfully integrate into global value chains: Caribbean countries will need to strengthen their capacity to provide process services, which are integral to value added goods output and important to participating upstream in value chains.

The basic ingredients for stronger export performance, whether in the context of value chains or through strengthened domestic production, are an appropriate regulatory framework, a focus on

⁴⁶ It should be noted that in the face of a substantial fall in the nominal value of world merchandise trade —by 10% in 2015— UNCTAD has noted that the “unrelenting internationalization of production” which started to lose steam after the Great Recession, now appears to be stalling, if not going into reverse. According to the Geneva-based institution, a revealing indicator of the reshoring process is the declining import content of exports: after rising in developing countries by almost 40% between 2000 and 2008, this measure fell back to 2003 levels in 2015. See UNCTAD (2017).

⁴⁷ See ECLAC (2014b).

⁴⁸ See WTO (2014, p. 3).

⁴⁹ WTO estimates that services value added traded within value chains accounts for 17% of developing country exports and 22% of developed country exports. This compares favourably with 21% and 19% for manufacturing value added in developing and developed countries, respectively. Exported services value added accounts for services embedded in manufacturing exports. See WTO (2014, pp. 88–89).

education and skills development, an enabling environment for entrepreneurs, efficient and expeditious border services, and reliable and competitively priced infrastructure and services.

Strengthened competitiveness through knowledge- and skills-upgrading should therefore be at the core of the rethinking of development strategy in the subregion and should be central to the drive to build resilience and achieve inclusive and sustained development with gender equality.

A key aspect of this strategy should be strengthened trade and economic ties within the subregion, and with the wider region and hemisphere, based not solely on a network of formal agreements, as is now the case, but on production and trade linkages strengthened through improved market intelligence and analysis, structured industry-to-industry contacts, improved trade-related infrastructure and border processes, and in areas such as ICTs, standards and quality development and certification, and sanitary and phytosanitary conformity.

An ECLAC Caribbean study (McLean and Singh, 2018) notes that the complementarity between goods producers, Belize, Guyana, and Suriname, and the remainder of the CARICOM countries should serve as a basis for increased intraregional trade flows. Preliminary analyses have identified potential complementarity within the Organisation of Eastern Caribbean States (OECS) in sectors such as yachting and cruise tourism, and in the production of certain differentiated goods, such as medical equipment. ECLAC has identified several other sectors and products as holding potential for Caribbean participation in value chains. These include the creative industries, tourism, professional services, financial services, offshore services, such as business process outsourcing, environmental services, green industries, energy services, downstream energy products, renewable energy and bioenergy, and electronics (intermediate inputs and light manufactures).

Certain risks have been cited regarding value chain participation, which Caribbean countries should take fully into account. These include vulnerability to global business cycles, as a consequence of interconnections and transmission mechanisms that stretch across countries and regions; increased vulnerability to supply disruptions, such as disasters, which may disrupt supply chains at critical points. There are also risks relating to labour and the environment, as host countries engage in a race to the bottom to secure foreign contracts and investments; and risks relating to income inequality, as wage gaps may open up between workers in export-oriented value chain employment and the rest of the economy. Caribbean countries must be prepared to act to mitigate these risks, which would undermine the achievement of a cross section of the Sustainable Development Goals and would militate against growth with equity and sustainable development. Policy options include strengthening backward linkages with the rest of the economy by integrating domestic supply chains as much as possible into export production, increasing value added capture through continuous technological and skill upgrading, and ensuring effective regulatory oversight in areas such as investment attraction and environmental protection.

E. The Caribbean and the blue economy

The blue economy provides the opportunity for Caribbean countries to develop vast marine resources and related services, and to do so sustainably.⁵⁰ Developing the blue economy also provides the opportunity for countries to respond to SDGs across all three pillars —social, economic and environmental— and most directly to SDG14 (conserve and sustainably use the oceans, seas and marine resources for sustainable development) but also, importantly, to SDG8, which calls upon countries to promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.

⁵⁰ The 2030 Agenda and SIDS-specific instruments —the Barbados Programme of Action for the Sustainable Development of Small Island Developing States, the Mauritius Declaration and the Mauritius Strategy for the Further Implementation of the Programme of Action for the Sustainable Development of Small Island Developing States, and the Samoa Pathway— all call for the conservation and sustainable development of the oceans and seas.

The oceans are estimated to contribute between US\$ 1.5 trillion and US\$ 3 trillion each year to the global economy; about 3%–5% of global economic activity.⁵¹ These activities cover a wide range of productive enterprise: fisheries and aquaculture, tourism, energy, shipping and port activities, seabed mining, and newer areas such as renewable energy and marine biotechnology. In addition to marketed goods and services, the coral reefs, mangroves and wetlands also provide valuable ecosystem services, such as coastal protection and carbon sequestration.

Small island States have been described as large ocean States because the oceans and seas within their exclusive economic zones (EEZs)⁵² constitute much larger geographic areas than the land area of the territories with which they are associated. For example, the Bahamas, with land area of about 10,000 km², exercises jurisdiction over an EEZ of 629,293 km², while Grenada, whose land mass is 345 km², exercises jurisdiction over an EEZ of 76,000 km².

The World Bank anticipates that growth in the size of the Caribbean's ocean economy will be significant in coming decades. Key areas of this growth are expected to be seafood, marine renewables, shipping and port infrastructure services, tourism, and blue carbon,⁵³ as carbon prices increasingly reflect the true value of coastal ecosystem services. Another important emerging area is marine biotechnology, which is the use of marine organisms for industrial and other purposes involving the synthesis of compounds and identification of pharmacological properties. These living marine resources have great potential for developing new food, biochemical, biomaterials, pharmaceuticals and cosmetics, fertilizers and pest control products for a global marine biotechnology market that is expected to reach US\$ 4.9 billion by 2018. It is important for SIDS to regulate access to and downstream use of marine genetic resources within their national jurisdictions—which include EEZs—in accordance with the principles, objectives and obligations of the Convention on Biological Diversity and the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization. This will ensure that, in zones under national jurisdiction, there is mutually agreed benefit sharing.⁵⁴

Economic activity, whether biotechnology, fisheries, tourism, shipping, aquaculture, or mining, has a direct impact on the natural capital of the oceans and affects flora and fauna. Among important threats in the Caribbean to the aquatic ecosystem are unsustainable fishing practices, especially overfishing; pollution from both land-based activities—such as untreated wastewater run-off—and from marine trash; habitat destruction from construction for coastal development, including tourism, and extractive industries; and marine invasive species.

While the Caribbean ocean holds the promise of improved livelihoods in both traditional and new areas, and has the potential to contribute substantially to achieving the SDGs and targets in key areas such as food security, disaster risk reduction and sustainable energy, the foregoing threats must be contained or eliminated if this potential is to be realized. An important impediment to conserving marine resources and promoting the health of the ocean is fragmented ocean governance. Progress towards a holistic approach is occurring in the Caribbean but needs to be intensified. In 2013, OECS adopted the Eastern Caribbean Regional Ocean Policy and Action Plan to guide the development of marine resources in a sustainable manner.

Several Caribbean countries have developed integrated marine policy frameworks to manage their ocean space and marine resources sustainably, including by promoting coordination and synergies across the spectrum of policymaking bodies, implementing agencies and stakeholders. These include

⁵¹ See Patil and others (2016, p. 5).

⁵² The EEZ is the sea area over which a country has exclusive rights regarding the exploration and use of marine resources and it extends 200 nautical miles from the country's coast.

⁵³ Blue carbon refers to carbon stored and sequestered in coastal ecosystems such as mangrove forests, seagrass meadows or intertidal saltmarshes.

⁵⁴ See Onguglo and Vivas Eugui (2018).

OECS members Saint Kitts and Nevis, Saint Vincent and the Grenadines, Antigua and Barbuda, and Grenada, as well as the Bahamas and Belize. Other initiatives have included the UNDP Caribbean Large Marine Ecosystem project, funded by the Global Environment Facility (GEF), which supports Caribbean countries in managing their shared living marine resources in a vast regional marine area, and, notably, the Caribbean Challenge Initiative (CCI). This was launched initially in 2008 and brings together a number of Caribbean States and territories, the private sector, and other partners—governments, funding agencies and NGOs—in an endeavour aimed at conserving and sustainably managing the subregion's marine and coastal environment.

The goal among CCI participating countries and territories is to conserve at least 20% of their nearshore marine and coastal environments by 2020, thereby tripling marine protected coverage in the subregion.⁵⁵ The achievements so far include the following: the Dominican Republic has declared 31 new marine/coastal protected areas totalling just over 3.2 million acres; the Bahamas has added over 11 million acres of marine and coastal environmental areas to protected habitats; Saint Kitts and Nevis has declared a protected area that encompasses a 2-mile radius around the entire island and includes 60% of its nearshore marine and coastal areas; and Haiti has joined the Initiative and is working to conserve and sustainably manage its marine and coastal resources.

An important issue for Caribbean States to address in developing the blue economy is the building of knowledge and technical capacities in respect of the marine environment so as to facilitate effective participation in research, knowledge-creation and development, and in order to optimize regional capabilities to sustainably use and manage the ocean's resources. To ensure this, the subregion must align education and training with future requirements by addressing gaps in marine sciences, and in research, innovation and technology development that relates to the oceans. The Caribbean people, inhabiting small islands in a vast sea, must increasingly develop a seaward as much as a landward outlook. In this regard, it will be very important to acquire and strengthen technical and vocational skills training related to the blue economy and its associated activities, to create in the Caribbean a large enough pool of both male and female professional, scientific and skilled persons to support the subregion's effort to sustainably use, conserve and manage its ocean resources. Grenada's promulgation in 2016 of its Blue Growth Coastal Master Plan, including the proposed development of a Global Blue Innovation Institute in the country is a positive development in this regard. So, too, is the passage in January 2017 by the House of Representatives of Jamaica of a bill conferring university status on the country's Maritime Institute.

F. The Caribbean and the creative industries

The creative industries, encompassing both goods and services, have been identified as a sector in which small developing countries can potentially compete successfully.⁵⁶ The rise of the digital economy and the global reach of the cultural and creative industries (design, music, arts, audiovisuals, film-making, publishing, animation) has created a window of opportunity for small States in one of the faster growing segments of the global economy. Developing country exports of creative goods grew on average by 10.6% annually in the period between 2003 and 2015; they accounted, in 2015, for more than half (52%)

⁵⁵ The Caribbean Challenge Initiative (CCI) was launched in 2008 with support from The Nature Conservancy. The Caribbean Biodiversity Fund (CBF), funded by the Government of Germany, the World Bank Group, the Global Environment Facility and The Nature Conservancy was also established, with a US\$ 42 million regional endowment, to support countries in meeting their CCI commitments. There has been significant private sector contribution to CBF. Participating countries in CCI include: the Bahamas, the British Virgin Islands, Dominican Republic, Grenada, Haiti, Jamaica, Puerto Rico, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines and the United States Virgin Islands.

⁵⁶ The creative goods sector comprises art and craft; audiovisuals; design; new media; performing arts; publishing; visual arts. Creative services include advertising and market research; architectural, engineering and other technical services; research and development; personal, cultural and recreational services; audiovisual and related services; and other personal, cultural and recreational services. See UNCTAD (2010).

of all exports of creative goods, which amounted to US\$ 509 billion.⁵⁷ The creative industries offer the Caribbean a strategic complement to the traditional sectors of tourism and mineral extraction, which is especially important in light of the fact that they often rely on the skills of young individuals of both sexes and can generate high levels of value-added.

Among CARICOM member States there is now a concerted drive at the regional level to create enabling conditions for the development of the creative industries.⁵⁸ Despite its evident potential, the industry is poorly defined, fragmented, and lacks coordinated and systematic institutional support in areas such as fiscal incentives, funding, marketing intelligence and business support services. The participation of many individual artists, artisans and MSMEs in the creative industries underscores the importance of support services, such as incubators, clusters and financing for start-ups, while the absence of timely and disaggregated data on industry composition, trade and economic performance diminishes the capacity of policymakers for evidence-based policymaking. An important area of focus should be outreach and education on rights and obligations under intellectual property —especially copyright— agreements and conventions, both within the creative industry and in Caribbean society. This is because development of the creative industries requires a supportive regulatory framework, as well as full recognition by the broader society of the value of creative work and the right of creators and innovators to be rewarded.

Several initiatives are under way to address the development of this sector. A Caribbean Creative Industries Management Unit (CCIMU), a joint initiative of CARICOM and the Caribbean Export Development Agency (Caribbean Export), funded by the Caribbean Development Bank, is to be established to nurture creativity and support the development of businesses in the creative industry. Stakeholder consultations have resulted in the identification of priority sectors: music, audiovisuals, film, interactive media, animation, fashion and contemporary design, festivals and carnivals. The Caribbean Development Bank has also established a Culture and Creative Industries Innovation Fund (CIIF) to strengthen the competitiveness of the industry. The Fund's focus includes building a supportive enabling environment, including through legislative reforms and incentive policies, as well as development of sector data and market intelligence.

The development of the creative industries will ensure a major new source of income and employment in a sector in which global trade is valued at over US\$ 5 trillion, and in which developing countries are already major, if not dominant, players. The creative industries, through subsectors such as design, art and craft, visual and performing arts, audiovisual services, advertising and marketing research and recreational services, offers synergies with and linkages to the subregion's major industry: tourism. The importance of ICTs and digital literacy to efficiency in many subsectors of the creative industries is in line with the subregion's broader objective of creating a skilled and knowledge-intensive workforce, while providing new opportunities particularly for youth, women and owners of MSMEs.

Finally, a more systematic and coordinated approach to developing the creative industries across the subregion should open new possibilities for collaboration and production integration in creative goods and services and serve to reinforce cultural and people-to-people links.

⁵⁷ See United Nations Conference on Trade and Development (UNCTAD), UNCTADStat [online database] <http://unctadstat.unctad.org/EN/>. There is a paucity of data on Caribbean exports in the creative industries: in the four years between 2007 and 2010, Barbados exported US\$ 371 million in the subsector relating to architectural, engineering and other services and, in 2015, US\$ 44 million in the subsector pertaining to design, which covers architectural drawings, fashion, toys and jewelry. Jamaica's significant exports have been in the personal, cultural and recreational services, and other cultural services, subsectors, which cover, inter alia, audiovisual and related services and cultural, sporting and recreational activities. The data show exports by Jamaica of US\$ 30 million in 2008 and US\$ 54 million in 2012. It should be noted that this is a sector regarding which data sets are incomplete and inconsistent, and in which significant underreporting may occur.

⁵⁸ See Caribbean Community (CARICOM), "Communiqué issued following the conclusion of the twenty-sixth intersessional meeting of the Conference of Heads of Government of the Caribbean Community", Georgetown, 2 March 2015 [online] <https://caricom.org/media-center/communications/communiques/communique-issued-following-the-conclusion-of-the-twenty-sixth-inter-sessio>.

G. Summary and recommendations

This chapter has outlined some of the main economic constraints facing Caribbean countries. The Caribbean is committed to addressing them by pursuing development strategies that take account of the subregion's current realities, as well as the challenges and opportunities in the global environment.

The Caribbean recognizes the importance of partnerships in this endeavour: it will continue to actively seek to build these, especially since the subregion has seen a decrease in the multilateral and bilateral support provided through concessional funding and capacity-building, as member States have achieved “middle-income” status. This is occurring despite structural, environmental and geographic vulnerabilities which are recognized by the global community.

This chapter has identified several key tasks to be pursued as the subregion rethinks its development approach and seeks strategic repositioning in global production and trade. These are skills development, physical and digital infrastructure development; sustainable energy; and private sector development, focused on MSMEs and their principal needs, on trade facilitation and access to financing. The overarching goal is to build competitiveness and resilience. All enablers should include a gender-based approach so as to allow women and men to achieve their full potential. The strategic repositioning that is being recommended has three supporting pillars: enhanced participation by the Caribbean in value chains, development of the blue economy, and development of the subregion's creative industries into a structured and dynamic sector.

III. Social development: a path to empowerment and inclusion

There is evidence that the Caribbean subregion, unlike the Latin American and Caribbean region as a whole,⁵⁹ has lagged in social investment in recent years. Current expenditures by Caribbean governments in 2016, at 29.5% of GDP, were only marginally above the levels obtaining in the years preceding the global economic crisis of 2008–2010.⁶⁰ Public capital investment has also declined in a number of countries in the subregion. At the same time, debt servicing has diverted resources from social and capital investment. Social development through the promotion of inclusion, autonomy and empowerment, particularly among the most vulnerable, has thus been constrained by the inadequacy of resources for social investment in such critical areas as education, sanitation, health care and housing, the provision of safety nets and opportunities for regular income through decent work and the development of skills and competencies to reflect the future that the Caribbean wants. Still, social development is central to resilience-building and sustainable development with equality, not merely a contingent or derivative consideration.

As evident in the UNDP Human Development Index measures for Caribbean countries, the human development gains achieved over past decades in the subregion have begun to be eroded. In the Caribbean, as elsewhere, certain groups, such as youth, women, older persons and persons with disabilities, will bear the brunt of diminished access to, or lessened availability of, basic services.

The resetting of development strategies in the Caribbean subregion will need to reflect fully the important role of social development as a fundamental driver of inclusive development with equality, and must clearly establish progress in social development in the subregion as an expression of people's enjoyment of their human rights, to which all are entitled. To ensure this, the Caribbean subregion must address several critical social challenges. These include tackling poverty and inequality; unemployment, especially among youth; access to inclusive and equitable education; inadequate social protection; access to quality health and social care; and preparation for an ageing population. Gender disparities remain primary obstacles to an inclusive and resilient society, hence the importance of promoting gender equality as a central and cross-cutting issue.

A. Addressing poverty, social exclusion and inequalities

ECLAC has recorded significant progress in reducing poverty in the context of the wider Latin American and Caribbean region. Between 2002 and 2014 in the region as a whole, more than 50 million people were lifted out of poverty and almost 30 million out of extreme poverty, thanks in significant measure to countercyclical spending after the 2008–2010 global economic recession.⁶¹ However, ECLAC also notes that while the income-poor accounted for slightly more than 28% of the regional population in 2014, a much larger percentage—at 50.9%, more than half of the region's population—remain vulnerable to poverty. In fact, since 2015, the levels of extreme poverty in the region have started

⁵⁹ ECLAC (2017g) notes that social spending in the region attained its 'highest levels this century' in 2015, at 10.5% of GDP for central government and 14.5% of GDP for the public sector, calculated as a simple regional average. However, social spending budgets in 2016/2017 for a number of countries showed reductions in this area, raising concern regarding the potential impact on the population of social spending contraction in a context of low, albeit still positive, growth.

⁶⁰ See ECLAC (2009 and 2017h). Current expenditures (simple averages) were in 2000, 28.1% of GDP and in 2017, 26.6% of GDP for the Bahamas, Barbados, Belize, Guyana, Jamaica, Suriname and Trinidad and Tobago.

⁶¹ See ECLAC (2016e).

to rise, even though the poverty rate in most countries continued to decline.⁶² In the Caribbean, the Country Poverty Assessments (CPAs) conducted regularly by the Caribbean Development Bank have shown, despite data gaps, that high proportions of Caribbean populations live below the poverty line (see table 5).

Table 5
The Caribbean (10 countries): poverty rate by age group, various years
(Percentages)

Country	0–14	15–24	25–44	45–64	65+	All persons	Poverty line (dollars per adult male per year)	Year
Antigua and Barbuda	24.6	21.6	14.0	15.3	15.2	18.4	2 366	2005–2006
Belize	50.0	43.0	35.0	31.0	34.0	41.3	1 715	2009
Bahamas ^a	13.9	9.1	4.9	3.5	6.3	9.3	2 863	2001
Dominica	38.7	29.1	27.2	21.2	23.0	28.8	2 307	2008–2009
Grenada	50.8	47.7	33.0	24.8	13.3	37.7	2 164	2007–2008
Jamaica	20.2	18.6	11.9	14.0	18.7	16.5	...	2009
Saint Kitts and Nevis	31.3	28.0	17.6	10.9	10.6	21.8	2 714	2007
Saint Lucia	36.9	32.5	25.0	21.3	19.1	28.8	1 905	2005–2006
Saint Vincent and the Grenadines	38.1	36.1	28.0	21.7	18.8	30.2	2 046	2007–2008
Trinidad and Tobago	23.0	22.1	15.6	11.5	6.7	16.7	...	2005
Average (simple)	32.8	28.8	21.2	17.5	16.6	25.0	...	...
Average (population weighted)	24.1	21.9	15.1	14.3	15.6	18.8	...	...

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of F. Jones, “Ageing in the Caribbean and the human rights of older persons: twin imperatives for action”, *Studies and Perspectives series-ECLAC Subregional Headquarters for the Caribbean*, No. 45 (LC/L.4130; LC/CAR/L.481), Santiago, Economic Commission for Latin America and the Caribbean (ECLAC), 2016, country poverty assessments and surveys of living conditions.

^a Figures correspond to the following age groups: 5–14, 15–19, 35–54, 55–64, and 65 and over.

Data derived from CPAs over the years also provide a snapshot of the variations in national poverty levels among males and females. In all the countries for which data are available, poverty levels are higher in female-headed households (see table 6). For example, Saint Kitts and Nevis recorded a poverty rate of 28.1% for males and 33.1% for females in 2000. By 2008, the country had made good progress in lowering the prevalence of poverty and in narrowing and reversing the gender gap in poverty, with 21.5% of females reported as being poor compared to 22.2% of males. Similar trends were found in Saint Vincent and the Grenadines, where the female poverty rate of 39.5% exceeded the male rate of 35.2% in 1996. However, by 2008, the trend was reversed with figures of 29.4% for females and 31.0% for males (see table 6). Furthermore, available evidence highlights the fact that female-headed households are more likely to face additional burdens, especially where there are more occupants in the household, effectively raising the dependency ratio.⁶³

This much larger at-risk population, reflecting the multidimensional nature of poverty, is beset by vulnerability-inducing factors such as irregular employment, minimal assets and savings, indebtedness, lack of health coverage, inadequate or absent social protection, and insecure access to adequate housing.

⁶² See ECLAC (2018, pp. 79–80).

⁶³ See Stuart, Gény and Abdulkadri (2018, p. 23).

Table 6
The Caribbean (16 countries and territories): individual and household poverty rates, various years
(Percentages)

Country	Year	Persons			Households		
		Poverty rate (males)	Poverty rate (females)	Poverty femininity index ^a	Poverty rate (male head)	Poverty rate (female head)	Poverty femininity index ^a
Anguilla	2002	24.8	22.0	89	17.9	24.1	135
	2009	8.1	3.6	44	3.7	3.8	102
Antigua and Barbuda	2006	19.7	17.3	88	13.5	13.2	98
Bahamas	2001	9.1	9.6	106	3.7	7.4	199
Barbados ^b	1997	...	...	...	6.5	11.6	179
	2010	18.0	20.5	114	11.5	19.4	169
Belize	1995	32.8	33.1	101	23.6	30.5	129
	2009	42.0	40.0	95	32.0	29.0	91.0
British Virgin Islands ^c	2002	17.4	24.1	139	13.6	21.6	159
Cayman Islands	2007	1.7	2.1	124	1.1	2.0	178
Dominica	2002	23.2	23.2	100	14.6	16.7	114
	2009	28.8	28.9	100	...	...	...
Grenada	1999	32.7	31.5	96	22.3	25.3	113
	2008	39.5	36.2	92	21.6	29.5	137
Jamaica	1995	29.2	27.7	95	20.0	20.6	103
	2000	19.8	17.8	90	12.8	13.2	103
	2005	15.2	14.4	95	9.6	11.8	123
	2010	18.7	16.5	88	11.1	13.8	124
Montserrat ^d	2009	30.0	33.0	110	26.0	20.0	77
Saint Kitts and Nevis	2000	28.1	33.1	118	...	...	...
	2008	22.2	21.5	97	...	...	...
Saint Lucia	1995	25.5	24.7	97	17.4	20.4	117
	2006	30.8	27.0	88	22.0	21.2	96
Saint Vincent and the Grenadines	1996	35.2	39.5	112	27.9	34.1	122
	2008	31.0	29.4	95	...	...	...
Trinidad and Tobago	1998	23.7	24.4	103	17.1	21.4	125
	2005	17.0	16.5	97	10.0	13.1	131
Turks and Caicos Islands	1999	25.9	25.9	100	17.4	20.4	117

Source: S. Stuart, L. Gény and A. Abdulkadri, "Advancing the economic empowerment and autonomy of women in the Caribbean through the 2030 Agenda for Sustainable Development", *Studies and Perspectives series*, No. 60 (LC/TS.2017/128; LC/CAR/TS.2017/8), Santiago, Economic Commission for Latin America and the Caribbean (ECLAC), 2018; Caribbean Development Bank (CDB), country poverty assessments and national surveys of living conditions.

^a Poverty femininity index: poverty rate among women/poverty rate among men x 100.

^b The Barbados survey in 1997 used a different methodology to the other poverty assessments, so estimates of poverty are not strictly comparable.

^c The poverty rates and femininity index for households in the British Virgin Islands are based on data which distinguish between households with adult males and households with no adult males.

^d The poverty femininity index for Montserrat is calculated on the basis of data for persons aged over 15.

Data from studies completed recently by ECLAC⁶⁴ and CDB⁶⁵ show that significant factors influencing poverty and vulnerability in the subregion include the gender of the head of household, levels of education, occupation and sector of employment, size and composition of the household, number of household members employed, and the quality of housing. CDB also found that female-headed households were more likely to be poor, but with the added consideration that female-headed households in a union were even more likely to be poor than single female-headed households—due perhaps to frequently absent or non-contributing partners. Good-quality housing is important in reducing poverty and vulnerability because it serves, among other functions, to protect families and their assets from frequent disasters, while access to basic services, such as sanitation and piped water, reduces the incidence of poor health and the burden of health care on vulnerable families.

Both the housing stock and access to services tend to be better in urban than rural areas, or than areas that experience overcrowding, such as inner-city communities, underscoring the linkages between where people live and their likelihood of being poor. Furthermore, poor household heads are consistently less likely to be in decent work—i.e. employment with health and other benefits—and much more likely to have neither primary, secondary nor tertiary education, reflecting the importance of education and decent work in addressing poverty. There is a need to address poverty reduction in the Caribbean in a holistic manner, applying multidimensional measures to this serious issue that itself has multidimensional causes. In this regard, education is one of the most important measures in the fight against poverty and vulnerability.

In advocating a rights-based approach to equality, ECLAC has emphasized that the concept not only speaks to the distribution of monetary income in society, but rather “it includes enhanced capabilities and agency, and equality in the full exercise of citizenship; recognizing individuals as being equal and interdependent means also that policies must be applied to promote their autonomy and mitigate their vulnerabilities”.⁶⁶ This implies that governments should play a central role in promoting social and economic inclusion and accelerate the implementation of international and regional human rights and the development standards and agendas to which they have committed, to in order to ensure that all women and men are able to exercise and enjoy the full spectrum of their rights.

