



# CANARI POLICY BRIEF No.17

Strengthening Institutional Arrangements in Trinidad and Tobago to Facilitate Climate Change Adaptation Policy Formulation and Execution 2014

## Climate Change and Disaster Risk Reduction

### Summary

The ecologies and economies of the small island developing states in the Caribbean region are particularly vulnerable to the impacts of climate change. Effective and timely policy responses can lessen these impacts and build resilience.

Though efforts at climate change adaptation in Trinidad and Tobago can be identified, their effectiveness has been hindered by inadequate policies, weak institutional arrangements and limited coordination across sectors and between government and civil society. National climate adaptation strategies need to be enhanced by strengthening policy and institutional frameworks, improving cross-sectoral coordination and facilitating civil society engagement.

### Key messages

1. Key sectors remain vulnerable to climate change impacts due to inadequate adaptation responses.
2. Barriers to effective sectoral climate change adaptation readiness include inadequate vulnerability assessments, inadequate sector-specific adaptation policies, insufficient sector funding, inefficient data and information management and limited cross-sectoral coordination.
3. National climate change adaptation planning and investment efforts need to more effectively engage civil society.
4. Key strategies to enhance climate change adaptation readiness require improved sectoral adaptation policy and planning, cross-sectoral coordination and civil society engagement and building on lessons learned.

### Multiple sectors are under threat and some are starting to respond

Climate change is projected to have significant negative effects on multiple sectors in Trinidad and Tobago, including agriculture, water resources, energy, human health, human settlements and coastal zones<sup>1</sup>. Sectors that depend on natural resources, for example agriculture and tourism, are especially vulnerable due to the adverse impacts climate change will have on natural systems. To reduce the risks and associated costs of impending climate change impacts on human and natural systems, adaptation responses are necessary.

Some sectors are already beginning the process of planning adaptation to climate change. For example, in 2012, Cabinet appointed an Integrated Coastal Zone Management (ICZM) Steering Committee to, in part, determine the vulnerability of the coastal zone of Trinidad and Tobago to climate change and make recommendations for adaptation.

<sup>1</sup> Inter-American Development Bank (IDB) 2014. Understanding the Economic Impacts of Climate Adaptation in Trinidad and Tobago. 520pp. <http://climate-iisd.org/news/idb-analyzes-economics-of-climate-change-in-trinidad-and-tobago/>

## **But some critical sectors just aren't adapting fast enough**

Despite progress being made in some sectors, the slow rate of adaptation planning in other critical sectors is a cause for concern. Sectors such as tourism (see Box 1)

### **Box 1**

*"Tourism in Trinidad and Tobago, like much of the Caribbean, relies significantly on the use of natural resources. Tobago's economy for example, depends heavily on revenues earned from sun, sea and sand tourism. With the impacts of climate change already affecting many other tourism dependent islands in the Caribbean adaptation is critical. Climate change driven impacts - such as beach erosion resulting from sea-level rise and destruction of important coastal tourism businesses and infrastructure caused by more intense storms and hurricanes and unpredictable seasons - will negatively impact the tourism product of the Caribbean. Strategic actions therefore need to be undertaken at the national level to create an enabling environment for the tourism sector to adapt to climate change."*

(Adaptation: Rapid Institutional Analysis (ARIA) Phase II Research Report. Trinidad and Tobago. CANARI, 2014)



*Growing sweet-peppers in Mayaro: Some local farmers are converting to protective greenhouse farming to improve crop yields in the face of a changing climate. (Source Sustain T&T)*

and food production (see Table 1) are yet to make climate change adaptation a strategic priority<sup>2</sup>, leaving livelihoods, ecosystems, infrastructure and food security at risk.

## **Barriers to sectoral climate change adaptation readiness need to be addressed**

Effective climate change adaptation actions in critical sectors can be achieved if the following barriers are addressed:

**Inadequate vulnerability assessments:** Knowing what adaptive strategies to implement requires analysis of the

**Table 1: Consequences of the climate change hazards in the agriculture sector of Trinidad and Tobago**

Event	Direct consequence	Indirect consequence
<b>Torrential rains</b>	Flooding	Harm to agricultural and livestock sites
		Erosion and land loss caused by water runoff
<b>Storm surge</b>		Erosion and land loss in low lying zones of the coastal area
<b>Hurricanes and tropical storms</b>		Losses in crops Damage in farms and livestock deaths
<b>Sea level rise</b>		Erosion and land loss in low lying zones of the coastal area
<b>Droughts</b>	Longer dry season	Reduction of crops Higher incidence of pests and diseases Increase in exploitation and pollution of groundwater

(Source: Understanding the Economics of Climate Adaptation in Trinidad and Tobago – IDB, 2014)

<sup>2</sup> Caribbean Natural Resources Institute (CANARI) 2014. Adaptation: Rapid Institutional Analysis (ARIA) Phase II Research Report. Trinidad and Tobago: CANARI

expected impacts that climate change will have on a particular sector. There are currently very few national and sectoral assessments that analyse such impacts. In instances where assessments do exist (e.g. UNECLAC's Assessment of the Economic Impact of Climate Change on the Agriculture Sector in Trinidad and Tobago<sup>3</sup>), there is little evidence to support their use in informing national/sectoral policies and plans for adaptation.

