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Cultural pathways to climate action in the Anglophone Caribbean

Richards, A.C.

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Appendix I

National Contributions and Reference to Culture

Island	National Contribution	Submission Year	Reference to Culture and Heritage ¹³⁴
Antigua and Barbuda	NC 3 ¹³⁵	2016	Mentions need to undertake an in-depth assessment of the impacts of climate change on cultural activity. Water challenges noted.
The Bahamas	NC 2 ¹³⁶	2015	The island's culture is mentioned within the context of protecting crabs in the forests of Andros. Bahamas National Trust promotes xeriscaping to increase the use of native plants in landscaping to conserve water.
Barbados	NC 2 ¹³⁷	2018	How climate change will impact foods important to Barbadian culture; permaculture mentioned to be promoted. Impacts on the fishing sector will require altering traditional fishing practices. Improving local knowledge utilized in decision-making is listed as an adaptation option under the tourism sector.
Dominica	NC 3 ¹³⁸	2020	Recognizes climate change as a threat to its unique environment and culture; Mentions climate proofing of the world heritage site of Morne Trois Pitons through its Management Plan, national parks, and forests (2020: 146); a strong tradition of conserving land resources used by the Indigenous peoples dating back to pre-Colombian times and changed with monoculture and now exacerbated by climate change. Using traditional building methods as part of enhancing infrastructure resilience and promotion of sustainable human settlements.
Grenada	NC 2 ¹³⁹	2019	Lists cultural assets and historical values among resources that will be impacted by climate change; mentions adoption of climate-smart agriculture, which uses traditional practices. Fisheries sector is vital to the culture and traditions of many coastal communities; climate change requires a move from coastal tourism to other forms of cultural tourism; cultural factors listed as shaping vulnerabilities.

¹³⁴ Search utilized the following words or stems: *cultur, tradition, indigen, heritage, local knowledge*.

¹³⁵ https://unfccc.int/sites/default/files/resource/atgnc3_0.pdf

¹³⁶ <https://unfccc.int/sites/default/files/resource/bhsnc2.pdf>

¹³⁷ <https://unfccc.int/sites/default/files/resource/Barbados%20SNC%20FINAL%20April%202018.pdf>

¹³⁸ <https://unfccc.int/documents/227871>

¹³⁹ <https://unfccc.int/documents/201190>

Jamaica	NC 3	2018	<p>Small farmers need help to adapt to changes in rainfall patterns brought on by climate change. To cope with the changes, they utilize the rich body of local knowledge available to them. The implementation of future policies and programmes that complement these existing traditional coping mechanisms will be essential in alleviating stresses as well as preventing further degradation of the local knowledge base that supports the survival of these farming communities (2018: 220); Many communities have developed their traditional strategies to adopt to changes, hazards or disasters (2018: 242); beach stabilisation efforts depend on traditional living shoreline structures such as deep-rooted native vegetation such as coconut palm, sea grape, seashore dropseed and panic grass to reduce the rate of beach erosion (2018: 242); A community-based adaptation approach that draws upon local farmer's knowledge and historical context can be instrumental in nurturing the building blocks for resiliency (2018: 11) Loss of archaeological, cultural and heritage attraction sites due to sea-level rise, flooding and hurricanes (2018; 236). For the case study on vulnerability and adaptation, the Greater Treasure Beach Area (GTBA) used, where its cultural heritage assets are listed as likely to be threatened by climate change (2018: 246)</p>
Saint Kitts and Nevis	NC 2 ¹⁴⁰	2016	<p>Adaptation options should be culturally acceptable. They are also listed as an adaptation option: wider adoption and more judicious application of proven, effective, 'traditional' technologies and knowledge. Many vulnerable island communities have had to adapt to weather- and climate-related hazards for generations and, in some cases, have accumulated skills and 'know-how,' which (although considered 'low-tech') have proven to be effective in the past. <i>Examples include (i) the construction of the traditional hipped roof (four-sided), which is resistant to wind damage, including from extreme events like storms and hurricanes (ii) the construction of houses on elevated structures or 'stilts' in low-lying, flood-prone areas as has been practiced widely in Guyana and Belize for generations; and (iii) more effective use of trees and shrubs to provide shade</i> (2016:66)</p>