ECLAC notes that “persistently high levels of inequality and poverty incur not only personal costs for the individual, but also social and economic costs for society as a whole”.⁶⁷ In the same vein, the United Nations technical support team to the Open Working Group on Sustainable Development Goals observed that “intersecting inequalities reinforce the deprivations faced by specific groups and individuals, and are closely related to marginal status in society e.g. based on gender, ethnicity, location, age, disability and indigenous identity”.⁶⁸ In the Caribbean, the poor are likely to be poorly educated or uneducated and are generally engaged in elementary occupations, rural small-scale enterprises and informal sector activities.⁶⁹ This accords with the observation by ECLAC that structural heterogeneity is largely responsible for high levels of inequality in Latin American and Caribbean countries: production structures are heterogenous and, notably, low-productivity sectors account for more than half of all jobs in some countries.

Income is an important driver of “intersecting” inequality, and across the subregion there are significant disparities in this area, reflected, for example, in conspicuous differences in consumption levels. The CARICOM Secretariat’s database shows that for the period 2006–2010, the share of the

⁶⁴ See Stuart, Gény and Abdulkadri (2018, p. 24).

⁶⁵ See CDB (2016a).

⁶⁶ ECLAC (2014a, p. 17).

⁶⁷ *Ibid.*, p. 24.

⁶⁸ UNICEF and others (2013, p. 1).

⁶⁹ See CDB (2016a).

lowest quintile in national consumption ranged from a low of 1.6% in Antigua and Barbuda to 9.8% in Saint Vincent and the Grenadines.

Governments in the subregion are implementing a range of programmes to address poverty and inequality. These include cash transfer programmes, such as transfers to schools or families of children in need, public assistance programmes and national insurance schemes; in-kind programmes, such as school meals, food basket and medicines for those in need; active labour market policies, covering areas such as adult literacy, skills training, small business support; social care services for persons with disabilities, older persons and victims of abuse; and community-based programmes, such as disaster risk reduction funds. The subregion must now intensify these efforts and do so within the context of a broader thrust for continued and deepened social development, to which skills development and education, decent work and employment, and social protection and health care, are central. Both poverty and inequality are to a significant extent mediated through labour markets, and through the associated scope and quality of social protection, thus making both education and skills development, and decent work, that much more critical for social development in the subregion.

B. Advancing women’s empowerment and autonomy: an objective of sustainable social development and part of the solution towards achieving it

Women’s empowerment and autonomy are indispensable to the achievement of gender equality and represent the political and individual processes for the full exercise and enjoyment of their human rights. Benavente and Valdés (2014) describe empowerment as the process of becoming stronger and control over one’s life and autonomy is the status of being free and able to make decisions that affect one’s life, thus together form the complementary conditions for equality.⁷⁰ The concept of empowerment is essentially concerned with changing and transforming power relations. It is not something that can be bestowed by others but is a process of understanding and recognizing inequalities in power and rights and acting to bring about structural change in favour of greater equality through access to, and control over material resources as well as access to institutional structures. This includes providing women with access to credit, entrepreneurship training and business opportunities, as well as the means to generate income to enable them to better manage their economic situation.

A woman is economically empowered and autonomous when she has both the ability to succeed and advance economically and the power to make and act on economic decisions (Golla and others, 2011, p. 4). When women are empowered, their access to resources and opportunities such as jobs, financial services, education and skill development, property and other productive assets is increased. More critically, women’s economic empowerment transcends women themselves to benefit their family members and immediate communities, because women are more likely than men to invest their earnings in the health and education of family members, especially children in the household, as well as in community projects. Studies have found that where women control a greater share of household income, spending patterns change in ways that benefit children. As a result, children are healthier and better educated, and better prepared for the future.⁷¹ The 2030 Agenda acknowledges the critical links between inequality, social exclusion and poverty, hence the vision of the SDGs and associated targets is that of a world in which every woman and girl fully enjoys their human rights with no legal, institutional, social, economic and political barriers in order to effectively contribute to national sustainable development.

⁷⁰ See Stuart, Gény and Abdulkadri (2018, p. 16).

⁷¹ Ibid. p. 17.

The fullest possible development and engagement of the skills and capacities of women at the workplace and in the wider society, across all three pillars, is therefore essential for the successful implementation of the 2030 Agenda, in synergy with the Montevideo Strategy for Implementation of the Regional Gender Agenda within the Sustainable Development Framework by 2030, adopted by the Latin American and Caribbean countries at the thirteenth session of the Regional Conference on Women in Latin America and the Caribbean, held in 2016. Women's potential can be given full expression through recognition, mainstreaming and implementation of equality in rights and opportunities in all three spheres of their autonomy —physical, economic and decision-making⁷²— and, in the case of the Caribbean, especially by: (i) eliminating all forms of violence against women and girls, (ii) accounting for and improving the gender distribution of unpaid domestic work and care responsibilities, (iii) addressing inequity and disadvantages in the labour market and promoting entrepreneurship, (iv) improving sexual and reproductive health services, and (v) enhancing women's participation and leadership at all political levels in the subregion (see box 4).

Gender-based violence continues to be one of the major threats to the social and economic security and development of the Caribbean region. The Caribbean has one of the highest violence rates in the world, as emphasized in a recent study conducted by the Inter-American Development Bank.⁷³ The study concludes that there is relatively high tolerance of both intimate partner violence against women (see figure 15) and violence against children in the subregion.⁷⁴ In the past 25 years governments have made progress in the adoption of normative frameworks to address violence against women and girls, with the adoption of the Inter-American Convention on the Prevention, Punishment and Eradication of Violence Against Women and agreements of the Regional Gender Agenda. The ECLAC Gender Equality Observatory for Latin America and the Caribbean records 15 Caribbean governments as having laws on violence against women: Anguilla, Antigua and Barbuda, the Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, Montserrat, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname and Trinidad and Tobago.

Gender-based violence is a major challenge to the achievement of sustainable development with equality in the Caribbean. Addressing it will require the expansion and improvement of data sources and the compilation of records that facilitate the identification and classification of its varying manifestations.

Another, related structural challenge to be addressed is patriarchal cultural patterns and the predominance of a culture of privilege in the subregion that limits the enjoyment of all rights by women in their diversity (ECLAC, 2017f). Women who are victims of domestic violence tend to have low self-esteem, reduced social and political participation, weak interpersonal relationships and low productivity at work, which all limit their capabilities, life opportunities and options. This scenario of violence is also evidenced in migration patterns, where women and girls are most at risk in circumstances of trafficking and international organized crime. Caribbean countries need to redouble their efforts in fighting all forms of violence against women and girls, and in reducing gender gaps in the labour market. Policies that focus on strengthening women's agency by broadening their life options and introducing a life cycle approach look promising. Examples of these are efforts to provide pregnant teens with support to avoid school dropout and to facilitate young mothers' access to employment with a view to promoting participation in social and economic life (UNDP, 2016).

⁷² The issues aligned with each sphere include the right to a life free from violence and discrimination; sexual and reproductive rights; economic social and cultural rights addressing matters such as income and employment, education, science and communications technology, work and control of resources, unpaid work and care, access to credit and finance, social protection and security; civil and political rights, including issues such as, political participation and leadership, presentation and parity, migration, conflicts and peacebuilding; and collective and environmental rights, including land and territory, water and forests, natural disasters, climate change, urban and rural development, risk management and mitigation.

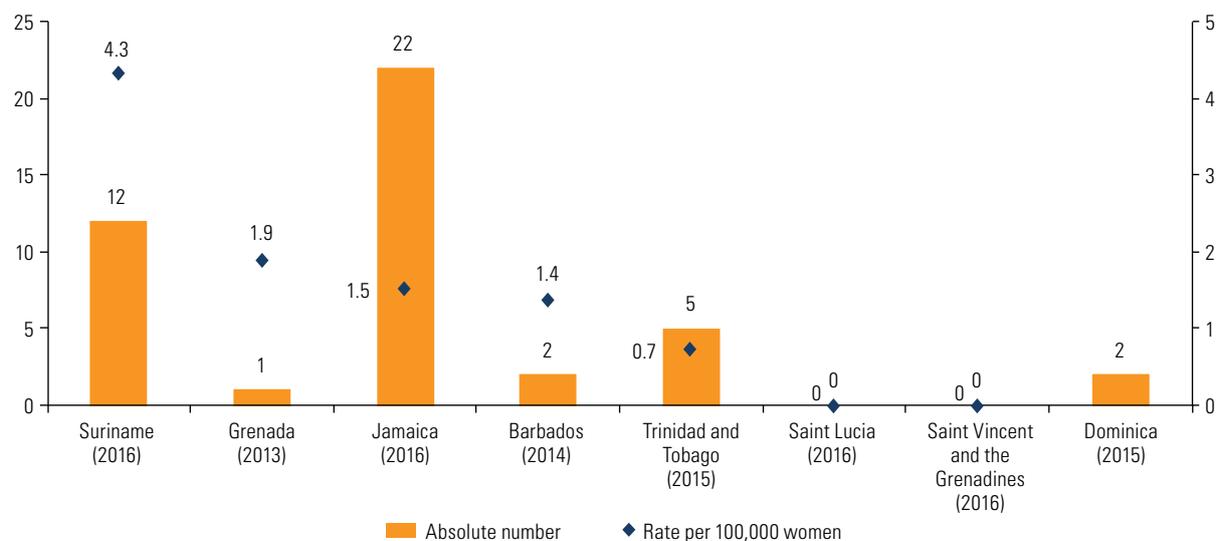
⁷³ See Sutton and Ruprah (2017).

⁷⁴ *Ibid.* p. 72.

Figure 15

The Caribbean (8 countries): women's deaths at the hands of their intimate partner or former partner, latest available year

(Absolute number and rate per 100,000 women)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), "Women's deaths at the hands of their intimate partner or former partner", Gender Equality Observatory for Latin America and the Caribbean [online] <https://oig.cepal.org/en/indicators/womens-deaths-hands-their-intimate-partner-or-former-partner>.

Regarding unpaid and domestic work, the unequal sharing of responsibilities between women and men in the care economy contribute to gender inequality. It has been reported that very little progress has occurred in the Caribbean subregion with respect to the recognition of women's contribution to national economies. Policies for childcare and parental leave could encourage more men to share domestic work. Only three countries in the Caribbean—the Bahamas, Dominica and the Cayman Islands—have policies on parental leave for both parents, but more research is needed to verify how many men have benefited from these policies and the extent to which they have facilitated women's access to economic activities. In addition, the Caribbean remains the only subregion yet to carry out a full-scale time-use survey to quantify unpaid work so as to comprehensively address entrenched inequalities linked to the gender division of labour within the household.⁷⁵ There is a need to measure time use and the distribution of unpaid domestic and care work within households and to design redistributive policies to break the cycles that lead to the disempowerment of women.

In this regard, self-employment and entrepreneurship for women should be supported in addition to policies and programmes aimed at improving their access to productive employment and decent work. It is important to develop and implement actions to support entrepreneurship for sustainable development, as the attached social values are still very low in the Caribbean. Caribbean female entrepreneurs face many challenges related to their intrahousehold responsibilities in the care economy and to other obstacles linked to finance and education. The financial obstacles are mainly linked to the fact that women are often excluded from the financial system, not having a bank account. They also have low levels of knowledge and awareness of financial products and services, including in rural areas, and in relation to requesting support for the establishment of agribusiness-related activities.⁷⁶

⁷⁵ See Stuart, Gény and Abdulkadri (2018, p. 26).

⁷⁶ Ibid, p. 37.

Box 4
Caribbean women's role in decision-making processes

The ability of both men and women to participate fully and equally in political and decision-making processes is a critical premise for achieving gender equality. In this context, the number of women holding ministerial cabinet positions is a direct expression of the political will to promote gender parity and the leadership shown by the government in that regard. With the exception of Cuba, Grenada, Haiti and Puerto Rico, women still account for less than 20% of cabinet members in the majority of Caribbean countries. The establishment of mechanisms that will guarantee gender parity should be promoted throughout the subregion to reflect the composition of society, strengthen democracy and accountability, and promote the mainstreaming of a gender perspective to ensure that the interests of both women and men are represented at all levels of government.

The Caribbean (16 countries): number of women in ministerial cabinet positions during the most recent term of office
(Percentages)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), Gender Equality Observatory for Latin America and the Caribbean

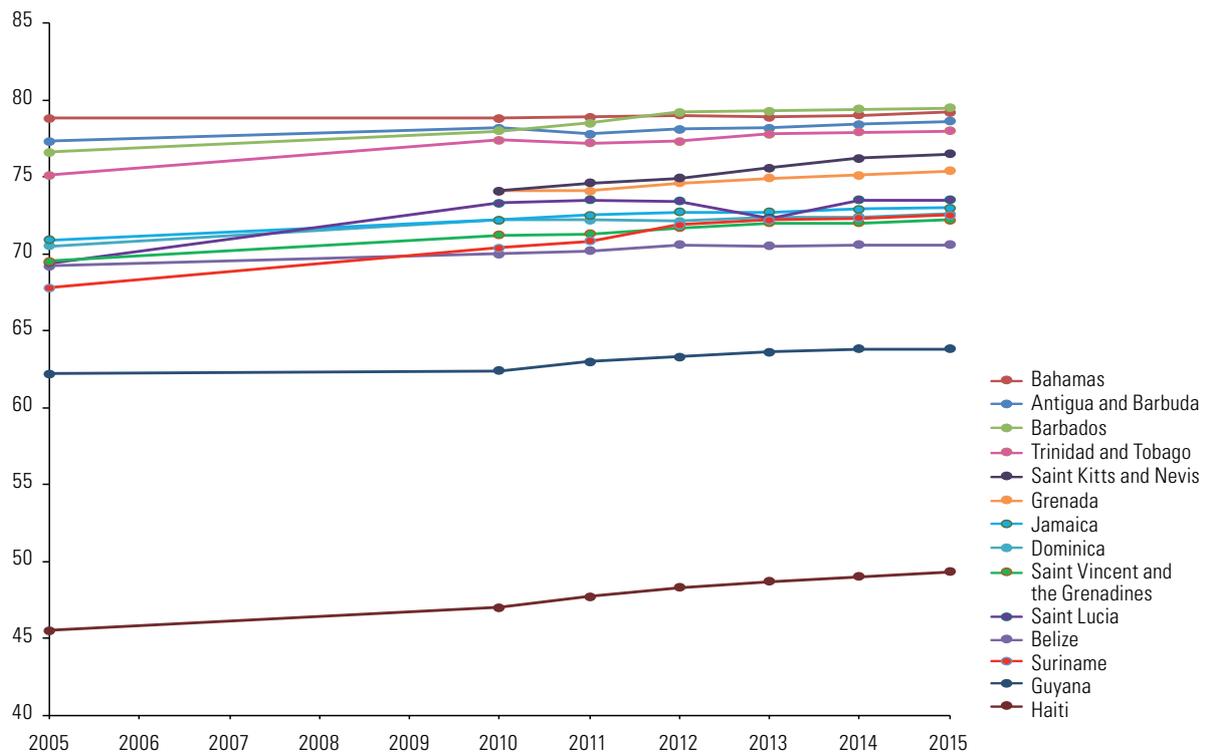
C. Human capital development, education and capacity-building as a central pillar of social inclusion and progress towards equality

Sustainable development with equality cannot be achieved without the alignment of human capital development, social empowerment, including women's autonomy, citizenship education policies and strategies, and an enabling institutional framework for people's participation. While human capital development policies and strategies are essentially focused on development of workers' knowledge and skills for current and future economies, social empowerment and citizenship education provide for the advancement of societally-conscious, informed and prepared individuals, families, communities that will make Caribbean societies more inclusive, equal and adjusted to their present and future needs. Such policies and strategies may be guided by a diverse set of social, demographic and politically motivated policy indicators, including country human development and competitiveness indices, literacy and numeracy indices, community distribution of citizen constituents, wealth, gender, age, health status, schooling and learning configurations and workforce education initiatives. Highlighted below

are the challenges and prospects linked to the Caribbean subregion’s provision of labour-market-ready, competency-based, inclusive and equitable education and training for both women and men.

Human capital development, including education strategies, can play critical roles in improving Caribbean competitiveness, which was identified as a major challenge to economic performance. While Caribbean countries have experienced a general decline in Human Development Index (HDI) rankings⁷⁷ over a five-year period leading up to 2016 (see figure 16) most still figure among high human development countries, with the exception of Guyana and Haiti, which fall into the medium to low human development category. However, within HDI, education, as a composite index, underperforms other human development factors, notably in Belize, Dominica, the Dominican Republic, Guyana, Haiti, Jamaica, Saint Lucia, Saint Vincent and the Grenadines and Suriname, where they are measured at medium human development. Like education rankings, literacy rates, particularly among youth and adults aged 15 years or older, score at the medium human development level for some countries, such as Belize, Guyana and Jamaica.

Figure 16
The Caribbean (14 countries): Human Development Index rank and performance, 2005–2015



Source: United Nations Development Programme (UNDP), *Caribbean Human Development Report: Multidimensional progress: Human resilience beyond income*, New York, 2016.

The human development rankings over the past five years may have a strong correlation with the subregion’s Global Competitiveness Index (GCI) as determined by the World Economic Forum (WEF). With the exceptions of Barbados, Jamaica and Trinidad and Tobago, the *Global Competitiveness Report 2016–2017* (WEF, 2016) shows that Caribbean countries lack the right mix of basic requirements (health and primary education), efficiency enhancers (labour market, higher education and training) and sophistication factors (technological progress, including ICT) to position their country competitiveness. This means that for

⁷⁷ See United Nations Development Programme (UNDP), “Human development data (1990-2015)” [online] <http://hdr.undp.org/en/data>.

Caribbean countries to become economically competitive, they will need to enhance the capacities of their human capital development and education systems by maintaining efficient social equity and protection policies for individuals while increasing quality and accessibility at all levels of education and training. Further, focusing on science, technology, engineering and mathematics (STEM) development, particularly for youths and adults is very important. At the same time, utilizing technology in the management and delivery of education and training systems would help to expand the opportunities for education and training.

1. Education systems: performance and quality issues

Within the past decade, Caribbean countries have steadily improved access at all levels in the education system. Prior to the United Nations Millennium Development Goals, most territories had achieved universal primary education and near universal secondary education. Table 7 shows the gross enrolment rates for all education levels in the Caribbean: although universal primary education and near secondary education have been achieved, with some exceptions, early childhood and tertiary education are way below the norms for developed and some developing countries.

Table 7

Caribbean Community: gross enrolment rates in education, average for 2008–2014
(Percentages of the population in the respective age group)

Country	Pre-primary age	Primary school age	Secondary school age	Tertiary institution age
Antigua and Barbuda	89	98	105	23
Bahamas	NA	108	93	NA
Barbados	79	105	105	61
Belize	49	118	86	26
Dominica	99	118	97	
Grenada	99	103	108	53
Guyana	66	75	101	13
Haiti	92	92	78	13.9
Jamaica	82	85	101	18
Saint Kitts and Nevis	60	100	88	14
Saint Lucia	78	105	103	NA
Suriname	96	113	76	NA
Trinidad and Tobago	83	106	86	12

Source: United Nations Development Programme (UNDP), *Human Development Report 2015: Work for Human Development*, New York, 2015.

The subregion's commitments under the Dakar Framework for Action on Education for All, adopted in 2000, increased policy actions to achieve universalization of access by 2015. However, while progress has been made in most territories over the past decade, recent economic challenges have triggered negative growth in educational access, especially in the tertiary education sector. The current fiscal challenges, which have cut subsidies to the higher education sector in a number of Caribbean countries, may impact enrolment rates, especially among the poor. The high rates shown in table 7 for Barbados, in particular, may be affected. Another alarming factor is the declining throughput rate towards completion of primary and secondary education; the further up the system, the lower the throughput rate. While adequate data are currently unavailable, it is known that the out-of-school population exceeds the in-school population.

Although Caribbean countries have fairly good primary and secondary education participation rates, results in examinations entries, sittings and performance scores over the past decade are somewhat disappointing. The pass-through rate to tertiary education in the Caribbean —currently about 15%— should necessarily serve as a benchmark to begin to approach levels in the developed world, which are now more than twice the level of that in the Caribbean.⁷⁸ Only about 30% of the eligible age cohort in the subregion sit the Caribbean Secondary Examination Certificate (CSEC) annually and, of this

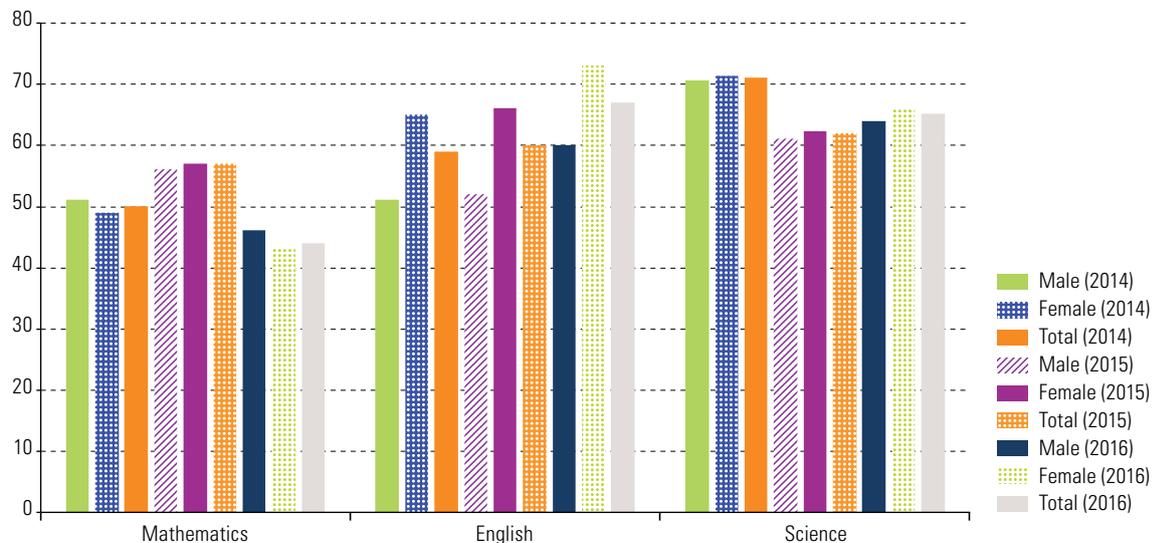
⁷⁸ Enrolment of 19-year-olds in tertiary education averaged 33% in OECD countries in 2015, and was as high as 73% in the Republic of Korea.

group, only about 25% achieve five passes or more, including in mathematics and English language, the baseline for entry into tertiary education.⁷⁹

Notably, data for two consecutive years (2015 and 2016) from the Caribbean Examinations Council (CXC)⁸⁰ show that only about 23% of students who entered the final CSEC examinations actually took them and, of this number, roughly 65% achieved pass grades. This low examination uptake rate is reflective of the degree of unpreparedness of students for all subjects. Even more noteworthy are the declining CSEC pass rates over the same two-year period in mathematics and most sciences. While there has been a slight increase in the number of students passing the CSEC English language exams, only 15%-17% of all students entered to sit CSEC English language at the general proficiency level have succeeded in this component of the exam.

To compound the issue, boys are underperforming relative to girls (see figure 17). In Barbados, Jamaica, the OECS countries and Trinidad and Tobago, girls comprise as many as two thirds of those sitting final examinations. Similar results are noted in performance, indicating that boys are undersubscribing for most subjects with minor exceptions in technical skills-based subjects, and underachieving in them. For English language, for example, of the 15%-17% successfully completing the CSEC examinations, around 10–11 percentage points represent girls and less than 5-6 points represent boys. Figure 18 illustrates the differences in passing performance in the CSEC final examinations for three consecutive years (2014–2016) among boys and girls for English language, mathematics and science.

Figure 17
The Caribbean (16 countries):^a candidates achieving general proficiency grades^b in the Caribbean Secondary Education Certificate (CSEC), 2014-2016



Source: Caribbean Examinations Council (CXC), *CXC Annual Report 2014*, St. Michael, 2014; *CXC Annual Report 2015*, St. Michael, 2015; *CXC Annual Report 2016*, St. Michael, 2016.

^a Anguilla, Antigua and Barbuda, Barbados, Belize, British Virgin Islands, Cayman Islands, Dominica, Grenada, Guyana, Jamaica, Montserrat, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Trinidad and Tobago, and Turks and Caicos Islands.

^b Grades I-III.

It is also important to note that two thirds of students enrolled across the campuses of the University of the West Indies in 2015/2016 were women and this trend, ongoing for some time, will likely continue with higher tertiary enrolment. If the Caribbean educational system is not yet fully fit for purpose, then its shortcomings and remedies must also be viewed through the lens of gender, since women are the primary demanders and consumers of educational services in the subregion, both for themselves, and

⁷⁹ See CARICOM (2017, p. 23).

⁸⁰ See Caribbean Examinations Council (CXC), "CSEC results 2016", St. Michael, 26 August 2016 [online] <http://www.cxc.org/csec-results-2016/>.

in families, on behalf of their children. The failure to equip students for the workplace in the subregion is therefore largely a failure to provide women with relevant and employable skills. It is therefore important to recognize that women's achievement in education has not yet been translated into commensurate achievement in the workplace; women continue to have lower-paying jobs and earn less than men (see chapter I). Furthermore, it is also important to bear in mind that, as noted by CDB (2016a), at the lower end of the consumption quintile a significant number of women have been found to have no education. In the case of Saint Kitts and Nevis, for example, 43% of women in the lowest quintile had no educational qualification compared to 28% in the general population.⁸¹

It may be deduced that primary and secondary education intake, completion and student performance rates, as well as adult literacy data in Caribbean countries, may have a cause-effect relationship with medium-to-high education human development indices that are characteristic of high- and medium-ranked developing countries. Similarly, tertiary education enrolment and graduation statistics present a compelling argument of why there may be a mismatch between labour market efficiency as seen in workers' competencies and skills and country economic competitiveness reflected by GCI rankings.

The situation is worse in disaster-affected countries in the subregion. While pertinent data have not been validated from countries recently ravaged by Hurricanes Maria and Irma in 2017, it is estimated worldwide that less than 5% of children aged 3-5 years are enrolled in early childhood education after such disasters.⁸² It is also estimated that more than twice as many girls as boys are likely to be out of school, with more than 90% of girls out of secondary school,⁸³ after conflicts or disasters strike, making girls in particular very vulnerable in such circumstances. This presents a serious challenge for policymakers called upon to consider rebuilding education systems, and for governments in general.