**Inadequate sector-specific policies:** Although most sectors in Trinidad and Tobago acknowledge the potential impacts that climate change pose, very few have effective policies to do anything about it. The drafting of the National Climate Change Policy in 2011 was a major step at prioritising climate adaptation needs in Trinidad and Tobago. Yet still, many sectoral policies are lagging and have not mainstreamed adaptation needs into sectoral development.

**Insufficient funding:** In addition to effective policy, adaptation cannot take place without the necessary financial support at the national and sectoral levels. A significant number of current adaptation initiatives are being funded by international donors, and though international funding is an important source of finance, national climate funding mechanisms also need to be established to optimise and sustain adaptation efforts.

**Inefficient data and information management:** Having access to accurate and reliable data and information is necessary for predicting and managing the impacts of climate change and for planning adaptation measures. While data and information on climate change relevant to Trinidad and Tobago exist, sourcing it can be challenging. For example, while some institutions like the Trinidad and Tobago Meteorological Service (TTMS) make climate relevant data easily available to stakeholders through their website, much needed data and information from other institutions are not as readily accessible. In some instances, information may be difficult to find without undertaking extensive and time consuming discovery processes. Consolidating and providing easy access to climate data and information from various sources (academia, non-governmental organisations, community based organisations, public and private sectors) to key



*The President of Matelot's Dorcas Women's group tends to plants in the group's greenhouse that was established under CANARI's Empowering Rural Women Project. The project helped rural women in Trinidad and Tobago climate proof their natural-resource-based small businesses. This is an example of a civil society initiative to support community adaptation. (Source CANARI)*

stakeholders and decision makers will facilitate effective adaptation and better coordination.

**Limited cross-sectoral coordination:** The vulnerability of individual sectors is compounded when the high degree of interdependence of many sectors is considered. National climate adaptation strategies therefore require effective cross-sectoral coordination. Current national coordination efforts, however, are not optimal. For this to be addressed, in addition to adequate sectoral policies and budgetary support, mechanisms for cross-sectoral coordination on climate change adaptation actions would need to be developed and implemented.

### **Civil society needs to be effectively engaged and their efforts supported**

National climate adaptation is no small feat, and though government action is fundamental, the need for the involvement of other diverse actors is crucial. The role of civil society is important in this regard. Civil society organisations can and have been contributing to national climate adaptation efforts in many ways, including through advocacy, public education, and

**3** United Nations Economic Commission for Latin America and the Caribbean (UNECLAC) 2011. An assessment of the economic impact of climate change on the agriculture sector in Trinidad and Tobago. ECLAC. 80pp

implementation of some community-level vulnerability assessments and adaptation measures. However, in spite of these contributions, civil society is often not sufficiently included in government-led governance, planning or investment processes aimed at adaptation. Involving civil society at the planning stage is necessary to avoid the ever common top-down adaptation approaches that often give insufficient attention to the effects of climate change at the community-level where, arguably, climate change will have the greatest impact.

Many civil society organisations also do not have adequate resources and competencies in all of the areas around climate change policy, planning and action. They need technical support and resources to increase their effectiveness.

### **What you can do to help strengthen institutional capacity to adapt to climate change**

Fortunately, national adaptation efforts do not have to start from zero. There are many opportunities to strengthen institutional capacity to adapt to climate change. The suggested strategies below are some plausible ways forward. In some instances the ground work is already being laid to support their implementation.

- Integrate climate adaptation strategies into sectoral planning for all sectors – All sectoral policies need to be updated to reflect the challenges of climate change and adaptation. Strategies to address adaptation should be based on analytical assessments and have sufficient and sustained budgetary support.
- Improve cross-sectoral coordination mechanisms – Developing and implementing mechanisms to facilitate better cross-sectoral coordination will make mainstreaming of climate adaptation into national and sectoral planning easier. Such collaborative efforts can also reduce costs and optimise the use of limited resources.
- Give key actors the tools they need to join the fight: Build capacity of CSOs and improve mechanisms for engagement- Government action is important but other actors such as civil society can help with national adapta-

tion efforts. Including civil society in policy formulation, planning and investment processes can improve adaptation approaches. Investing in capacity development for CSOs (e.g. technical support) will also enhance efforts put forward by such organisations.

- Build on lessons learned- National climate adaptation approaches can benefit from the knowledge gained through the experiences of other nations and organisations that are leading the way. Establishing a national climate change information system for the management and sharing of climate data and information will facilitate building on lessons learned and enhancing adaptive capacity. Understanding what works and what doesn't saves time and money.

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### **Caribbean Natural Resources Institute**

The Caribbean Natural Resources Institute (CANARI) is a regional technical non-profit organisation which has been working in the islands of the Caribbean for over 20 years. Our mission is to promote and facilitate equitable participation and effective collaboration in the management of natural resources critical to development in the Caribbean islands, so that people will have a better quality of life and natural resources will be conserved, through action learning and research, capacity building and fostering partnerships.

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