

CSC Evaluation and Monitoring Programme

## Laying the Foundations for Community Resilience to Disasters and Tackling Climate Change in the Caribbean Region



Dr Nicole Greenidge \_

The Caribbean nation of Barbados is one of the Small Island Developing States (SIDS) currently under severe threat from natural hazards and climate change.

Home to approximately 280,000 residents and with a total land area of just 431km², the island's dense population and low elevation make it particularly vulnerable to a wide range of threats. According to the Barbados Government National Communication of 2018, under the United Nations Framework Convention on Climate, most of the country's infrastructure and a quarter of its communities are located within two kilometres of the coast, placing them at high risk of climate change impacts, such as sea level rise and coastal flooding.

Additionally, the island is susceptible to earthquakes and landslides which can affect localised areas. Like other SIDS, Barbados' small economy and population, and the fragility and interconnectedness of its ecosystems to livelihoods together with the array of potential natural hazards are driving risks up to phenomenal levels that threaten its very existence. Immediate and urgent action is therefore needed to address the root causes of risks, build resilience and adapt to the realities of the climate crisis. Central to this is the development of comprehensive and effective policies, legislation and country strategies on disaster management.



Sandy Bay, Caribbean beach on the South Coast of Barbados.

At the forefront of this effort is Nicole Greenidge, a Commonwealth Alumnus who completed a PhD in Human Geography. Her studies focused on developing an Integrated National Disaster Risk Reduction and Climate Change Adaptation Development Investment Framework for Barbados. By providing expert technical support to Barbados and 18 other countries in the Caribbean, she helps governments to develop policies and legislation that strategically guide the implementation of comprehensive disaster management plans and programmes at a national level, helping to disaster-proof the region.

**Dr Nicole Greenidge** is a Commonwealth Alumnus who completed a PhD in Human Geography at the University of Manchester in 2017. She is currently working as a Disaster Risk Management Specialist (DRMS) at the Caribbean Disaster Emergency Management Agency (CDEMA), the intergovernmental organisation of the Caribbean Community (CARICOM) responsible for disaster risk management. She has successfully led initiatives that will strengthen the institutional arrangements for addressing comprehensive disaster management (CDM) in two Caribbean states. Her work includes strengthening risk considerations, mitigation strategies, and the early recovery components of national policies. Nicole is also a part-time lecturer at University of the West Indies Open Campus, teaching a course on Disaster Risk Reduction, where she applies knowledge and skills honed through her PhD to lead online classes for graduate students on framing and applying Disaster Risk Reduction principles within policies, programmes and strategies that seek to enhance the resilience of society and the natural environment.



The 19 Caribbean States supported by the Caribbean Disaster Emergency Management Agency (CDEMA) to develop policies and legislation to guide the implementation of comprehensive disaster management plans and programmes.

## Strengthening Policies to Manage Disasters and the Impact of Climate Change

Prior to being awarded a Commonwealth Scholarship to study for a PhD, Nicole worked as a programme coordinator for the Caribbean Disaster Emergency Management Agency (CDEMA), an inter-governmental agency for disaster management in the Caribbean region. It supports 19 participating states to identify and reduce the risk and losses that are associated with the effects of natural hazards and climate change thereby enhancing sustainable development in participating states in the region. While working for CDEMA, Nicole realised there was a gap in expertise in the field of disaster risk reduction and climate change adaptation across the member states served by CDEMA. To further improve her knowledge and skills in this area and help address this gap, she decided to embark on a PhD study journey through a Commonwealth Scholarship, focussing on Human Geography and the area of Disaster Risk Reduction and Climate Change Adaptation.

As part of her PhD studies, Nicole conducted a workshop in Barbados to gather multiple perspective of stakeholders on how to reduce flood related risks in the region. Participants of the workshop were engaged from very different levels of expertise and experience, including government administrators, technocrats, private sector and community emergency management volunteers.

'When I did the application for the scholarship, I really felt that I needed to hone my skills more, and that we need to build the cadre of experts that we have in the Caribbean region.'



Nicole leads participants during a workshop hosted at Baobab Towers by the Government of Barbados, in the use of the Ketso visual tool [accessed through the University of Manchester] to gather multiple perspectives on how to reduce flood related risks in Barbados.

Upon completing her studies, Nicole was determined to use the acquired skills and knowledge and her PhD research findings to inform policies aimed at strengthening resilience and response to natural and climate change threats, and to promote sustainable development in both her country of Barbados and in the Caribbean region as a whole.

'I did my research using my country as a case study as part of my PhD. I wanted to share with the government the findings of the research that I had done. I expected to contribute as a Commonwealth Scholar to my country and sustainable development in the region.'