The issue of quality in education and training for children and youth is also deserving of attention. The establishment of SDG 4—ensure inclusive and equitable quality education and promote lifelong learning opportunities for all—has increased global monitoring of the attainment of learning outcomes with an emphasis on reading and mathematics proficiencies. The United Nations Educational, Scientific and Cultural Organization (UNESCO) has revealed the startling fact that, globally, every 6 of 10 children and adolescents, whether in school or not, are not learning and that the situation is gravest in reading (literacy) and mathematics.⁸⁴ In Latin America and the Caribbean, more than 50% appear not to be meeting minimum proficiency levels by the time they leave lower secondary school; a situation near equal between boys and girls. This matter progresses into youth experience and so creates an even greater problem when youth are seeking to engage in further education, training and employment. Urgent attention is needed to ensure that development programmes and skills training options for children and youth adequately ensure improvement in learning attainments in literacy, mathematics and science.

These results, which show relatively high failure rates and proficiency deficiencies among students entering the education system, and the high in-and-out-of-school adolescent and youth populations constitute clear evidence of a failing education system in the Caribbean. The data suggest that the Caribbean education system, of which certifying and examinations bodies that design curricula and administer learning assessments are an integral part, urgently need reform. The models and approaches for learning and human development are now obsolete and must be radically changed if the subregion is not to continue producing poor student performance results, ultimately expressed in social disharmony and economic regression.

2. Resourcing issues for education systems

As reflected in figure 18, Caribbean countries have spent about 4%–6% of their GDP on education, with less than 1% being devoted to tertiary education. This spending varies, however, from country to country. Despite significant investment in education, there is inefficiency with respect to outcomes and use of public resources.

⁸¹ See CDB (2016a, p. 33).

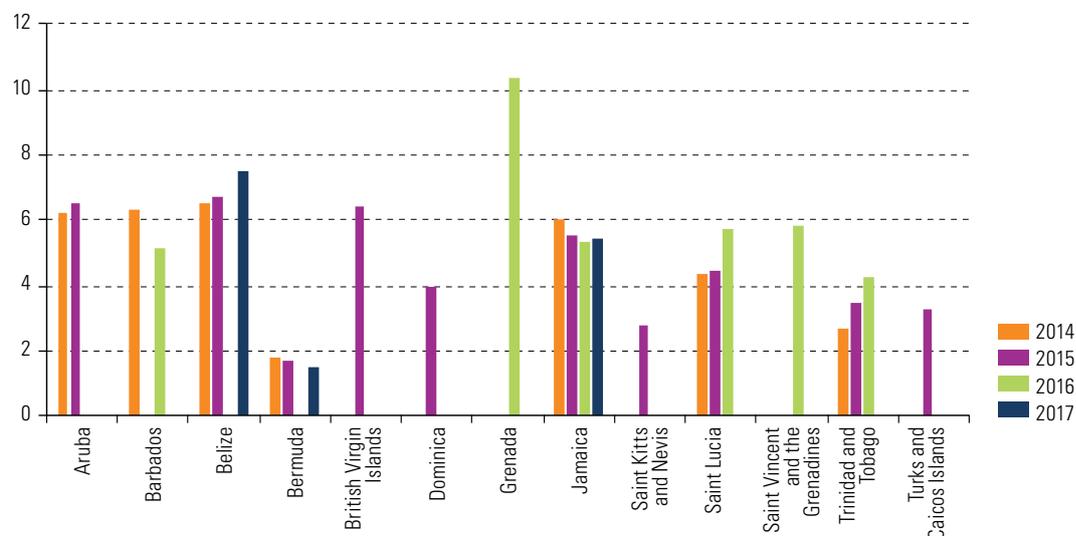
⁸² UNESCO (2016, p. 428).

⁸³ UNESCO (2015, p. 3).

⁸⁴ See UNESCO (2017).

Figure 18

The Caribbean (13 countries and territories): government expenditure on education, 2014–2017
(Percentages of GDP)



Source: UNESCO Institute for Statistics (UIS), UIS.Stat [online database] <http://data.uis.unesco.org/>.

Efficient management of education finance is not the only issue faced by developing countries in their education and training systems. Many countries have also not efficiently managed school infrastructure repairs, upgrades and construction, in addition to deployment and use of ICTs and learning resources such as textbooks. Another concern is the issue of teacher underpreparedness and teacher shortage. Recruitment and training has become a challenge, given that an already insufficient number of qualified teachers at primary and secondary levels has been exacerbated by increasing teacher migration, lured mainly to the higher-quality education systems of North America, the United Kingdom and Europe.

3. Delinquency issues facing education and human capital development

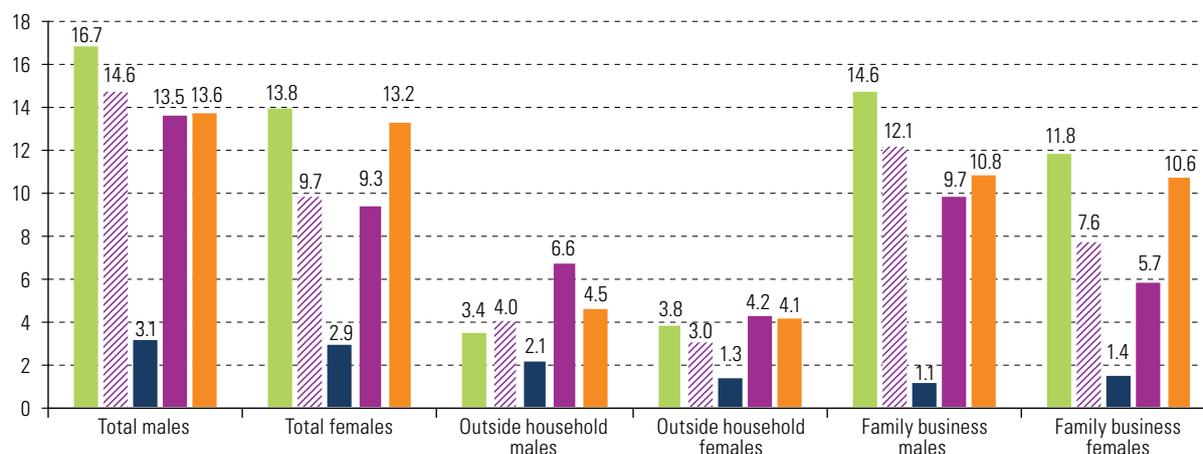
While literacy challenges among children and youth continue to be a pressing problem for Caribbean societies, negative in-school experiences exacerbate literacy and other learning issues during schooling. Underachievement is commonplace where students encounter exclusion and marginalization as part of the school experience (World Bank, 2003). Accordingly, such students frequently drop out of school because they are no longer encouraged to have a true sense of belonging and therefore participation in curricular and co-curricular activities dwindles. To compound the situation, youths who are in school and exposed to violence in their communities in countries like Jamaica and Trinidad and Tobago have a tendency to demonstrate low school attendance and ultimately lower performance. UNDP (2012) has reported that in 2010 low-performing students resided in communities with murders (20%), shootings (29%), rapes (16%), gang violence (44%) and other criminal activities.

The prevalence of community-based crime has now become a major concern for Caribbean countries. Students who are troubled by community violence and display antisocial behaviour in school, may receive corporal punishment because it is viewed as permissible and appropriate (ECLAC, 2007). This only cultivates a harsher school experience for these students who develop delinquency problems and so revert to a harsher community destined to contribute their share to social ills. These students' poor performance and achievement are manifested in progressively negative futures for them, such as a life of unemployment or drug abuse, among others (UNDP, 2012).

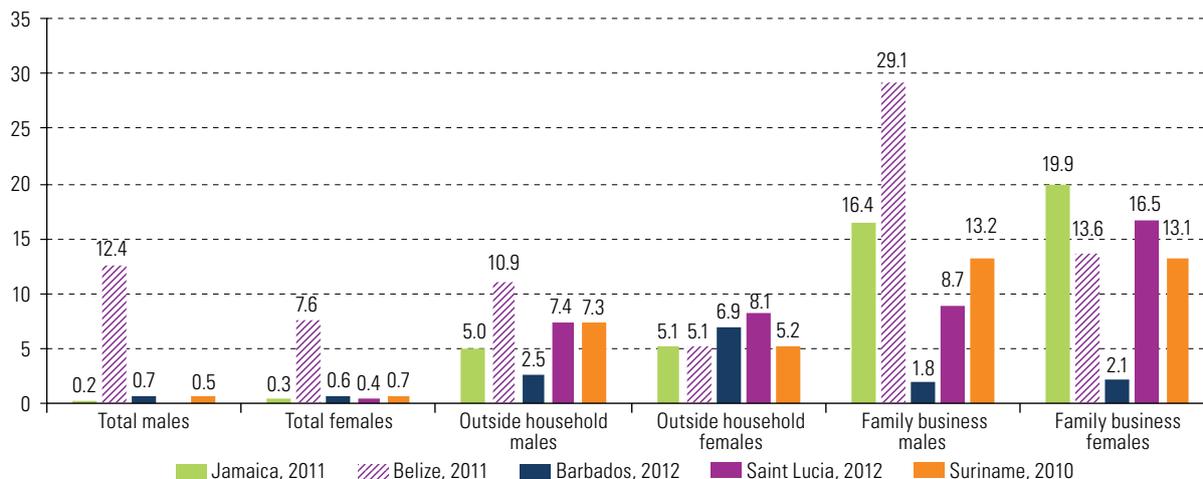
Another major issue is that out-of-school children and youth are exploited for labour in the informal sector (see figure 19). Statistics from the United Nations Children’s Fund (UNICEF) have revealed that, while work in the household and family-owned businesses by both boys and girls aged 12–14 has been a growing concern, in fact this trend has been extending to the 5–11 age cohort in countries like Belize, Jamaica, Saint Lucia and Suriname. There are two issues concerning child and youth labour in the informal sector. On one hand, children who are both in school and making a living for themselves and their families may drop out of school because of their pressing commitments and desire for earnings. On the other, individuals who may already be out of school may turn to informal illegal activities for the sake of income. These situations can only create further problems for children and youth education and future employment, their families’ income potential and the wider society where they may become delinquent and contribute to social deviance and criminal activity.

Figure 19
The Caribbean (selected countries): child labour by sex and type of work, age groups 5–11 and 12–14, various years^a
(Percentages of all children in age group)

A. Children aged 5–11



B. Children aged 12–14



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from the United Nations Children’s Fund (UNICEF) and official figures from the respective countries.

^a On the basis of multiple indicator cluster surveys (MICS).

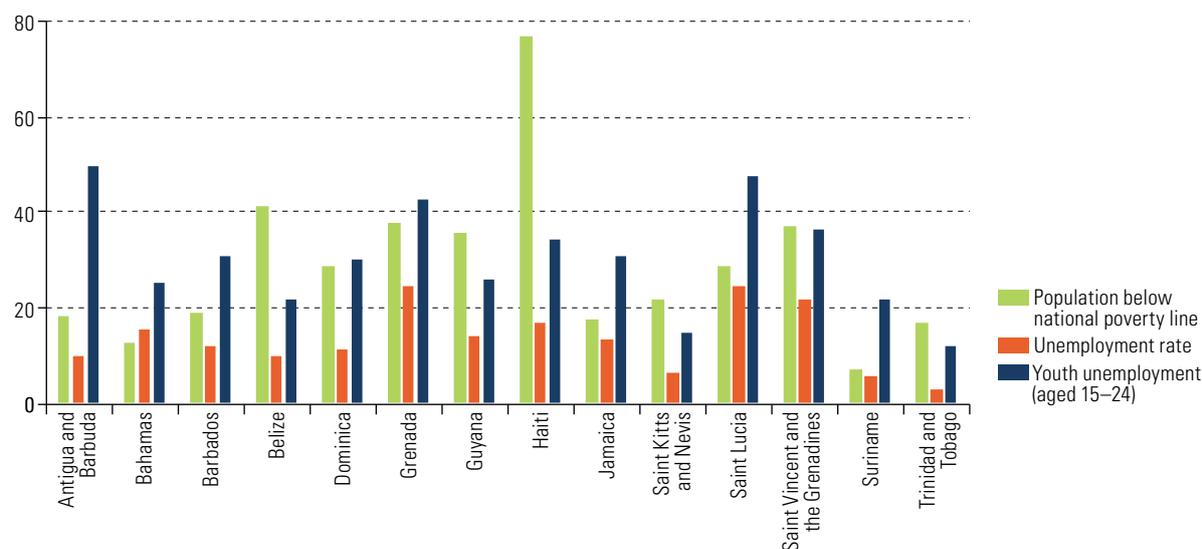
Youth underemployment and unemployment are also major contributors to the lessened interest in schooling. Youth attending both secondary and tertiary education institutions have shown disenchantment with the present economic realities and lack of jobs, so are less and less inclined to pursue further education and training (CARICOM/University of the West Indies/Centre for Gender and Development Studies, 2008). This scenario of joblessness, lack of further education and skills development and general societal disinterest introduces further delinquency which can be expressed in violence, crime, drug abuse and mental illness.

4. Workforce mobility and development: labour market and employment issues

While young people face education challenges to remain in school, attain basic literacy, mathematics and scientific proficiencies and gain overall competencies to demonstrate performance at secondary and tertiary education levels, an increasing gap between the workforce demands and education provisions looms large. Stagnant economic growth, especially since the global crisis, has resulted in high levels of unemployment. It is important to note that although unemployment rates have fallen slightly in the subregion in the past few years (in the most recent yearly figures, from 7.8% in 2016 to 7.4% in 2017), they remain very high (ILO, 2017).

The contracting workforce, characterized by increasing job loss and limited job creation, has mostly affected women and youth, making them more vulnerable in society (Kandil and others, 2014). Bourne, among others, including ECLAC, have pointed out that the employment situation in the Caribbean is woefully inadequate and that unemployment is higher among those under age 25 and among women (Bourne, 2014). Youth unemployment rates have been rising for over a decade and have reached alarming levels. In fact, a CDB study found that the average youth unemployment rate was nearly 25% for the countries in the Caribbean for which data were available—more than three times the adult rate of 8% (CDB, 2015b). Gender differences were evident, with young women experiencing unemployment rates of over 30%, compared with 20% for young men. Importantly, it was estimated that youth unemployment cost countries of the subregion on average 1.5% of GDP annually: the cost to Belize—which in 2016 had the largest proportion of its population aged between 10 and 24, except for Haiti—was highest, at 2.8% of GDP. More recent data show continuing high youth unemployment rates, at 32.4% in Barbados, 32.8% in Jamaica, and 8.4% in Trinidad and Tobago (see figures 20 and 21).

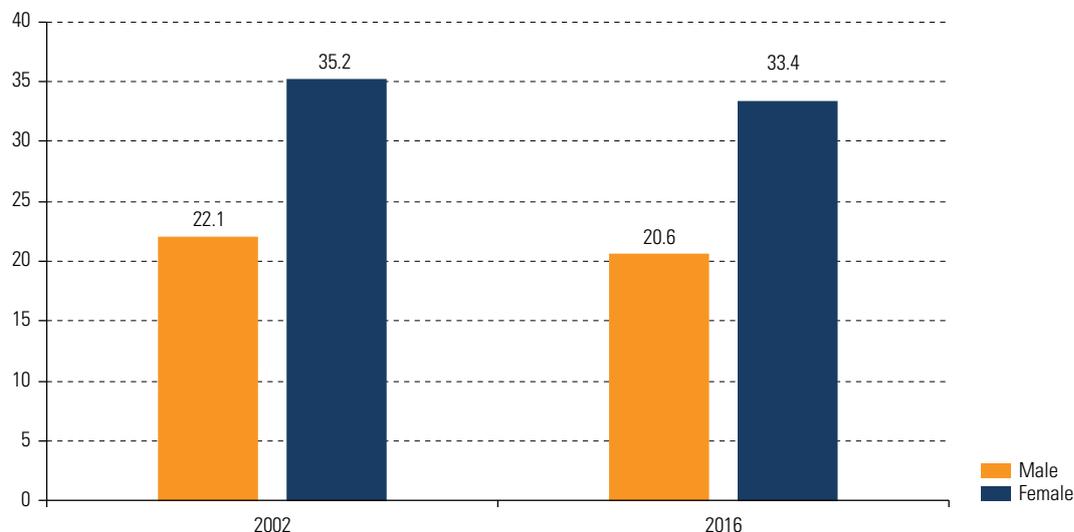
Figure 20
The Caribbean (14 countries): population below national poverty line, unemployment rate and youth unemployment (Percentages)



Source: United Nations Development Programme (UNDP), *Caribbean Human Development Report: Multidimensional progress: Human resilience beyond income*, New York, 2016 and World Bank, "World Development Indicators" [online database] databank.worldbank.org/data/databases.aspx.

Figure 21

The Caribbean (10 countries):^a unemployment rate by sex, population aged 15–24, 2002 and 2016
(Percentages)



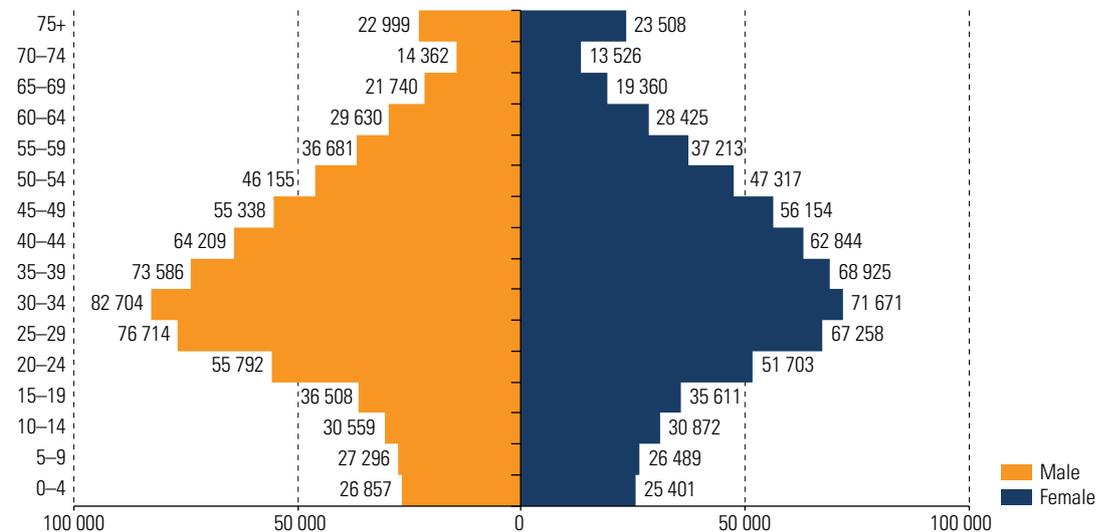
Source: Economic Commission for Latin America and the Caribbean (ECLAC), *Linkages between the social and production spheres: gaps, pillars and challenges* (LC/CDS.2/3), Santiago, 2017.

^a Simple average for Bahamas, Barbados, Belize, Guyana, Jamaica, Saint Lucia, Saint Vincent and the Grenadines, Suriname and Trinidad and Tobago.

The Caribbean workforce, comprising mostly secondary school graduates, with fewer tertiary education graduates, faces numerous challenges in its social demographics, knowledge potential, skills capacity and job diversity. However, some countries fall short of even this level. A 2014 study of Belize by the International Monetary Fund (IMF) found that approximately 75% of the Belizean workforce in 2012 comprised workers at or below primary education level only, with 90% of its employment in the private sector. This represents a grave situation for the workforce, especially where highly skilled labour and knowledge workers may be needed to transform the Belizean economy. In some countries, public sector employment (OECD, 2017, p. 72) accounts for the largest share of the workforce, as in Barbados (17.2%) and in the Eastern Caribbean States. At the same time, jobs in the public sector are essentially slow to change in their diversity, functions and competency requirements.

Individuals of the subregion are no longer considering only local and national job possibilities but are seeking out global job opportunities as they prepare for their careers. There has been recognized subregional progress in some areas, such as certification and benchmarking for secondary education in the Caribbean; the development of Caribbean Vocational Qualification (CVQ) based on regionally agreed occupational standards; the development of a CARICOM Qualifications Framework, to facilitate mobility of students and graduates seeking further education or employment; and the establishment by several CARICOM member States of national accreditation bodies which will serve to facilitate the establishment of a regional tertiary accreditation system, now under discussion.

However, the increased mobility of professional workers, especially in nursing, allied health, teaching and engineering professions to more developed nations has resulted in a shortage of qualified labour in critical sectors. The net migration rate of Caribbean nationals (ECLAC, 2006) has generally been one of the highest globally. When immigration and emigration data are combined (see figure 22) the proportions differ greatly depending on the population size, with major impacts on smaller territories. For countries with less than 100,000 inhabitants, where the highest proportions are seen, 42% of the native-born population lives abroad, while one third of inhabitants are immigrants (see figure 23). In addition, a slight majority of the total immigrant population are males (51.3%), particularly in the 25–39 age group. This means that future job markets are losing their demographic dividend and possibly a significant share of skilled and higher-productivity young labour (Mejía, 2017).

Figure 22The Caribbean (30 countries and territories):^a total immigrants by sex and age group, 2015

Source: W. Mejía, “Outlook on international migration in the Caribbean: executive summary. Draft version subject to change”, Economic Commission for Latin America and the Caribbean (ECLAC)/International Organization for Migration (IOM), Santiago, August 2017 [online] https://www.cepal.org/sites/default/files/events/files/caribe_resumen_ejecutivo_v1_eng_ow.pdf.

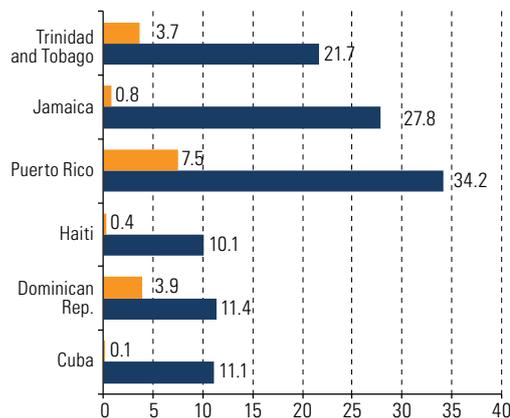
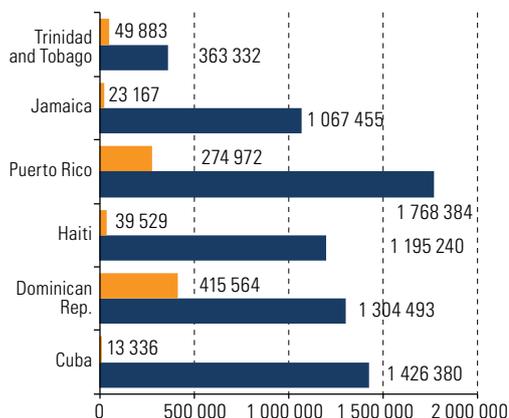
^a Anguilla, Antigua and Barbuda, Aruba, Bahamas, Barbados, Bonaire, British Virgin Islands, Cayman Islands, Cuba, Curaçao, Dominica, Dominican Republic, Grenada, Guadeloupe, Haiti, Jamaica, Martinique, Puerto Rico, Saba, Saint Barthélemy, Saint Kitts and Nevis, Saint Lucia, Saint Martin, Saint Vincent and the Grenadines, Sint Eustatius, Sint Maarten, Trinidad and Tobago, Turks and Caicos Islands, and United States Virgin Islands.

Recent ECLAC studies have also drawn attention to the high level of migration of educated and skilled persons from the Caribbean, and especially of women (Platonova and Gény, 2017). Data for 2010/2011 indicate emigration rates of the tertiary educated population at 93% for Guyana, 75% for Haiti, 68% for Trinidad and Tobago, 66% for Barbados, and 48% for Jamaica (Platonova and Gény, 2017, p. 13). In addition, data show that among immigrants to the United States, those from English-speaking countries tend —because of the language, higher income levels and lower poverty rate of their home countries— to have higher education levels.

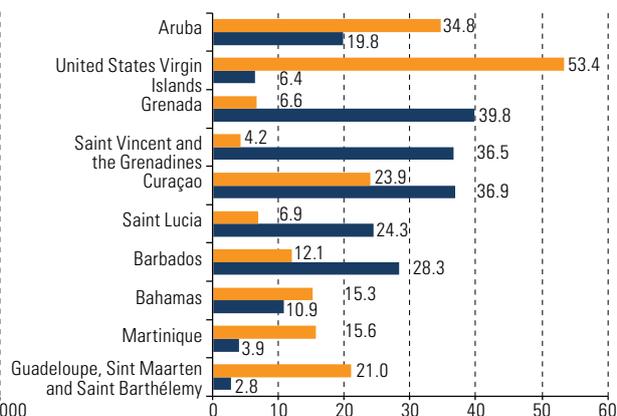
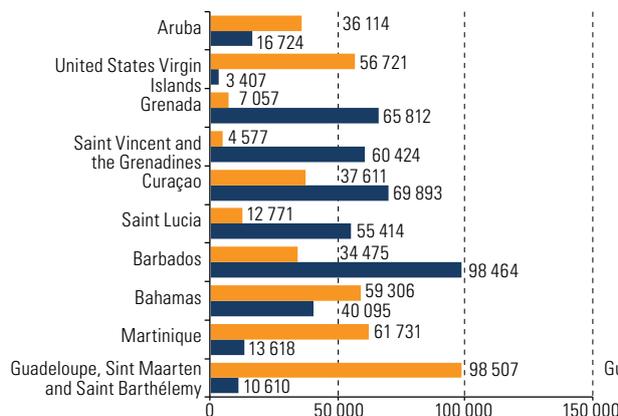
The World Bank reports that between 2002 and 2006, more than 1,800 nurses left the Caribbean for higher-paying jobs abroad, mostly in the Canada, the United Kingdom and the United States (World Bank, 2010, cited in Platonova and Gény, 2017). In Jamaica, about three of every four locally trained nurses have migrated to developed countries due to poor remuneration, lack of opportunities in education and training, violence and stressful working conditions. In the United States, 17% of foreign-born health-care workers residing in the country in 2010 came from the Caribbean (MPI, 2012 cited in Platonova and Gény, 2017, p. 20). While this is not unique to SIDS, the Caribbean emigration rates for trained individuals is relatively high. This includes emigration of highly skilled women and youth, to countries with high Caribbean diaspora populations. Several reasons have been cited for high emigration rates including; poor working conditions, inadequate remuneration and benefits commensurate with qualifications, underutilization of skills and insufficient training and career progression opportunities. OECD (Misha, 2006) points to above 50% of highly skilled (tertiary educated) migrants leaving some of the poorest countries in the region such as Haiti and Guyana. In some instances, as many as 70% of the workforce with complete secondary schooling has left the region for OECD countries. While emigration of the skilled is a challenge, especially in response to negative income shocks, policies to encourage diaspora engagement beyond remittances offer an important opportunity to benefit from this group (Alleyn and Solan, 2018).