¹⁴⁰ <https://unfccc.int/documents/64787>

Saint Lucia	NC 3 ¹⁴¹	2017	Loss of cultural heritage from climate change will reduce amenity value for coastal users; disruption of cultural activities; increase knowledge of the environment and cultural factors that affect it to maintain a healthy environment that sustains. To challenge entrenched cultural attitudes, more use should be made of traditional knowledge and folk culture which respected land and nature. Many of the adaptation measures being practiced or promoted are variations of traditional practices that many are familiar with (i.e., rainwater harvesting; agriculture sector needs proper documentation of historical/traditional knowledge (2017:295)
Saint Vincent and the Grenadines	NC 2 ¹⁴²	2016	The vulnerability and adaptation assessment chapter was developed using traditional knowledge, among other sources
Trinidad and Tobago	NC 3 ¹⁴³	2021	Cultural assets could be adversely affected. Resistance to cultural and traditional agricultural practices is listed as a barrier to reforestation and rehabilitation of degraded forested lands; the vulnerability and adaptation assessment and proposed adaptation actions build upon 'local experiences and reflect the views and needs of a range of stakeholders to include Indigenous peoples' (2021:206)

¹⁴¹ <https://unfccc.int/documents/81558>

¹⁴² <https://unfccc.int/documents/141282>

¹⁴³ <https://unfccc.int/documents/416026>

Appendix II

References to DRM and Climate Change in Culture Documents and Frameworks

Island	References to Disaster Risk Management (DRM), Climate Change or Environmental Change
Heritage Legislation	
Antigua and Barbuda	<p>The 2016 Cultural Heritage Protection Bill contains definitions of cultural heritage and under this legislation, the National Parks Authority is responsible for protecting heritage in danger, so it is assumed that climate change and disasters are included as emergencies. The National Parks Act, and the Environmental Protection and Management Act (2019) do not specifically mention tangible cultural heritage. The EPMA states <i>‘Coordinate the development and implementation of government’s sustainable development, climate change, environment and natural resources management policies and activities’ (2019:x) providing a meaningful entry point for integrated heritage and climate change considerations.</i> The Physical Planning Act (2003) <i>makes provisions for physical development in Antigua and Barbuda to preserve and improve the quality of the physical environment and specifically mentions tangible heritage, but not why it’s important.</i> The Disaster Management Act (2002) does not specifically mention cultural heritage just vulnerable areas.</p>
Barbados	<p>No legislation that only focuses on heritage, although definitions are provided in the Cultural Industries Development Act (2013). The Physical Development Plan 2022 specifically mentions cultural heritage as a stand-a-lone topic and in relation to impacts from the climate crisis. Likewise, the Planning Act 2019 replaces the Town and Country Act and lists culture and heritage as one of its sections however no specific references to climate change or disaster risk management). The National Conservation Commission Act (2000) mentions cultural heritage and its protection and specifically mentions the protection of the seacoast of Barbados from erosion or encroachment by the sea’ (2000:20). The Coastal Zone Management Act (1998) mentions coastal resources and that any area containing archaeological remains or wrecks can be designated as restricted. The Emergency Management Act allows for the designation of vulnerable areas but no details on how plans may affect cultural heritage during disaster emergencies.</p>
Dominica	<p>The National Trust Bill mentions <i>‘monument to include any building, structure, object, or other work of man or of nature whether above or below the surface of the land or the floor of the sea within the territorial waters of Dominica and any site, cave or excavation’ (1983: section 2.</i> The Physical Planning Act (2002) includes a provision to <i>‘protect and conserve the cultural heritage of Dominica’ (2002: f).</i> The Development and Planning Corporation Act mentions the <i>‘preservation of sites and objects of architectural or historic interest’ (1972: section 4).</i> The Emergency Powers (Disasters) Act (1987) does not mention</p>

