



Climate Resilience Strategy 2012 - 2017



CARIBBEAN DEVELOPMENT BANK

CLIMATE RESILIENCE STRATEGY 2012–17

July 2012

CLIMATE RESILIENCE STRATEGY - 2012–17

BACKGROUND

1.01 The Fourth Assessment Report of the Inter-governmental Panel on Climate Change (IPCC) 2007¹, indicates that for the Caribbean, climate change impacts could include precipitation pattern changes that are likely to increase pests and diseases and significantly threaten agricultural productivity and human health. In the latter case, this could involve changes to the distribution of diseases such as dengue and the re-emergence of malaria in some countries. Predictions also include increases in the intensity and frequency of hydro-meteorological hazards such as extreme rainfall events, drought, and hurricanes for these countries, considered to be among the world's most vulnerable to natural hazards. Regional climate researchers using existing digitised, archived, daily observational meteorological datasets have already documented changes in the climate of the Caribbean Region that show findings consistent with globally observed trends². Improved monitoring and data analysis of Caribbean coral reefs led researchers to conclude that sea surface temperatures are now at the upper tolerance threshold for key coral formations, and bleaching has been linked to warm episodes above this threshold. Climate change and variability is therefore likely to further exacerbate environmental degradation and pollution of the relatively fragile and sensitive small island ecosystems.

1.02 There are few credible estimates of the economic impact of climate change on Caribbean countries in a “no adaptation scenario”. Estimates of quantitative economic impact are difficult, not only because of rapid changes in global climate change projections but also because of the limited climate model projections at suitable spatial scales available for the Caribbean, and the weak inventory of the Region's environmental resources and assets. Various studies have given estimates, which range from between 5-30 percent (%) (annualised values) of gross domestic product (GDP). However, even taken at the low end of the range (in absolute terms), the impact of climate change on CDB's BMCs is expected to be devastating to their long-term growth and development.

1.03 This is potentially a significant burden for countries that contribute negligible levels of greenhouse gas (GHG) emissions to the atmosphere. A 2008 preliminary examination of the potential costs³ to the island nations of the Caribbean if GHG emissions continue unchecked, that is based largely on the 2007 report of the IPCC, shows that for three categories of loss i.e. increased hurricane damages, loss of tourism revenue, and infrastructure damage, the total cost of global inaction to the Caribbean is projected at USD22 billion (bn) annually by 2050 and USD46 bn by 2100. Further, while the regional average is high, there is also considerable variation around this average at the country level. The projected cost of inaction⁴ is estimated at 75% of GDP or more by 2100 in The Commonwealth of

¹The UN Environment Programme and the World Meteorological Organisation, established IPCC to provide the world with a clear scientific view on the current state of knowledge in climate change and its potential environmental and socio-economic impacts.

² Findings show a decrease in the extreme intra-annual temperature range i.e. the number of very warm days and nights is increasing dramatically while the number of very cool days and nights are decreasing. Peterson et al, (2001).

³ The Caribbean and Climate Change - The Costs of Inaction: Ramón Bueno, Cornelia Hersfeld Elisabeth, A. Stanton Frank Ackerman, Stockholm Environment Institute—United States Center Global Development and Environment Institute, Tufts University, May 2008.

⁴Under the optimistic scenario— called “rapid stabilisation” or “low-impact”—the world begins taking action in the very near future and greatly reduces emissions by mid-century with additional decreases through the end of the century. Under the pessimistic scenario—called “business-as-usual” or “high-impact”— GHG emissions continue to skyrocket throughout the 21st century. The cost of inaction, or the difference between these two scenarios, may be seen as the potential savings from acting in time to prevent the worst economic consequences of climate change.

Dominica, Grenada, Haiti, St. Kitts and Nevis, and Turks and Caicos Islands, with smaller, but still relatively high levels for a number of the other countries.

1.04 Although categorised as mainly middle-income states, BMCs face serious endemic structural economic and social challenges that must be addressed while building resilience to climate change⁵. The IPCC - Working Group II (2007) identified other serious constraints which face the Caribbean Region's ability to effectively address such climate change issues as, *inter alia*:

- (a) absence of research on many areas of vulnerability and deficiencies in the distribution and reliability of observation systems, which have led to poor technical capabilities to generate reliable scientific data and research for public policy;
- (b) weak communication of risks to stakeholders and general low awareness of the issues by the population;
- (c) limited inter and multi-disciplinary research; and
- (d) limited studies on the economic and social impacts of climate variability and change and poor prioritisation in the treatment of these issues at the regional and at the national levels.

Regional Response

1.05 The member states of the Caribbean Community (CARICOM) identified climate change as the first of 14 priorities to be addressed under the 1994 Barbados Programme of Action (BPOA)⁶. CARICOM has long relied on a regional approach to address common needs either through regional project initiatives or building and strengthening capacities of regional institutions to provide direction and coordination. CARICOM Ministers of Government, responsible for the implementation of the Barbados Programme of Action, subsequently issued a mandate for the Region to put in place an appropriate institutional mechanism to develop and implement initiatives to address the risks posed by climate change to the Region.

