



# INSIDE STORIES

## on climate compatible development

Climate & Development  
Knowledge Network

June 2012

### Key messages

- Grenada is a highly climate-vulnerable Small Island Developing State which, lacking sufficient resources of its own, relies heavily on multilateral finance and technical support to design and deliver major climate compatible development policies.
- Its Strategic Program for Climate Resilience (SPCR) seeks to set the country on a path to mainstream low-carbon and climate resilient poverty reduction and sustainable development, through multilateral finance and technical support.
- As a relatively low greenhouse gas emitter, Grenada has placed the primary emphasis of its SPCR on climate resilience, while contributing to emission reductions in the forestry sector.
- This is the first national strategy developed under the Pilot Program for Climate Change Resilience, a donor-funded initiative for Caribbean states, and other Caribbean nations can learn from it.

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## Strengthening climate resilience: the case of Grenada

**Grenada is a Small Island Developing State (SIDS) consisting of three islands: Grenada, Carriacou and Petit Martinique. Historically the country has not been susceptible to the impacts of hurricanes and other extreme weather events, but this has changed drastically in recent years. In September 2004, the country sustained severe damage when it was devastated by Hurricane Ivan, and was further ravaged by Hurricane Emily only 10 months later. It has also been affected by recent storm surges, tropical depressions, flooding and landslides, all leaving trails of destruction in their wake, including considerable damage to roads and other physical infrastructure.**

The impacts of climate change are likely to further exacerbate the challenges that Grenada faces. A 1–2 metre rise in sea level would destroy much of the coastal infrastructure that is critical to the country's economic and social stability, wiping out the airport, all seaports, and 11–18% of tourist resorts – a devastating blow in a country where tourism provides a high proportion of gross domestic product (GDP) and employment (estimated at 7.3% of total GDP, and 21.4% of total employment in 2011). Agricultural exports are already affected: crop losses due to hurricanes and droughts have harmed many businesses and livelihoods in recent years.

Without urgent measures to achieve greater climate 'resilience' or adaptive capacity, Grenada's sustainable

development objectives will be severely compromised. However, like many other SIDS, the country lacks the financial resources, human resources and technical capacity to implement strong climate resilience initiatives independently. Against this backdrop, the Government of Grenada developed its 2011 Strategic Program for Climate Resilience (SPCR) – a platform that will allow the country to redirect its path towards low-carbon and climate-resilient poverty reduction and sustainable, climate compatible development, through more coordinated and comprehensive methods that replace the fragmented project-by-project approaches of the past.

The SPCR is managed under the Pilot Program for Climate Change Resilience (PPCR), which in turn is part of the

international Climate Investment Funds (CIFs – see box). The PPCR helps a number of Caribbean Community and Common Market (CARICOM) member states transform their development pathways towards low-carbon climate resilience, to be consistent with poverty reduction and sustainable development goals. Grenada's is the first national SPCR to be developed within the PPCR Caribbean Regional Track, and inspires similar interventions in other countries through example. The SPCR aims to reduce post-disaster capital expenditure requirements, economic losses due to weak infrastructure, and the risk of loss of life associated with disasters, while at the same time restoring, enhancing and protecting its small forestry resources. The disaster-related aims are pursued through the comprehensive Disaster Vulnerability and Climate Risk Reduction Project (DVRP), while the forest-related aims will be pursued through a Forest Rehabilitation Project, both funded under the SPCR.

Grenada's SPCR will benefit from an \$8 million PPCR grant and a \$12 million concessional loan, directed towards large-scale projects that have previously lacked funds (such as the DVRP) and technical assistance to improve data and information systems, develop future projects, and undertake vulnerability assessments. The SPCR seeks to create an enabling platform to allow Grenada to mainstream low-carbon and climate-resilient development in the key sectors of disaster risk reduction, water management, coastal infrastructure, agriculture and tourism. Given the country's low contribution to global greenhouse gas emissions – ranking 170<sup>th</sup> worldwide in cumulative emissions between 1990 and 2005 – and its high

### **Climate Investment Funds**

Climate Investment Funds (CIFs) are two funds – the Strategic Climate Fund and the Clean Technology Fund – that help developing countries pilot low-emission and climate-resilient development. With CIF support, 45 developing countries are piloting transitions to clean technology, sustainable forest management, increased energy access through renewable energy, and climate-resilient development. The CIFs are channelled through the African Development Bank, the Asian Development Bank, the European Bank for Reconstruction and Development, the Inter-American Development Bank (IDB), and the World Bank Group.