	cultural heritage either in the designation of vulnerable areas or how it might be affected during disaster response and recovery.
Grenada	The Physical Planning and Development Control Act, No. 25 of 2002 mentions ‘to protect and conserve the natural and cultural heritage of Grenada’ (2002: section e). The Grenada National Trust Ordinance, No. 20 of 1967, mentions that the Trust is a ‘body interested in the preservation of places of historic and architectural interest...’ (1967: Preamble). The National Heritage Protection Act (1990) speaks to the removal of pre-Columbian cultural objects without a permit. The National Parks and Protected Areas Act (1990) declaring protected areas to ‘preserve any historic landmark or any area or object of historic, prehistoric, archaeological, cultural or scientific importance...’ (1990: Section 16). The Emergency Powers Act, No. 17 of 1987 does not mention cultural heritage or how it may be impacted by emergencies. The Planning and Development Authority offers protection to cultural heritage during emergencies through interim preservation, but these focus on development as the emergency.
Jamaica	Jamaica currently has no detailed, specific statement of purpose for protecting tangible cultural heritage. While the Jamaica National Heritage Trust Act delineates the objects of the Trust, Jamaica’s primary heritage authority, this Act does not contain any specific text discussing why heritage values are essential and should be protected. Furthermore, other legislation mentioning cultural heritage contain only broad, vague statements about protecting cultural heritage or natural resources; Forest Act, no. 17 (1996), Article 23(1) (a, i): “(1) The Minister may declare any Crown land to be a protected area if it appears to him to be desirable for the following purposes—(a) protection against storms, winds, rolling stones, floods, landslides; . . .(i) protection of national amenities, flora and fauna”; the Jamaica National Heritage Trust Act and the Natural Resources Conservation Authority Act contain no provisions specifically dealing with how to protect cultural heritage during times of disaster response and recovery. The JNHT legislation is presently being amended.
Saint Kitts and Nevis	While the National Conservation and Environment Protection Act and the National Trust Act state that the identification, protection, and conservation of cultural heritage are objects of their respective Acts, these Acts do not contain any specific text discussing why heritage values are essential and should be protected. Furthermore, the Development Control and Planning Act contains only a broad, vague statement about how the agency will protect cultural heritage. The interim preservation order process in the Development Control and Planning Act authorizes the protection historic sites and buildings in emergencies. Still, these provisions seem more applicable to emergencies during normal development operations rather than a coherent strategy to deal with long-term, large-scale natural disasters.
Saint Lucia	St. Lucia does not have a detailed, specific statement of purpose on protecting tangible cultural heritage. While the St. Lucia National Trust Act, No. 16 of 1975, states that the identification, protection, and conservation of cultural heritage are objects of the Act, it does not contain any specific text discussing why heritage

	<p>values are essential and should be protected. Furthermore, the Physical Planning and Development Act (2005) contains only a broad, vague statement. The Physical Planning and Development Act (2005) authorizes protection of historic sites and buildings in emergencies. Still, these seem more applicable to emergencies within normal development operations than a coherent strategy for long-term, large-scale natural disasters. In addition, while St. Lucia has an Emergency Powers (Disaster) Act, No. 5 of 1995, However, there is likely no detailed outline of how these emergency regulations may affect cultural heritage during disaster response or recovery.</p>
Saint Vincent and the Grenadines	<p>No legislation with a detailed specific statement of purpose on protecting tangible cultural heritage. The National Trust Act (1990) lists the purposes to be served by the National Trust. Still, it makes no statement about why the protection of cultural heritage is critical to the nation's well-being. The National Emergency and Disaster Management Act, No. 15 (2006) grants the government wide-ranging powers to control the access and use of real property through emergency regulations. In particular, the government can declare an area to be an "especially vulnerable area, " allowing it significant control of land-use decisions in that particular space. However, there is no detailed outline of how these emergency provisions may affect cultural heritage during large-scale disaster response or recovery. The Physical Planning and Development Board may also protect cultural heritage in certain situations through building preservation orders. However, emergencies contemplated by the Town and Country Planning Act arise during normal development processes rather than large-scale natural disasters. Thus, the Town and Country Planning Act has no provisions explicitly dealing with protecting cultural heritage during disaster response and recovery.</p>
The Bahamas	<p>No legislation with a detailed specific statement of purpose on protecting tangible cultural heritage. The Bahamas National Trust Act lists the protection of cultural heritage as one of its purposes. Still, it offers no statement about why the protection of cultural heritage is critical to the nation's well-being. The same may be said for the Clifton Heritage Authority Act and the Bahamas Public Park and Public Beaches Authority Act. Furthermore, the Planning and Subdivision Act notes that preserving historic buildings is essential, but that is not why they should be saved. The Disaster Preparedness and Response Act (2006) grants the Prime Minister the power to control the access and use of real property during emergencies, designate especially vulnerable areas, and prepare particular area precautionary plans that may impact cultural heritage. No detailed outline of how these emergency regulations, designations, or plans may affect cultural heritage during large-scale disaster response or recovery.</p> <p>The Minister of the Environment may also protect cultural heritage in certain situations through preservation orders. Such orders, however, derive from emergencies arising during normal development processes rather than large-scale natural disasters. Thus, the Planning and Subdivision Act contains no</p>