1.06 A proposal for the establishment of a regional climate change centre was developed and approved by the CARICOM Council of Trade and Economic Development (COTED) in February 2002. The objectives of the Caribbean Community Climate Change Centre (CCCCC), which has been operational in Belize, the host country, since 2004 are to:

- (a) enhance regional institutional capabilities for the co-ordination of national responses to the adverse effects of climate change and spearhead regional initiatives in those areas;
- (b) perform the role of executing agency for regional environmental projects relating to climate change; and
- (c) promote education and public awareness on climate change issues to facilitate regional consensus for negotiations related to the United Nations Framework Convention on Climate Change (UNFCCC).

⁵ These include: (i) high levels of indebtedness, in some cases well above 115% of GDP; (ii) high levels of absolute poverty, ranging from 20–50% and (iii) a heavy reliance on imported fossil fuel.

⁶ BPOA is a policy document that both comprehensively addresses the economic, environmental, and social developmental vulnerabilities facing islands; and outlines a strategy that seeks to mitigate those vulnerabilities. It remains the only internationally approved programme specific to Small Island Developing States (SIDS) which has been collectively and unanimously endorsed by SIDS.

1.07 CARICOM's early political championing in international fora of the climate change threat to the survival of its member states' led to assistance from the development community. BMCs benefited from support of the World Bank's Global Environment Facility (WB/GEF), with the formulation of regional project initiatives, beginning with the Caribbean Planning for Adaptation to Climate Change (CPACC) Project in 1997. CPACC helped to focus attention on the vulnerability of the island nations of the Caribbean to the impacts of climate change. These efforts continued with the Canadian International Development Agency supported Adaptation to Climate Change Project and the subsequent follow-on project, Mainstreaming Adaptation to Climate Change financed by WB/GEF. These efforts have continued to be supported by both WB/GEF and some bilaterals with the implementation of follow-on demonstrative initiatives which are now in their final stages of implementation. In 2006, WB approved four pilot sub-projects in three Organisation of Eastern Caribbean States (OECS) Member Countries - the Implementation of Adaptation Measures in Coastal Zones Project with the CCCCC responsible for project management.

1.08 The focus of these initiatives has been the testing of adaptation measures while explicitly recognising that climate change, land degradation, desertification and the conservation of biodiversity are inter-related environmental issues, and that measures to reduce the expected impacts from climate change on marine and terrestrial resources provide room and synergy for addressing other environmental degradation issues. However, with the emphasis on pilots and demonstration activities these projects have had little reach in terms of replicability and "scaling up" in BMCs national development programmes.

1.09 In an effort to take a more strategic approach to climate resiliency, the Pilot Program for Climate Resilience (PPCR) was developed as part of the Strategic Climate Fund, a multi-donor Trust Fund within the Climate Investment Funds managed by WB. The overall objective of the program is to provide incentives for scaled-up action and transformational change in integrating consideration of climate resilience in national development planning consistent with poverty reduction and sustainable development goals. PPCR is designed to provide programmatic finance for national climate resilient national development plans and support for both the development and implementation of such plans. The Caribbean has been included in the PPCR with the inclusion of The Commonwealth of Dominica, Grenada, Haiti, Jamaica, St. Lucia and St. Vincent and the Grenadines as pilot countries and a track for regional initiatives. Grenada, St. Lucia and St. Vincent and the Grenadines now have approved Strategic Programmes for Climate Resilience (SPCR) under implementation. Jamaica is in the process of completing the preparation of its SPCR and Haiti submitted its Phase I proposal for approval in November, 2011.

1.10 At the regional level, CCCCC has since its inception initiated much of the technical work on regional climate change impacts with the support of the University of the West Indies. It has been successful in developing formal cooperation and collaboration agreements for joint research and information-sharing with the regional and international scientific research community. With the support of the Institute of Meteorology, Cuba and the Hadley Centre, United Kingdom, the Centre recently completed general circulation modeling of climate change for the Region for the period 1950-2100, down-scaling the model from 300 kilometre (km) to 25 km resolution. This down-scaling work will allow the development of economic sector models for example, in agriculture, as well as for key ecosystems and natural resources such as watershed and water resources. Over time, the Region has been establishing monitoring networks for sea-level rise, health of coral reefs and tsunami detection. In addition, elements of the regional meteorological network have now been incorporated as an integral component of the wider Global Observatory Monitoring System.

1.11 With limited in-coming resources to support climate adaptation investments, CARICOM Heads of Government in 2007, decided there was need for a more formal strategic approach to address the challenges of climate change and called for a regional climate change strategy. The CCCCC coordinated

the preparation of the Strategy - *“The Framework for Achieving Development Resilient to Climate Change (2010-2015)”* that was approved by the Heads in July 2009. The Regional Framework includes some 20 goals designed to increase resilience of member states social, economic and environmental systems under five strategic themes:

- (a) mainstream climate change adaptation (CCA) strategies into sustainable development agendas of CARICOM States;
- (b) promote the implementation of specific adaptation measures to address key vulnerabilities in the Region;
- (c) promote actions to reduce GHG through fossil fuel reduction and conservation, and switching to renewable and cleaner energy sources;
- (d) encourage action to reduce vulnerability of natural and human systems in CARICOM countries to the impacts of climate change; and
- (e) promote action to derive social, economic, and environmental benefits through the prudent management of standing forests in CARICOM countries.

