

Progress in Climate change adaptation in the Caribbean community



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The Caribbean community is deeply committed to the implementation of adaptation and mitigation measures to minimise the effects of climate change on the region's sustainable development. Governments, as well as the private sector, are involved in such efforts. The region is making commendable progress through the delivery of training programmes, the practice of sustainable tourism and initiatives in renewable energy.

A REGION EXPOSED

While Small Island Developing States (SIDS) produce only a tiny fraction of global greenhouse gas (GHG) emissions, many, because of their location barely above sea level, are among the most vulnerable to the effects of climate change. Climate change is therefore a matter of critical importance for the very survival of the Caribbean community (CARICOM).

Over the past decade, the Caribbean has experienced extensive social, economic and environmental impacts of intensive storms and hurricanes, with consequent significant loss of life, and major set backs in the national and regional development programmes. Ignoring the spectre of climate change and its anticipated impacts, would truly expose the region to unprecedented consequences, and display poor stewardship in our responsibility for the natural and built environment and the regional patrimony.

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The scope of the required adjustments varies widely since each CARICOM Member State has its own special adaptation needs and resource constraints. These states have for some time been engaged in gathering information and are now arriving at a position where the risks can be better understood and adaptation measures can be identified.

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IMPACTS OF CLIMATE CHANGE

The anticipated impacts of climate change on the sustainable development of the region will affect all sectors, but most critically, tourism, water, agriculture, human habitat and economic infrastructure. More than 95 per cent of the tourism infrastructure in many CARICOM Member States is located within 10km of the coastline, thus rendering the industry highly susceptible to the effects of exaggerated wave action and tidal surges.

Climate variability, as expressed by changing and unpredictable weather patterns, already represents a major challenge for the agriculture sector as well as for planners generally in the community. Both the tourism and agriculture sectors will be severely affected by declining water availability and by extended periods of drought.

Another significant threat is the projected impact of climate change on human health, through an increase in the presence of vectors of tropical diseases, such as malaria and dengue, and the prevalence of respiratory illnesses. These diseases will affect the well being and productivity of the workforce of the Caribbean and compromise the region's economic growth and development potential.

THE CARIBBEAN COMMUNITY CLIMATE CHANGE CENTRE

In 2002 the CARICOM Heads of Government decided to establish the Caribbean Community Climate Change Centre and to place the issue of climate change at the highest level on their agenda. The Caribbean community coordinates its climate change activities, through the Climate Change Centre, which is based in Belize. The centre provides a range of services and products relating to research, impact assessment, response strategies and systematic observation of climate change in the region.

The Caribbean community recognises the need to deal with climate change through international agreements and joint implementation efforts, but is also committed to action at national level. Such action is aimed at implementing adaptation and mitigation plans and programmes.

ADAPTATION EFFORTS IN THE CARIBBEAN COMMUNITY

There are many opportunities for a wide range of adaptation options to be adopted throughout the Caribbean community. At national level, governments

as well as the private sector are now taking action to address climate change issues with noticeable progress in a number of areas.

It is to their credit that these governments contributed to, and supported, for over five years commencing in 1997, the foundation project, Caribbean Planning for Adaptation to Global Climate Change (CPACC) with the support of the Global Environment Fund (GEF), through the World Bank, and in association with the University of the West Indies and the CARICOM Secretariat. Presently, the GEF funded Mainstreaming Adaptation to Climate Change (MACC) Project is being implemented by the Caribbean Community Climate Change Centre.

The project's objectives include:

- ▶ Build capacity to identify climate change vulnerability and risk.
- ▶ Build capacity to reduce vulnerability to climate change.
- ▶ Build capacity to access and effectively utilise resources to minimise the costs of climate change.
- ▶ Public education and outreach.

Sustainable tourism

In CARICOM, the tourism sector makes the greatest use of the coastal and marine resources and many of the region's adaptation efforts can be seen through the response of this major economic sector. The tourism sector is highly dependent on infrastructure. This includes airports, coastal protection structures, natural amenities, beaches, reefs and wetlands, access to clean and adequate supply of water, reliable energy and food. Even before climate change issues were on the regional and global agenda, the tourism sector was turning its attention to sustainable tourism. While much emphasis has been placed on training, there are also many practical examples of adaptation measures being implemented.

