

Climate Change and Disaster Risk Reduction

Introduction

2011

The island of Saint Lucia possesses a richness of natural, cultural and heritage resources which are highly vulnerable to the global phenomenon of climate change. The impacts span multiple areas, ranging from biodiversity and coastal resources, to agriculture and tourism. These impacts are intricately linked and the daily life and livelihoods of Saint Lucians are becoming increasingly affected.

Civil society recognises and believes that immediate responses through co-ordinated work 'on the ground' to mitigate against and adapt to climate change and its impacts are key. Saint Lucian civil society sees a vital role for itself in this process, which will contribute to building a Saint Lucia that is less vulnerable and more resilient to the impacts of climate change. Civil society has therefore developed an agenda for addressing climate change characterised by action, collaboration, support for the work of the government and advocacy on issues which require immediate attention.

Civil society's role in addressing climate change

Civil society's members are people of action, contributing distinctive skills in the national community, including:

• collaboration	• innovative approaches
• grassroots and traditional knowledge sources	• networking
• information sharing	• research

Civil society wants to rapidly advance Saint Lucia's plans for adaptation to the impacts of climate change and acknowledges the policy principle of the National Climate Change Policy and Adaption Plan of Saint Lucia (2003) that encourages:

"the participation of stakeholders in addressing climate change in a co-ordinated fashion that avoids duplication of effort and conflict and that ensures efficient use of resources and the creation of positive synergies."

In our efforts to actively participate, we have identified threats to, and gaps in attempts at boosting resilience. We need to make our practices more sustainable and we will advocate for policy changes where these gaps and threats are evident.

Scope

This agenda was developed by civil society organisations in Saint Lucia using a participatory process which facilitated discussions and analysis of main climate change impacts experienced in Saint Lucia, understanding of stakeholder rights, responsibilities and interests, information sharing on the work being undertaken by these groups to address climate change

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Natural and heritage sites are under stress from unsustainable management practices and are being further compromised by the impacts of climate change.

impacts, and plans to deal with climate change that are set out in the National Climate Change Policy and Adaptation Plan (2003).

This agenda represents the voice, hands and minds of civil society. Representatives of these groups developed communication strategies to share this agenda with the wider public. The priority areas defined for action include consideration of spiritual, anthropological, legislative, philosophical perspectives. They reflect that climate change impacts on our natural resources and creates further cross-cutting impacts on human health, livelihoods, the fabric of our Saint Lucian society and the character of the Saint Lucian environment.

We note that research and technology - both modern and traditional - are necessary inputs to provide appropriate and effective solutions in all areas.

This document is one of the many ways in which we wish to communicate with the wider public on the civil society climate change agenda. Our main activities will be encouraging participation, building public awareness and carrying out advocacy action in each priority area.

Guiding principles

A number of overarching principles have informed the formulation of this agenda and guide its implementation:

- Recognise the urgency: Climate change isn't waiting... It's happening NOW! We need to act NOW! Making a plan is not good enough; it must be put into action.
- Acknowledge the scale of impacts: We recognise that some impacts of climate change are beyond our control.
- Acknowledge responsibility for impacts: Some of man's actions are exacerbating climate change impacts; national pride is a key ingredient in reducing these negative actions.
- Recognise the importance of individual action: Mental adaptation of the individual is a critical first step in adapting to climate change; we must take personal responsibility to change the practices that are unsustainable in the face of climate change.
- Raise awareness: Climate change education must begin at a very early age – at kindergarten. The message of climate change is to be simplified so that the ordinary citizen can understand its critical impacts and take action to adapt and mitigate.
- Identify human health as an area which is impacted upon by all sectors: Addressing the impacts of climate change on all sectors will translate into minimising the impact on human health.
- Encourage and seek out indigenous knowledgebased adaptation: Researching, developing, documenting and sharing indigenous solutions and responses in the region are key for successful adaptation.
- Respect and care for the community of life: Human beings and communities are part of a larger ecosystem in which all forms of life deserve to be respected and maintained.
- Empower and collaborate with stakeholders and participate in action: The costs, benefits and responsibility for addressing the impacts of climate change must be shared among all stakeholders who share in the management of resources and have the right to participate in decision-making. The value systems, interests and priorities of all

stakeholders must therefore be understood and respected.

• Encourage and promote the involvement of corporate sector: The private sector should improve the way they work by giving consideration to natural resource management and the impact of climate change on profitability.

1. Freshwater Resources

We depend on our freshwater supply for domestic and agricultural purposes, the sustenance of our biodiversity and landscape, and for maintenance of health. Impacts on freshwater resources are extremely significant and are of great concern.

Main impacts:

- 1. Decreasing water quantity and quality with serious repercussions across all sectors.
- 2. Degradation of forest in natural water catchment areas.
- 3. Damaged watercourses in need of rehabilitation.
- 4. Prolonged drought events.
- 5. Increased stress on limited water sources and water storage facilities.