Figure 23
The Caribbean (selected countries and territories): immigrants and emigrants, population and relative weight, 2015
(Number of persons and percentages)

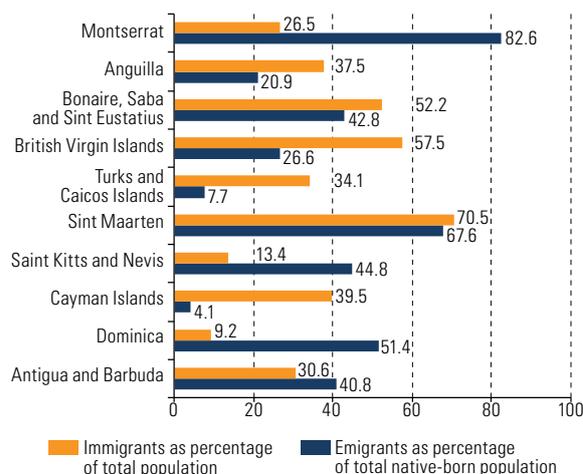
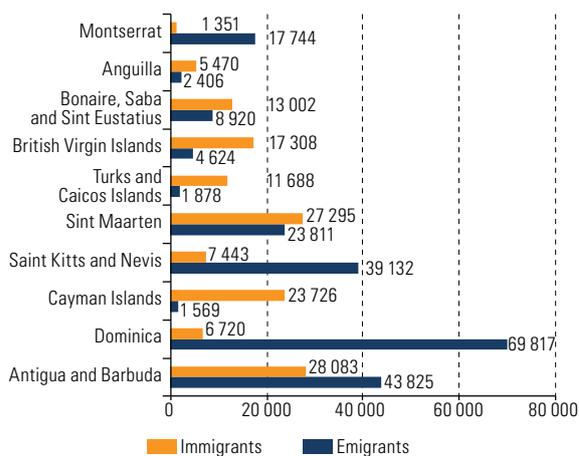
A. From 1 million to 12 million inhabitants



B. Between 500,000 and 1 million inhabitants



C. Less than 100,000 inhabitants



Source: W. Mejía, "Outlook on international migration in the Caribbean: executive summary. Draft version subject to change", Economic Commission for Latin America and the Caribbean (ECLAC)/International Organization for Migration (IOM), Santiago, August 2017 [online] https://www.cepal.org/sites/default/files/events/files/caribe_resumen_ejecutivo_v1_eng_ow.pdf.

Considering the spin-off from the fourth industrial revolution, knowledge economies require greater cognitive and creative abilities and technical proficiencies in their workforce. The ILO Future of Work Initiative⁸⁵ and the WEF report *The Future of Jobs* (WEF, 2016) signals major disruptions in the global and regional economy with anticipated new business models and approaches to doing work to be achieved by 2020. It suggested new and emerging jobs that will require new and different skill sets adopted in different ways by both men and women. The knowledge worker must be emotionally intelligent, culturally adaptable and technically skilled with appropriate knowledge. The report identifies drivers of industrial change, the top three being climate change, flexible work and new technologies. These drivers will impact industries' pace of growth and jobs created.

The WEF report further identifies certain job families as having potential for growth while others may remain stagnant. For example, architecture and engineering and computer and mathematical job families will show strong employment growth while manufacturing and production jobs and those in office administration will show decline. In fact, the report has predicted that artificial intelligence and machine learning jobs will outpace the job families of education and training and legal, business and financial operations. Additionally, future jobs require rapid and unprecedented changes to knowledge in subjects or disciplines. It is estimated that 50% of the current core curriculum developed in formal qualifications at four-year degree programme levels will be outdated and challenged by technological developments. Similarly, technical skills and work-ready competencies which will be required for job success in the new economies will undergo significant changes. These knowledge, skill and competency changes for the jobs of the next five years are to be quickly absorbed in the learning outcomes of curricula, not just at the tertiary level but also at the secondary and, where possible, primary education levels also.

The curriculum reality in the Caribbean is not necessarily one that has considered the future of jobs as it often lacks flexibility and creativity. Knowing these challenges, schools, certifying bodies and tertiary education institutions in the Caribbean may need to make a greater effort in rapidly changing curriculum to respond to these global skills and competency requirements in order to prepare graduates for the emerging global workforce demands.

5. Prospects for Caribbean human capital development and related strategies

Sustainable Development Goal 4 of the 2030 Agenda for Sustainable Development addresses the critical issues of quality education and lifelong learning. In this context, the Caribbean Human Development Index and GCI data demonstrate why locating human capital development, social empowerment and education strategies within a broader human development framework are important to achieving the SDGs. An ecological systems approach in human development is what is required for rethinking and remodelling education and training systems to make them more efficient. This approach integrates sector management modelling and incorporates macroplanning technology tools for reducing national resource wastage, improving competency-based learning outcomes in and out of school and enhancing overall education and training systems and individual performance. There are four levels in the ecological systems approach which impact on learning by children (as well as youth and adults) namely: (i) public governance or the rule of law and effectiveness of public policies; (ii) historical antecedents and the organization of society including the community; (iii) family structures, role modelling and practices; and (iv) the educational community with the school environment as a place of learning and empowerment. The ecological systems theory proposed by Bronfenbrenner (Darling, 2007) locates the child and youth

⁸⁵ International Labour Organization (ILO)/Sir Arthur Lewis Institute of Social and Economic Studies (SALISES), *The future of work in the Caribbean: What do we know? What do we need to know? ILO/SALISES Research Consultation*, December 2017 [online] http://www.ilo.org/wcmsp5/groups/public/---americas/---ro-lima/---sro-port_of_spain/documents/genericdocument/wcms_614940.pdf.

in terms of their social relationships, within this human development system. National and institutional structures, policies, strategies, financing models and curricula now need to explore a more holistic model for thinking about learning and its impact on society and the economy. One approach is adopting a curriculum continuum or seamless system where learning is matched to human development needs from the early childhood to tertiary education and skills development levels are mapped, learning and performance gaps captured and addressed and human empowerment is stimulated. This system reduces duplications and ensures greater efficiency in public spending and accountability.

The CARICOM Human Resource Development 2030 Strategy⁸⁶ has focused on creating a seamless human resource development system. This system proposes to create unhindered synergies and linkages from early childhood all the way through tertiary education and workplace skills development in a lifelong learning context. It adopts the CARICOM Qualifications Framework (CQF) as an important tool to enable governments, awarding bodies such as the Caribbean Examinations Council and schools and institutions of higher learning to develop, administer and award qualifications pegged against approved and standardized learning outcomes of national, regional and international currency. The framework is also designed to establish a level playing field between the traditional academic education provided and technical and vocational skills training that has not received equal recognition for decades. In the seamless system, all learning institutions must introduce competency-based education and training (CBET) so any assessment will be based purely on achievement of the competencies specified in the curricula learning outcomes that are aligned with CQF or its national equivalent.

Dysfunctional education and training systems in the Caribbean, including outdated schooling models, can be re-conceptualized to include open and innovative schooling and de-schooling (or alternative schooling) designs within the human development framework. Belize and Suriname have embraced open and innovative schooling; each has established one such school as a test case to reach out-of-school learners. While alternative or home schooling has not been embraced in the mainstream across the subregion, useful practices have been recorded in Jamaica and Trinidad and Tobago. Newer disruptive school models may be learning-centred, technology-outfitted, cost-efficient, resource optimal and environmentally sound learning spaces and established within broader institutional structures in education systems. Heavier emphasis can be placed on choice and flexibility in learning resources, online and digital learning processes and automations such as learning management and administrative systems to equip the twenty-first century teacher and learner as future employers as well as creating more safety nets for socially displaced and disenfranchised learners who normally lack adequate learning access and support within traditional schools.

Other than schooling and institutional structures, there are obvious challenges with institutional leadership and management practices. For example, several regional and national universities and colleges have continued to operate using traditional management models but make incremental yet sometimes unsustainable changes that do not really challenge the educational systems in the subregion (Ezenne, 2010). There is a tendency to want to retain older bureaucratic structures, models and lecture-type modalities for learning delivery, whereas the twenty-first century learning model has evolved drastically to include service-centred, leaner business models, work-based learning approaches adopting stronger industry alliances and open, online and distance-learning instead of classroom-based instruction. Massive open online courses (MOOCs) and open educational resources (OERs) pave the way for increasing access to tertiary education through shorter certifications and ready-made licensed educational materials to support the curriculum. Adoption of learning mode changes are more cost effective and provide for lower cost to students. The methods for delivery of education and training—largely classroom-based pedagogy in schools, vocational learning spaces and tertiary education

⁸⁶ See CARICOM (2017).

institutions— should be reconsidered. These would obviously have implications for quality management and assurance mechanisms in service-centred institutions (Ali, 2015). Presently, while there are external quality assurance bodies in the region overseeing establishment and monitoring institutional quality, there are some capacity challenges with the bodies to perform routine due diligence and ensure system accountability. It stands to reason that policy and strategic choices need to dictate rapid restructuring of institutions, systems and models to accommodate what is now needed.

Another issue facing dysfunctional education and training systems is the lack of access to verifiable accurate information on students' learning and performance (Ministry of Science, Technology and Tertiary Education, 2005). One challenge is poor qualifications mapping and articulation so that performance data from school-to-school, employer-to-employer and level-to-level in the system can be managed. This also pertains to information on qualifications awarded, including subject or course grades, credits or workplace certifications received because generally these are not “banked” across the system to enable any institution or employer to readily obtain all learning data to make decisions based on assessment of prior learning and achievement, admissions and employability. With the advent of cryptographic blocks of data established in digital codes within shared distributed online databases, blockchain technology presents huge potential for mapping learner information on an open source online management system and for creation of digital certifications accessible on smartphones. This technology enables seamless tracking of a learner's grades and history in courses, subjects, training and qualifications or certifications, and easy accessibility of qualifications on their digital devices.

The curriculum offered across the subregional space is a clearly contentious issue that will need to be resolved for many reasons. The curriculum disconnect with language, mathematical and scientific literacies, labour market demands and life skills, social and civic responsibility requirements accessed on a gendered basis; the prevalence of teacher-centred and outdated curriculum content and instructional methods; the insufficient use and deployment of ICTs in pedagogy and administrative processes; and the lack of focused delivery and assessment of learning outcomes are just some of the issues which are to be addressed in the curriculum continuum in a seamless system. Moreover, the subregion has identified some clear priorities for curriculum planning considerations with the CARICOM Human Resource Development 2030 Strategy, such as the blue and green economies, climate change, cultural industries, alternative tourism industries, green engineering, nanotechnologies, robotics, animation, transportation systems, health and family life and democracy education. Collective efforts are therefore needed to transform this strategy into reality.

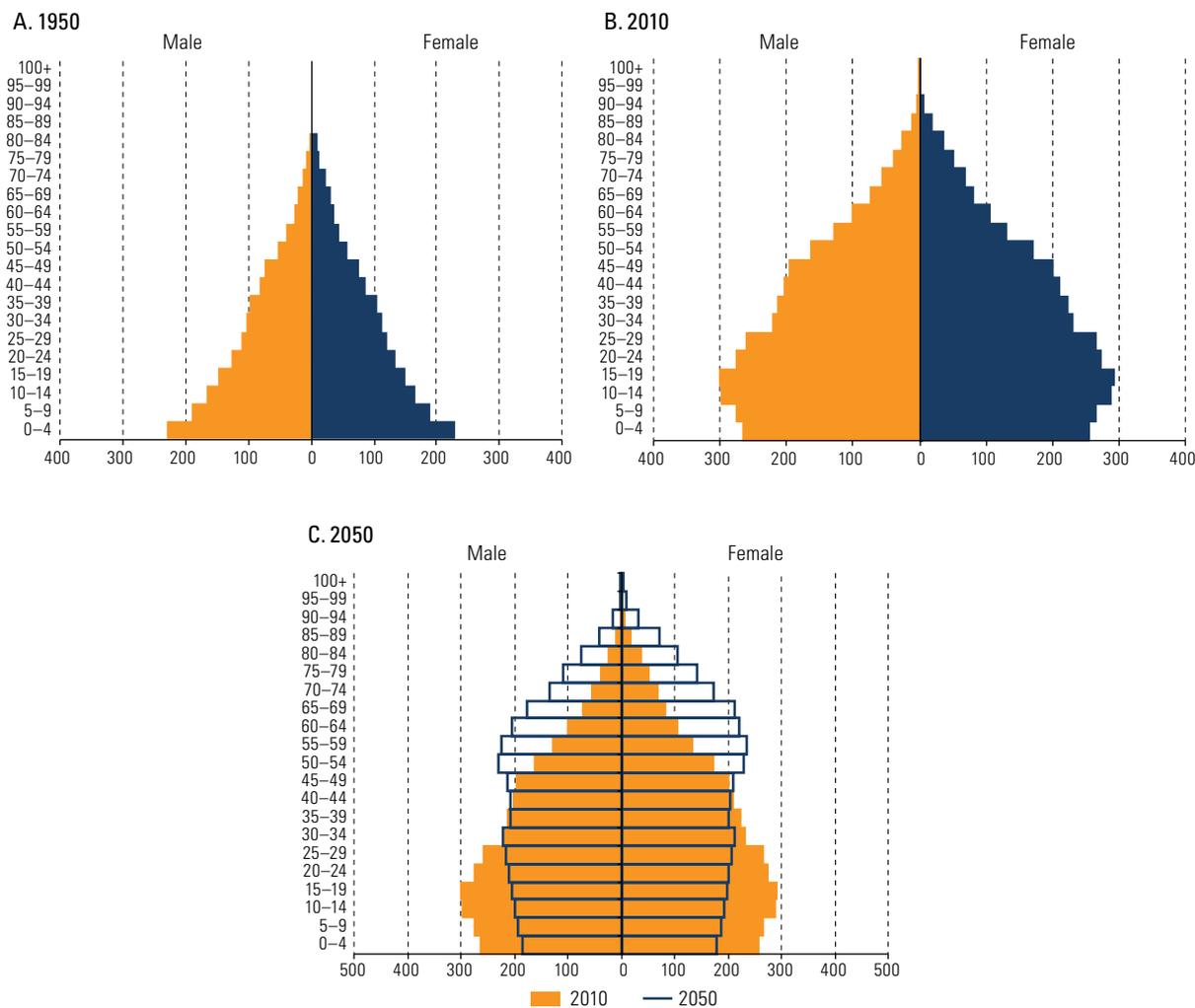
D. Two age groups in focus: youth and older persons to benefit better from the potential of intergenerational ties

ECLAC data show that most countries of the subregion are still in the vital demographic dividend period (ECLAC, 2016e, pp. 199-202). However, many CARICOM States have a fairly narrow window left of the demographic dividend; it will close in the 2020s for at least five countries,⁸⁷ while for the rest the period will extend well into the 2040s and 2050s.⁸⁸ This reality conveys a sense of urgency to invest in youth in the subregion. Figure 24 shows Caribbean population pyramids for 1950, 2010 and 2050, respectively, illustrating the changing age structure as the subregion's population ages (Nam and Jones, 2018).

⁸⁷ Antigua and Barbuda, Jamaica, Saint Lucia, Saint Vincent and the Grenadines and Suriname.

⁸⁸ This is the case for Grenada, Haiti, Guyana and Belize, as well as the Dominican Republic.

Figure 24
The Caribbean (9 countries):^a population pyramids, 1950, 2010 and 2050
(Population in thousands)

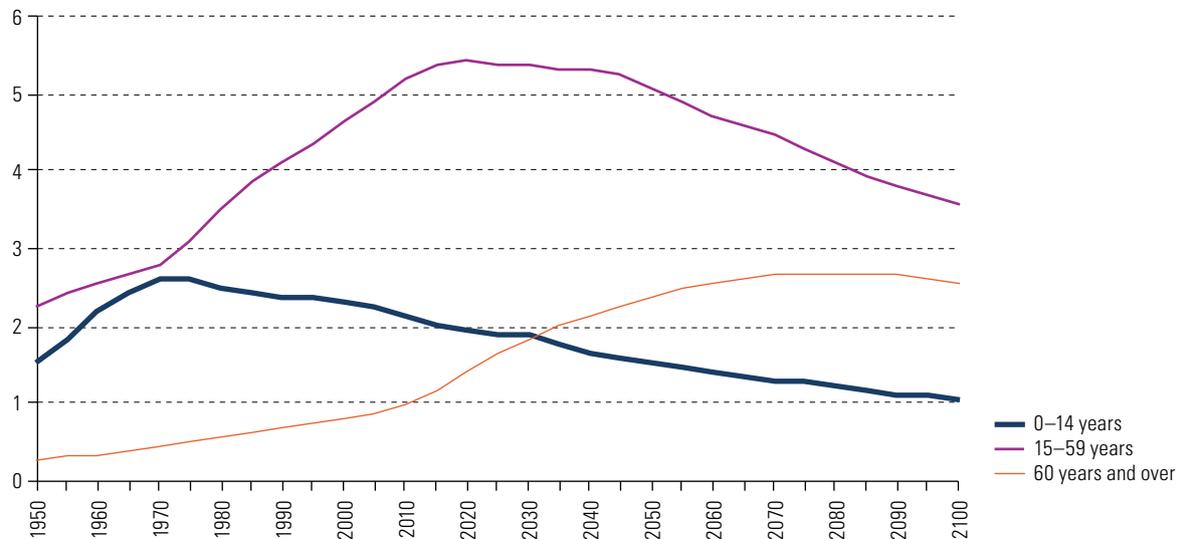


Source: V. Nam and F. Jones, "Inclusive social protection and demographic change: the implications of population ageing for social expenditure in the Caribbean", *Studies and Perspectives series-ECLAC Subregional Headquarters for the Caribbean*, No. 66 (LC/TS.2017/153; LC/CAR/TS.2017/14), Santiago, Economic Commission for Latin America and the Caribbean (ECLAC), 2018.

^a The Bahamas, Barbados, Belize, Grenada, Guyana, Jamaica, Saint Lucia, Saint Vincent and the Grenadines, and Trinidad and Tobago.

The Caribbean will therefore need increasingly to address the implications of population ageing. The latest projections indicate that, at the regional level, the ageing process is a little more advanced across the Caribbean than it is in Latin America, but far less advanced than in North America (Jones, 2016, p. 16). The old-age dependency ratio (percentage of persons aged over 65 in relation to those aged 15–64) in 2015 was 11 in Latin America, 14 across the Caribbean and 22 in North America. By 2040, it is projected at 24 in Latin America, 28 in the Caribbean and 37 in North America. Over this period, the number of older persons will double in the Caribbean, from 1.2 million, which corresponded to 14% of the population in 2015, to 2.1 million or the equivalent of 23% of the population in 2040 (see figure 25).

Figure 25
The Caribbean (24 countries and territories):^a population by age group, 1950–2100
(Millions of persons)



Source: United Nations, “World Population Prospects: The 2015 Revision. Key Findings and Advance Tables”, *Working Paper*, No. 241 (ESA/P/WP.241), DVD Edition, New York, Population Division, 2015.

^a Anguilla, Antigua and Barbuda, Aruba, Bahamas, Barbados, Belize, British Virgin Islands, Cayman Islands, Curaçao, Dominica, Grenada, Guadeloupe, Guyana, Jamaica, Martinique, Montserrat, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Sint Maarten, Suriname, Trinidad and Tobago, Turks and Caicos Islands, and United States Virgin Islands.

Another global phenomenon that is important to highlight is the ageing of this age group itself, a trend that is also occurring across the Caribbean. The number of people aged 70 and over in the subregion is expected to increase from 500,000 (or 6%) in 2015 to 1.2 million (or 13%) in 2040, and there is likely to be an accelerated increase in the number of persons aged 90 and over after 2035 (ECLAC, 2016f). All States and territories across the Caribbean are, therefore, giving more attention to this demographic transformation, although the dynamics of ageing vary from country to country. ECLAC data revealed that the regional average of the national old-age dependency ratio was 14 for the Caribbean in 2015. The ageing of the population is, however, more advanced in Aruba, Curaçao, Guadeloupe, Martinique and the United States Virgin Islands, with the dependency ratio in 2015 ranging from 18 in Aruba to 30 in Martinique. In Antigua and Barbuda, Barbados and Trinidad and Tobago, the dependency ratio is close to the regional average of 14, whereas the process is less advanced in Belize, Guyana, Jamaica and Suriname, with ratios below the regional average (ECLAC, 2016f, p. 17). Despite these differences, the ageing of the population is a common and pressing issue having considerable impact on all Caribbean societies and important implications for public policy, responding not only to the challenges anticipated but also considering the opportunities that it presents.

The marginalization of young people and older persons in this process and the failure to develop their capabilities fully will prove costly to Caribbean society. On one hand, the inability of youth, including those who are tertiary educated, to find gainful employment, besides having a direct impact on current and future GDP, may also lead to an undervaluing of education and training among young people in societies that require a highly trained and technologically skilled population for advancement and progress. Some may argue that this is already the case with young males in Caribbean society, but much

more should be done to include females in these sectors.⁸⁹ High youth unemployment also affects the effective dependency ratio in the subregion as young people are forced to extend their dependence on families and relatives, often strained circumstances where many households are headed by single mothers and where social protection measures are confined largely to those in full-time employment. Alienation, exclusion, deprivation and growing incidence of youth crime result.

Several frameworks exist at the global, regional and subregional levels that address the situation of youth. In fact, the United Nations Convention on the Rights of the Child, the World Programme of Action for Youth to the Year 2000 and Beyond, the Lisbon Declaration on Youth Policies and Programmes and the Baku Commitment to Youth Policies produced by the Global Forum on Youth Policies are legal and policy frameworks that provide practical guidelines for national action. Complementary to these global initiatives, the Caribbean subregion adopted the CARICOM Youth Development Action Plan (2012–2017), which has been recently renewed for the period 2017–2022, aimed at advancing the 2010 Declaration of Paramaribo on the Future of Youth in the Caribbean Community and the Commonwealth Plan of Action for Youth Empowerment 2007-2015. Furthermore, Caribbean countries are currently implementing the 2030 Agenda for Sustainable Development and the SDGs which make clear reference to youth in a series of Goals and targets, as well as to intergenerational equity.

The establishment or updating of national youth policies and councils constitute important responses by political leaders in the subregion and by concerned countries. Policies for youth are focused mainly on education, employment, health, participation, and prevention of juvenile delinquency. For example, in Antigua and Barbuda, the policy proposes the adoption of a “positive youth development model” and has eight strategic objectives: strengthening social environments, education and training, employment and sustainable livelihoods, health, participation and empowerment, care and protection, crime, violence and rehabilitation, gender equality and gender relations. In the Bahamas, the draft of the national policy also has measures that favour initiatives of microcredit and youth enterprises, business opportunities for youth, training and training for youth leaders. In Barbados, the national policy identifies 10 priority areas, one of which differs from the other countries: the theme of housing and participation in the environment. In Belize, the policy also includes measures on sexual and reproductive health. Indeed, a UNFPA study reveals that Latin America and the Caribbean is the only region where births to girls under the age of 15 have risen. In this region, these births are expected to increase slightly through 2030 (UNFPA, 2013, p. 5). The lack of contraceptive use is particularly worrisome considering the high rate of HIV/AIDS (UNFPA, 2013, p. 37) and that, despite the significant advances in reducing the number of new HIV infections, by 42% between 2001 and 2011, it is necessary to improve and expand services for adolescents and young people, particularly those living in rural areas, those with disabilities and those belonging to the LGBT population (ECLAC, 2013, p. 5). Data on rates of other sexually transmitted infections are also needed to identify the other services that are crucial for the adolescent and young population. The Caribbean Community’s Youth Development Action Plan sets out a framework for youth development and the subregion should treat the improvement of their well-being as a priority.

On the other hand, Jones (2016) showed that many older persons continue to be active in the labour force across the Caribbean. It was revealed that 40% of men aged 65 and over in Jamaica and Belize are still active in the labour market. In other countries, such as Barbados, Suriname and Trinidad and Tobago, that figure is around 12% to 14% (Jones, 2016, p. 32). The labour force participation rates for older women are around half the rates for older men. The study’s analysis also revealed that the propensity of older persons to remain in the labour force was closely related to the coverage and level of social security in each country. In countries where the effective coverage rate of the contributory social security pension is relatively high, for example in the Bahamas, Guyana and Barbados, labour

⁸⁹ See, for example, Figueroa (2007).

market participation among older persons is lower. Where there are fewer older persons receiving a contributory old age pension, for example, in Belize, Jamaica and Saint Lucia, older persons are more likely to remain in work (Jones, 2016, p. 33). Among those who do work, they are more likely to be self-employed, engaged in informal activities.

Another ECLAC study (Gény, 2018) documented that some Caribbean countries have implemented a series of measures or are in the process of adopting programmes targeting older persons. In Jamaica, the Ministry of Labour and Social Security administers the country's labour laws, which though not specifically targeting older persons, include provisions for the right to work on the part of all citizens. The revised policy aims to promote work at the local level, so as to incorporate older persons who choose to contribute to the labour force as well as to the development of their own businesses. In Guyana, the policy decision regarding the establishment of measures that promote the participation or re-entry of older workers into the labour market is pending approval. Some countries offer employment to persons aged 50 and over to fill vacant skills-based contract positions in the public sector. For example, in Anguilla, retired teachers are employed as substitute teachers and also work in the hotel sector; retired nurses are engaged in residential homes for older persons; retired dentists are employed under contract with the government; and retired civil servants work in juvenile detention centres as cooks. In Trinidad and Tobago, senior public officers who retire are often recalled, on short-term contracts, to provide training and share their expertise; and a repertoire of skills of older persons has been established to serve as a skills-bank for persons aged 60 and over. In Bermuda, the Department of Workforce Development, under the Ministry of Home Affairs, provides services for older persons to re-enter the workforce, including career guidance, employment assistance, and career development services or training, for instance by assisting them with online job applications and job searches, among others.

Despite the advances made, the majority of countries have not implemented a specific measure to promote the participation or re-entry of older workers in the labour market. Caribbean countries are strongly encouraged to adopt employment policies for older persons, especially those willing to continue working, including career support, elimination of all forms of discrimination against older workers, and the promotion of inclusive and conducive working environments, as well as volunteer programmes for older persons. The participation of older persons in the labour market will not only be of benefit to the older persons themselves in terms of self-esteem, autonomy and independence, but their contribution will benefit the entire society.

The ageing of Caribbean populations also creates opportunities for lifelong learning. However, only a few countries have developed lifelong learning programmes for older persons. Trinidad and Tobago has established the Adult Education Programme in the Ministry of Social Development and Family Services, which provides courses and exams at high school level for adults and older persons who want to complete their education. It has also launched a programme to facilitate their access to and use of ICTs under the ICT for Seniors Programme (Human Rights Council, 2016, para 56). In Barbados, the Unique Helping Hands Senior School, opened in 2012, serves retired and independent persons aged 50 and over and promotes the concept of learning through interaction. It offers programmes in areas such as information technology, arts and craft, music and foreign languages. The Cayman Islands offers programmes at the University College and the International College of the Cayman Islands.