Source: [www.climateinvestmentfunds.org/cif/](http://www.climateinvestmentfunds.org/cif/)

vulnerability to the effects of climate change, the SPCR's primary focus is to build resilience into those sectors. Nonetheless, these efforts should in time enable Grenada to take on more significant commitments to low-carbon strategies, beginning with the Forest Rehabilitation Project.

Several valuable lessons and experiences that have arisen during the SPCR's initial implementation phase can now be shared with other developing nations looking to pursue a similar path.

### **Development of the SPCR**

For over 20 years, in parallel with international developments under the United Nations Framework Convention on Climate Change (UNFCCC), Grenada initiated a number of policies and programmes related to climate change. But they failed to mainstream low-carbon development and climate resilience into existing technical and institutional frameworks – partly due to the past project-by-project approach, but also due to the lack of adequate funding, human resources and technical expertise.

However, in developing the SPCR, Grenada consolidated results and action points from these past projects into a comprehensive and cross-sectoral programme for the medium to longer term. Buy-in was ensured through extensive participatory stakeholder consultations held on all three islands, over several years, to develop the smaller projects that fed into the SPCR. These consultations engaged representatives from government, statutory bodies, the private sector, academic institutions, youth and student groups, farmers' organisations and the general public. In addition, two Joint Missions were undertaken in early 2010 to gather essential inputs and enhance stakeholder consensus on SPCR design. The missions involved key government agencies, local stakeholders and regional and international partners. Stakeholder engagement continued even after the launch of the SPCR, with consultations on geographic information systems (GIS) and data systems, and on watershed management.

Despite these efforts, public dissent emerged when the possibility of relocating some small communities

was raised. This was resolved once it was explained that the relocation would aim to leave communities no worse off. Given minimal negative impacts, the potential for private-sector expansion and investment, and the accompanying possibility of job creation, the SPCR received relatively positive public buy-in.

A greater source of contention in finalising the SPCR was within the Government of Grenada. With their differing mandates, government ministries, such as the Ministry of Finance, Planning, Economy, Energy and Cooperatives advocated a focus for the strategy that differed from that proposed by the Ministry of the Environment, Foreign Trade, and Export Development. For example, the latter Ministry pushed for the inclusion of non-physical components, such as a legislative reform agenda. It was eventually agreed that these components would be addressed in a subsequent phase of the initiative. After much discussion, the outcome of the Joint Missions was an endorsement of the strategies found in the SPCR by national stakeholder groups and relevant multi-development banks, such as the World Bank and the IDB, as well as by the Government itself.

Despite formal endorsements of the SPCR, some local environmentalists are still calling for immediate action, not only on the legislative reform agenda but also on areas such as food security and alternative energy, which are strongly linked to poverty alleviation. There is a feeling of 'initiative fatigue', as well as scepticism about whether the SPCR will actually be implemented. In some quarters, the initiative is seen as merely repackaging past projects

that have failed. The major concern expressed is that too much effort has been concentrated in government agencies and not enough is being done to connect the SPCR to the individual and community level – to encourage greater public participation in planning and implementing climate compatible development.

## **Important features of the SPCR**

### **Institutional framework**

The SPCR is coordinated by a specialised Project Coordination Unit (PCU) in the Ministry of Finance, Planning, Economy, Energy and Cooperatives that is responsible for implementation, monitoring and reporting. The PCU is advised by a National Climate Change Committee and supported by the Ministry of Environment, Foreign Trade and Export Development, as well as several other ministries with technical expertise in relevant sectors, such as the National Water and Sewage Authority and the Ministries of Works, Education, Health and Physical Planning. However, the PCU will maintain overall responsibility, and safeguard environmental and social considerations consistent with World Bank standards and the Government of Grenada's Environmental Assessment Framework. The PCU has produced an operations manual to assist in executing its mandate and will be setting up a knowledge platform to share lessons learned.