1.12 A draft Implementation Plan (IP) for the Strategy was endorsed for submission to the Heads of Government, for approval by the CARICOM COTED at its Thirty-Seventh Special Meeting held in Georgetown, Guyana, September 1–2, 2011. The IP identifies priority activities under each strategic element and goal area, assigns responsibilities for implementation, including the estimated costs for actions. Even as the IP acknowledges significant resource and capacity challenges that hold back the Region’s sustainable development and growth it emphasises and underscores the necessity for a “transformational change” in mindset, institutional arrangements, operating systems, collaborative approaches and integrated planning mechanisms as being fundamental to the national development planning and resource allocation processes.

CDB’s Response

1.13 At the May 2008, Board of Governors Annual Meeting, and as part of the overall discussions and negotiations for the Seventh Replenishment of the Special Development Fund (SDF 7) the Bank presented a position paper on climate change at a roundtable discussion. The objective was to raise awareness and to solicit feedback from the Board of Directors and Contributors to the SDF. There was general agreement with the Bank’s intention to target three operational themes through four strategic objectives and within a limited number of core priority sectors, in which CDB has strong experience and would expect to be a leading provider of assistance. Environmental Sustainability and Disaster Management was included as one of the four strategic objectives. The primary focus of CDB’s proposed interventions was the integration of CCA considerations into sustainable development strategies with support provided for:

- (a) preparing and adopting national climate change strategies and adaptation plans;
- (b) mainstreaming CCA into sectoral policies, strategies and plans;
- (c) building community resilience to adapt to climate change;
- (d) supporting regional institutions to monitor CCA;
- (e) research into climate change modeling and predictions; and
- (f) supporting BMCs’ access to the emerging climate change financing mechanisms.

1.14 To support the work programme in these areas under SDF 7, Disaster Risk Reduction (DRR), Environment and Climate Change areas were allocated “set asides” of USD30 million (mn) and USD4 mn respectively, as presented in Table 1 .

**TABLE 1: SDF 7 “SET ASIDE” RESOURCES
FOR DRR, ENVIRONMENT AND CLIMATE CHANGE
(USD’000)**

Item	Allocation	Commitment December 31, 2011
DRR	30.0	25.6
Environment, Climate Change	4.0	3.5
TOTAL	34.0	29.1

1.15 The Environment “set aside” was used primarily to finance regional technical assistance to increase the capacity of the Caribbean Institute for Meteorology and Hydrology and CCCCC to effectively deliver on their mandates to provide critical technical support to assist BMCs to develop and implement CCA and DRR initiatives at the national and regional levels. CDB also provided support to CCCCC to assist BMCs to prepare project proposals for priority climate resilient interventions. There were several smaller technical assistance interventions under both the “Environment” and the Regional Capacity Building allocation for the support of mainstreaming environment, climate and DRR issues. Under the DRR allocation, the Bank provided assistance to BMCs for emergency response and rehabilitation efforts in the aftermath of a series of hurricanes and extreme rainfall events that caused significant damage and loss of life in some BMCs. Appendix 1 shows the interventions financed under the Environment, Climate Change “set aside” allocation.

1.16 Although small, CDB’s interventions have been useful and welcomed by BMCs and the beneficiary regional institutions. Recent assistance to the regional institutions will help to strengthen critical databases and data retrieval systems necessary to support climate risk research and to design responsive policies and programmes, for both regional and national level DRR and climate resilience initiatives. The emergency response and rehabilitation interventions have been critical in assisting BMCs to reduce the extended periods of socio-economic dislocation typically associated with these natural hazard events.

1.17 Given the urgent needs of BMCs, CDB could make a larger and more significant contribution to their efforts in both DRR and CCA, if adequately resourced. A major impediment has been the shortage of concessional resources available to finance more comprehensive interventions in its post-disaster rehabilitation support to BMCs. Even though the Bank places emphasis on rebuilding infrastructure to higher standards to address DRR and CCA adaptation requirements, it has been challenged to help BMCs directly address the wider and more complex socio-economic, environmental and natural resource management issues that exacerbate their physical vulnerabilities. The high indebtedness of BMCs, and the current recessionary world environment have greatly reduced their ability to finance robust capital investment programmes and more often than not resources for capital expenditure are increasingly diverted to support disaster recovery and rehabilitation work.

Improving Climate Risk Management Climate Risk Resilience in BMCs

1.18 Although BMCs contribute negligible GHG, there is acceptance that as small islands and low-lying states they are set to bear the brunt of impacts from climate variability, sea level rise and climate change. These impacts are already profoundly affecting geophysical, biological and socio-economic systems and combined with the predicted increased frequency of extreme rainfall events and hurricanes have the potential to reverse many of BMCs hard-won development gains. Key findings from recent

studies show that “damage potential under current climatic and economic conditions is already high, with annual expected losses totaling up to 6% of GDP in some countries. This economic damage is considered comparable in scale to the impact of a serious economic recession - but on an on-going basis”⁷.