	provisions explicitly protecting cultural heritage during disaster response and recovery.
Trinidad and Tobago	<p>No legislation with a detailed specific statement of purpose on protecting tangible cultural heritage. The National Trust Act (1991) lists the purposes to be served by the National Trust. Still, it makes no statement about why the protection of cultural heritage is critical to the nation's well-being. Furthermore, the Environmental Management Act (2000) does not list the protection of cultural heritage as among its purposes, although historic resources would undoubtedly be affected. The Disaster Measures Act, Chap. 16:50 of the 1978 Act grants the government the power to control the access and use of real property through emergency regulations. However, there is no detailed outline of how these emergency regulations may affect cultural heritage during large-scale disaster response or recovery.</p> <p>The National Protected Areas Policy (2011)</p> <p>The National Planning Authority may also protect cultural heritage in certain situations through immediate compliance orders. Still, emergencies contemplated by the Planning and Facilitation of Development Act arise during normal development processes rather than large-scale natural disasters. Thus, the Planning and Facilitation of Development Act has no provisions explicitly dealing with protecting cultural heritage during disaster response and recovery.</p>
Cultural Policies	
Barbados	Specifically mentions the need to research practices surrounding agriculture over the years, recognizing the importance of those practices in designing and implementing modern agricultural programmes (26). ¹⁴⁴
Grenada	In its Section 15 (2012:40) ¹⁴⁵ , specifically mentions protection and preservation of natural environment as an element of cultural development; From time of ancestors, there was appreciation of the need to interact positively with the environment: In cultural history an awareness of the presence of streams and rivers, of building houses on the banks of rivers, of how and where we dispose of garbage; Modern life has made persons less mindful of environment and this has caused havoc on societies during hurricanes and heavy rains; Environmental awareness was basis of engagement in agriculture. Communities knew when and where to plant and when to reap; Must acknowledge that agriculture has been the main source of economic activity of the majority of Caribbean people for centuries and recall that many beliefs, attitudes and practices have grown around it; In search for economic solutions using agriculture, there is a call to look back at old traditions and assess their value in the present. <i>Actions to be taken:</i> Give direction for the collaboration between the Division of Culture and the Ministry of Agriculture to provide incentives for farmers to experiment with traditional

¹⁴⁴ National Cultural Policy for Barbados 2010 (presently being updated)

¹⁴⁵ National Cultural Policy for Grenada 2012 (pending update)

	agricultural practices as solutions to modern sustainability; Encourage schools and community groups in activities related to environmental protection and the cultural practices related to it; Support the preservation of, and, where appropriate, the development of the Rain Forest, Dry Forests and Swamp Lands; Establish a cadre of local researchers with the specific task of researching local traditional foods and their nutritional values and documenting local indigenous knowledge.
Jamaica	Mentions as one of its policy strategies, the promotion of areas of convergence with other sectors such as the environment, and policy goals to leverage culture to drive equitable and sustainable development ¹⁴⁶
Saint Kitts and Nevis ¹⁴⁷	No specific references or intersections
Trinidad and Tobago National Culture Policy 2020 – 2025 Cultural Transformation Policy 2023 - 2027	Severe environmental challenges and weather patterns are listed as part of the global challenges in the regional context of the policy (10); the sector is threatened by several environmental factors (12); culture is mentioned as a powerful means of exploring and addressing significant challenges such as environmental issues which require addressing individual philosophies and belief systems (27); Definitions of culture; no mention of climate change; details cultural transformation through curriculum enhancement
Management Plans at World Heritage Properties	
Antigua: Nelson’s Dockyard	The Disaster Management Plan is a working document, with much of the Tropical Cyclone Preparedness Plan completed. Other sections, such as earthquakes, tsunamis, fire, death, etc., must be completed. The National Parks Authority (NPA) has elaborated a Risk Preparedness and Response Manual specific to the Naval Dockyard. This is being implemented and assists the Park staff in facing natural threats. Specific individual actions are being undertaken in relation to the impact of climate-induced hazards at the property
Barbados: Historic Bridgetown and its Garrison	Chapter on Risk Assessment with a Risk Assessment Register. In 2021 – 2022 climate change part included as draft
Saint Lucia: Pitons Management Area	Needs to be updated to include Risks and Climate Change
Saint Kitts and Nevis: Brimstone Hill Fortress National Park (BHFNP)	Saint Kitts and Nevis has a Climate Change Strategy and a Disaster Risk Strategy, however the BHFNP is not dealt with specifically in either strategy. Also, BHFNP does not itself have a Climate Change or Disaster Risk Management Plan. The Management Plan does not specifically mention this hazard. The National Conservation and Environmental Protection Act 1987 (NCEPA) provides consideration for the protection of the BHFNP; however, it does not provide a

¹⁴⁶ National Policy on Culture and Creative Economy of Jamaica 2017 – 2027 (Pending Cabinet of Jamaica approval)

¹⁴⁷ Saint Kitts and Nevis National Cultural Policy, 2017. Accessed 3 July 2024 at <https://www.culture.gov.kn/wp-content/uploads/2018/08/DoC-St.-Kitts-Nevis-National-Cultural-Policy-SKN-NCP...27.5.18.pdf>

