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# SAINT LUCIA'S NATIONAL ADAPTATION PLAN (NAP)

## LEVERAGING LIMITED RESOURCES



Presented by; Kemuel Jean Baptiste  
Chief Extension Officer  
Department of Agriculture

**April 9, 2019**

**Korea Global Adaptation Week 2019**

**Songdo Convensia, Republic of Korea**

# OUTLINE

- Climate impacts
- International, regional & national climate change framework
- Saint Lucia's NAP & process
- NAP supplements



# Expected impacts of climate change



Decreased water availability



Sea level rise



Loss of revenue

Increased flooding events from intense & unpredictable rainfall



Higher temperatures & longer dry periods



More intense storms



Increased pests and disease



Decreased food security

# ECONOMIC IMPACT OF CLIMATE EXTREMES ON SAINT LUCIA OVER PAST TWO DECADES

<b>Event</b>	<b>Year</b>	<b>Economic Impact (US\$ millions)</b>
<b>December Trough</b>	<b>2013</b>	<b>99.88</b>
<b>Hurricane Tomas</b>	<b>2010</b>	<b>336.00</b>
<b>Hurricane Dean</b>	<b>2007</b>	<b>18.80</b>
<b>Hurricane Ivan</b>	<b>2004</b>	<b>2.60</b>
<b>Storm Lily</b>	<b>2002</b>	<b>20.00</b>



# INTERNATIONAL CLIMATE CHANGE FRAMEWORK

- **United Nations Framework Convention on Climate Change (UNFCCC)**, ratified by Saint Lucia in 1993
- **Paris Agreement (PA)**, ratified by Saint Lucia in 2016



# REGIONAL FRAMEWORK

- **Implementation Plan** for the **CARICOM** Regional Framework for Achieving Development Resilient to Climate Change: **2011-21**
- Defines the **region's strategic approach for coping with climate change**
- Based on a CARICOM Head of State mandate to the **Caribbean Community Climate Change Centre (5Cs)**

# NATIONAL FRAMEWORK-ADAPTATION

## Climate Change Adaptation Policy (CCAP) of 2015

- Provides a framework for addressing the impacts of climate change, in an **integrated manner, across all key sectors**
  - **Adaptation Facilitation**: creating the appropriate **enabling environment**: e.g. **policy, legislative & institutional environment**; e.g. this National Adaptation Plan
  - **Adaptation Financing**: putting in place measures to ensure **adequate & predictable financial flows**; e.g. Climate Adaptation Financing Facility (CAFF) with SLDB (DVRP/WB)
  - **Adaptation Implementation**: taking **concrete actions on-the-ground** to prepare for or respond to the impacts of climate change; e.g. rainwater harvesting systems
- Promotes actions with **mitigation co-benefits**

# COST OF INACTION TO SAINT LUCIA

**At least 12.1% of its GDP by 2025,  
rising to 24.5% by 2050 and  
49.1% by 2100**

*Bueno, R., Herzfeld, C., Stanton, E.A., Ackerman, F. (2008). The Caribbean and Climate Change: The Costs of Inaction. Stockholm Environment Institute - US Center, Global Development and Environment Institute, Tufts University, Medford.*



# SAINT LUCIA'S NATIONAL ADAPTATION PLAN

## NAP-2018-2028

- **Identifying adaptation needs, and developing & implementing strategies, programmes** to address those needs-**across sectors**
- **Transparency** in process of engagement of donor agencies to optimize resource utilization
- Engaging and channelling donor support through NDA for **accountability**
- Designation of a **focal agency** to provide leadership in the process
- Establishment of a **Coordinating Mechanism** (The National Climate Change Committee NCCC)