1.19 Despite their small size and population, BMCs need differentiated responses to CCA, based on the nature and level of vulnerabilities and the diversity of environmental conditions, relative to the developmental priorities of each country. Even with the uncertainty that surrounds the full extent and nature of potential impacts of climate change, it is accepted that substantial financial resources will be required for BMCs to address its potential impacts and to transition to a more low-carbon development strategy.

1.20 While it is imperative that BMCs aggressively set out to attract and access as much resources as possible, there are other factors that will ultimately determine the success of their climate resilience programmes. Central to these efforts must be the full participation of key policymakers and other stakeholders (including public sector and civil society) through awareness building and understanding of adaptation needs, and the integration and internalisation of climate resilience considerations in wider development policies and strategies. In particular, BMCs need to capture explicitly the synergies between DRR and climate adaptation and climate mitigation and adaptation.

1.21 For example, the substantial and sustained investments required for knowledge and capacity-building, technology development, and to create a more enabling environment to support climate resilience programmes will also benefit BMCs’ wider DRR and environmental sustainability objectives. Similarly, adoption of measures that will lower GHG emissions offers the opportunity to place BMCs on a more efficient productivity path with greater use of renewable energy, improved energy efficiency from fossil fuel sources and the adoption of clean technologies to address other pollution concerns.

1.22 An extensive and complex architecture of climate financing funds and mechanisms from multi-lateral and bilateral sources is now developing at the global level. Under the Copenhagen Accord of 2009, and the Cancun Agreements 2010, developed countries continued to reiterate their previous commitments to provide new and additional resources for climate change and a balance in the allocation between mitigation and adaptation resources through international institutions estimated at some USD30 bn globally by 2012. The proposed balanced allocation between adaptation and mitigation is proposed for delivery through a “fast start” financing package. For the longer term, developed countries have committed to mobilising USD100 bn a year by 2020. Based on research carried out by the World Resources Institute, as of November 2011, 23 developed countries and the European Commission have announced individual “fast-start” finance pledges estimated at USD28.22 bn. Despite these commitments, the mechanisms for delivery of these funds remain unclear.

1.23 In the face of mounting losses associated with increasing frequency and intensity of natural hazard induced disaster events, BMCs, as part of the Alliance of Small Island States⁸ (AOSIS), have continued to press for more tangible, sustained, predictable, “on the ground” development assistance to support climate resilient development programmes. Countries have also contended that more direct access to resources is required and that regional institutions should play a greater role in both the delivery of financing, as well as the implementation of climate change work programmes, because they are better positioned to realise economies of scale and to customise solutions to meet the needs of their members. Developed countries and multi-lateral and bilateral institutions on the other hand, contend that often countries are unable to provide a comprehensive and coherent policy and programme framework, within which they can frame or align their assistance. In addition, the weaknesses of BMCs’ technical and

⁷ Economics of Climate Adaptation - Caribbean Catastrophic Risk Insurance Facility (2010).

⁸ AOSIS is a coalition of 42 small-island and low-lying coastal countries member states that share similar development challenges and concerns about the environment, especially their vulnerability to the adverse effects of global climate change. It functions primarily as an ad hoc lobby and negotiating voice for SIDS within the UN system.

implementing capacity at the national level are deterrents to the provision of assistance, given the strong transparency and performance monitoring requirements associated with such assistance.

Recommendations from CDB Roundtable Discussion on Climate Change - May 2011

1.24 At the May 2011, Board of Governors Meeting in Port-of-Spain, Trinidad and Tobago, the Bank hosted a roundtable panel discussion of technical climate change specialists from the Region to discuss climate finance needs of the Region and to increase awareness among its BMCs and shareholders, about the dialogue to elaborate the IP of the Region's Climate Change Strategy, and to share the Region's negotiating perspective as it prepared for its participation in the UNFCCC's 17th Conference of the Parties (COP). The Panel made a range of recommendations for the Bank's engagement in addressing climate change in the BMCs. Some of these have been incorporated as areas for CDB's intervention under the proposed strategy. It was recommended that CDB :

- (a) play a coordinating and intermediating role to assist BMCs to attract adaptation funding and seek to become a conduit for providing climate finance to the Region;
- (b) intensify efforts to access and utilise available financing through bilateral sources and serve as an implementing entity for funding mechanisms such as the Adaptation Fund and the proposed Green Climate Fund (GCF);
- (c) strengthen its engagement in the on-going climate change negotiations and in particular with the finance and planning ministries and work to create an environment conducive to private sector participation to integrate climate resilient and low carbon policies and strategies in the development programmes of the BMCs; and
- (d) promote the expansion of a more innovative range of risk transfer instruments, as part of a multi-faceted climate resilience development programme for BMCs.

Outlook for Financing to BMCs Post UNFCCC 17th COP, Durban

1.25 The signals from the 17th Durban Meeting of COP UNFCCC, December, 2011 are that the development community is committed to the establishment of the GCF as an operating entity of the Financial Mechanism of the Convention, with operational status by mid-2012. The Fund will provide more balanced allocation of resources for adaptation and mitigation and more direct access by countries. There was agreement to establish an Ad Hoc Working Group - The Durban Platform for Enhanced Action - to continue to work towards identifying a global goal for substantially reducing global emissions by 2050, complete negotiations by 2015, and to have this in force from 2020.