### **PPCR Caribbean Regional Track**

The Grenada SPCR forms part of a wider Caribbean Regional Track, currently being overseen by the IDB. Grenada is one of six countries in the

Regional PPCR, the others being Dominica, Haiti, Jamaica, Saint Lucia, and Saint Vincent and the Grenadines. The Caribbean has several regional cooperation organisations, including the Organization of Eastern Caribbean States (OECS) and the CARICOM, which will contribute to the PPCR, alongside national governments. Grenada's SPCR shares common interests with, and will surely benefit from, certain PPCR activities to be implemented at the regional level, such as climate risk analysis, GIS data sharing, legislative review, streamlined tourism resilience, consultation processes and private-sector engagement. Nevertheless, the national SPCR will allow Grenada to focus on context-specific vulnerabilities, local opportunities and domestic governance for climate compatible development (see section on key lessons for more on regional programming).

### **Objectives and priority work areas**

As a climate compatible development strategy, the SPCR weighs heavily on the side of climate resilience by improving physical infrastructure, rather than emphasising low-carbon development activities at the outset. However, it also engages the forestry sector in an attempt to address Grenada's contributions to greenhouse gas emissions, which are already very low compared to those of larger developing and developed economies. As such, the overriding objective of the SPCR is to redirect Grenada's pathway towards low-carbon and climate-resilient poverty reduction and sustainable development, through incremental changes in the medium to longer term. The small size of

this tri-island state means that virtually all of its population is exposed to the impacts of climate change, and the SPCR is designed to benefit the entire population, including those engaged in private-sector activities.

In particular, the SPCR emphasises technical assistance and capacity building activities relating to hazard monitoring, climate risk identification and improved policy in key sectors, in order to enable the Government of Grenada to mainstream climate change into investment decisions and position the country to access external funding for future projects. The broad-based project outputs of the SPCR are divided between direct investments and technical assistance, as follows:

**Investment Project 1: Disaster Vulnerability and Climate Risk Reduction Project.** The DVRP aims to reduce the impacts of climate change disasters and related economic and fiscal shocks by mainstreaming preparedness. This will include climate-proofing key infrastructure (housing, schools, retirement homes, water supply, bridges), and increasing the capacity of the Government to administer climate monitoring and hazard planning, and respond quickly to disasters. The development of climate-proofed civil infrastructure is also expected to increase employment in local communities.

**Investment Project 2: Forest Rehabilitation Project (FRP).** The FRP aims to reduce the vulnerability of forests to the impacts of climate change and enhance the benefits derived from them – biological diversity, soil and water conservation, and income

generation through recreation and ecotourism. The FRP aims to mitigate climate change, promote sustainable livelihoods, and offer new employment opportunities, particularly for women, who will be encouraged to become involved in managing tree nurseries and other enterprises.

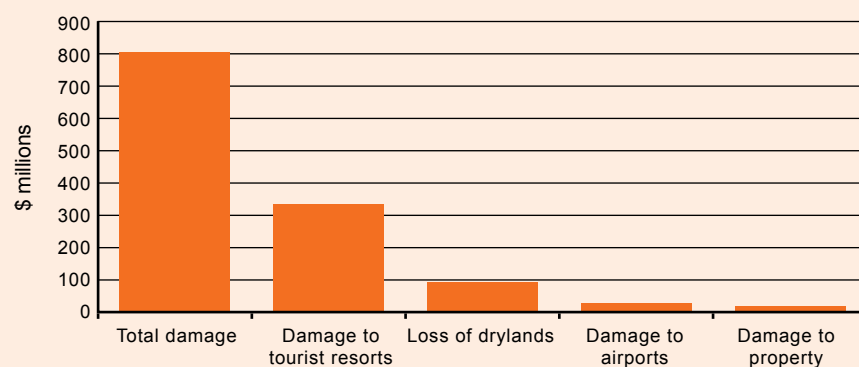
**Technical Assistance Project 1: Water Resources Assessment and Management Study.** This study will assess the impacts of climate change on the availability and management of freshwater sources, taking into account concerns such as rises in sea level and saline intrusion into coastal aquifers. The study aims to identify, quantify and classify water resources using GIS and other methods, improve Grenada’s policies for watershed and water resource management, and identify the best adaptation options for demand, supply and storage.

**Technical Assistance Project 2: Roadmap for Coastal Zone Management (CZM).** The CZM roadmap will address the expected effects of rising sea levels on coastal erosion, flood risks and the loss of land

and protective coastal ecosystems such as coral reefs. In addition to making an inventory of the physical features likely to affect, and be affected by, climate change, the roadmap will review and analyse the laws and institutions affecting coastal management, in areas such as fisheries, public works, water and forests – for conflicts, gaps and overlaps in responsibilities and coordination.