	<p>DRM plan. In 2021 as a part of a UNESCO pilot initiative at select world heritage sites in the region, a DRM and Climate Change Plan and Key Actions was developed. Its implementation status is unknown. Prior to this UNESCO sponsored exercise, there has been no Climate Change Risk Profile or Disaster Risk Profile, or Climate Change/Disaster Risk Management Plan done for BHFNP.</p>
<p>Dominica: Morne Trois Pitons National Park</p>	<p>Sections on Natural Hazards and a Chapter on an Analysis of Issues, which includes climate change</p>
<p>Jamaica: Blue and John Crow Mountains National Park (BJCMNP)</p>	<p>Management Plan does not have a major focus on DRM and Climate Change, however work in forested areas works on building resilience to climate change; acknowledges the need to integrate Indigenous knowledge into the development, planning and management systems of the property; draft DRM and Climate Change being developed by site manager, Jamaica Conservation and Development Trust (JCdT)</p>
<p>Jamaica: The Archaeological Ensemble of 17th Century Port Royal</p>	<p>There is a draft Port Royal and the Palisadoes Protected National Heritage Management Plan 2022 – 2027 that addresses climate change and disaster risk management in terms of engaging with the community, the protection and monitoring of all forms of cultural heritage in the event of climate change and other natural hazards</p>

Appendix III

Ethnographic Research Questions

Traditional Knowledge, Practices and Climate Change in the Caribbean

This research project focused on the following Indigenous communities of the Caribbean:

The Garifuna of Saint Vincent and the Grenadines (2) the Kalinago of the Commonwealth of Dominica and Saint Vincent and the Grenadines, and (3) the Maroons of Jamaica (Charles and Moore Towns)

Your answers will help to:

- Understand how climate change is understood and observed by traditional communities
- Understand how communities used traditional knowledge to understand climate change and mitigate and adapt
- Identify the degree of change noted by these communities and how impact is perceived
- Identify – based on the past – what are the important considerations for future climate change adaptation
- How can traditional knowledge and practices be mobilised to better understand and fight climate change or to co-manage the environment?

Please answer the following questions as best as possible.

1. How do you/your community define the natural environment?
2. What does climate change look like to you/your community?
3. How does climate change impact your community?
4. Are there things in the atmosphere, traditional forecasting, plants, and animals that you/your community use to identify severe changes in the environment/extreme weather events?
5. Do these help you to know when to plant, sow, harvest, fish, what kind of fish, how to construct a particular dwelling?
6. Is there traditional knowledge about natural environmental disturbances that are only transmitted orally or through rituals?
7. Are there plants or activities used to restore balances in nature or between human and nature
8. Have you noticed the following changes? If yes, what is the community/individual response to this change? What is the cause:
 - *Less fish/marine life; Habitat damage/less vegetation; Sea-level change; Disappearance of certain flora/fauna; Change in coastal areas (to include coastal erosion); Increased*

incidences of flooding, rain, historical flooding events; Significant increase in pests; Unpredictable seasons, bad weather; Higher temperatures

9. Have you noticed an increase in severe weather events or flooding? What is being done to manage these impacts?
10. What changes have you made in your communities and your ways of doing things in relation to droughts, flooding, hurricanes, coastal erosion, coastal flooding?
11. Are you aware of any time in the past when your ancestors or communities had to relocate from coastal areas and why?
12. Have severe weather systems or any other reasons influenced where or when you do your farming or fishing?
13. What are the historical practices which helped assure your/your community's food security or water, forest, and fire management?
14. What are the traditional practices used by your ancestors worth reviving which could strengthen how you adjust to these climate changes (i.e., better relationship with biodiversity and natural resources)?
15. Have any of your traditions changed or been altered because of climate change, seasonal changes, changes to the natural environment?
16. Are there practices linked to locations that had to be relocated due to changes to the natural environment
17. What can be learnt from how things were or are being done by your community in response to these changes (farming, housing construction, water conservation etc.)?
18. Are there any practices done by your ancestors that you still utilize in relation to the natural environment?

This original list of questions presented above were discussed with the Caribbean Amerindian Organization (CAO) and representatives from the various communities participating in this study. The feedback allowed a whittling down, eliminating, or merging of questions into five central questions:

1. What do you think climate change is and how does it impact you and your community?
2. Are there any knowledge, practices, and strategies that you recall your ancestors using to deal with these changes (communities were further prompted in relation to the chosen areas after giving initial responses)
3. Are any of these still being practiced by you or your community today?
4. Are any [knowledge, practices and strategies] relevant if there is an increase in these challenges for the future?
5. Do you believe traditional knowledge is useful for adjusting to climate change