Intergenerational programmes are crucial for promoting active ageing, intergenerational solidarity and social cohesion as recommended in several international and regional frameworks, notably the San José Charter on the Rights of Older Persons in Latin America and the Caribbean. Trinidad and Tobago, through its Health Promotion and Health Education Units, has conducted annual outreach intergenerational programmes, which include walking/running to promote healthy and active ageing. In Belize, the National Council on Ageing is piloting a programme called "Adopt-A-Grandparent" aimed at connecting older persons living on their own, who may be experiencing signs of depression, with young

people in the community to help promote intergenerational relations. In Sint Maarten, the government is planning to implement an intergenerational project that will create opportunities for seniors and young persons to share time together. These are good practices, but much more needs to be done to foster social cohesion and strengthen solidarity between generations in the subregion.

E. Social protection: catalyst for sustainable development

Social protection is a key instrument for maintaining basic income security and ensuring access to social services in a subregion prone to external shocks, both human-caused, such as the Great Recession, and natural, such as the passage of Hurricanes Irma and Maria. Beyond its short- to medium-term impact, social protection —encompassing social insurance, social safety nets and active labour market policies— also offers the subregion what is increasingly recognized to be an effective means for addressing inequality and promoting sustainable development (ECLAC/ILO, 2015, p. 16). ECLAC estimates that, on average, the size of the elderly population represents about 13% of the working age population in the Caribbean compared to 25% in OECD countries. In 2010, the average share of GDP devoted to pension payments in Caribbean countries was 3.7%: Barbados (6.5%), Antigua and Barbuda (4.5%) and Trinidad and Tobago (4.4%) allocated the most while the Bahamas, Belize, Jamaica and Saint Lucia all allocated between 2.4% and 2.8% of GDP (Nam and Jones, 2018, p. 29).

Despite this low level of expenditure on social protection, there is a range of safety net programmes, insurance schemes and labour market interventions in the subregion.⁹⁰ Regional studies have identified shortcomings in the provision of social protection, such as the procyclical nature of expenditures, insufficient targeting of poor and vulnerable groups, and gaps in social insurance, especially as only 40% to 50% of the regional workforce is in formal employment (Barrientos, 2004; Williams and others, 2013).

Thus, quite apart from the need to increase the provision of resources, there are important gaps that need to be narrowed, such as those in family allowance programmes and unemployment insurance, the latter being largely absent in the subregion, with the exception of Barbados. Social protection programmes will also need to take account of rapid demographic changes in the subregion. These changes include the increasing number of older persons and the high rates of migration among the young and economically active, developments that will inhibit the growth of the public revenue base while the demand for care and care facilities increases.

The harmonization of social protection systems in the subregion and the portability of rights and benefits are vital measures that must be taken to facilitate the movement of peoples. Although this is particularly important in the context of regional integration and building competitive regional economies, existing subregional arrangements are limited in scope or coverage.⁹¹

Social protection systems are critical to the implementation of the 2030 Agenda and to the reduction of poverty and inequality at all stages of the life cycle; from the provision of benefits for the unborn through maternal care, to the provision of support for the family of the deceased through burial assistance.⁹² It is especially important for the poor and vulnerable when they age and a powerful antidote to social exclusion. Furthermore, by reducing the burden caused by ill-health, and by creating a healthier and

⁹⁰ CDB (2016a, pp. 55-56) provides a list of such programmes in selected Caribbean countries.

⁹¹ The CARICOM Agreement on Social Security is in force in all CARICOM member States, except Haiti and Suriname. It does not cover short-term benefits, such as maternity or sickness benefits. The Convention on Social Security in the Organisation of Eastern Caribbean States is in force in the seven OECS member States —Antigua and Barbuda, Dominica, Grenada, Montserrat, Saint Kitts and Nevis, Saint Lucia, and Saint Vincent and the Grenadines— and the two associate members, Anguilla and the British Virgin Islands. The Convention does not apply in other Caribbean States.

⁹² SDG target 1.3: Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and vulnerable; and SDG target 10.4: Adopt policies, especially fiscal, wage, and social protection policies and progressively achieve greater equality.

more productive society, social protection contributes both directly and indirectly to economic growth and to sustainable development. This is a reversal of the long-held view that macroeconomic growth and high levels of prosperity should be achieved before countries choose to focus on social transfers, such as social health protection.⁹³

ECLAC research (2016) reveals that there are still many older persons living below national poverty lines in the Caribbean. Based on data for 10 countries, the average poverty rate among persons aged over 65 was 17%, although the rate varied significantly, from 7% in Trinidad and Tobago to 34% in Belize. In addition, it was reported that among older persons living in poverty, hunger was a frequently cited complaint, as were the inability to maintain and repair their homes or afford medical expenses, loneliness and lack of assistance and help (Jones, 2016, p. 32). Information available for Martinique showed that more than 44,000 persons aged over 45 were living below the poverty line in 2011, with the at-risk of poverty rate for that age group close to 19%.

All the English-speaking Caribbean countries have social security systems, often referred to as national insurance schemes. The coverage of social security systems, however, varies significantly from country to country depending on the extent of formality or informality in each economy.

In the Bahamas, Barbados, Guyana, Saint Kitts and Nevis and Trinidad and Tobago, there is social security coverage and most older persons receive a contributory pension. In contrast, in Belize, Saint Lucia and Saint Vincent and the Grenadines, a third or fewer of older persons receive a social security pension, which does not include non-contributory or other forms of assistance (Jones, 2016). For example, in Barbados the National Insurance Scheme provides benefits for older persons above the age of 66 and 6 months, once they have paid into the plan. In Bermuda, the government has increased the social insurance pension benefit payment by 5% and a number of amendments to the existing legislation are being proposed to enhance the Pension Commission's powers of protection regarding members' rights and benefits. In Anguilla, the current social protection framework is also being updated with the Social Protection Act, replacing the Hospital and Poor Relief Act, enabling the new Social Protection Board to give relief to older persons in need. In Jamaica, a National Social Protection Strategy was adopted in 2014 and the Ministry of Labour and Social Security administers social protection and social security legislation, policies and programmes for older persons. The Programme of Advancement through Health and Education (PATH) is a proxy means-tested social assistance programme, which includes the payment of a social pension for older persons in selected households. In Trinidad and Tobago, the National Insurance Scheme provides a contributory monthly pension benefit of TT\$ 3,000 (the equivalent of about US\$ 445) to workers who retire between the ages of 60 and 65 (Gény, 2018).

ECLAC data (2018) on non-contributory schemes revealed that all Caribbean countries have implemented measures with the exception of Dominica, Grenada and Saint Lucia. Some countries have recently expanded the coverage and quality of these non-contributory pension schemes. Guyana and Suriname are the only countries to have set up a universal pension scheme, which is offered to all

⁹³ According to the International Labour Organization (ILO), social health protection is founded on the human right to health and social security and plays a major role in reducing poverty, generating income and increasing wealth. See ILO (2008). ECLAC associates the substantial fall in the poverty rate among employed persons in the Latin American region which occurred between 2002 and 2013 with an expansion in social protection, including social health protection. In 2002, 32% of the employed were living in poverty and 10.5% were living in extreme poverty; by 2013, this had fallen to 17.1% and 4.9%, respectively. Data across 18 Latin American countries show that, during the same period, health system coverage among employed persons expanded from 43.1% to 73.5%. According to ECLAC, the improvements in regional poverty rates are linked to various factors "including a favourable economic context, significant improvements in the labour market, and various social policy initiatives, such as the expansion and redefinition of policies and programmes aimed at overcoming poverty and indigence, and the promotion of social inclusion" (ECLAC, 2016e, p.109). It should be noted that in 2013 almost half of all workers in the Latin American and Caribbean region were engaged as employers or wage earners in low-productivity sectors: as unskilled self-employed workers in microenterprises, and as domestic workers, with little access to social protection benefits, such as pensions and health care and with low labour incomes. ECLAC emphasizes the importance of universal social protection to remedy these gaps.

citizens aged 65 and above. Others have established pensions that are provided to those who have no other pensions, or in specific situations. In Anguilla, it was reported that the non-contributory old age pension provides payments to older persons living in indigence and persons employed above the age of 65 who are exempt from social security deductions. In Barbados, the non-contributory pension, in the form of a stipend paid twice a month, is for older persons who were informally employed in the country and could not pay into a pension plan. In Belize, since 2003, there has been a non-contributory programme available to older women at 65, and older men at 67, through the Belize Social Security Board. This pension can only be claimed by one member of a couple and it is worth BZ\$ 100 a month (about US\$ 50). Saint Vincent and the Grenadines also has a non-contributory assistance age pension in place since 2009, under which older persons received a small allowance.

Despite this progress, it is important to highlight that, with the exception of Trinidad and Tobago, non-contributory pension schemes are not well funded, as reflected in their low level of benefits relative to the poverty and extreme poverty lines. Hence, more needs to be done to provide adequate income to the most vulnerable to allow them to age with dignity (Gény, 2018). In a recent study on the implications of population ageing for social expenditure in the Caribbean, which assessed the implications of population ageing for social expenditure in 10 Caribbean countries⁹⁴ by producing age-related projections of public expenditure on education, pensions and health care as a percentage of GDP, ECLAC concluded that the biggest increase in future costs will come from pensions and health care (Nam and Jones, 2018).

The Caribbean subregion, with an envisioned future that is critically dependent on building human capital, should now accord the highest priorities to both education and targeted social protection, including social health protection. These priorities are highly interdependent and synergistic in their impacts. Among the main health challenges faced by the subregion is the prevalence of non-communicable diseases.

F. Non-communicable diseases (NCDs) in the Caribbean

The Caribbean has made much progress in its efforts to improve the health of the subregion's population, and this is reflected in declining mortality, including infant mortality, and increased life expectancy. The average life expectancy in the subregion is currently 71 years for males and 75 for females (*The Lancet*, 2017).⁹⁵ Institutionally, the establishment of the Caribbean Public Health Agency through the consolidation of regional health institutions and the adoption, since 1984, of successive Caribbean Cooperation in Health (CCH) initiatives to promote functional and other cooperation in the subregion, have been very important.⁹⁶ Nonetheless, demographic, social and cultural changes have emerged which could undermine progress already made and which have implications for further progress by the subregion.

In territories such as the United States Virgin Islands and Martinique, where around 20% of the population are aged over 60, 80% of deaths are due to non-communicable diseases (NCDs). In contrast, in Guyana and Belize, where only around 5% of the population is over 60, non-communicable diseases account for between 60% to 70% of deaths. The major NCDs in the Caribbean share common underlying risk factors, namely unhealthy eating habits, physical inactivity, obesity, tobacco and alcohol use and inadequate use of preventive health services (Jones, 2016, pp. 42-44).

⁹⁴ Antigua and Barbuda, Bahamas, Barbados, Belize, Grenada, Guyana, Jamaica, Saint Lucia, Saint Vincent and the Grenadines, and Trinidad and Tobago.

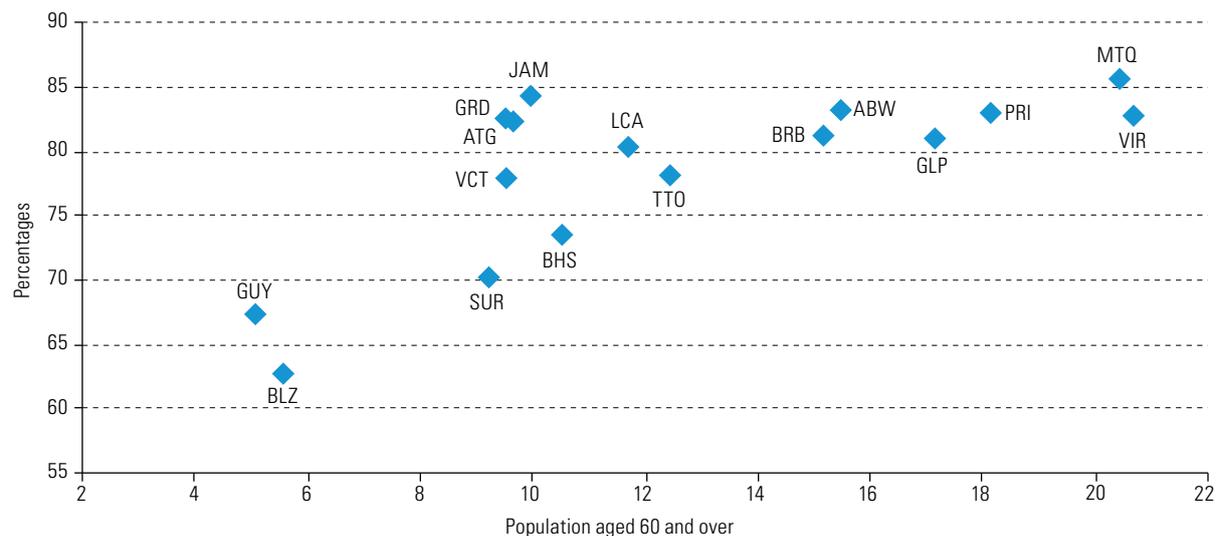
⁹⁵ For males, life expectancy ranges from 63.6 years in Haiti and 64.7 years in Guyana to 74.7 in Antigua and Barbuda and 76.7 in Cuba; for females, life expectancy ranges from 64.4 years in Haiti and 71.2 years in Guyana, to 79.9 in Antigua and Barbuda and 81.3 in Cuba.

⁹⁶ The priorities of phase IV of Caribbean Cooperation in Health (CCH IV) include regional standards and regulations; training programmes; common approaches to international challenges to public health; research and development on healthy products; evaluation and research on health systems and models to identify best practices; and shared policy frameworks. The current integration of the regional initiative, which covers the period 2016–2025, will focus on primary care and on the production of regional public goods in health: two well regarded examples of which are the Pan-Caribbean Partnership against HIV/AIDS (PANCAP) and the OECS Pharmaceutical Procurement Service.

These challenges are complicated by a growing cohort of older persons, changes in diet and lifestyles, and increasing urbanization. Climate change, marked by frequent disasters and extreme weather, is also contributing to a resurgence of vector-borne diseases which adversely affect not only the domestic population but also the vital tourist industries on which many Caribbean economies depend. Notwithstanding these serious health-related concerns, it is the prevalence of NCDs that is widely recognized as the primary health challenge the subregion faces as it looks to the future. The subregion is the global epicentre of NCDs, with 70% of all deaths attributable to these diseases (see figure 26). Mortality in the subregion from NCDs is the highest in the Americas, with an estimated 40% of these deaths occurring prematurely in those under 70. Heart attacks, strokes and diabetes cause most premature deaths, and hypertension is the leading risk factor. Diabetes prevalence in the subregion is also twice that of global rates (Port of Spain Declaration Evaluation Secretariat, 2016).

Figure 26

The Caribbean (15 countries and territories): deaths due to non-communicable diseases (NCDs) and population aged 60 and over, around 2010
(Percentages of all deaths)



Source: F. Jones, "Ageing in the Caribbean and the human rights of older persons: twin imperatives for action", *Studies and Perspectives series-ECLAC Subregional Headquarters for the Caribbean*, No. 45 (LC/L.4130; LC/CAR/L.481), Santiago, Economic Commission for Latin America and the Caribbean (ECLAC), 2016.

The human and economic costs of death and disability as a consequence of preventable NCDs are a considerable burden on resource-constrained Caribbean governments and societies. For example, the economic burden of diabetes and hypertension alone has been estimated to be 1.35% of GDP in the Bahamas, 5.3% of GDP in Barbados, 5.9% of GDP in Jamaica, and 8% of GDP in Trinidad and Tobago (Abdulkadri, Cunningham-Myrie and Forrester, 2009, pp. 175-197). As the population in the subregion ages, the cohort of persons aged 60 years or older is expected to almost double from 1.2 million, which corresponded to 14% of the population in 2015, to 2.1 million or the equivalent of 23% of the population in 2040. Without countervailing action, the prevalence of disabling diseases can be expected to continue to increase sharply, placing strains on health systems which will be faced with growing demand for services. Health experts caution that as populations age and illness with disability becomes more prevalent, health systems will be required to provide services "that are generally costlier than the interventions that have led to declines in mortality in childhood or for the major causes of mortality in adults" (*The Lancet*, 2017, p. 1211).

The implications of NCDs, not only in terms of cost to health systems, but for productivity and output, are also quite stark; globally in 2016, communicable, maternal, neonatal and nutritional deficiency diseases accounted for 12.6% of years lived with disability (YLD), while NCDs accounted for 80.6% of YLDs, and injuries for 6.9%. It is also reported that, in 2016, YLDs as a result of diabetes were more than twice the expected rate in Barbados, Jamaica, Saint Vincent and the Grenadines, Trinidad and Tobago, Puerto Rico and the Virgin Islands, while Haiti had a higher than expected rate of the respiratory illness, asthma (*The Lancet*, 2017, p. 1235) (see table 8). NCDs have not only economic implications, but pose a major social challenge in the form of the marginalization and social exclusion that result from disability, unemployment and impoverishment. The Caribbean will need to respond to these developments not only with social protection policies, but also with prevention and amelioration measures, including promoting changes in lifestyle and diet, instilling the value and importance of physical activity and reducing and eliminating alcohol and tobacco consumption.

Table 8
The Latin American and Caribbean region and the Caribbean (7 countries):
disability-adjusted life years by cause, 2012
(Per 1,000 population)

	Communicable diseases ^a	Non-communicable diseases					Total non-communicable diseases	Injuries	All causes
		Malignant Neoplasms	Diabetes mellitus	Mental and behavioural disorders	Cardiovascular diseases	Other			
All Persons									
Bahamas	78	28	13	36	40	73	190	36	304
Barbados	40	45	20	35	38	89	227	33	300
Belize	61	12	14	32	23	69	149	47	257
Guyana	109	24	27	35	77	88	250	79	437
Jamaica	70	31	20	31	49	78	209	44	323
Suriname	60	19	13	32	33	76	173	51	284
Trinidad and Tobago	51	40	41	36	71	100	287	69	406
The Caribbean ^b	67	28	21	34	47	82	212	51	330
Latin America and the Caribbean	52	27	12	32	39	83	193	44	289
Developed countries	21	54	8	38	76	93	269	32	322
Males									
Bahamas	82	28	14	36	48	72	198	50	330
Barbados	46	46	19	34	44	89	232	48	326
Belize	68	15	10	34	22	67	148	73	289
Guyana	118	18	23	36	83	90	249	115	482
Jamaica	79	34	18	31	52	79	215	64	357
Suriname	66	20	15	32	34	71	172	76	314
Trinidad and Tobago	51	41	46	35	85	103	309	107	467
The Caribbean ^b	73	29	21	34	53	81	218	76	366
Latin America and the Caribbean	59	27	12	33	44	82	198	72	329
Developed countries	25	63	8	41	86	90	288	46	359
Females									
Bahamas	74	28	12	37	33	73	183	23	280
Barbados	34	45	20	36	33	88	222	19	274
Belize	55	10	17	30	23	70	150	20	225
Guyana	99	29	30	34	71	86	250	42	391
Jamaica	62	28	23	31	45	76	203	24	289
Suriname	54	17	12	32	32	82	175	27	255
Trinidad and Tobago	50	39	36	37	56	97	265	32	346
The Caribbean ^b	61	28	21	34	42	82	207	27	294
Latin America and the Caribbean	45	27	13	31	34	83	188	17	250
Developed countries	17	46	8	34	67	96	251	19	287

Source: F. Jones, "Ageing in the Caribbean and the human rights of older persons: twin imperatives for action", *Studies and Perspectives series-ECLAC Subregional Headquarters for the Caribbean*, No. 45 (LC/L.4130; LC/CAR/L.481), Santiago, Economic Commission for Latin America and the Caribbean (ECLAC), 2016.

^a Communicable, maternal, perinatal and nutritional conditions.

^b Average for seven countries shown.

In its Noncommunicable Diseases Progress Monitor 2017, WHO sets out progress indicators that were endorsed by the Seventieth World Health Assembly, held in May 2017, and which are intended to assist countries in fulfilling commitments made since the first High-level Meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases in 2011, as well as in complying with the 2030 Agenda, under which SDG target 3.4 calls for reducing premature NCD deaths by one third and for promoting mental health and well-being.

The Caribbean has made mixed progress across the range of WHO progress monitors. Most countries of the subregion have put in place national NCD targets; have promulgated comprehensive national NCD policies, strategies or action plans; and have initiated public education awareness campaigns on physical activity. However, in other areas, such as implementing measures to reduce tobacco demand, the harmful use of alcohol and particularly unhealthy diets, progress in the subregion has been modest or non-existent. Suriname's high level of compliance regarding tobacco demand reduction measures is worthy of note, as is Jamaica's incomplete but generally balanced level of implementation across the progress indicators.⁹⁷ In addition, recent ECLAC research found that 80% of those registered in the Non-Communicable Disease Programme in Barbados are over the age of 65. The Barbados Drug Service supplies free medication to patients aged 65 or older and to those diagnosed with hypertension, diabetes, asthma, glaucoma and epilepsy, under the special benefits services. Trinidad and Tobago has adopted the Chronic Disease Assistance Programme, under which specific pharmacies provide free medication to older persons who are living with diabetes, hypertension, high blood pressure, arthritis and other diseases, and free cataract surgery is also offered for older persons. In Belize, a Non-Communicable Disease Protocol with an ageing component was introduced. In Bermuda, the Department of Health has three free clinics that host weekly screenings of blood pressure and blood sugar readings for older persons. In addition, the survey STEPS to a Well Bermuda provides an assessment of selected chronic noncommunicable diseases and their risk factors, including for those aged 60 and above. The 2017 objective of this initiative is to target the reduction of chronic obesity and the rise in diabetes. Furthermore, with its Enhanced Care pilot programme, which began in 2017, the government is aiming to increase primary care, pharmaceutical access and health-care services for persons with one or more chronic diseases (Gény, 2018, p. 43).

It is important to note that vulnerable groups such as women and children are likely to suffer most from inattention to risk factors and from an increase in NCDs. The national-level reviews conducted in the Caribbean in 2015 the framework of Beijing+20 reported generally higher levels of NCDs among women regarding hypertension, diabetes, obesity and cancers, as well mental health, in particular regarding gender-specific mental disorders affecting those who experience post-partum depression (Mondesire, 2015, p. 21). Furthermore, children do not make independent decisions yet and bear the consequences for their health of decisions made by adults in areas such as diet. The quality of the environment also matters. WHO has noted, for example, that both outdoor ambient and indoor air pollution are major risk factors for NCDs, contributing to cardiovascular disease, stroke, chronic obstructive pulmonary disease, lung cancer and acute respiratory infections.

⁹⁷ The progress indicators are: setting time-bound national targets; generating reliable mortality data; implementing regular risk factor surveys; implementing multisectoral national strategies/action plans that integrate NCDs; undertaking tobacco demand-reduction measures; implementing harmful use of alcohol reduction measures; undertaking measures to reduce unhealthy diets; implementing national public education and awareness campaigns on physical activity; establishing evidence-based national guidelines for the management of major NCDs; providing drug therapy/counselling for eligible persons at risk of heart attacks and strokes. See WHO (2017).

The Caribbean, already at the centre of a global surge in NCDs, must now take urgent action to comply fully with the 2030 Agenda and its health Goal and targets, as well as with commitments undertaken in the Port of Spain Declaration on non-communicable diseases of 2007, and by the High-level Meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases, in 2011, and the high-level meeting of the General Assembly on the comprehensive review and assessment of the progress achieved in the prevention and control of non-communicable diseases in 2014, and under global and regional instruments, such as the WHO Framework Convention on Tobacco Control, the Madrid International Plan of Action on Ageing and the San José Charter on the Rights of Older Persons in Latin America and the Caribbean. These are critical actions for building resilience and advancing sustainable development with healthier environment in the subregion.

G. Summary and recommendations

This chapter emphasizes the importance of social development as a central pillar of sustainable development. For this reason, it is noted with concern that the advances made by the Caribbean in human and social development now appear to be at risk of erosion or of losing momentum. Against this background, it is important that current fiscal constraints and the persistent low growth that has plagued the subregion do not deter from governments actively pursuing creative policies and programmes that promote social development that is inclusive and equal for all. Social development, especially lower levels of poverty and inequality, must be seen as a catalyst for sustainable development, rather than as a contingent outcome of economic growth and increased prosperity. Development for all will only be guaranteed by implementing social development measures, such as those relating to social protection, job creation and entrepreneurship, health care, education and skills development, and broadened and improved access to basic services. Individuals and communities face structural impediments to social advancement. These include, for example, heterogeneous production structures, opaque and inefficient labour markets, and non-existent or inadequate rural and inner-city infrastructure and services. These and other impediments, as well as the interconnected nature of disadvantages and vulnerabilities experienced by women, youth, older persons, and other marginalized groups, together with the importance of intergenerational equity—including as it relates to safeguarding the environment—make it imperative that States assume a leading and active role in promoting inclusive social development with equality in the Caribbean subregion. Transparent, accountable and responsive governance, as well as the availability of resources and the engagement of partners, will be vital for meeting the challenges of social development, and more broadly, for ensuring the sturdiness of all three pillars—the social, the economic and the environmental—that are the foundation of sustainable development.

IV. Environmental management: vulnerability, constraints and opportunities

The environmental challenges in the Caribbean region are considerable, with natural disasters, the increasing impact of climate change and the loss of biodiversity, anthropogenic stressors on freshwater and land-based sources of pollution among the more serious concerns. These challenges constantly undermine the wider social and economic developmental goals. The economic development of the subregion derived from the tourism and industry has raised the population's expectations with regard to services, infrastructure, products and general quality of life. These expectations are not without costs in the form of externalities to the natural ecosystems, which endure the pressures of unsustainable development.

The subregion has committed itself to pursuing development mandates framed by the SIDS agenda and the 2030 Agenda for Sustainable Development. This is a complex undertaking, requiring the organic integration of economic, social and environmental policies; yet it creates an important opportunity for stakeholders to develop coherent governance frameworks based on inclusive, integrated and coordinated policies and programmes. Such considerations are also in line with commitments to the Sendai Framework for Disaster Risk Reduction 2015-2030 and the Paris Agreement under the United Nations Framework Convention on Climate Change.

Irrespective of the economic system underpinning national economies within the subregion, it is the physical environment, with its limited natural resources and finite carrying capacity, which provides the foundation for all human activity, and this foundation has been increasingly strained in recent years. A prosperous economy and high quality of life are inextricably linked to and dependent on a healthy environment. The environment is of particular significance to Caribbean SIDS given that their unique sociocultural and environmental features and their island and coastal characteristics are drivers of, rather than constraints on development.