**Technical Assistance Project 3: Improving the Use of Data and GIS for Climate Change Adaptation.** To support informed medium- to long-term decision-making, technical assistance on GIS and data systems will aim to provide the best available information on local and regional climate change and variability. Stakeholder consultations on the SPCR revealed that considerable data already exist in Grenada, but the project-by-project approach of the past has resulted in differing standards and inaccessible information. This project will review existing standards, policies and institutions relating to GIS, identify the gaps in current GIS data, and assess the human and technical capacity needed to improve data management.

**Costs of damage to Grenada from mid-range predictions of sea-level rises by 2050**



## Funding for the SPCR

Mid-range rises in sea level could, as early as 2050, cost Grenada up to a total of \$801 million (see figure). This total is anticipated to rise to between \$1.3 and \$3.7 billion by 2080. The economic

costs of climate change thus represent an overwhelming burden to Grenada's economic viability. Furthermore, as a SIDS, Grenada cannot fund projects for climate change resilience and mitigation from domestic sources alone. Some of Grenada's past funding

challenges have been resolved under the SPCR, which enables the country to turn to the multilateral finance facility of the CIFs. Where the SPCR cannot provide financial support, it may still be in a position to offer technical assistance.

## Key lessons and implications

Grenada's SPCR is concluding its major design phase and is on the cusp of true implementation. There is the potential to make good progress in climate compatible development, based on a strong design process. The following lessons and implications have emerged so far.

**Tailoring country-specific climate change responses:** Climate compatible development means different things for different countries, depending on national circumstances and priorities. In SIDS and other developing countries that have high vulnerability to rising sea levels and relatively low potential for emission reductions, resilience should be the primary focus of climate change responses, while still addressing greenhouse gas limitations through key sectors, such as forestry.

**Comprehensive approaches to mainstreaming climate resilience:** A comprehensive approach to reducing climate risk and disaster vulnerability, together with broad-based projects that may be integrated into existing laws, policies, strategies and institutions, are likely to work better than a piecemeal project-by-project approach. While there is still a long way to go, the SPCR signifies a first step towards pursuing an overall climate compatible development strategy for the country.

**Cross-sectoral and participatory design and implementation:** The involvement of representatives from all stakeholder groups in the design and implementation of national programmes can increase the information base on which the programme draws and ensure procedural legitimacy. Furthermore, involving civil society at the implementation stage is vital to avoid feelings of 'initiative fatigue' that may result from past failures as well as increase the on-the-ground effectiveness of government programmes.

**Synergies with regional programming:** CDKN and the UK's Department for International Development have partnered with the Caribbean Community Climate Change Centre to develop a detailed Implementation Plan for the Regional Framework for Achieving Development Resilient to Climate Change. All CARICOM heads of state, including Grenada, endorsed the Implementation Plan in early 2012. To date, the regional and national tracks have advanced in parallel, and there is an opportunity to integrate them further. Additionally, the SPCR specifically recognises the CARICOM Implementation Plan and seeks collaboration to identify synergies and reduce duplications.

**Attracting external finance:** The CIFs have already addressed some of Grenada's finance challenges by supplementing domestic funds for the DVRP. Funding for other initiatives is limited, but the provision of technical assistance under the SPCR may help attract international or private finance once the SPCR is fully operational.

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## About CDKN

The Climate and Development Knowledge Network (CDKN) aims to help decision-makers in developing countries design and deliver climate compatible development. We do this by providing demand-led research and technical assistance, and channelling the best available knowledge on climate change and development to support policy processes at the country level.

## About CPDC

The Caribbean Policy Development Centre (CPDC) is a coalition of Caribbean non-governmental organisations (NGOs). It was established in 1991 to sensitise NGOs and the general public on key policy issues and to impact policy-makers on decisions which put the interests of Caribbean people at the centre of the Caribbean development strategy.

## About IDLO

The International Development Law Organization (IDLO) is an intergovernmental organisation that promotes legal, regulatory and institutional reform to advance economic and social development in developing countries, transition economies and nations emerging from conflict.

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Damage caused by Hurricane Ivan in Grenada. © wikimedia.org  
Editing, design and layout: Green Ink  
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