Responses - Civil society will:

- Advocate through key policy makers for amendments to the land use policy to more effectively address the impacts of climate change on freshwater resources.
- Assume an active role in enforcement of the land use policy, by partnering with government to strengthen monitoring, reporting on incidence of encroachment and provision of research results on the impacts of encroachment on natural water catchment sites.
- Strengthen our on-the-ground efforts and continue work in public education and awareness on the impacts of climate change.
- Collaborate with government to research and promote practical solutions to address drought such as rain water harvesting, selection of new water storage and catchments for increased water supply, and water conservation.
- Advocate for legislative changes and enforcement measures to improve water conservation.
- Assist in identifying the sources of siltation and collaborate in education efforts to promote practices which reduce siltation.
- Advocate for environmentally-friendly silt removal mechanisms that do not exacerbate existing problems and recycling of all materials that have been removed.

Priority areas identified for action

The priority areas identified for immediate action by civil society are: freshwater resources, damage to infrastructure, food security, biodiversity, coastal and marine resources, livelihoods and culture. For each priority area, we have outlined the main impact(s) and our proposed solutions.



Rivers in Saint Lucia provide water for domestic use and for the agriculture industry.

2. Infrastructure

Damage to infrastructure affects all sectors. After an extreme event, such as a hurricane or period of intense rainfall followed by landslides and flooding, limited resources are diverted away from other development priorities towards relief, rehabilitation and reconstruction activities.

Main impacts:

- 1. Damage to infrastructure roads, buildings, ports, utilities.
- 2. Reduced or limited access for business operations.

Responses - Civil society will:

• Advocate through key policy makers for amendments to the land use policy to more effectively address the impacts of climate change on infrastructure.



Infrastructure provides access and shelter and is integral to supporting many other sectors.

- Perform a 'watchdog' role to identify the disconnect between policy and reality in the enforcement of the land use policy.
- Strongly advocate that the planning approval process be removed from the influence of the political directorate and that the participatory process is instead used in decision making for development proposals.
- Advocate that the capacity for undertaking environmental impact assessments (EIAs) be built among all stakeholders.
- Strongly advocate that government improve/develop and enforce building codes that take climate change into consideration.
- Lead by example on infrastructure development that takes into consideration climate change impacts.
- Communicate with stakeholders on traditional ways of building inherent in our culture which provide resilience.
- Contribute to the development of climate change friendly and viable development alternatives.
- Lobby for the support of key stakeholders, such as the financial sector, to consider climate change and its impacts in decision making through the inclusion of development permits into approval criteria.
- Advocate and communicate to all stakeholders that all development must meet the triple bottom line of sustainable development (environmental, economic and social).
- Collaborate with government in developing a comprehensive adaptation plan for human settlements.

3. Food Security

Climate change impacts on the quality and quantity of food produced in Saint Lucia. Prolonged drought events and intense periods of rainfall have caused crop loss. Damaged infrastructure has decreased the quality of exports and reduced the income of local farmers.

Main impacts:

1. Food quality and quantity is reduced.

Responses - Civil society will:

 Advocate through key policy makers for amendments to the land use policy to more effectively address the impacts of climate change on agriculture which devotes land fairly to agriculture and provides green spaces.



Climate change can negatively impact the size and availability of catch for fishers.

- Advocate for the allocation of good quality lands and complementary infrastructure for agriculture.
- Promote and collaborate with government to encourage persons to grow their own food and increase tree cover through programs such as: 'Jardin Creole'; planting of fruit trees; backyard gardens (eat what you grow); school gardens; and composting.
- Encourage buying local food.
- Promote and encourage the creative and innovative use of local foods and welcome government collaboration in this regard.
- Advocate that local lending agencies be more supportive in local agriculture and product development.
- Promote an overall thrust to encourage agricultural diversification by all stakeholders (including government) to ensure that:
 - more value added products are created from the food resources;
 - the strength of our tourism product is guaranteed to our visitors so that they can continue to enjoy unique gastronomic experiences;
 - ideas such as aquaculture are explored in rural schools and communities to address food scarcity;
 - local knowledge is gathered, communicated and used.

4. Biodiversity

Saint Lucia's biodiversity offers ecosystem services which are critical in providing resilience to climate change impacts, but human activities have enhanced risk. Deforestation, inappropriate land use, poorly planned physical development, and unregulated agricultural and tourism practices increase the risk of substantial damage to ecosystems.

Climate change effects, such as periods of intense rainfall and coral bleaching cause stresses on these ecosystems and lead to further loss of biodiversity. The loss of natural windbreaks, like mangrove forests; loss of fish nursery areas; the increase in invasive species and pathogens are other examples of the impacts of climate change on biodiversity.

Main impacts:

- 1. Loss and damage to habitats.
- 2. Decreased populations of endemic species.
- 3. Increase in invasive species populations which pose serious threats in many sectors.



Mangrove forest can serve as costal defences against intense storm surges.

