

Background of Guyana

The adverse, and potentially catastrophic, impacts of climate change are already being experienced in Guyana. Since the 1960s, Guyana has observed marked increases in temperatures, sea levels and the frequency and intensity of extreme rainfall events. The impacts on Guyanese people, society, economy and environment, during flooding events in 2005, 2006, 2008, 2010, 2011, 2013, 2014 and 2015 and the droughts of 1997-8, 2009-2010 and 2015 are poignant examples of the devastation which can be caused by climate change. Flooding in 2005, for example, caused damage estimated at US\$ 465 million (60% of GDP) and during the drought in April 2015 potable water had to be trucked into communities in Regions One and Nine. The potential increase of the frequency and intensity of extreme events is especially alarming given Guyana's particular vulnerability to climate change.

Climate models project that temperatures will increase and that sea levels and the height of storm surges will rise. Projections also indicate that average annual precipitation will decrease and that the proportion of heavy rainfall events will increase, though there is greater uncertainty about these values. This in turn is expected to exacerbate adverse social, economic and environmental impacts and act as an additional stress factor on systems with vulnerabilities derived from non-climate drivers.

Guyana has already started to take action to build resilience to change impacts and to enhance capacities to adapt. At a global level, Guyana ratified the United Nations Framework Convention on Climate Change (UNFCCC) in 1994. Since that time, two National Communications have been prepared and submitted to the Convention. In 2015, Guyana submitted its Intended Nationally Determined Contribution to the UNFCCC. Further, Guyana ratified the United Nations Convention on Biological Diversity in 1994 and the United Nations Convention to Combat Desertification in 1997.

At the national level, Guyana has prepared a Low Carbon Development Strategy (LCDS) to foster low carbon and climate resilient development. The LCDS, prepared in 2009 and updated in 2013, highlighted the importance of adaptation and building resilience and in this regard identified thematic priorities such as upgrading infrastructure to protect against flooding, hinterland adaptation, addressing systematic and behavioural concerns, and developing innovative financial risk management tools among others. The LCDS is supported by sectoral policies including the National Integrated Disaster Risk Management Plan, the National Strategy for Agriculture in Guyana, and the Sea and River Defence Policy among others. Guyana also prepared the framework for the Green State Development Strategy which encompasses seven key themes with considerable potential to contribute to the transition to a Green State:

1. Green and Inclusive Structural Transformation: Diversifying the economic base, accessing new markets and creating decent jobs for all
2. Sustainable management of natural resources and expansion of environmental services: stewardship of natural patrimony
3. Energy – Transition towards Renewable Energy and Greater Energy Independence
4. Infrastructure and spatial development
5. Human Development and Wellbeing

6. Governance and Institutional Foundations
7. International Cooperation, Trade and Investment

Guyana has also made progress in implementing adaptation and resilience building actions principally through interventions to the drainage, irrigation and sea defence systems to reduce the risks of flooding. Despite these strides, Guyana still requires a comprehensive framework for building climate resilience so as to achieve the Government's vision for a green economy. This Climate Resilience Strategy and Action Plan (CRSAP) addresses this gap and aims to provide a comprehensive and overarching framework for adapting and building resilience to climate change impacts. The CRSAP identifies potential changes in Guyana's climate (both slow-onset and extreme events), identifies current and projected cross-sectoral climate vulnerabilities and risks and assesses Guyana's current capacity for building climate resilience.

Key vulnerabilities

The key vulnerabilities in Guyana are:

- Flooding – this occurs as a result of heavy rainfall in both coastal and hinterland Regions. Sea Level Rise results in overtopping of sea defences leading to coastal floods. Additionally, when combined with periods of heavy rainfall, will restrict coastal drainage
- Droughts – prolonged dry periods result in droughts.

Examples

In June 2017, persistent rains severely flooded low-lying areas of Mahdia, Region 8. This rendered the area inaccessible and critical infrastructure like roads and bridges were in disrupted. Several residents were displaced because their homes were inundated. Additionally, emergency supplies had to be flown into the area from Georgetown

Conversely, in the last three years (2014, 2015 and 2016) Region 9 has experienced severe drought conditions that resulted in death of crops and livestock, increases in pests, and even water rationing.

SDGs being addressed by the country

National policies on adaptation; mandates/directives etc.