1.26 In this context, developing countries were urged to develop National Adaptation Management Plans for building climate resilience and to frame them within the broader context of their national sustainable development objectives, plans, policies and programmes. The Parties to the Convention endorsed and urged that country action should follow a "country-driven, gender-sensitive, participatory and fully transparent approach, taking into consideration vulnerable groups, communities and ecosystems, and should be based on and guided by the best available science and, as appropriate, traditional and indigenous knowledge, and by gender-sensitive approaches, and agreed that the national adaptation plan process should not be prescriptive, nor result in the duplication of efforts undertaken in-country, but facilitate country-owned, country-driven action".⁹

⁹ Draft Decision COP 17: National Adaptation Plans, UNFCCC Website
(http://unfccc.int/files/meetings/durban_nov_2011/decisions/application/pdf/cop17_nap.pdf)

2. PROPOSED CDB CLIMATE RESILIENCE STRATEGY

2.01 In the run-up to the 17th COP Durban Meeting, there has been increasing interest by the development community in financing initiatives to support the implementation of the Region's IP. This resulted in the approval of several regional financing initiatives that will help to improve and expand the regional environment and hydro-meteorological monitoring systems, build technical capacity of regional institutions responsible for climate and weather-related services and research and in turn improve the support they provide for regional and national level capacity-building initiatives¹⁰. BMCs remain concerned that there is still insufficient clarity surrounding availability of resources and the mechanisms for delivery of financing for national level climate change adaptation investment programmes. At the CARICOM Heads of Government Meeting in Grenada, February, 2011, CCCCC was mandated to develop a pipeline of investment-ready capital projects capable of attracting available financing, on behalf of member states, as part of their efforts to operationalise the IP and "to be ready" to receive financing to address urgent priorities of their CCA agenda.

2.02 Despite the enormous levels of financing required and the challenges imposed by BMCs' weak technical and administrative capacities, it is important that they are integrally involved in the decision-making process about fundamental choices for their future development. As an experienced development partner, CDB can play a pivotal role in supporting BMCs' efforts to effectively address the pressing and urgent climate change issues but it must first seek to carve out a role that is bold, creative and responsive to the urgent short-term needs as well as the longer term articulated vision of the Region's Climate Change Strategy for a more transformational development path. In keeping with the vision of its BMCs, CDB must take into consideration its size, current operations and the skill profile of its staff and the current economic environment and socio-economic risk profile of its BMCs. The approach needs to be proactive and multi-faceted, given the BMCs many challenges; the need for urgent action, significant levels of finance required and their weak technical and administrative and implementing capacities. As a priority, CDB must mobilise and provide sustainable levels of financial resources to support their climate resilient investment programmes, and build the supporting capacity for successful policy and plan implementation. In the short term, it must help the most vulnerable and least capable BMCs to implement urgent priority initiatives.

2.03 The proposed Climate Resilience Strategy (CRS) specifically seeks to:

- (a) develop and operationalise a robust environmental sustainability risk framework that explicitly includes climate resilience, for CDB's operations; and
- (b) assist BMCs and regional institutions to mobilise financing, design, and implement policies, strategies and investment programmes to address climate resilience and deliver on their sustainable development objectives. A Logical Framework Matrix for the CRS is included at Table 2.

2.04 A two-phased approach will be necessary to build a CDB-explicit value chain to support climate resilience in BMCs, using the experience and expertise of its staff working within its core operational areas is proposed. It will need to engage BMCs to design and deliver a programme of capacity building and investment interventions that can be further scaled up and widened in the longer term, as capacity strengthens and financing levels improve.

¹⁰ Australia Aid has committed AU\$4.19 mn for direct financial support to the CCCCC. The European Commission has provided €8 mn for the execution of a CARIFORUM programme on climate change which will significantly increase climate and coral reef monitoring and early warning systems as well as fund adaptation pilots. CDB is also contributing USD470,250 from its SDF to fund technical services for the development of a pipeline of climate change investment projects. Climate Development Knowledge Network is supporting the development of a risk management framework for decision making in 2-3 states (£405,000). In total £16.27 mn has been committed to the IP through CCCCC to date [Department for International Development's (DFID's) contribution being 30% of this sum].

2.05 The proposed phases are described below:

Phase 1: 2012–15

- (a) Strengthen staff capacity by building an explicit internal climate risk framework for CDB's operations.
- (b) Establish itself as an intermediary of climate finance and an implementing entity providing direct access and more sustainable funding levels to BMCs, using the global climate finance architecture.
- (c) Strengthen the knowledge framework and capacity of regional institutions and BMCs to assess climate change risks.
- (d) Support BMCs to design and implement appropriate policies and climate-resilient development programmes for financing by CDB and other development institutions.

Phase 2: 2016–17

- (a) Scale-up and replicate successful programmes initiated during Phase 1 with, limited expansion into new operational areas.
- (b) Place emphasis on the establishment of long-term sustainable levels of concessional financing and the use of more innovative approaches, mechanisms and instruments to support the full transition of BMCs to a more sustainable low carbon development path.