Responses - Civil society will:

- Advocate through key policy makers for amendments to the land use policy to more effectively address the impacts of climate change to ensure that 'our footprint' is smaller and that existing biodiversity habitats are not compromised.
- Advocate that government explore and support institutional collaborations and participatory management to efficiently and effectively manage state lands including rehabilitation as a critical climate change adaption strategy.
- Advocate that government undertake a valuation of our biodiversity to determine its economic value.
- Advocate the adoption of a parallel national green accounting system¹ so that natural resources are considered in measuring development and that it be communicated to the public.
- Advocate that highly sensitive germplasm² should be conserved so as to ensure that biodiversity is not completely lost when a natural disaster occurs.
- Work in collaboration with government to explore mechanisms for germplasm conservation.
- Advocate that government should quantify the benefit from non timber forest products.
- Undertake an active role in public education and awareness of the value of non timber forest products.
- Advocate to government that incentives be offered for the management of private lands for biodiversity conservation.
- Continue research, monitoring and public education and collaborate with government in addressing the impacts of climate change on biodiversity.

2 Germplasm: the reproductive or vegetative propagating material of plants (FAO - Food and Agriculture Organization)

Green accounting is a type of accounting that attempts to factor environmental costs into the financial results of operations e.g. water use per capita; how much reforestation has been undertaken per capita; how much indigenous knowledge have we transmitted/repackaged per capita.

5. Coastal and Marine Resources

The coastal zone and its resources are inextricably linked to Saint Lucian society and culture, and like biodiversity, provide a critical buffer to the impacts of climate change when well managed.

The marine environment requires sustainable use and management so as to withstand climate change impacts and ensure that livelihood activities and tourism interests connected with its use can be maintained.

Main impacts:

- 1. Coastal and marine resources are being degraded, due to:
 - erosion
 - sea level rise
 - increase in sea temperature
 - terrestrial activities affecting the coastal area

Responses - Civil society will:

- Promote, encourage and plant trees and other types of vegetation on the coast in order to reduce erosion.
- Advocate that government pursue the construction of artificial wetlands and protection of wetland areas in order to enhance the integrity of our coastal zones.
- Advocate to government that infrastructure development not occur on the coast.
- Advocate through key policy makers for amendments in legislation to regulate land development in the Queen's Chain³ to address the impacts of climate change.
- Advocate that government enforce legislation on domestic grey water management to decrease the level of pollutants entering coastal zone.
- Collaborate with government and other stakeholders in identifying options for waste reduction and proper garbage disposal.
- Strongly advocate that the marine tourism sector be more closely regulated to protect Saint Lucia's coastal and marine resources.
- Continue its work in public awareness and education regarding protection of the coastal and marine zone.



of coastal resources in the history of slavery in the Caribbean.

3 The concept of the Queen's Chain is established in ancient French Law and is codified in Appendix II of Volume VI of Saint Lucia's Revised Ordinances 1957. It is the portion of land that runs one hundred and eighty-six and-one-half feet (186.5') inland from the high watermark. (Newsletter of Saint Lucia National Trust, January 2011)

6. Livelihoods and Culture

Our livelihoods and culture are intrinsic elements of who we are; as such, civil society has identified these as a specific priority area in our action agenda. It is our view that this was a major omission in the National Climate Change Policy and Adaptation Plan (2003).

Main impacts:

1. Livelihood assets⁴ are being compromised by climate change impacts.

- Social impacts resulting from loss of livelihoods are becoming more apparent.
- Threats to the Saint Lucian culture are emerging.

Responses - Civil society will:

- Advocate for a review of traditional knowledge and traditional technologies related to food security and the use of non-timber products to identify those that are more suitable to 'climate proofing' livelihoods.
- Collaborate with researchers, government and other stakeholders to review traditional knowledge and traditional technologies for 'climate proofing' livelihoods.
- Promote innovative and entrepreneurial approaches to climate change adaptation.
- Promote and encourage traditional practices of self-help and community help to address social impacts.
- Promote cultural practices, such as "Jounen Kwéyòl" festival, to secure cultural and traditional heritage and the conservation of natural resources.
- Collaborate with other stakeholders including government to develop community tourism and heritage tourism initiatives.
- Encourage the sharing of traditional values that support climate change resilience e.g. sharing of resources, supporting each other.

Concluding statements

Civil society will be vigilant to ensure that the National Climate Change Policy and Adaptation Plan (2003) is fully implemented.

Appropriate climate change mitigation and adaptation actions are cross-cutting in all the priority areas we have outlined and civil society will work to ensure that climate change resilience is built.

We recognise that civil society, in spite of the work it is able to accomplish, requires capacity development and will, as part of this action agenda, take steps to increase our capacity to address climate change.

We have pledged to create "A civil society coalition for action on climate change" which will move the agenda forward. We believe that stimulating the growth of a culture of advocacy will go a long way in promoting this agenda, but also that our organisations will 'become the change we seek' by taking these actions to address climate change.

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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Livelihoods are defined as the capabilities, assets (social, natural,
human, physical, financial and cultural resources) and activities required for a means of living. This definition includes the concept of well-being and quality of life.