With a view to highlighting the major challenges and opportunities within the natural environment in the Caribbean, this chapter is divided in four parts, beginning with the fundamental activity of climate change adaptation, followed by an examination of water resources and solid waste management, energy transition, and sustainable transportation.

Finally, the chapter summarizes the capacity challenges faced in implementing the environmental dimension of the Caribbean development experience, and suggests steps to address these, including financial considerations as they relate to the environment.

A. Climate change adaptation

Climate change and its impacts have brought increasingly significant development challenges to the countries of the Caribbean subregion over the past few decades. The special geo-ecological characteristics of Caribbean small islands and low lying coastal States are well known. Their generally small landmass, large marine area, population distribution and economic activity are intrinsic contributors to their vulnerability to external economic and environmental shocks. Coastal population density has grown throughout the region in recent decades, with over 41 million people living within 10 km of the coast, and some 166 million within 100 km (Patil and others, 2016). Further, 14.5% of residents in Caribbean SIDS live in low-elevation coastal zones less than 10 m above sea level and more than 50% of the population live within 1.5 km of the shore (Mycoo and Donovan, 2017). This coastal concentration of the population not only contributes to environmental degradation and land-based sources of pollution in vital coastal waters, but also exposes the majority of people and urban infrastructure to the impact of natural hazards in the region, especially hurricanes.

Many studies, including ECLAC (2011) and IDB (2014), project that the increasing impact of climate change will continue for the foreseeable future. In fact, it is estimated that the mean annual temperatures in the Caribbean will increase by between 1°C and 5°C by 2080. This warming trend will not manifest itself homogeneously, as it is expected to be more severe in the north-western Caribbean territories than in the Eastern Caribbean, and larger in land areas than over the sea. Precipitation levels are also expected to vary. For example, while in the Greater Antilles precipitation is projected to increase, many climate change projections forecast that various areas within the Caribbean will in fact become drier. Furthermore, sea levels are expected to rise. Several countries in the subregion are already experiencing coastline loss. Although the degree to which all these phenomena will occur is still unclear, the influence of El Niño Southern Oscillation (ENSO), volcanic and tectonic crustal motions and variations in the frequency or intensity of extreme weather events could create significant challenges for Caribbean countries (UNDP, 2017).

In response to the challenge of climate change, countries in the subregion have identified priority sectors for adaptation through their national communications under the United Nations Framework Convention on Climate Change (UNFCCC), namely: coastal zones, freshwater resources and agriculture. UNDP has also identified other important overlapping sectors that are vulnerable to the impacts of climate change and that could play an important role in prospective adaptation measures, namely tourism, human health, biodiversity and fisheries (UNDP, 2017). Furthermore, ECLAC has highlighted the importance of energy systems in the adaptation to climate change and overall enhancement of resilience to disasters. Indeed, it has been noted that through the modernization of energy systems, Caribbean countries could address climate change mitigation and adaptation simultaneously (Flores and Peralta, 2018).

Several regional entities, including CARICOM and ECLAC, utilizing the guidelines of the Sendai Framework for Disaster Risk Reduction 2015-2030, are facilitating the integration of the disaster risk management agenda into a regional disaster management framework.

The Caribbean Community Climate Change Centre (CCCCC), with the aid of the Green Climate Fund (GCF) and the United States Agency for International Development (USAID) is also working to strengthen an integrated system for the implementation and financing of sustainable adaptation approaches in the Eastern and Southern Caribbean region.

These approaches are gradually increasing Caribbean resilience to climate change. However, if the Caribbean is to successfully implement climate change adaptation measures, several important barriers will need to be overcome. These include such issues as weak institutional capacity, limited data and information availability, the absence of long-term environmental planning and the inadequacy of relevant policies. Another major challenge hindering further improvements is the lack of an integrated, coherent institutional infrastructure for enhanced governance, given that roles and responsibilities for specific areas of engagement are usually shared by different institutions with separate budgets. For example, climate change issues are typically overseen by the Ministry of Environment, while disaster risk management is usually the responsibility of a disaster preparedness office. Strengthening the institutional, technical and financial capacity of the subregion's countries is imperative, as are developing inter-institutional collaboration, making more efficient use of resources and promoting better, more integrated planning and decision-making.

Notwithstanding the cross-cutting nature of climate change adaptation, the related policies remain dispersed among multisectoral programmes and plans in the Caribbean. However, a resilience-building agenda must necessarily embrace a multifocused strategy covering such areas as zoning; energy, water and wastewater management; transportation; and planning. It is therefore also imperative that stakeholders leverage synergies between climate change adaptation, climate change mitigation and disaster risk management. In so doing, more effective and comprehensive policy approaches could be developed, and financial and human resources could be better used. For example, climate change adaptation strategies such as the construction of seawalls and dykes and the elevation of critical infrastructure favour disaster risk reduction. Similarly, adaptation and mitigation of climate change and

disaster risk management underscore the importance of implementing and enforcing sound land-use plans and diversifying national energy matrices as critical requirements to increasing overall resilience. The benefits that the countries of the subregion could achieve from incorporating energy efficiency measures and renewable energies into their energy matrix also include reduced greenhouse gas emissions, enhanced resilience and improved energy security and access.

In this regard, the consolidation of partnerships, both with other countries and regional entities, including through South-South cooperation, would facilitate effective response to climate related challenges.

Additionally, as will be discussed below, one of the most significant impacts of climate change in the subregion is the increased frequency and ferocity of extreme weather events, which pose a fundamental threat to the implementation of the Samoa Pathway and achievement of the Sustainable Development Goals. Such events exacerbate existing social vulnerabilities and inequalities, disproportionately affecting women, children, older persons, those with disabilities, the poor and marginalized populations. Climate change and climate variability impacts also extend to ecological services provided by fragile ecosystems found in the subregion, notably corals reefs and wetlands. These ecosystems are vital for sustaining livelihoods and enhanced human development and represent a first barrier of protection against natural hazards (CCCC, 2017b). Therefore, the subregion should seek to integrate disaster risk management as a core aspect of its development agenda. The management and enhancement of resilience to disasters should also be proactive and involve cross-cutting themes, such as gender and the role of technology in environmental sustainability.

Complementing these approaches, the New Urban Agenda adopted at the United Nations Conference on Housing and Sustainable Urban Development (Habitat III) in 2015 provides a framework for the planning and management of urban areas over the next 20 years. The need to develop an urban agenda for the Caribbean subregion, given the high exposure of coastal settlements, is evident. In this regard, ECLAC and the United Nations Human Settlements Programme (UN-Habitat) have developed a Subregional Action Plan for the implementation of the New Urban Agenda in the Caribbean (ECLAC/UN-Habitat/MINURVI, 2017), taking into account Caribbean priorities for sustainable urban development and Caribbean-specific objectives and priorities for implementation of the New Urban Agenda.

This Caribbean urban agenda should include policies such as integrating climate change adaptation with disaster risk management and planning for land-use; implementing building codes and mainstreaming resilience to climate change in cities; and a financial strategy that improves access to and use of climate funds and insurance, and uses a range of financial instruments to mobilize resources to strengthen urban resilience.

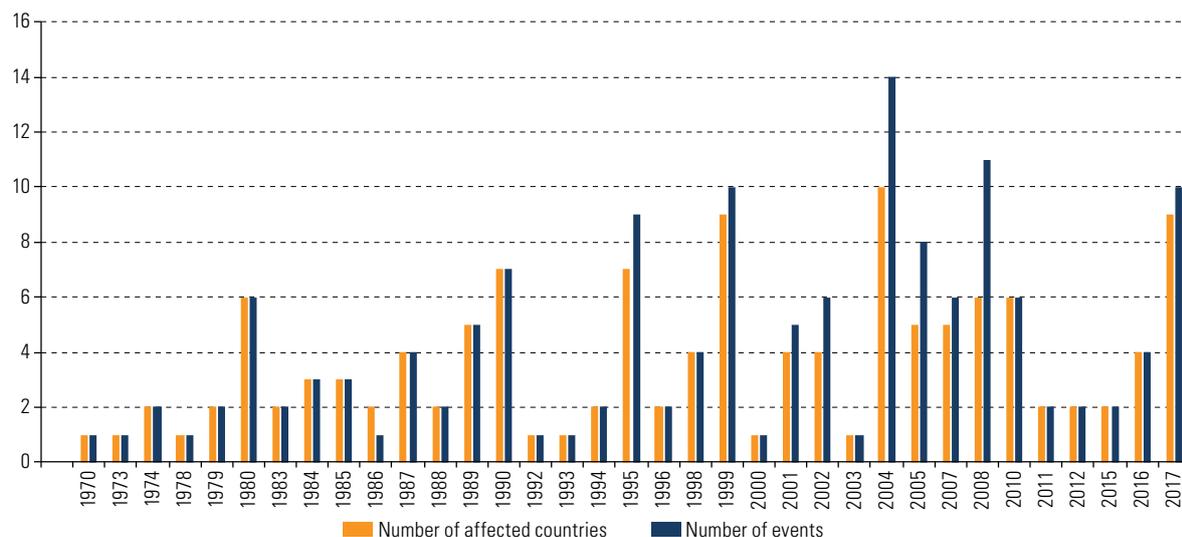
1. Natural hazard vulnerability and resilience

The Caribbean is the second most hazard-prone region in the world, due to both its geographical location and the concentration of its population in coastal areas. The evidence is that almost 17% of the 10,271 disasters registered worldwide between 1970 and 2010 occurred in Latin America and the Caribbean. Natural threats in the region range from hurricanes, floods and drought to volcanic eruptions, among others (Bello and others, 2017). Regular annual losses from disasters in the Caribbean are estimated at US\$ 3 billion, with the social and production sectors bearing the brunt. Core sectors such as tourism and agriculture are especially vulnerable as disasters invariably reverse or retard hard-won economic gains. Production and social spending are also diverted to meet reconstruction costs, directly affecting human well-being. Disaster-related costs are expected to escalate in the Caribbean in the face of population growth, rapid urbanization, increased exposure of assets and climate-change-related phenomena (Bello and others, 2017).

As demonstrated by the 2017 hurricane season, such storms are the most dangerous natural hazards affecting Caribbean countries. For the subregion, the average number of countries affected and magnitude

of damage caused by disasters⁹⁸ has increased significantly decade by decade since the 1970s (see figures 27 and 28). Indeed, based on accumulated data, the hurricane season of 2017 was the third worst in history.

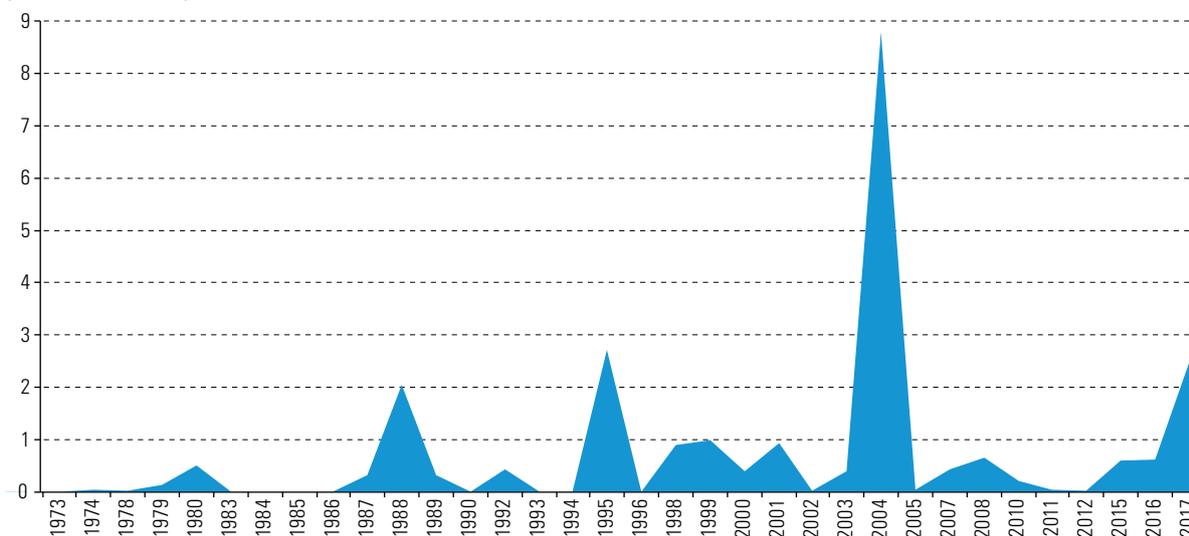
Figure 27
The Caribbean (29 countries and territories):^a number of disasters caused by storms and number of affected countries, 1970-2017



Source: Centre for Research on the Epidemiology of Disasters (CRED), Emergency Events Database (EM-DAT) [online] www.emdat.be.

^a Anguilla, Antigua and Barbuda, Barbados, Bahamas, Belize, Bermuda, British Virgin Islands, Cayman Islands, Cuba, Dominica, Dominican Republic, Grenada, Guadeloupe, Guyana, Haiti, Jamaica, Martinique, Montserrat, former Netherlands Antilles, Puerto Rico, Saint Kitts and Nevis, Saint Martin, Saint Lucia, Saint Vincent and the Grenadines, Sint Maarten, Trinidad and Tobago, Turks and Caicos Islands, United States Virgin Islands.

Figure 28
The Caribbean (29 countries and territories):^a damage caused by storms, 1973-2017
(Billions of dollars)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of Centre for Research on the Epidemiology of Disasters (CRED), Emergency Events Database (EM-DAT) [online] www.emdat.be, and assessments by ECLAC and the World Bank.

^a Anguilla, Antigua and Barbuda, Barbados, Bahamas, Belize, Bermuda, British Virgin Islands, Cayman Islands, Cuba, Dominica, Dominican Republic, Grenada, Guadeloupe, Guyana, Haiti, Jamaica, Martinique, Montserrat, former Netherlands Antilles, Puerto Rico, Saint Kitts and Nevis, Saint Martin, Saint Lucia, Saint Vincent and the Grenadines, Sint Maarten, Trinidad and Tobago, Turks and Caicos Islands, United States Virgin Islands.

⁹⁸ EM-DAT only has a monetary figure for damage. It does not have a monetary figure for the total cost of each disaster.

Given the Caribbean's vulnerability to disasters, stakeholders in the subregion must improve their capacity to incorporate the components of disaster risk management in sector planning and budgeting, rather than laying the full responsibility on emergency management agencies. In this regard, the conceptual framework of disaster risk management opens a window of opportunity for Caribbean countries. The framework allows for the development of innovative alternatives to effectively reduce community vulnerability to disasters while building capacities in disaster response and enhancing resilience. The disaster risk management framework comprises five pillars: risk identification, risk reduction, preparedness, financial protection and resilient recovery. These facilitate an integrated and proactive approach to disaster management. Unfortunately, despite global improvements, the subregion still lags far behind others with regard to the integration of disaster risk management into disaster management governance frameworks.

With respect to existing limitations, ECLAC has played an active role in assisting Caribbean governments with their alignment to the disaster risk management framework (see box 5) and has also stressed the importance of post-disaster assessments to identify the issues that aggravate the risks of disaster and to guide recovery processes. These assessments expose pre-existing social, economic and environmental vulnerabilities and offer governments an opportunity to change course. Since post-disaster assessments single out specific vulnerabilities, they allow authorities to prioritize needs for reconstruction, settlement relocation, and the provision of assistance to vulnerable and marginalized populations. The assessment of disasters is proposed not only for large-scale natural disasters, but also for high-frequency, low-intensity disasters, which have pervasive cumulative effects on local and national development. By consistently assessing the effects of separate disasters, evidence of the cumulative impact of disasters on the economy can be evaluated with the aim of reducing vulnerability.

Post-disaster reconstruction funding and follow-up is another aspect that stakeholders should consider more carefully. Assessment tools for macro socioeconomic and environmental impacts, such as damage and loss assessments (DALA) and post-disaster needs assessments (PDNA) should be deployed more consistently and supported with funding alternatives that allow the necessary recovery and resilience enhancement measures to be adopted. ECLAC has done extensive work in the Caribbean in this area (e.g. in the Bahamas in 2015, 2016 and 2017; Belize in 2016; Anguilla, the British Virgin Islands, Sint Maarten, and Turks and Caicos Islands in 2017). These initiatives should be consistently followed up through measures to identify specific funding alternatives that allow Caribbean countries to reduce their vulnerabilities to disasters. Moreover, governments are highly encouraged to undertake recovery and reconstruction assessments, as these allow stakeholders to determine the effectiveness of regional post-disaster management systems in the allocation of financial resources and in the overall achievement of reconstruction targets.

It is recommended that stakeholders in the region continue to support other smaller but equally important efforts. Initiatives such as the Green Response to Disasters project championed by the Association of Caribbean States, the CARICOM Regional Energy Efficiency Building Code (REEBC) and ICT for development (ICT4D) could be useful for promoting the gradual integration of the core pillars of disaster risk management into national and regional development frameworks. Stakeholders including the European Union,⁹⁹ CDB and OECS should be encouraged to become more actively involved as partners, providing technical and financial resources to advance the implementation of similar initiatives in the subregion. These entities could also help to broaden the discussion on the management of disasters as a fundamental part of the sustainable development agenda, given the increasing impact of climate change.

⁹⁹ In May 2015 the European Commission announced new funding of € 14.3 million to support countries in the Latin American and the Caribbean region affected by natural disasters and to invest in disaster risk reduction and resilience.

Box 5**ECLAC damage and loss assessments during the 2017 hurricane season**

The 2017 Atlantic hurricane season was one of the most impactful ones for the Caribbean subregion in recent years. According to the Emergency Events Database (EM-DAT), in the English-speaking Caribbean there were 10 disasters in nine countries and territories during 2017 Atlantic hurricane season.

The season's impact exceeded most of the customary physical indicators by which the strength and social displacement of a hurricane are measured. ECLAC led damage and loss assessments in five of the countries affected by the two most powerful storm systems of the year, Hurricanes Irma and Maria. These assessments were conducted for Anguilla, the Bahamas, British Virgin Islands, Sint Maarten, and Turks and Caicos Islands during the final quarter of 2017. The damages, losses and additional costs caused by these hurricanes were high relative to the size of the economies, with a total estimated cost of US\$ 5.4 billion. To this should be added the costs in other countries or affected territories such as Antigua and Barbuda, Dominica, and United States Virgin Islands.

The Caribbean (selected countries and territories): damage and loss assessments conducted by ECLAC during the 2017 hurricane season

(Millions of dollars at constant 2017 prices)

Country/territory	Damage	Losses	Additional costs	Total cost
Anguilla	188	123	16	327
Sint Maarten	1 049	988	53	2 089
British Virgin Islands	1 650	444	198	2 292
Turks and Caicos Islands	290	230	39	559
Bahamas	32	87	12	131
	3 209	1 872	317	5 398

Source: Economic Commission for Latin America and the Caribbean (ECLAC).

Of this total, damages are estimated at US\$ 3.2 billion. The production sector bore 44.1% of the total damage (US\$ 1.376 billion), followed by social sectors with 43.7% (US\$ 1.042 billion) and infrastructure with 11.6% (US\$ 785 million).

Losses of revenue and other income were estimated at US\$ 1.9 billion. In terms of losses, the production sector was the worst affected, accounting for 84.9% of losses. The infrastructure sector bore 11.6% while the social sector assumed 3.4%. More than 90% of losses were assumed by the private sector.

Additional costs were estimated at US\$ 317 million, of which 49.8% were in the infrastructure sectors, 32.6% social in the sectors and 16.8% in the production sectors.

The consequences of the 2017 Atlantic hurricane season will last several years. They also point to the importance of investing in disaster risk reduction for resilience and enhancing disaster preparedness for effective response and to “build back better” in recovery, rehabilitation and reconstruction.

Source: Economic Commission for Latin America and the Caribbean (ECLAC).

2. Coastal economic activities

The impact of natural phenomena such as extreme weather events, exacerbated by climate change and anthropogenic factors, have jeopardized the health of the subregion's critical marine and coastal services. For example, in the case of the fishing sector, all major commercially important fisheries are either fully developed or overexploited (Agard and Cropper, 2007). According to the World Resources Institute (Waite and others, 2014), 75% of coral reefs across the Caribbean currently face medium or high levels of threat. In fact, 10% of coral reefs are on the verge of collapse and show no live coral cover. In addition, 70% of the beaches in the region are being eroded at a significant rate. The destruction of the coastal ecosystem is not only an environmental problem; it constrains vital opportunities to reap the benefits of the Caribbean ocean's economy, as highlighted in chapter II.

Marine and coastal resources, including such sectors as fisheries and tourism, serve as the principal engine of growth for the service-based economies of the Caribbean. In fact, the dependence of Caribbean economies on their coastal and marine resources is among the highest in the world.¹⁰⁰ In 2016 alone, the travel and tourism sector in the Caribbean contributed US\$ 56.4 billion to the subregion's GDP (14.9%)¹⁰¹ and 13.4% of total employment. The Caribbean also claims one of the highest proportions of women in the tourism industry, concentrated in service (42.9%) and clerical jobs (67.3%) (Stuart, Gény and Abdulkadri, 2018). Activities such as scuba diving and fishing, hospitality services and restaurants provide more than US\$ 400 million in revenue across the region, supporting the livelihood of millions of Caribbean people (WTTC, 2015). Tourist facilities in Caribbean countries are usually close to the coast given the appeal of Caribbean beaches to visitors. This sector is therefore especially vulnerable to the effects of climate change such as sea level rise and disasters caused by natural hazards.

Despite these threats, the Caribbean Tourism Organization (CTO) estimates that tourist arrivals will continue to increase. Indeed, in 2016 the region experienced a 4.2% increase in arrivals, better than the overall international increase of 3.9% (CTO, 2017). Considering the sector's importance, it is illustrative to review the effects of the 2017 hurricane season on the tourism sector of the affected countries. That sector bore 51% of the total costs of these disasters in the ECLAC assessment of five countries and territories (see box 3). The damage was caused mainly by strong winds and water surge at the lower levels of the properties close to the seashore, both being pervasive problems throughout the Caribbean. Understandably, proximity to water is a desirable amenity for hotels, resorts and resorts, but it comes with a cost. In this case, proper seawalls are recommended to avoid damage and disruption of activities.

The duration of the post-disaster recovery of the tourism sector, estimated between two and five years in some of these territories, will have important effects on employment due to the percentage of people who work in this sector. Since this sector employs a large proportion of female workers, this factor should be considered during the reconstruction phase. During reconstruction, most of the employment generated comprises heavy tasks biased towards male employment. Specific compensation and employment policies should therefore be considered for women.

Considering the importance of the coastal activities and their vulnerabilities to extreme weather events, actions such as the definition of marine protected areas in the Bahamas and the indefinite moratorium on offshore oil exploration in Belize's territorial waters and exclusive economic zone are positive developments that reflect the willingness of stakeholders in the Caribbean to address the challenges to oceans and coastal resources. Other initiatives, such as the Caribbean Regional Sustainable Tourism Development Programme adopted by CTO in 2018, have also helped in shaping a regional sustainable tourism policy framework and in identifying the barriers that hinder its implementation¹⁰² (Andrews, Cumberbatch and Hinds, 2012).

To address coastal protection and tourism, new policy approaches that assure the sustainability of the tourism sector and the health of the natural resources have been essential. Already, more attention is being given to environmentally sustainable forms of tourism, such as ecotourism and community-based tourism. These trends take advantage of the unique characteristics of local communities and habitats, protect culture and heritage and increase the amount of tourist-dollars that stay in communities.

¹⁰⁰ It is estimated that around 70% of its population lives along the coast and relies in economic terms on its resources and services (WTTC, 2015).

¹⁰¹ According to the World Tourism and Travel Council (WTTC) the Caribbean comprises: Anguilla, Antigua and Barbuda, Aruba, Bahamas, Barbados, Bermuda, British Virgin Islands, Cayman Islands, Cuba, Dominica, Dominican Republic, Former Netherland, Antilles, Grenada, Guadeloupe, Haiti, Jamaica, Martinique, Puerto Rico, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Trinidad and Tobago, and United States Virgin Islands.

¹⁰² The objectives of the Caribbean Regional Sustainable Tourism Development Programme are: (i) improving planning and management; (ii) maintaining and developing a high standard of environmental quality; (iii) addressing sociocultural and economic issues; (iv) encouraging the conservation and sustainable use of natural and cultural resources by tourism enterprises; (v) intensity training and in-service education for a more sustainable approach to tourism; (vi) involving local communities and other stakeholders. The main barriers identified are: (i) lack of information on funding opportunities; (ii) lack of public awareness; (iii) low interest in sustainable issues by government; (iv) lack of collaboration among stakeholders; (v) lack of understanding about sustainable tourism; (vi) lack of clear objectives; and (vii) lack of access to low-interest finance (Andrews, Cumberbatch and Hinds, 2012).

Sustainable tourism also reflects global trends of environmental awareness and protection and places greater emphasis on the authenticity of the local experience.

Caribbean countries are thus moving towards a paradigm shift in the development of the tourism sector. The incorporation of sustainability considerations into regional and local policy frameworks has attempted to stimulate the sector's growth and to ensure that resources are used in a sustainable way. A continued effort to strengthen governance infrastructures is required, as well as a clear link between the incentive framework and the externality costs which arise from the use of environmental services in the tourism sector (Phillips, 2012).

ECLAC has identified three key elements for the enhancement of sustainability in the tourism sector. First, it is important to improve the institutional framework for environmental governance to provide the opportunity for all economic agents to earn rewards from the use of environmental resources while paying their true environmental cost. Second, it is necessary to create mechanisms, such as taxes, to better incorporate environmental externalities. Third, it is important for stakeholders to develop strategies to strengthen ancillary sectors and mitigate the impact of influences such as climate change. Vital backward and forward linkages between the tourism sector and other sectors of the economy, notably agriculture and the creative industries, should be further developed in a strategic manner to leverage growth opportunities across the local economies.

In this regard, it is argued that production sectors such as agriculture and manufacturing should be harnessed integrally to support local producers and services providers as part of a deliberate strategy to reduce the percentage of products and services consumed by the tourism sector that are imported or provided by international hotel chains. Allowing local markets to provide these products and services could boost community economies, thereby boosting local livelihoods. Finally, there is a continuing need to promote public awareness and education on the importance of sustainability. Sustainable development policy is best implemented in communities that are well informed of the advantages and implications of pursuing a sustainable approach to everyday living. Attention should, therefore, be given to building public awareness of the value of sustainable tourism among the widest range of stakeholders, as well as to identifying the roles and responsibilities of various stakeholders in attaining these policy goals (Phillips, 2012).