**TABLE 2: LOGICAL FRAMEWORK
CLIMATE RESILIENCE STRATEGY 2012–17**

OBJECTIVES	EXPECTED OUTCOMES/ IMPACTS	BENEFICIARIES	PERFORMANCE INDICATORS/ SOURCE METHODS	ASSUMPTIONS/RISKS
<p>GOAL:</p> <p>Contribute to the sustainable development and poverty reduction efforts of BMCs through the implementation of a transformative climate resilient policy and investment financing strategy for BMCs.</p>	<p>Increased climate resilience of BMCs.</p>	<p>Local communities and individual households of BMCs.</p>	<p>GDP growth in selected BMCs enhanced by climate resilience efforts.</p> <p>Progress towards the achievement of the sustainable Millennium Development Goal targets.</p> <p>BMCs Development partners and Bank's Annual Reports.</p>	<p>Assumption Timely access to climate change finances so that BMCs are not overwhelmed and thrown off-course before available resources take effect.</p> <p>Risk Post Durban decisions are not supportive of BMCs climate resilience agenda.</p>
<p>CRS Programme Objectives</p> <p>Establish and operationalise a robust Environmental Sustainability Risk Framework for CDB's operations.</p> <p>Mobilise concessional resources for financing climate adaptation and mitigation in BMCs.</p>	<ul style="list-style-type: none"> - CDB's operations internalise climate risk considerations for (a) investment portfolio; (b) country risks and discrete project investments. - Enhanced Environment and Social Review Procedures and other Operational Policies enhanced with climate risk considerations. - Policy dialogue with BMCs enhanced by climate resilience considerations with respect to Country Strategy Papers (CSPs), Country Poverty Assessments (CPAs) and Climate Change Policy-based Loans (PBLs). - Financial instruments developed to better support climate resilience investment initiatives for public and private sectors. - Increased and sustainable levels of concessional resources available for financing BMCs climate investments and climate resilience programmes. - Enhanced access to climate finance through designated implementing entity for climate change on behalf of BMCs. 	<p>CDB and BMC Staff.</p> <p>BMCs, private sector, regional institutions, vulnerable communities.</p>	<ul style="list-style-type: none"> - Climate Finance Advisor and Adaptation Mainstreaming Consultant recruited by October, 2012. - CDB has contributed to training of 25 % of staff in key climate sensitive sector ministries in BMCs. - At least six BMCs establish and implement enhanced CSPs by 2015; four CPAs and two climate resilience enhanced PBLs. - Additional resources mobilised for financing targeted climate change development programmes in BMCs by 2015 and 2017. - Designation status achieved for at least one climate change financing mechanism. 	<p>Assumption BMCs keep commitments for a more transformative approach to climate resilience.</p> <p>Risk Weak coordination at regional and national levels frustrate efforts to chart a more transformative comprehensive programme for climate resilience and low carbon development path in BMCs.</p>

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CLIMATE RESILIENCE STRATEGY 2012–17**

OBJECTIVES	EXPECTED OUTCOMES/ IMPACTS	BENEFICIARIES	PERFORMANCE INDICATORS/ SOURCE METHODS	ASSUMPTIONS/RISKS
<p>Assist BMCs and regional institutions to design, finance and implement policies, strategies and investment programmes to address climate resilience and deliver on their wider sustainable development objectives.</p> <p>Partnerships and cooperation with other development partners and Regional Institutions towards climate resilience of BMCs.</p>	<ul style="list-style-type: none"> - Enhanced capacity of BMCs and regional institutions to respond to climate change impacts through use of decision-support tools capable of answering ‘what if’ questions developed for climate sensitive sectors for BMCs. - Enhanced capacity to mainstream climate change into development policies and plans and investment programmes by BMCs. - Enhanced cooperation and collaboration between CDB and other development partners. 	<ul style="list-style-type: none"> - Regional climate and weather related institutions, universities, finance, planning and climate sensitive sector ministries, private sector and vulnerable communities. - BMCs policies and investment programmes. - BMCs Development Programmes. 	<ul style="list-style-type: none"> - Number of tools and guidance resources for climate risk assessments developed. - Number of enhanced environment/climate change monitoring, data collection and observational networks operational and in use. - Number of climate resilience enhanced policies and programmes implemented and supported by CDB by 2017. - CDB internal documents. Memoranda of Understanding. Partnership Agreements. 	
<p>Climate Proofing of Existing and New Investment Portfolio:</p> <p>Financing for mitigation investments.</p>	<ul style="list-style-type: none"> - Improved designs of CDB financed investments to respond to climate change and improved climate resilience. - Reduced GHGs from CDB financed investments. 	<p>Investments financed in climate sensitive sectors; agriculture, water, social and physical infrastructure, vulnerable communities, private sector.</p>	<ul style="list-style-type: none"> - CDB and BMCs annual reports. - 20% of existing portfolio. - 40 % of approved investments in climate sensitive sectors and community level interventions by 2015. - 60% of approved investments in climate sensitive sectors and community level interventions by 2017. 	<p>Assumption Bank quickly develops its own internal capacity for supporting climate resilience.</p> <p>Risks Lack of commitment of BMCs to integrate climate resilience in development.</p>
<p>Knowledge building and capacity development for climate resilience at the regional and national Levels.</p>	<p>BMCs and regional institutions have enhanced capacity to develop climate resilient policies and investment programmes.</p>	<p>BMCs regional and sub-regional and country level: research, monitoring and reporting observational networks, data collection, administrative and regulatory systems and other governance arrangements supporting climate resilience.</p>	<p>Number of “stand alone” or internal project components for climate risk enhanced capacity and institutional strengthening interventions financed by CDB for regional and national institutions.</p>	