Nicole engages with participants from one of two workshops held in 2015 in Barbados on developing an integrated flood risk decision making system for Barbados at Baobab Towers.

Following the Scholarship, it took Nicole several attempts to secure continuous employment within the government space and to reach a position where she could influence the application of her PhD research findings. In 2019, she rejoined CDEMA as a Risk Management Specialist. Working for CDEMA gave Nicole a direct opportunity to use her PhD findings to inform government policies aimed at building resilience and tackling climate change.

'I have applied the skills that I have gathered as a result of benefiting from the Commonwealth Scholarship to facilitate the drafting of a National Disaster Management Policy for my country that incorporated findings from my PhD research, and this was really rewarding for me.'

Working as a Disaster Risk Management Specialist, Nicole provides technical support to participating states in the identification and treatment of critical and core disaster mitigation priorities as a component of National Comprehensive Disaster Management Programmes. Thus far, she has been able to work with two states to strengthen the incorporation of risk considerations (inclusive of risk associated with climate change) into the mitigation and early recovery components of their national policy and legislation.

Using her knowledge and skills in disaster risk preparedness that were sharpened during her PhD studies, Nicole supports the Caribbean states in drafting technically sound and implementable policies, legislation and country strategies on Comprehensive Disaster Management.

'Given the technical strengths I honed in disaster management during my PhD study, I have supported the participating states to identify stronger evidence base for the development of policy, legislation and country strategies.'

Facilitating the effective implementation of her knowledge and ideas, Nicole benefits from a supportive management team at the Caribbean Disaster Emergency Management Agency. As a result, she has had the opportunity to implement the recommendations from her PhD concerning the planning required on disaster risk reduction and climate change adaptation. This requires participating states to identify and treat critical and core disaster mitigation priorities as a component of national Comprehensive Disaster Management programmes.

'They [Management Team] have given me the space to advance my research findings and to test the recommendations from my PhD. I have included recommendations from the PhD into a new policy for my country on comprehensive disaster management.'

In addition to her technical expertise, Nicole depends on a diverse range of supportive partnerships and networks to successfully influence disaster management policies in the Caribbean region.

At CDEMA, she supports the Deputy Executive Director in the development and maintenance of partnerships and collaborative arrangements with leading technical institutions responsible for disaster risk reduction.

Additionally, she liaises with specialised technical partner institutions and government sectors in the development of strategies for sustaining capacity building and resilience to hazards. Partner institutions include the Caribbean Development Bank (CDB), The Caribbean Community Regional Organisation for Standards and Quality (CROSQ), The University of West Indies, United Nations Development Programme (UNDP), United Nations Office for Disaster Risk Reduction (UNDRR), and the World Meteorological Organisation (WMO) among others.

'The research skills [enhanced during the Scholarship] have been really helpful to me because I'm able to make sense of a large amount of material. So, having had the broad exposure with the PhD, I'm able then to give better advice to the countries that I'm working with.'

In addition, Nicole works in consultation with community-based organisations such as the International Federation for Red Cross and Red Crescent Societies, who have played a pivotal role in mobilising communities in relation to disaster risk reduction. By involving and consulting with these groups, she ensures that disaster management policies are inclusive and contain provisions that enable these community-based organisations to effectively support disaster management activities.

## Making Disaster Management Policies in the Caribbean more Effective and Sustainable

With support from her employer and in collaboration with regional and international partners, Nicole has been instrumental in informing strategies, legislation and policies that are aimed at strengthening capacity on disaster risk reduction and climate change adaptation for the participating states in the Caribbean region- work that has been advanced in two States, with plans for further support for the region, as Nicole oversees the review of CDM blueprint (policy, legislation and work programme) implementation in CDEMA States.

The remaining challenge is to ensure the effective implementation and sustainability of these policy instruments. This requires engagement from stakeholders from participating states at all levels in the implementation of instruments that are targeted at building resilience and reducing the loss of lives and livelihoods to disasters in their respective countries.

'I have been able to contribute to the capacity of the region to frame and facilitate cooperation on disaster risk reduction including through MOUs and regional programmes.'

The Caribbean Disaster Emergency Management Agency is leading a number of vital projects aimed at strengthening resilience in the Caribbean region. Some cornerstone activities that fall under Nicole's portfolio include developing road maps for strengthening early warning systems, safer construction curriculum and training, testing the community resilience framework, and harnessing innovative technologies to support resilient settlements on the coastal zones of the Caribbean. To support the progress that has been made in Barbados alone, the CDM policy that has been drafted is being refined through highly consultative and participatory processes facilitated by Nicole on behalf of the Department of Emergency Management. Other national stakeholders include the Ministries of Finance and the environment, the private sector organisations, and community-based groups, all of whom will have an opportunity to have input before the policy is submitted for approval and adoption by the cabinet of the country of Barbados.