3. Protection of biodiversity

The geography and climate of the Caribbean islands give rise to a large diversity of habitats and ecosystems that are seriously threatened by the impacts of climate change and anthropogenic action. With 26,000 km of coral reefs, the Caribbean represents 7% of global coral reef ecosystems. The subregion enjoys a high degree of endemism and many marine habitats share the same species, especially migrating species. The subregion also hosts a wide range of terrestrial ecosystems and supports important freshwater habitats, wetlands and underground karst networks. In addition to providing habitat for many unique and migratory fauna and flora, freshwater sites provide clean water, hydroelectricity and many other ecosystem services to local communities. These services are especially important to Caribbean SIDS, most of which rely on limited, land-based fresh water from functional ecosystems (CEPF, n/d; OECS, 2009). However, more than 700 species in the subregion are endangered, making it one of the worst hotspots according to the Critical Ecosystem Partnership Fund (CEPF, n/d). In addition, processes such as urbanization, accelerated growth of communities and uncontrolled or unregulated pollution from economic activities put enormous pressure on ecosystems. This is aggravated by the fact that the management of protected areas in the subregion, both marine and terrestrial, is still weak and inadequately funded. An increasing number of countries, for example Antigua and Barbuda, Aruba and the Bahamas, depend on desalination for their freshwater sources, in the face of rapidly declining or non-existent freshwater sources (Cashman, 2013).

Goal 14 of the 2030 Agenda is “Conserve and sustainably use the oceans, seas and marine resources for sustainable development”. The Caribbean region has both sovereign marine waters and shared marine resources. Considering that natural resources management practices vary considerably from national to subregional and regional levels, the Caribbean region has historically addressed sustainable marine resources management at all these levels. These objectives are also detailed under national obligations including, for example, supporting the objectives agreed to under such agreements as the Samoa Pathway, the Aichi Biodiversity Targets under the Convention on Biological Diversity, the Land-Based Sources of Pollution Protocol (LBS Protocol) and the Protocol Concerning Specially Protected Areas and Wildlife (SPAW Protocol), the latter two both protocols to the Cartagena Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region.

An important example of a regional effort towards shared marine resources management is the project A Global Partnership for the Sustainable Management, Use and Protection of the Caribbean and North Brazil Shelf Large Marine Ecosystems (CLME+ region). CLME+ is a five-year project (2015-2020) implemented by UNDP and co-financed by the Global Environment Facility (GEF). It assists participating countries from two large marine ecosystems (LMEs) —the Caribbean Large Marine Ecosystem and the North Brazil Shelf Large Marine Ecosystem— to improve the management of their shared living marine resources through an ecosystem-based management approach. The combination of the two LMEs is referred to as the CLME+ region. Covering a vast marine area of 4.4 million km²,¹⁰³ the CLME+ region is regarded as one of the world’s most geopolitically diverse and complex LMEs. It is bordered by over 35 culturally diverse States and territories ranging from some of the largest (Brazil and the United States) to some of the smallest (Barbados and Saint Kitts and Nevis), representing different stages of development. This marine space covered by CLME+ is also key to many globally relevant ecological processes. The marine resources as well as key problems affecting their sustainable management are shared to a large extent by the many territories that make up this region. The more common activities negatively impacting the productivity of the marine ecosystems are overfishing, illegal unregulated fishing, marine pollution, habitat degradation and climate change.¹⁰⁴

B. Water resources and solid waste management

The management of water resources and solid waste has gained increasing attention in the discussion of sustainability in the Caribbean in recent years. However, actions remain insufficient. Addressing both topics poses serious challenges to stakeholders in the region, especially in the context of economic growth and the mitigation and adaptation of climate change. Both topics have been recognized as important in the achievement of overall economic development and human well-being in the Caribbean region. The two topics are also closely connected, since the inadequate management of each is a major threat to the other.

1. Water resources

Factors such as population growth and the scarcity of water resources challenge the traditional approach to water management. In fact, current and projected impacts of climate change on Caribbean resources are indisputably negative.¹⁰⁵ Projections show that, because of climate change, the Caribbean region will become markedly drier and that rainfall will decline, mainly during the rainy season. Furthermore, due to the close interconnectivity of land and sea, particularly in SIDS, the proper management of water resources is of great importance in the context of the conservation of marine ecosystems and groundwater.

¹⁰³ See [online] <https://www.clmeproject.org/>.

¹⁰⁴ See [online] <https://clmeplus.org/clme-region/>.

¹⁰⁵ In 2010 alone, over 100,000 acres experienced some kind of water stress, prompting government investment of over US\$ 30 million (CCIC, 2013).

Combined with rising sea levels and increasing average temperatures, the projected overall result of this situation is significantly lower levels of water security and an increased need for responsive and innovative water management solutions that provide potable water and water for commercial, industrial and agricultural needs (CCIC, 2013).

Although there is an increasing trend to mainstream water resources management at the local and regional level, countries in the subregion have yet to implement adequate governance frameworks to fully support their initiatives. At the national level, the management of the Caribbean water resources sector is still governed by inflexible organizational arrangements. On the one hand, there are countries that have exclusive institutional entities to address water resources management, such as Jamaica, Trinidad and Tobago, while others share this responsibility across a number of ministries and institutions. In most Caribbean countries, water service providers also play a key role in water management. Water supply and wastewater services are undertaken by a government-owned company or statutory authority, with little independent oversight and evaluation. Little distinction is made between responsibilities for water services and water resources management, as they are centralized within the same organization. As a result, water resources are seen as an integral extension of water supply services. Finally, organizations such as CDB, IDB, the European Union, the Food and Agriculture Organization of the United Nations (FAO) and USAID tend to focus their attention on operational activities at the regional level, but rarely focus on restructuring institutional frameworks at the national level (GWP, 2014).

Although most countries report over 95% access, with water seen as government-guaranteed service provided at minimal cost, potable water sustainability is not guaranteed. Issues such as the lack of potable water, ageing water infrastructure, inefficient water use by core sectors of the economy, lack of wastewater management and lack of long-term planning hinder the long-term sustainability of water services. In addition, the provision of water services, its economic regulation and tariff definition are neither standardized nor updated. Consequently, water resources are overexploited and there is no major incentive for their conservation (GWP, 2014).

Among some of the most important alternatives that should be explored to address the challenges posed with respect to water resources are: (i) rainwater harvesting at the individual residence level; (ii) the use of desalination as an option for the provision of potable water; (iii) the design and development of irrigation systems that optimize the harvesting and use of ground, surface and rainfall resources; (iv) recycling and reuse; and (v) wastewater management. In addition, the linkages between the water sector and other sectors should be further explored (GWP, 2014). Two of the sector's most relevant linkages are with the energy and the tourism sectors. First, the transportation and desalination of water consume large amounts of energy. As mentioned before, energy in the Caribbean is mainly imported and generated from fossil fuels. Water management could increase water security as it would not be linked to the behaviour of the energy sector. Second, the disposal of wastewater into the oceans encourages the growth of sargassum, which has negatively affected the attractiveness of beaches and coastal areas so important to the tourism sector, while increasing nutrient loads in coastal waters, impacting reefs, fish nurseries, seagrasses and other coastal marine ecosystems. The need for more consistent wastewater treatment given the high levels of urbanization in Caribbean coastal areas demands urgent attention.

Caribbean countries have expressed commitment to working towards the development of integrated water resources management (IWRM) strategies and plans. The CARICOM Council for Trade and Economic Development (COTED) has reaffirmed the importance of water resources for sustainable development, especially in the context of climate change, as has the Global Water Partnership-Caribbean (GWP-C), which was formed in 2004 and represents a milestone in IWRM instrumentation. GWP-C has no fewer than 80 partners in over 20 Caribbean territories who have worked to promote better water resources management through the adoption of IWRM schemes. GWP-C supports the development of IWRM roadmaps and undertakes awareness-raising activities (GWP, 2014).

CELAC has also addressed water management in its Plan for Food and Nutrition Security and the Eradication of Hunger 2025,¹⁰⁶ through capacity-building programmes to secure access and improve water management. It also raises the sustainable use of surface and ground water, water harvesting and the use of recycled water in agriculture. Capacity development programmes aimed at producers, farmers, women, youth and their organizations ensure that they consider optimum production systems (FAO, 2014).

2. Solid waste management

Solid waste management, apart from its obvious physical unattractiveness, has played a secondary role to other issues such as energy, land and coastal degradation, biodiversity loss, and climate change. Although recent figures are unavailable for most countries, solid waste generation for the Caribbean was estimated at between 27,000 and 945,000 metric tons in 2005, with daily per capita waste generation rates ranging from 0.7 kg to 2.8 kg. At the Ocean Conservancy's International Coastal Cleanup Conference held in Montego Bay in 2008, it was reported that a total of 6,781,537 items of garbage had been collected from Caribbean coastal areas, 90% of which were from land-based sources (Binger, 2011). According to Caribbean Regional Fund for Wastewater Management (GEF-CReW) and the United Nations Environment Programme (UNEP), 85% of wastewater entering the Caribbean Sea remains untreated and 51.5% of households lack sewer connections. In contrast, only 17% of households are connected to adequate collection and treatment systems. In addition, wastewater discharge has been a large contributor to the loss of over 80% of living coral in the Caribbean in the past 20 years. UNEP (Villasol and Beltrán, 2004) has drawn attention to the problems caused by sewage-related pollution: (i) increased fish mortality; (ii) eutrophication; (iii) threats to corals, swamp ecosystems and seagrass beds; (iv) biological diversity loss; (v) red tides; and (vi) impacts on human health.

Several waste management challenges facing the Caribbean have been identified (Phillips and Thorne, 2013). According to De Cuba, Burgos and Contreras-Lisperguer (2008), the cost of land for municipal landfill sites is possibly the most obvious constraint, since landfills are overwhelmingly the most widely-used waste disposal method in the Caribbean. Apart from land availability, SIDS also face the challenge of choice of optimal location. Given that most built developments and settlements are in the coastal zone, Caribbean countries are often forced to establish landfills in the coastal area to minimize per capita waste haulage costs, as well as take advantage of more level coastal terrain for disposal. Other related constraints identified by ECLAC include limited natural, human and financial resources, the unavailability of scale-efficient technologies, highly open, trade-dependent economies, weak institutions and weak governance frameworks.

The particular economic, social and environmental circumstances of the Caribbean make this issue critical, especially for medium- to long-term sustainable development. Adequate and integrated waste management is crucial in economic terms since Caribbean economies are mainly natural-resource-based, with tourism, mining, agriculture and fisheries being the dominant sectors. First, both the physical beauty and pristine nature of the Caribbean attract up to 20 million cruise and stay-over visitors annually, making the tourism sector one of the main contributors to GDP and employment in most countries. Second, mining and agriculture contribute significantly to the generation of hazardous and other toxic waste and have the potential to damage the natural environment. In this sense, all these economic activities can be significantly affected by the absence of adequate waste management systems. With respect to the social dimension, overall economic growth and resulting levels of urbanization and consumption have increased the generation and diversification of the waste stream, with rapidly growing challenges such

¹⁰⁶ The document also has considerations for topics presented in this chapter, especially disasters. CELAC understands that a stable production and timely attention to socio-natural disasters that can affect food availability (FAO, 2014).

as e-waste, plastics, toxic and biomedical waste. The waste management issue is also compounded by the fact that the Caribbean comprises mostly SIDS. The impact of marine litter is readily amplified through indirect pollution of groundwater and surface water, degradation of coastal and marine resources such as wetlands, coral reefs and fisheries, limited land space in which to site waste disposal facilities, limited human and institutional capacity for regulating and managing waste, and enhanced public health risks (Phillips and Thorne, 2013).

Considering the heterogeneous nature of local water management frameworks, incremental approaches are required to attend to the current situation of the sector. Any local effort in this direction should be coupled with international contributions (i.e. financial and technical), and most importantly, with support at the highest political level. It is also imperative for stakeholders to involve both women and men, especially in IWRM initiatives, since this can increase the overall effectiveness and efficiency. Participation by both women and men could improve the performance of the project, as well the likelihood of sustainability. In this sense, a project is more likely to achieve its goals if women and men, regardless of social class, are active participants and decision makers (UNDP, 2006).

The LBS Protocol to the Cartagena Convention is an important framework for combating marine litter. Annex I of the Protocol lists the primary pollutants of concern which include “persistent synthetic and other materials, including garbage, that float, flow or remain in suspension or settle to the bottom and affect marine life and hamper the uses of the sea”. Annex II provides parameters for determining how to evaluate wastes, including parameters for: (i) the characteristics and composition of the waste, (ii) the characteristics of the activity or source category, and (iii) alternate production, waste treatment technologies or management practices. Finally, annex III sets acceptable levels of waste concentrations in wastewaters, and says that “floatables” (solids) should not be visible (United Nations, 2014).

Caribbean countries will need to more diligently to incorporate waste management as a core activity in the achievement of their development goals. In this regard, among the critical strategies for enhancing waste management operations in the Caribbean proposed by ECLAC are: (i) implementation of fully integrated solid waste management systems; (ii) promotion of national composting; (iii) promotion of recycling; (iv) review of fee structures for municipal solid waste management; (v) strengthening of institutional and regulatory frameworks for municipal solid waste management; and (vi) promotion of public-private partnerships for solid waste management (Phillips and Thorne, 2013).

This challenge also offers a great opportunity to address other important considerations, such as the need to redress gender inequality. In that sense, the effectiveness of waste disposal initiatives can be improved through the incorporation of an understanding of gender particularities. Waste management initiatives can also provide support to women (especially if they are responsible for waste disposal) and ease their overall work burden through improved family health. In addition, waste disposal initiatives can contribute to gender equality by offering opportunities for women’s increased employment (OCDE, 1998). It is also important to find synergies between the management of waste and other threats. For example, stakeholders in Trinidad and Tobago are working to develop a waste-to-energy plant to enhance sanitation facilities while maintaining scenic beauty. This plant is also expected to generate bioenergy, helping to tackle renewable energy generation in the country.

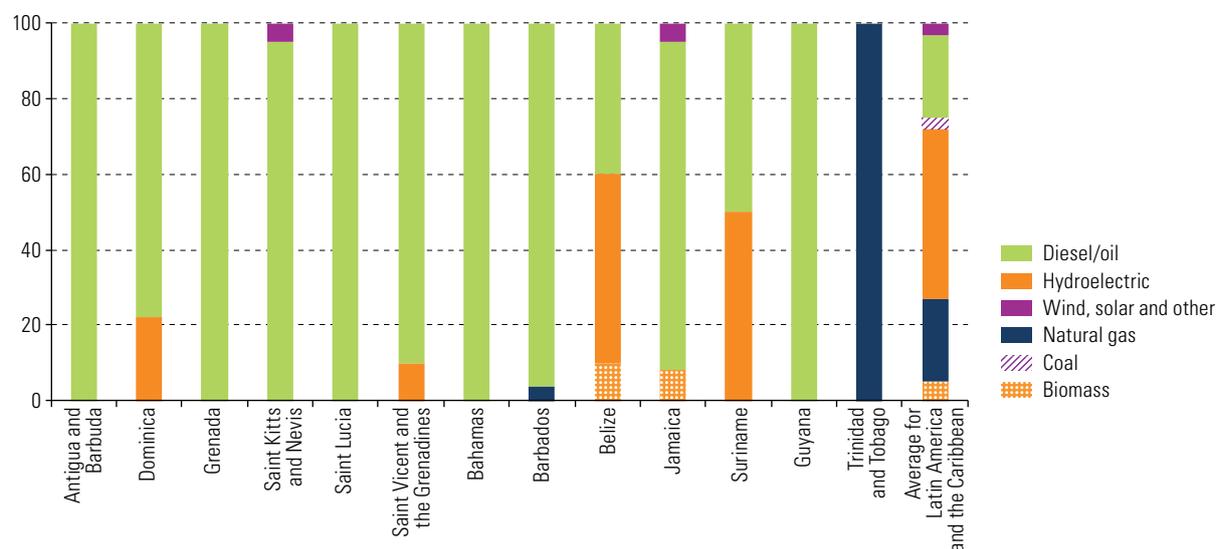
C. Energy transition

The demand for energy services in the Caribbean has increased considerably over the last decade. Despite efforts to modernize energy systems, most countries still rely heavily on fossil fuels to meet their power requirements. Indeed, the greater Caribbean region has only four fuel-producing nations; Barbados, Belize, Suriname and Trinidad and Tobago. Of these countries, only Suriname and Trinidad and Tobago maintain a net positive energy production balance; in the other two, energy consumption

continues to outweigh primary energy production. However, large deposits of high-grade oil have recently been found off the coast of Guyana, and that country is preparing to begin pumping within the next year or two. Similarly, in 2018, Grenada found oil and gas in huge commercial quantities and will likely become a major oil-producing country in the near future. Although initiatives like PETROCARIBE,¹⁰⁷ have provided Caribbean countries with an alternative to finance their fuel consumption, the volatility of oil prices still render these economies vulnerable. As a result, countries in the subregion have some of the highest electricity tariffs in the world (OAS/NREL, 2012; Ochs and others, 2015; CDB, 2015b).

Most countries have implemented appropriate national energy policies. Although the region has advanced from a policy point of view, the implementation and enforcement of regulations is lethargic. Trinidad and Tobago has committed to increase the percentage contribution of renewable energy sources in its overall energy supply to 10% by 2021; Grenada seeks to achieve a 20% contribution of renewable energy in all domestic energy usage by 2020. However, energy diversification is still to be achieved in these and many other Caribbean countries (see figure 29).

Figure 29
The Latin American and Caribbean region and the Caribbean (13 countries): installed generation capacity, various years up to 2015
(Percentages of total capacity)



Source: A. McIntyre and others, "Caribbean energy: macro-related challenges", *IMF Working Paper*, No. WP/16/53, Washington, D.C., International Monetary Fund (IMF), 2016

Given the existence of data gaps in the region, it is difficult to obtain an accurate breakdown of the exact share of every sector in primary energy consumption, making analysis and strategic planning difficult. However, it is known that electricity generation is the main consumer of fossil fuels, followed by transportation and industry. The growth of the tourism sector and increased access of the population to adequate housing has boosted the overall demand for energy services. In most countries the energy sector is characterized by the monopoly of a single power utility that controls the generation, transmission and distribution of on-grid electricity. There are few independent electricity producers, typically because of special restrictions on such activities. In addition, electric power systems throughout the subregion

¹⁰⁷ PETROCARIBE is an alliance of Caribbean States with the Bolivarian Republic of Venezuela established in 2005 to purchase oil on preferential payment conditions. The payment system allows for a participating nation to buy oil at market value with only a portion paid upfront; the remainder can be paid through a 25-year financing agreement at 1% interest.

tend to be isolated, outdated, and unreliable. The resilience of generation systems and transmission and distribution networks to potential hazards is thus limited and energy security not guaranteed. Electricity access is generally universal, but countries like Belize, Guyana, Saint Vincent and the Grenadines and Suriname still face severe challenges, such as frequent lack of access, mainly in rural areas. In other fuel-intensive sectors, such as transportation, industry and construction, the use of outdated, inefficient technologies has resulted in increasing consumption patterns (OAS, 2012; CARICOM, 2015; CDB, 2015).

Fortunately, the subregion shows great potential for overcoming the limiting characteristics of current energy systems and for transitioning to the application of more sustainable technologies and practices. Caribbean countries can develop or access almost all renewable energy technologies known today, making it possible to diversify energy mixes across the subregion in the future. In addition, the transition of some Caribbean economies from agriculture to industry and services opens a window of opportunity for the deployment of sustainable demand-side measures, such as energy efficiency in the building sector, transportation, lighting, and industry. Factors that hinder the modernization of energy systems include fiscal constraints, data gaps, lack of local capabilities, weak local markets and incomplete or inadequate governance frameworks. The welfare of the energy sector in the Caribbean is also heavily influenced by natural disasters induced by climate change. The increase in the frequency and magnitude of tropical cyclones has devastated the energy infrastructure of many countries in recent years.

The Caribbean adopted a regional energy policy at the fourteenth Inter-Sessional Meeting of the Conference of Heads of Government of the Caribbean Community. Implementation of this policy has been supported by the creation of an Energy Unit within the Directorate of Trade and Economic Integration of CARICOM in 2008, and the adoption of the Caribbean Sustainable Energy Roadmap and Strategy (C-SERMS) as a guiding implementation framework. Other relevant projects that have been completed in this context and were instrumental in setting the path for the subregion were the Caribbean Renewable Energy Development Programme (CREDP), the Caribbean Renewable Energy Capacity Support Project (CRECS) and the Caribbean Sustainable Energy Programme (CSEP). Although these programmes faced important challenges that limited the implementation of their goals, they played a fundamental role in putting energy issues on national and regional agendas, laying the foundation for the subregion's vision on energy sustainability and paving the way for complementary initiatives that sought to address the limitations encountered along the way. Each programme also produced new information on the sector.

As a result, key issues have been widely surveyed and discussed, especially the Caribbean's potential for renewable energy development, the challenges and barriers to implementation of such an energy strategy and the opportunities for intraregional energy connection which might be exploited, among others. Though not all issues have been completely addressed, there is regional consensus on the importance of a more aggressive deployment of renewable energies, better data gathering schemes and the need for the promotion of energy efficiency.

Caribbean governments need to work more actively with regional and international organizations in strengthening indigenous capabilities and local awareness if they are to reap the benefits from the modernization of energy systems. Threats posed by climate change and natural disasters should be seen not only as opportunities to promote the energy modernization agenda, but also as core concerns guiding the long-term strategic planning and operations of government agencies in the Caribbean. In addition, a gender perspective could nurture energy modernization initiatives in a positive way. The diversification and decentralization of energy systems should be viewed as an opportunity not only to enhance resilience measures, but also to improve access to energy services for all Caribbean citizens. In this regard, the impact of interventions designed to promote energy access depends on household decision-making and how the preferences, opportunity cost of time and welfare of women are reflected in those decisions. Accordingly, the expansion of access to energy is another area that could have positive impacts on women's well-being (Köhlin and others, 2011).

D. Sustainable transportation

Fossil energy is the primary source for power generation and domestic transportation in the Caribbean. Considering the global challenges from climate change, many countries have initiated strategies and projects for deploying renewable energy technologies, as well as enhancing energy efficiency. IMF (2016) estimates that transportation accounts for 36% of the total primary energy consumed in the region. This highlights the importance of increasing energy efficiency in the transportation sector as one of several strategies to improve performance, mitigation efforts and sustainability. To date however, efforts to transition to renewable energy and to enhance energy efficiency in domestic transportation systems remain very limited. Transportation remains understudied in Latin America and the Caribbean and there are important data gaps that frustrate policymaking and a comprehensive understanding of the sector.¹⁰⁸ These gaps impact the sustainability and efficiency of fleet transitions, as they reflect lack of understanding of fleet composition and of the minimum technical and governance requirements that should be applied (Ochs and others, 2015).

Transport-related policies are so varied that they require major investments and systemic changes in areas such as urban planning, development of public transportation alternatives, establishment of sectoral emissions goals, introduction of incentives to promote use of energy-efficient vehicles and adjustments to the users' behaviour. Along with access to reliable electricity, inefficient transportation systems are also an important barrier to development in the subregion, as suboptimal systems increase the cost of goods and services throughout the Caribbean. Furthermore, countries in the subregion are currently underutilizing public transportation, which could reduce the use of personal vehicles. Addressing this issue is not easy, demanding urban planning and the implementation of attractive new public transportation options. In addition, governments that choose to make changes to the current transportation paradigm are expected to make improvements to their infrastructure and institutional, regulatory and technical frameworks, thus creating an enabling environment and setting the foundations to promote a generalized transition of other public and private vehicles in the near future.

ECLAC has actively supported the design of energy efficiency measures to improve the performance of government transportation fleets (Flores, Hidalgo and Peralta, 2017). The opportunities and challenges for increasing energy efficiency in government vehicle fleets through electrification have been explored. As a result, the international best practices in fleet electrification have been identified and the most suitable comprehensive approaches for fleet transitions suggested. In view of the leading role that the public sector plays in promoting the use of renewable energies and enhancing energy efficiency, ECLAC has presented a roadmap to transition government fleets to vehicles that have equivalent energy efficiency alternatives in the market.¹⁰⁹ ECLAC suggests that such a transition would give Caribbean States the opportunity to assess and upgrade their electricity infrastructure and test its readiness to support the introduction of renewable energies. This would also allow them to introduce institutional, normative, technical and infrastructure modifications and upgrades to pave the way to extend the transition to public and private transportation in the near future. Although ECLAC focused strictly on government fleets, private users could benefit from some instruments, such as the fleet assessment to determine the viability of purchasing alternative-fuel vehicles. It should be noted that fleet transition in the context

¹⁰⁸ Four main data gaps that hinder further improvements in this sector have been identified: (i) coordinated data collection and analysis, as data are often disorganized or uncollected, (ii) updated sector plans and strategies, since available information is often out of date, (iii) fuel use, and (iv) reliable vehicle registration databases. In addition, ECLAC observes data gaps in the assessment of grid functionality and storage potential, updated power sector capacity plans, and detailed analysis of electricity end-users.

¹⁰⁹ This roadmap consists of three stages with related subphases: (i) readiness (objectives and goals, vehicle eligibility criteria, fleet assessment, technology assessment, governance assessment, and infrastructure analysis); (ii) implementation (operation, maintenance and disposal); and (iii) follow-up (monitoring and verification). ECLAC concluded that Caribbean efforts towards fleet transition may be in the readiness phase. The study therefore focuses on establishing criteria to assess the level of readiness and outlines the most relevant components and accomplishments required to carry out the preparatory phase for an energy-efficient fleet transition (Flores, Hidalgo and Peralta, 2017).

of energy efficiency and renewable energy deployment does not only mean electrification. This kind of effort requires broad participation of all related stakeholders, the implementation of governance reforms and modernization or improvement of the existing infrastructure. Governments should be encouraged to make sure the right instruments to gather and analyse information are put in place.

Caribbean SIDS should seek to collaborate with regional or international entities and donors in the deployment of standardized instruments for data gathering and analysis. Although there are data gaps and governance issues that require prompt attention before moving forward, the subregion has shown great disposition and progress in this direction. The achievement of the broader goals in this regard must be supported with specific actions in public transportation systems and the deployment of programmes aimed at fostering a behavioural change among drivers and at improving the performance of roads by reducing traffic volumes. Public transportation in particular is of relevance to the subregion because it is essential for movement of the workforce and those who lack access to a vehicle. Decision makers and planners should consider measures in the public transportation sector that are aligned with land use and transportation planning strategies. In addition, the adaptation or transformation of public transportation systems in the Caribbean could provide a great opportunity to address gender inequality, as more efficient and safer transportation systems could improve and facilitate mobility and accessibility. Such a facility would respond to specific needs, such as addressing the employment challenges experienced by women in both rural and urban areas.