Guiding Principles

2.06 CDB's interventions in its BMCs must be shaped by its own lessons of experience, and those of its development partners, and should seek to design and align Bank actions and interventions using "best practices" employed by the wider development community to deliver effective development assistance. The key guiding principles for designing and implementing the CRS are:

- (a) Regional Action: As a regional Bank, CDB is fully cognisant of the opportunities and efficiencies to be gained from regional action and the need to develop and work for effective solutions at both regional and national levels. Climate risk management and adaptation will require extensive cross-country collaboration, planning and monitoring in the interest of the management and protection of both global and regional public goods.
- (b) Country Ownership: In keeping with the core principles of the Paris Declaration on Aid Effectiveness, the Bank will develop and tailor its assistance to address the priorities of the BMCs approved national policies, development plans, poverty reduction strategies, sector strategies, and National Adaptation Plans of Action.
- (c) Selectivity and Focus: The strategy will take into account the Bank's comparative advantages and areas of competence as well as the potential for partnerships and the use of other sources of development assistance.
- (d) Partnerships: The range of technical resources and the scale of financing require the support of not only its traditional development partners but of the wider development community. The Bank will continue to replicate best practices, collaborate and build synergies with the interventions of other development partners (bilateral and multilateral) working in the Region, as well as seek to improve its engagement with the private sector, non-governmental and civil society organisations.
- (e) Monitoring and Reporting: CDB is committed to ensuring the monitoring and reporting of the outcomes and impacts of its interventions within its overall existing monitoring and evaluation framework to ensure that there is systematic assessment of its contributions and their effectiveness to inform its future work programme.

3. PROPOSED PRIORITY AREAS FOR CDB'S INTERVENTIONS

3.01 Climate Proofing of Existing and New Investment Portfolio:

- (a) CDB will give priority to financing investments in key climate-sensitive sectors identified as priorities by BMCs and which overlap with the Bank's core areas of competence and experience. These have been identified as water, including wastewater and water resource management, agriculture, energy, physical infrastructure such as coastal and river defences, roads, drainage, social infrastructure e.g. schools, health centres;
- (b) DRR is a historic priority for the Bank, and is acknowledged as a critical short-term response to CCA. The Bank will continue to provide assistance for disaster rehabilitation and mitigation but will place greater emphasis on identifying/developing innovative risk transfer instruments and initiatives and building community resilience; and

- (c) CDB will assist BMCs to manage and strengthen degraded geophysical, biological and natural resource systems to deliver the ecosystem services needed to sustain climate resilience and poverty reduction. The Bank will use a range of approaches and entry points such as “stand alone” projects or interventions integrated in discrete investment projects. Emphasis will be given to initiatives that offer opportunity for delivering a revenue stream for poverty reduction and those that help to establish and strengthen participatory governance arrangements.

Support for Mitigation Investments

3.02 CDB will promote and support investments and initiatives that will increase the economic competitiveness of the private sector, helping to develop new products and services while capturing other benefits such as improved energy security, through improved energy efficiency (using both supply and demand side measures), and the expansion of investments in renewable energy sources¹¹. The adoption of new technologies that promote reduction in GHG emissions from sources such as transport, solid waste, and wastewater treatment systems could also be supported.

Knowledge Building and Capacity Development for Climate Resilience at the Regional and National Levels

3.03 CDB will support BMCs’ efforts to design and mainstream climate risk management strategies in regional, national and sectoral policies and facilitate the design of appropriate legal, administrative and governance arrangements that will provide the enabling environment for the effective and successful adoption of climate resilient programmes. Assistance will be provided to regional institutions and BMCs to build technical capacity to improve knowledge and information systems to support Environment, DRR and Climate Resilience and to monitor and report on the performance and impacts of implemented interventions. Initiatives may include:

- (a) establishment of robust observational networks, data collection and reporting systems for environment, DRR and climate risk monitoring and information systems at both the regional and national levels;
- (b) refinement and downscaling of climate prediction models to support decision-making at macro (policy) and micro (project) levels;
- (c) establishment of more participatory environmental governance and administrative processes;
- (d) adoption and implementation of improved building and construction standards and best practices such as the design, adoption and the use of building codes;
- (e) improvements to spatial and environmental planning systems to better regulate and control development and establish more effective and efficient administration of physical planning and environmental management performance systems and processes;
- (f) improvements in technical capacity for mainstreaming Environment, DRR and Climate Resilience in national development planning and investment finance programming including the development of tools to better identify and prioritise natural hazards climate risk vulnerabilities; and

¹¹ CDB is in the process of preparing a revised energy policy that will further elaborate its strategy for promoting and developing renewable energy and increasing improvements in energy efficiency in its BMCs.