Title	Year	Executing organisation	Description
Framework for the Green State Development Strategy	2017	Ministry of the Presidency	The GSDS will be “based on sustainable use of biodiversity and a decarbonised approach that endeavours to provide an inclusive and better quality of life for all Guyanese within the ecological limits of our country’s natural resources, and with the relevant physical and human capital” President Granger (Framework for the GSDS, 2017)

Title	Year	Executing organisation	Description
			<p>Builds on the Low Carbon Development Strategy (LCDS)</p> <p>Identified issues to be further examined and consulted on in the process to develop in the GSDS</p> <p>Being implemented by the Department of the Environment with support from UN Environment</p>
Low Carbon Development Strategy (LCDS)	2009/2013 update	Ministry of the Presidency	The LCDS fosters low carbon and climate resilient development. The Strategy highlighted the importance of adaptation and building resilience, and identified thematic priorities such as upgrading infrastructure to protect against flooding, hinterland adaptation, among others.
National Integrated Disaster Risk Management Plan (NIDRMP)	2013-2023	Civil Defence Commission	The NIDRMP focuses on risk identification, prevention, financial protection and risk transfer, preparedness and recovery. Links to climate change are articulated.
National Adaptation Strategy for the Agricultural Sector	2009-2018	Ministry of Agriculture	The goal of this strategy is to more effectively reduce the risks posed by climate change and position the agricultural sector to adapt. Among its objectives is to build resilience and adaptive capacity within the sector.
Initial National Communication (INC)	2002	Office of the President	Guyana is required to submit national reports to the UNFCCC on its efforts to implement the Convention and address climate change. The SNC built on the INC and addresses the 'National Circumstances' of the country and provides a 'Vulnerability and Adaptation Assessment'.
Second National Communication (SNC)	2012	Ministry of Agriculture	
Climate Change Action Plan	2001	Ministry of the Presidency	A supplement to the INC, this action plan identifies adaptation as one of nine programme areas. It links climate change to the national development agenda.

Title	Year	Executing organisation	Description
Climate Change Adaptation Policy and Implementation Plan	2001	National Ozone Action Unit/ Hydromet	It complements the INC and Guyana Climate Change Action Plan with a more detailed focus on coastal low-lands.

Other adaptation work ongoing:

1. Japan-Caribbean Climate Change Project:

Development of draft proposal for *Improved Access to Water in Region 9* (specifically Nappi, Hoiwa and Parishara)

2. Climate Change Adaptation Programme (2016 – 2020)

Supported by the Caribbean Community Climate Change Centre (5Cs) and include development of smart agriculture systems, early warning systems and water management

3. Accessing Readiness Preparatory Support from the GCF:

Build national capacity to access funding from the GCF by initializing the required institutional arrangements and training relevant local stakeholders

4. USAID – NAP Support Project

Support on communications, public education and awareness

5. Technology Needs Assessment:

Identification of priority technologies for climate change adaptation and mitigation

Priority adaptation themes/sectors

The draft CRSAP highlights 15 priority adaptation sectors:

Agriculture

Ecosystems and Biodiversity

Energy

Fisheries

Mining

Sea and River Defences

Tourism

Trade

Transport

Water

Housing

Forestry

Health

Indigenous Peoples

Community and Regional Development

Progress on NAPs

- **Have you initiated and launched the process? How? What were the activities undertaken? Are there any published materials and outputs on this?**

The draft CRSAP has been prepared and under the JCCCP the Government of Guyana is currently seeking to update the CRSAP to ensure that it aligns with the GSDS and other key adaptation actions.

- **What key milestones were achieved in undertaking the process? (includes outputs etc.)**

The creation of an Action Plan through exclusive stakeholder input. This Action Plan includes scored vulnerabilities and corrective actions for all the key sectors in Guyana.

- **When are you likely to produce and communicate your NAP?**

This should be completed by the end of 2018

- **Is there any (technical/financial) support received by the government in undertaking the process? If yes, on what particular workstream do you get the most support?**

The GoG is receiving support under the JCCCP to update the CRSAP and align with UNFCCC Guidelines and GoG's vision for a Green Economy.

- **Have you tried accessing the GCF? Please share your experience.**

Ongoing national adaptation initiatives

The OCC will be receiving training under the CTCN Project to assist in preparing proposals to submit for funding. This training is expected in September.