Another important topic to address in the context of the enhancement of sustainable transportation in the subregion is inter-island passenger transportation. ECLAC has studied the main factors that influence the demand for maritime passenger transportation in the Caribbean, highlighting the importance of switching to more sustainable means of transportation to address the challenges posed by climate change and overall economic vulnerability. The incorporation of maritime transportation systems such as ferries is one such suggested response. This means of transportation could provide Caribbean countries with an alternative that makes better use of maritime space and that has the potential to foster trade and tourism. The strong economic performance of the subregion's economies were found to offer a good basis for the growth of maritime passenger services in the Caribbean (Bello, Phillips and Indar, 2016).

E. Addressing capacity challenges in implementing the environmental pillar of the Sustainable Development Goals in the Caribbean

The Caribbean has made measurable progress in sustainable environment management. At the same time, there is work to be done in forging greater synergies between the environment and other sectors. To achieve the goals of sustainable development, policymakers must provide stakeholders with robust and flexible governance frameworks that recognize the importance of the environment and natural resources management. This will require human resources development, including knowledge management. In addition, providing personnel with adequate incentives will contribute to building working teams with the expertise and knowledge to address cross-cutting environmental issues. Stakeholders should also leverage the support given by relevant agencies in this area.

Environmental and natural resources management in the context of national and regional priorities and supporting SIDS sustainable development and the 2030 Agenda will require additional financing. The subregion will need to explore innovative financing frameworks that consider the prevailing circumstances, taking into consideration current fiscal constraints and the lack of access to concessional financing. One way to address these issues is by pursuing funding for investment in green industries, which will address simultaneously climate adaptation, use of cleaner technologies, poverty and unemployment reduction. These industries should be linked to the current core sectors of Caribbean economies, notably

agriculture and tourism, and to prospective new niches in energy, water and wastewater management, and recycling.

Funding alternatives should also address the subregion's vulnerability to natural disasters and the need to incorporate sustainable reconstruction and resilience measures. This approach will also have to be complemented by existing post-disaster instruments such as the Caribbean Catastrophe Risk Insurance Facility (CCRIF) and methodologies, notably the ECLAC damage and loss assessments and post-disaster needs assessments. The 2017 hurricane season demonstrated the need for clearer pathways to financing post-disaster reconstruction and resilience enhancement. Resilient reconstruction should be regarded as the norm and not only as a reactive approach to this kind of event.

The Green Climate Fund represents one of the most viable funding alternatives for Caribbean countries. In this regard, governments in the subregion should take advantage of platforms such as the Structured Dialogue with the Caribbean hosted by the Fund in Belize in June 2017¹¹⁰ to express concerns and share strategies to tailor funds to the requirements of the Caribbean. While the Fund has a presence in the region, however, a greater level of involvement on the part of Caribbean countries is desirable and necessary.

Whatever the funding sources, Caribbean countries should make sure that financing delivers value for money. For this subregion, integrated environmental management is urgently needed as a component of sustainable development. Caribbean citizens demand sustainable approaches to every aspect of their society, environment and the economy. Achieving this should be seen as an opportunity to foster economic development and to position the Caribbean as a climate-resilient and environmentally responsible region. National development plans should build upon frameworks inherent in the green and blue economy, leveraging international best practices, experiences and partnerships to better reinforce their transition to more sustainable societies and economies.

¹¹⁰ The purpose of this meeting was to bring together key stakeholders and increase engagement. Another significant focus was developing a roadmap for Caribbean countries by identifying project opportunities in partnership with accredited entities, as well as mapping readiness and project preparation support needs that GCF can provide.

V. A way forward: policy considerations and recommendations

Today the Caribbean subregion stands at a critical juncture, characterized by both long-standing challenges and emerging opportunities.

The challenges straddle the social, economic and environmental dimensions of development. They range from the onerous debt burden and persistently low economic growth to poverty, inequalities and increasing non-communicable diseases, and to substantial threats to ecosystems and biodiversity. The global context in which Caribbean countries must address these challenges, as outlined in the preceding chapters, is not favourable.

While the challenges are many, there are also opportunities which can be pursued to ensure that the countries of the subregion do their utmost to achieve the Sustainable Development Goals and, in this journey, ECLAC will collaborate with the subregion in the framework of its Caribbean first strategy.

The development of holistic global development frameworks, such as the 2030 Agenda, the Samoa Pathway and the Sendai Framework, have served to define and clearly mark the path to a viable and sustainable future in the Caribbean. These frameworks have fundamentally changed the development paradigm by identifying synergies and interlinkages among the three sustainable development pillars, and form an unprecedented globally-agreed platform for addressing these interrelated challenges in the medium to long term. Moreover, they all call for greater attention to be paid to evidence-based decision-making and to monitoring, transparency and accountability and to promote a people-centred approach where all women and men can contribute to and benefit from sustainable development. These measures should improve policy formulation and implementation in the Caribbean subregion, promote policy consistency over time and across sectors, and encourage multi-stakeholder involvement and engagement.

The following sections contain the conclusions and recommendations, which are largely aimed at facilitating priority-setting across the three sustainable development pillars.

A. Aligning Caribbean national development frameworks with global sustainable development agendas

The mainstreaming of the SDGs should now be integral to the formulation and implementation of national development plans in the Caribbean. The main challenges that Caribbean countries face in formulating such plans include financing for development, particularly inadequate access to concessional resources and grants; weak technical capacities, especially with regard to the production of disaggregated data; insufficient public awareness and political buy-in; and shortcomings in establishing effective institutional mechanisms to implement the plans.

Key recommendations:

- Caribbean countries should continue to make the case against the “graduation” of SIDS which prevents them from accessing grants and concessional resources from the multilateral development banks and bilateral sources.
- Multilateral and bilateral partners should be urged to continue and intensify their cooperation with Caribbean regional institutions and with member States and associate members in order to strengthen technical capacity and capabilities in the subregion to produce and disseminate disaggregated data.

- Every Caribbean country should prioritize drawing up an integrated, long-term national development plan. Countries that have not yet formulated a national development plan should take advantage of the 2030 Agenda to do so. When devising a new plan or implementing an existing one, Caribbean countries should institutionalize evidence-based processes in their national development and policy processes to ensure the sustainability of national development strategies.
- Institutionalizing evidence-based processes will require statistical capacities to be strengthened to ensure that disaggregated official statistics are collected, processed, produced and disseminated in a timely manner. Therefore, the national statistical system in each country should be formalized to facilitate the follow-up and review of the SDGs and the SIDS agenda in parallel with the monitoring and evaluation of the national development plan.
- Caribbean countries should ensure that the institutional mechanisms to implement the SDGs and the accompanying national development plans have multisectoral and cross-cutting structures. These mechanisms can benefit from the involvement of all stakeholders, including civil society organizations, academia and the private sector, and the effective participation of women, youth, older persons and persons with disabilities, among other groups. Countries that have not yet done so should initiate public awareness-raising and information campaigns in respect of the 2030 Agenda for Sustainable Development.

B. Critical cross-cutting issues for the implementation of global and national development frameworks in the Caribbean

The three cross-cutting issues critical to bringing about sustainable development in the Caribbean subregion are: achieving gender equality; utilizing ICTs for development; and generating data for evidence-based decision-making. These issues not only underpin a number of Sustainable Development Goals and targets, but are critical to the successful implementation of the global development frameworks at the subregional level.

Key recommendations:

- The subregion will need to address the persistence of gender inequalities that prevent Caribbean women from exercising their rights and undermine their decision-making, physical and economic autonomy, which is at the core of the Regional Gender Agenda that Caribbean governments have committed to implementing in synergy with the 2030 Agenda for Sustainable Development. To this end, governments in the subregion should prioritize drafting, reviewing and adopting national gender equality policies and plans, strengthening the machineries for the advancement of women, increasing budget allocations for gender issues and fostering intersectoral and inter-agency coordination at all levels of government to mainstream a gender perspective in all policies and development plans in the subregion.
- Equally important is the need to strengthen the role of ICTs in the Caribbean subregion by expediting and promoting efforts to improve and harmonize legal and regulatory frameworks; broadening and deepening ICT training and skills in the subregion, especially for women, youth and older persons; and incentivizing investment in more robust and reliable national and regional broadband networks.
- A related objective is removing the main constraints on the potential of ICTs to improve the efficiency and effectiveness of disaster risk management, including by strengthening human resource capabilities in this area.

- Caribbean countries are encouraged to conduct an assessment of their capacity to generate and use disaggregated data, in particular gender data. To promote the wider collection and use of gender data, there is a need for greater awareness of the value of gender statistics and more investment in statistical literacy. Greater collaboration among a wide range of stakeholders, including national statistical offices, national machineries for the advancement of women, ministries, academia, non-governmental organizations and the private sector, is essential. Such collaboration will enhance the working relationship between the producers and users of gender data, and promote the sharing of good practices for addressing the challenges that the Caribbean currently faces with regard to the production and dissemination of robust gender statistics.
- In recognition of the critical role disaggregated data plays both in sound evidence-based decision-making and in promoting transparency, accountability and good governance, statistical capabilities in the Caribbean need to be strengthened. ECLAC will continue to assist Caribbean countries in this regard.

C. Partnerships for sustainable development

In order to meet the technical and financial requirements for implementing a new generation of integrated global, subregional and national development frameworks, the Caribbean subregion will have to embark on a process of both strengthening traditional partnerships and developing and consolidating new ones.

Key recommendations:

- Caribbean partners among the members of the Development Assistance Committee (DAC) should support Caribbean countries by providing more financial and technical assistance for implementing the 2030 Agenda for Sustainable Development and the Samoa Pathway, thus reversing recent declines in ODA flows to these countries.
- Caribbean partners, and the wider global community, should support in all relevant forums the recommendation that new parameters of eligibility be designed for better access to financing for development for SIDS, made in the report of the Joint Inspection Unit, “Comprehensive review of United Nations system support for small island developing States: final findings”.
- Caribbean partners, and the wider global community, should be encouraged to strongly support the ECLAC Debt for Climate Adaptation Swap Initiative in all relevant forums. This proposal can help to create greater fiscal space, while promoting investments in green industries for economic transformation and sustainable development.
- Caribbean countries should utilize the high-level political forum on sustainable development, the Forum of the Countries of Latin America and the Caribbean on Sustainable Development, CARICOM, CELAC and related institutions and platforms to strengthen relationships with traditional and leading partners, such as the European Union, as well as to promote newer forms of collaboration and partnerships, such as triangular and South-South cooperation. These institutions can help to bring the impact of de-risking on the Caribbean economies to the attention of the global community.
- Caribbean countries should intensify their efforts to mobilize resources by exploring new instruments as well as new sources, including private and philanthropic funding, and the use of blended and other forms of innovative financing.

D. Recognizing constraints and pursuing opportunities in the economic sphere

The Caribbean subregion has failed to keep pace with other developing countries, including SIDS, in terms of economic growth. Despite considerable challenges, Caribbean countries must do more to build resilience and strengthen adaptive capabilities through policy choices, actions and strategies aimed at structural transformation.

Key recommendations:

- Deepening and expanding the regional integration process will be essential to updating the Caribbean vision of sustainable development. To achieve this, gains will have to be made beyond functional cooperation, through the free movement of goods, people, services, capital and technology in the subregion as part of the CARICOM Single Market and Economy (CSME) initiative.
- The subregion must become more export competitive. To achieve this, countries should prioritize four enabling factors: (i) skills development and training for both women and men; (ii) sustainable energy; (iii) infrastructure, both physical and digital; and (iv) private sector development, especially of MSMEs, through trade facilitation and access to finance.
- A more competitive subregion should provide the basis for participation in, and a focus on, more skill-intensive and technology-driven areas of goods and services production. To this end, strategies should focus on two areas: (i) value chain production and engagement; and (ii) blue economy development.
- Key recommended strategies for value chain production and engagement include stronger trade and economic ties within the subregion, region and hemisphere. These ties that go beyond the existing network of formal agreements and encompass production and trade linkages based on improved market intelligence, industry to industry contacts, and modern and more efficient trade-related infrastructure and border processes.
- A recommended strategy for developing the blue economy is to promote integrated ocean governance frameworks, including coordination and synergies across the spectrum of policymaking bodies and stakeholders; regulate access and downstream use of marine genetic resources within national jurisdictions—including EEZs—in accordance with internationally agreed principles, objectives and obligations, which cover prior informed consent and mutual benefit sharing; build knowledge and technical capabilities within the subregion with regard to the marine environment, including aligning education and training priorities with the technical and scientific requirements for the sustainable development of marine and ocean resources; and promote the sustainable development of tourism and related industries.
- Support should be provided for cultural and creative industries through fiscal incentives, market intelligence, data generation and other business support services; outreach and education on rights and obligations under copyright and other intellectual property agreements and conventions within the creative industry and the wider Caribbean society; existing initiatives, notably those of the Caribbean Export Development Agency and the Caribbean Development Bank, to nurture and facilitate the development of businesses in the creative industry and to strengthen the industry's competitiveness.
- Caribbean countries should step up advocacy efforts at the national, regional and international level to raise awareness among the international community of the devastating impact of terminating correspondent banking services, or “de-risking”, on the Caribbean economies, with a view to finding a solution.

- There should be greater subregional coordination to address the challenges faced by the international financial services (IFS) sector in the Caribbean. This is essential for establishing regulations and making clear the challenges that small island developing countries face in the IFS sector.
- With regard to the implementation of policies governing the IFS sector, there is need for greater efforts to be made to establish regular consultation between the international regulatory authorities and Caribbean SIDS, since such policies have had a deleterious effect on the offshore financial sector in the subregion. In many instances, regulatory authorities fail to recognize the progress Caribbean SIDS have made and are making in pursuing compliance or the challenges they face in doing so.
- Technology as an essential component of economic restructuring, Caribbean governments should therefore offer better incentives to encourage innovation in green, clean, climate-smart and appropriate technologies, such as investment in science and STEM training. This will, in turn, facilitate the adoption of new technologies to upgrade regional production and service delivery systems to make them more competitive.
- Institutional arrangements should be strengthened to support closer collaboration among policymakers, technology producers, innovators, knowledge management platforms, universities, research institutions, private firms and consumers.
- Governments, in collaboration with the private sector, should consider developing national and regional innovation systems to create opportunities for researchers, technology developers and new market entrepreneurs. The intellectual property regime should also be strengthened to encourage the development and marketing of indigenous technologies and support economic restructuring.

E. Social development: promoting empowerment, autonomy and inclusion to achieve sustainable development with equality

Development strategies in the Caribbean should reflect the importance of social development with a gender perspective as a fundamental driver of inclusive and sustainable development with equality. Furthermore, social development in the subregion should be clearly established as an expression of rights to which all members of society are entitled. To this end, the Caribbean subregion will need to focus its attentions on social challenges, including poverty, inequality, unemployment—especially youth and female unemployment—, inadequate social protection, insufficient access to high-quality health and social care, access to inclusive and equitable education, crime and citizen insecurity.

Key recommendations:

- The multidimensional character of poverty means that governments will need to play a proactive role in addressing this complex issue. In the light of fiscal constraints, existing subregional initiatives to combat poverty and inequality, which tend to be targeted measures, should be expanded efficiently.
- Human development and capacity-building initiatives can be expanded by:
 - Mapping curricula across all levels of education to ensure that performance and learning gaps are addressed and that present and future labour market demands can be met. Learning outcomes must be assessed against national quality standards. Particular attention should be paid to male under-participation and under-achievement in the education system and gender stereotypes that could prevent women from pursuing careers in non-traditional areas that are needed for the future of work. Career planning and counselling are therefore required, with a particular focus on STEM.

- Formulating inclusive policies and strategies to provide education and training to children, youth and education workers in rural and remote or vulnerable areas, including crime hotspots, and during emergency or disaster-related situations. These policies and strategies should adopt a gender-based approach in order to meet the needs of the different population groups.
- Adopting non-traditional education approaches and models to facilitate non-formal and informal learning, including lifelong learning. These may include promoting open and innovative schools, as well as recognizing and ensuring the quality of home schooling. The prioritization and more widespread adoption of digital learning/online learning through massive open online courses (MOOCs), open educational resources (OERs), mobile-based learning or digital learning services should also be considered.
- Encouraging the use of blockchain technology to create a seamless, synchronized qualifications management process and, eventually, to replace conventional, paper certifications with digital ones. Regional certification bodies, such as CXC, need to be reorganized to meet these new efficiency and technology-mediated learning and qualifications requirements.
- There is need to change sociocultural expectations regarding women's disproportionate responsibilities for unpaid care and domestic work, which leave them with less time to invest in paid work, networking and skills building. Caribbean countries should carry out time-use surveys to assess the disproportionate responsibilities borne by women in the subregion that limit their ability to fulfil their potential.
- Reforms should be implemented to give Caribbean women equal access to productive employment, income-earning opportunities, decent work, and to financial literacy and services that empower them, and to provide enabling frameworks to increase their economic autonomy and their participation in decision-making processes.
- Policies and programmes should also be adopted to promote self-employment and entrepreneurship among women and youth, as well as the participation in or re-entry to the labour market of those older workers willing to continue working. Caribbean government institutions, including financial institutions, and the private sector should facilitate access to credit, loans and business knowledge, and provide financial literacy and technical assistance to MSMEs, among other services.
- A human rights-based approach and principles of equality, non-discrimination and empowerment of migrants should be applied to all migration policies and frameworks in order to value migrants' agency and recognize their contribution to sustainable development in the countries of origin and return, transit and destination, paying particular attention to the Caribbean diaspora. In this context, enhancing regional, subregional and bilateral cooperation is fundamental to migration policies and governance that promote mobility, joint skill and career development and social inclusion.
- All countries in the subregion should continue to focus on eliminating all forms of discrimination, violence, exploitation, corporal punishment and other harmful practices against women, children, older persons and those with disabilities in the public and private spheres. It is therefore recommended that legal and policy frameworks be reviewed to ensure that they are in full compliance with international and regional human rights standards and the Sustainable Development Goals.
- Priority should be given to broadening and deepening social protection systems in the subregion, as they are crucial to reducing poverty and inequalities at all stages of the life cycle and implementing the 2030 Agenda and other development frameworks. Caribbean countries should therefore consider adopting measures to establish a social protection floor, including by expanding the coverage and level of social protection, and promoting non-contributory pension schemes to those who have worked, or continue to work, in the informal sector or as caregivers, particularly women.

- The Caribbean subregion must take urgent action to comply fully with the health Goals and targets of the 2030 Agenda, as well as commitments undertaken in the Declaration of Port of Spain on non-communicable diseases, particularly those at the High-level Meeting on the Prevention and Control Non-communicable Diseases in 2011 and at the high-level meeting of the General Assembly on the comprehensive review and assessment of the progress achieved in the prevention and control of non-communicable diseases in 2014. A concerted effort must be made to raise awareness among all age groups and genders of the need to take preventive action, and to adopt best practices for the treatment of patients with non-communicable diseases.
- The population of the Caribbean is ageing, with the number of older persons in the subregion projected to double by the year 2040. This demographic shift has severe implications for the prevalence of non-communicable diseases and the attendant health-care needs. The training of health-care professionals in medical and nursing schools should therefore take into consideration future needs for geriatric and gerontological services in many countries, and the curricula and experiential learning options revised or expanded to cater for these needs. There is also need for greater public-private investment in care infrastructure, in anticipation of increased demand.
- The health tourism in the Caribbean is growing, even as the subregion grapples with high levels of emigration among its health professionals. The Caribbean is uniquely placed to develop health tourism as a niche market to provide more lucrative job opportunities for health-care professions; this may well help to curb the haemorrhage of nurses and doctors from the subregion. The development of health tourism will also help to diversify Caribbean economies, while promoting foreign exchange earnings and strengthening the development of the local health sector.

F. Environmental sustainability and sustainable development

Environmental sustainability challenges in the Caribbean are significant. Addressing them will require changes to economic, social and cultural behaviour that have been ingrained in local practice over time. This situation is exacerbated by the absence of reliable environmental data and information to develop an informed response. The subregion will need funding and technical support to address this challenge effectively. Sources, such as the European Development Fund and the Green Climate Fund, and mechanisms, such as the proposed ECLAC debt for climate adaptation swaps, and South-South cooperation, should be aggressively pursued.

Key recommendations:

- Natural hazard vulnerability and resilience. Given their location in the world's second most hazard-prone region, Caribbean governments need to ensure that disaster risk management is an integral part of their national development strategies, particularly in the context of strengthening subregional resilience to natural disasters. Such strategies should also address cross-cutting issues, including gender, the role of ICTs and application of technology. Governments should draw upon the work of regional mechanisms, such as the Regional Comprehensive Disaster Management (CDM) Strategy and Programming Framework 2014-2024 developed by the Caribbean Disaster Emergency Management Agency (CDEMA) and the guidelines developed by ECLAC to mainstream disaster risk management strategies into national development instruments.
- To boost the resilience of cities the following steps should be taken:
 - Strengthen coastal defences to protect infrastructure such as roads, airports and ports
 - Include disaster risk management in the national public investment system. In order to be approved, each public investment project must include a disaster risk reduction component
 - Promote the conservation of wetlands, mangroves, and coral reefs

- Build institutional capacity by:
 - Producing data using new technology (geographic information systems, drones)
 - Strengthening government capacity in the areas of planning, monitoring and evaluating adaptation efforts
 - Strengthening public officials' capacity to access the international financial system and insurance funds
- Encourage sustainable spatial planning by:
 - Updating building codes and infrastructure standards
 - Revising zoning regulations and carrying out a detailed census and mapping of informal settlements
 - Promoting compact cities (clustered services combined with good transportation and better land use).
- Protection of biodiversity. Ecosystems and biodiversity in the Caribbean are seriously threatened by processes such as urbanization, the accelerated growth of communities, land-based and marine pollution, and by economic activities, such as tourism and over-fishing. Against this backdrop, governments and stakeholders should step up efforts and enforce measures to protect ecosystems and the services they provide. Various regional initiatives offer valuable platforms for protecting biodiversity and sharing knowledge and lessons learned, these include the multi-stakeholder Interim Coordination Mechanism for the Sustainable Management, Use and Protection of shared Living Marine Resources in the Caribbean and North Brazil Shelf Large Marine Ecosystems, the European Union voluntary scheme for Biodiversity and Ecosystem Services in Territories of European overseas, the Caribbean Biodiversity Fund, the Caribbean Challenge Initiative and the OECS project to protect the Eastern Caribbean region's biodiversity.
- Coastal economic activities (tourism):
 - The subregion's marine and coastal resources are an economic engine, contributing to overall prosperity. The integrated management of those resources through institutional frameworks and programmes that address issues such as climate change adaptation, disaster risk management, and coastal ecosystem sustainability, is critical. The Guyana Mangrove Restoration Project, and the Bahamas Marine Protected Areas project provide opportunities for the subregion to leverage and share experiences and accumulated knowledge through South-South cooperation.
 - Caribbean countries should embrace a paradigm shift in the tourism sector by focusing on approaches that will ensure the sustainability of the sector and the health of subregion's natural resources. In particular, greater attention should be paid to developing environmentally sustainable forms of tourism, such as ecotourism and community-based tourism. Consideration should be given to the proposals made by ECLAC to enhance the sustainability of the tourism sector through measures to include environmental externalities in economic agents' rewards and costs, and strengthen intersectoral linkages within the economy. Raising awareness among both stakeholders and wider public of the importance of the industry and its environmental sustainability should be a priority in the subregion.
- Efforts should be made to promote sustainable transportation in Caribbean SIDS. This will require systemic changes in areas such as urban planning, public transport development, setting sectoral emissions goals, incentives to promote the use of energy efficiency vehicles, and transport users behaviour. Governments should consider the proposals made in the CARICOM Energy Policy

on promoting the use of fuel efficient vehicles and the ECLAC roadmap for promoting energy efficiency in government transportation systems, which identifies international best practices in relation to fleet electrification and suggests the most suitable comprehensive approach for a fleet transition.

- Water resources and solid waste management:
 - Water management and sustainability is a vitally important issue in the subregion. To meet these challenges, the following initiatives should be explored: (i) rainwater harvesting at the household level; (ii) desalination to provide potable water; (iii) irrigation systems that optimize the harvesting and use of groundwater, surface water and rainwater; (iv) recycling and reusing water; and (v) better wastewater management.
 - The subregion's economic, social and environmental circumstances mean that improving waste management should be central to its development goals, with tourism, mining, agriculture and fisheries the most affected sectors. Safeguarding the subregion's physical beauty and pristine nature, groundwater and surface water, coral reefs, and coastal and marine resources, is imperative.
 - Caribbean countries should ensure the engagement of both women and men in the initiatives and strategies to manage water resources sustainably and address waste management. These initiatives can help to reduce women's unpaid domestic and caregiving-related work burden, improve family health and generate employment opportunities for women.
- Energy transition:
 - The majority of Caribbean economies are totally dependent on imported fossil fuels to power economic and social activities. In an effort to mitigate greenhouse gas emissions and offset energy price shocks, many countries have started to implement renewable energy programmes, with renewable energy targets ranging from a 10% share up to 85% of the energy matrix by 2030. These initiatives should be vigorously pursued.
 - The efforts to develop renewable energy in Caribbean SIDS are nevertheless undermined by inefficient and unstable energy grids. As a result, smart grid technologies cannot be properly deployed, nor can sustainable energy pricing policies and connectivity strategies be properly applied. Caribbean economies should therefore seek to enhance their energy grids as a matter of priority, in order to fully maximize the gains that can be achieved from a more diverse and sustainable energy mix.

Given that weather events are expected to be more intense as a result of climate change, the resilience of Caribbean energy grids must be improved to minimize the economic and social fallout of disasters. Grid hardening strategies, including installing underground networks and eliminating system redundancies, are highly recommended in the short to medium term.

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Over the past five decades, Caribbean small island developing States have made significant progress in both deepening and entrenching democratic traditions and norms, and in advancing human development. Despite such progress, the subregion's sustainable development trajectory has become increasingly uncertain. In recent years there has been a growing awareness that the subregion has persistently lagged behind comparable economies in the developing world on the path to sustainable development.

Long-standing problems are now being aggravated by climate change, with the increasing frequency and intensity of extreme events hampering the sustainable economic growth of these island economies and undermining the security of their populations. The resulting damage and loss has also led to escalating costs and a greater emphasis on disaster risk management.

In this context, the main challenge facing the Caribbean is to identify paths to development that emphasize macroeconomic stability with growth, equity and environmental sustainability. This first issue of The Caribbean Outlook, a report prepared by the Economic Commission for Latin America and the Caribbean (ECLAC) subregional headquarters for the Caribbean, with the support of the Economic Development Division of ECLAC, not only offers perspective on the threats and challenges faced by the Caribbean, but also proposes a rich body of innovative solutions to issues which must be confronted resolutely if the subregion is to achieve these sustainable development paths.