- (g) establishment of arrangements and mechanisms that strengthen links and cooperation and collaborative arrangements between public sector, private sector and civil society to finance and implement climate resilient development initiatives.

Institutional Action Programme

3.04 BMCs' size, absorptive capacity, weak technical and administrative capacities and their relative slow implementation pace have served to affect their credibility as effective users of development assistance. However, the urgent need for climate resilience financing, the nature of the emerging global financing architecture also present opportunities for innovation and creativity in the design and delivery of official development assistance funds, through blending these with new financing mechanisms. In addition, there are increasing opportunities to design new modalities to replace the traditional emphasis of development assistance using the discrete investment project approach.

Environmental Sustainability Risk Framework

3.05 As part of Phase 1 of the Strategy (2012–15), CDB will seek to build on its existing environment and social safeguard system to establish an Environmental Sustainability Risk Framework that will allow it to systematically assess and manage environment, disaster and climate related risk at the country, sector, programme and project levels. This will require the strengthening of the technical capacity of its Operations staff through training and the development and use of customised guidance resources, new operational policies and procedures to identify and specifically address climate risk considerations in its policy dialogue and investment programming work with BMCs. This process is set to begin by mid-2012 with the support to the Bank of a DFID-financed Adaptation Mainstreaming Consultant for three years.

Mobilise and Increase Access to Concessionary Financing

3.06 As noted earlier, BMCs have argued that financing modalities must be developed that allow for increased participation of regional institutions in the emerging finance architecture associated with the United Nations (UN) Conventions. In keeping with this view, AOSIS requested that CDB, on their behalf, serve as a member of the Transitional Committee for the Design of the GCF, to press their demand for the increased participation of regional institutions and more direct access by countries to financing mechanisms like the GCF. The argument is rooted in the belief, that many of the challenges faced by SIDS are shared and, therefore, require their close cooperation in the development of solutions that must be customised with their full participation.

3.07 The size and complexity of the emerging global finance market will require creativity and innovation for the blending of public (multi-lateral and bilateral) and private financing mechanisms (pension funds, carbon credits), as well as the use of different enabling instruments, risk sharing, insurance, government guarantees, taxes and fiscal incentives. The required skills set and expertise necessary to explore opportunities to effectively use these markets to develop solutions accessible to BMCs are unlikely to be found in any one BMC.

3.08 This area of finance mobilisation is one in which CDB can be proactive and exercise a leadership role in developing creative approaches to meet the long-term sustainable levels of financing needs of BMCs. Given the time frame that may be required to build the required administrative, financial and implementing capacity in some BMCs, CDB proposes to seek status as a designated Implementing Entity to existing special purpose financing mechanisms such as the Adaptation Fund, and GEF, on behalf of BMCs. The Bank has received assistance from DFID for a Climate Finance Advisor who will help the Bank for a period of two years, to develop strategies to mobilise concessional resources in support of BMCs' climate resilience programmes.

3.09 It is envisaged that by year three, the Bank's capacity and staff competence should be sufficiently robust to allow it to confidently continue the internal capacity-building intervention started under Phase 1 on its own, and to continue capacity and institutional building work with its BMCs and regional institutions. It should also by that time be able to determine the need for additional staff should there be significant scaling-up of the work programme.

4. CONCLUSION

4.01 The document has outlined the key areas of interventions considered priorities proposed for managing the risks of climate change and the continuation of the enhancement of the capacity of BMCs to meet their national climate resilience objectives. It should be noted that while the Bank's CRS provides the focus for climate specific actions, it is supported and aligned with existing and related CDB policies and specifically with the Environmental Sustainability Policy and Environment and Social Review Procedures and the Disaster Management Strategy and Operational Guidelines.

PROJECTS APPROVED UNDER
THE ENVIRONMENT AND CLIMATE CHANGE “SET ASIDE” - SDF 7
(USD'000)

PROJECT	BENEFICIARY	TOTAL
Proposal for Designing a SPCR		
SPCR	Grenada	37
Enabling CCA Interventions in BMCs	Regional	470
Rescue and Digitisation of Meteorological and Hydrological data	Regional	292
Energy Interventions Impact Assessment Survey 1999 -2008	Jamaica	29
Sustainable Energy for Competitive OECS	Regional	1,587
Implementing a Framework for Environmental Management	St. Lucia	97
CDB Executed		
Building Professional Capacity in Climate Change - Response within CDB: Phase 1	Regional	41
Mainstreaming Disaster Risk Management in OECS Countries	Regional	90
Drought Management Conference	Regional	27
Regional Agricultural Risk Management Symposium	Regional	30
Promoting Energy Efficiency in the Caribbean - Conference	Regional	43
Training in Business Continuity Planning for Micro, Small and Medium Enterprises	Regional	101
Training in Business Continuity Planning for Micro, Small and Medium Enterprises	Regional	95
Development of Disaster Risk Management Plans for the Agricultural Sector	Regional	45
Initial Assessment of the Water Sector in the Caribbean - Regional	Regional	275
Support for the Sixth Caribbean Conference on Comprehensive Disaster Management	Regional	106
TOTAL		3,365