Receiving this high-level backing will play a pivotal role in ensuring implementation will follow. This kind of top-level commitment will also be essential to ensure that there is effective monitoring and evaluation of the policies to measure their progress and effectiveness in disaster prevention and management.

Some participating states are currently working with external partners who are invested in their country on development projects. Often these partners require a disaster-management monitoring and evaluation framework

to be in place before embarking on the projects, thereby helping to re-enforce disaster-management policies and the monitoring of their progress in the respective countries. This has contributed to pushing the disaster prevention agenda forward.

To further complement this national and regional work, meeting international commitments has been key. In 2015, the Sendai Framework for Disaster Risk Reduction 2015-2030 became the first major agreement endorsed by the UN General Assembly to support the implementation of disaster management policies in the Caribbean region and beyond. This framework<sup>1</sup> provides member states with concrete actions they can take to protect development gains from the risk of disaster. 2020 was the year for the completion of Target E of the Sendai Framework for Disaster Risk Reduction (DRR): To substantially increase the number of countries with national and local DRR strategies by 2020. In CDEMA participating states' national DRR strategies are called Country Work Programmes (CWPs). Since 2012, CDEMA States have been generating three-to-five-year CWPs through a highly consultative and evidence-based model approach. For Nicole and her colleagues, the impetus of meeting Target E of the international framework has added a sense of urgency to their work and has helped them gain additional buy-in from top-level stakeholders for the redevelopment of CWPs.

'There is a certain accelerated enthusiasm in countries [to fulfil the requirements of the Sendai Framework] that they'll be able to say yes, we've reached the expected target.'

## **Empowering Students to Become Agents of Change in Climate Action**

While studying for her PhD at University of Manchester, Nicole had an opportunity to teach the course on Climate Change, Disasters and Response, at the International Development for the Global Development Institute in 2018 to Masters students. This gave her a platform to share her knowledge with 50 students and, above all, it greatly enhanced her teaching skills which she now uses in her current teaching activities in Barbados.

'While studying for my PhD, I was able to be a course lecturer there [at University of Manchester]. That helped me to be where I ended up being now, because I can say I have some experience doing some teaching and that was exactly in the topic I studied.'

As a part-time lecturer at the University of the West Indies Open Campus, Nicole now teaches a course on Disaster Risk Reduction, 'Building SIDS' Resilience in a Changing Environment', a subject area that she is well versed in as it was part of her PhD studies.

<sup>1.</sup> The CDEMA participating states have a Regional Comprehensive Disaster Management Strategy and Results Framework of 2014-2024 which provides the priority areas for attention in the Caribbean Region aligned to the SFDRR.

'I had the opportunity to guide ten students through the successful completion of the course. The course was a perfect match for my PhD and explored the various principles and applications of Disaster Risk Reduction.'

Of her 10 students, four were working within disaster management offices in some of the participating Caribbean states that were receiving technical advice from Nicole and colleagues to develop legislation and policies to support disaster risk reduction in climate change adaptation.

By equipping these strategically positioned students with transferable knowledge and skills in Disaster Risk Reduction, they are well placed to positively contribute towards informing the disaster management strategies in their countries. For her other students, working in ministries such as tourism and health, they were equipped to play a role in their ministries' emergency planning for disaster management.

'So, even though the number was small, these professionals were working within strategic positions [to influence plans and policies in disaster management] in the countries.'

Through her teaching activities, the Commonwealth Alumnus has also had an opportunity to interact and exchange knowledge with other local academics and professionals working in the field of disaster management and climate change. This has further enhanced her expertise and guided her teaching.

Nicole's future plans are focused on identifying opportunities where she can be more involved in the implementation of the disaster management activities on the ground, a slight shift from her current work of designing projects, conducting consultations and informing strategies and policies.

'I think that being educated in the UK was a wonderful experience for me because I felt that the sky was the limit. So, if you wanted to do or learn something, the tools and the opportunities were there for you.'

The experience of studying and living in the UK created opportunities for academic, professional and personal development for Nicole. Beyond her own growth, she can celebrate her undeniable influence on policy development in Barbados and the impact of her work in other countries in the Caribbean region.

'What has been the greatest reward has been to guide in the development of the Barbados comprehensive disaster management Policy and to incorporate pieces of my PhD research in the policy for discussion and later inclusion.'

Equipped with the expertise, confidence, and networks gained during her Commonwealth Scholarship and through her subsequent hard work and dedication, she is helping to mitigate the devastating effects of natural disasters and laying the foundations for a more secure future for the region.

More about Dr Nicole Greenidge's work

https://www.cdema.org/about-us/what-iscdema#which-states-are-members-of-cdema