The Caribbean Environment Network (CEN) Project, an initiative of the Caribbean Environmental Programme (CEP) was implemented during 1996-99 to improve environmental quality and coastal and marine natural resource protection, by promoting the use of environmentally sound practices in the tourism industry. This project conducted training workshops and developed training manuals for a number of areas including Improved Training and Public Awareness on Caribbean Coastal Tourism and Manual for Sand Dune Management in the Wider Caribbean. The effects of these training workshops will become more evident in the near future.

Water management

With respect to water management, desalination plants have been constructed in Antigua and Barbuda and Barbados. In some CARICOM states, such as St Vincent and the Grenadines, building codes require cisterns to be constructed for water capture and storage. At the regional level, the Caribbean Environmental Health Institute (CEHI) is encouraging Member countries to practice Integrated Water Resource Management. The Integrated Watershed and Coastal Area Management (IWCAM) Project was approved by the Global Environment Facility (GEF) in May 2004.

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Sustainable energy

The climate change challenge of small island nations is compounded by their struggle with expensive fossil fuel imports and an inability to supply electricity in rural areas. It is recognised however, that these nations are especially suited to utilise combinations of modern renewable energy technologies and the implementation of energy efficiency measures. The development and use of renewable energy is gaining momentum across the region.

Solar energy initiatives are largely private sector based and focus primarily on the provision of water heaters, but in Barbados the government has offered incentives to homeowners for the installation of these units. Solar companies in Barbados and St Lucia have expanded their services to several other CARICOM States. Households as well as hotels across the region are now utilising these services. Solar driers have also been profitably used in drying onions, hay and plastics in Antigua and Barbuda, Barbados and Trinidad and Tobago respectively. In Barbados, sugar factories are now engaged in cogeneration using bagasse to produce electricity and are contributing approximately 15-18 per cent of that country's primary energy supply. The Government of Belize recently invested US\$62 million in a cogeneration plant, Belize Co-Generation Energy Limited (BECOGEN), which will use bagasse to generate 31.5 megawatts of electricity most of which will be sold to the national grid. The private sector is also very actively involved in energy conservation schemes. The Caribbean Alliance for Sustainable Tourism (CAST) is assisting hotels by conducting energy audits, and is a leading advocate of incentives for the promotion of energy efficient technology, the development of standards and building codes and the provision of attractive interest rates for the purchase of energy efficient technology.

Other sustainable energy initiatives are ongoing in the region. With assistance from the Global Sustainable Energy Islands Initiative (GSEII), St Lucia has adopted a National Sustainable Energy Plan, establishing aggressive targets for renewables and energy efficiency, and setting the stage for significant changes in the energy sector. Grenada and Dominica are developing similar plans.

Food and agriculture

Another major initiative is the Regional Special Programme for Food Security (RSPFS) which is spearheaded by the Food and Agricultural Organization (FAO) in collaboration

with the CARICOM Secretariat with support from the Government of Italy. This project involves the CARICOM Member States, and the Dominican Republic. A key aim of the Programme is to address constraints related to increasing trade, increasing small farmer productivity, and improving food policy, food insecurity information and linkages between food product development and promotion and food health related issues.

GOING FORWARD

In October 2007, the Climate Change Centre signed a Memorandum of Understanding with the Government of the United Kingdom to facilitate funding for the development of the comprehensive Caribbean Regional Climate Change Strategy. This project will provide the Caribbean community with a coherent and cohesive policy framework and implementation plan to guide its efforts.

Adaptation efforts in the region so far, have focused primarily on capacity building for adaptation. However, it should be pointed out that the adaptation activities highlighted herein are in keeping with the Region's Sustainable Development agenda, namely the implementation of the Barbados Programme of Action (BPoA) and the more recent Mauritius Strategy of Implementation. There is now a need however, for developing a mechanism which would provide a more deliberate feed of climate change adaptation issues into the sustainable development agenda.

Author

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Organisation

The objectives of the Caribbean Community (CARICOM), formerly the Caribbean Free Trade Association, are to improve standards of living and work; the full employment of labour and other factors of production; accelerated, coordinated and sustained economic development and convergence; expansion of trade and economic relations with third states; enhanced levels of international competitiveness; organisation for increased production and productivity; and achievement of a greater measure of economic leverage.

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