# NAP-SLU PROCESS

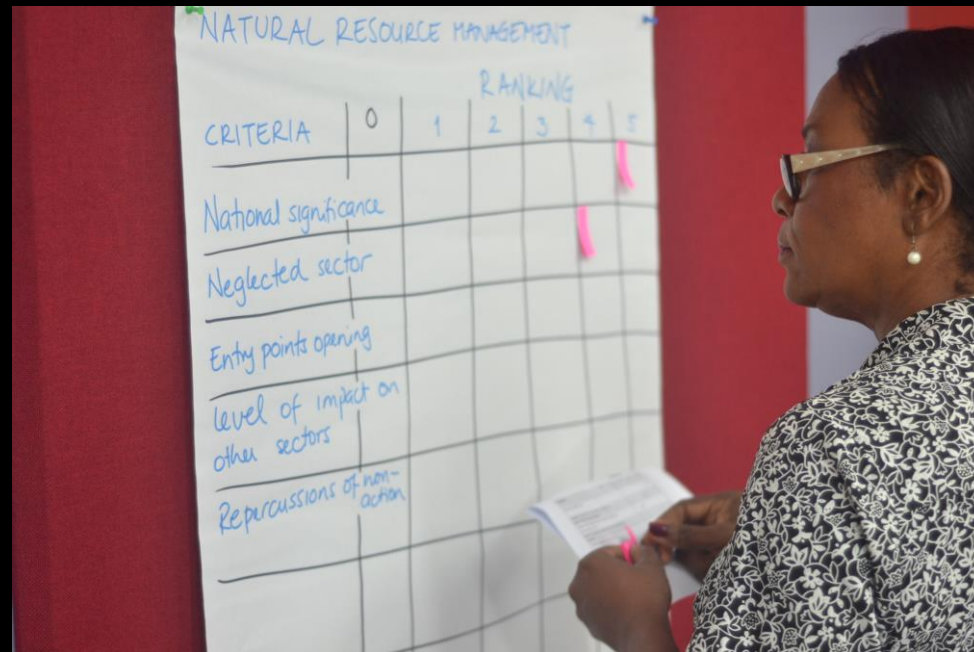
- **CONSULTATION AND COLLABORATION** WITH MULTI-STAKEHOLDERS INCLUDING PRIVATE SECTOR
- ENGAGEMENT OF **POLICY MAKERS** AND SECTOR ADMINISTRATORS (NAP ASSEMBLY)
- **PRIORITIZATION** OF SECTORS FOR ACTION AND RESOURCE ALLOCATION
- SECTORAL ADAPTATION STRATEGIES AND ACTIONS PLANS DEVELOPED (SASAPs) FOR PRIORITY SECTORS
- **DONOR SYMPOSIUM** April 2018
- APPROVAL BY CABINET OF MINISTERS IN JUNE 2018



May 2017



May 2017





June 2017 Training Sessions  
Journalists-left  
Government-right



# NAP-SLU PROCESS CONT'D

- **Built on previous processes & products**
- **Multiple planning, broad stakeholder & focus group sessions**
  - **Water**-June and July 2017; October 2017; February 2018
  - **Agriculture** –June, July, August & October 2017; February 2018
  - **Fisheries** –June & October 2017; February 2018
- Focus group sessions & **NAP validation workshop**-February 2018



NAP validation workshop, February 15, 2018

# NAP VISION

Saint Lucia & its people, their livelihoods, & the country's social systems & environment are **resilient** to the risks and impacts of climate change through **continuous, coordinated & effective adaptation efforts.**



# OUTPUT OF CONSULTATIVE PROCESS

- **40 CROSS SECTORAL MEASURES**
- **271 SECTORAL MEASURES**
- **70 WATER – 19 PROJECT CONCEPT NOTES**
- **45 AGRICULTURE – 11 PROJECT CONCEPT NOTES**
- **31 FISHERIES – 10 PROJECT CONCEPT NOTES**
- **20 NATURAL RESOURCE MANAGEMENT**
- **16 INFRASTRUCTURE**                      **11 EDUCATION**
- **26 HEALTH**                                 **21 TOURISM**

# OVERARCHING GOALS

To **enhance the national enabling environment** for climate-related adaptation & risk-reduction action within & across development sectors.

To **accelerate the implementation of climate adaptation** & risk reduction actions critical to safeguarding the country's socioeconomic & environmental systems.

## Cross-sectoral adaptation measures

### Areas of focus:

- NAP coordination
- Information management
- Research and Systematic Observation
- Skills building for implementing adaptation
- Institutional strengthening
- Communications and awareness raising
- Resource mobilisation
- Policy, legal and regulatory frameworks
- NAP Monitoring and Evaluation

## Initial / Broad Sectoral Adaptation Measures

Priority sectors/areas

1. Water

2. Agriculture

3. Fisheries

4. Infrastructure and Spatial Planning

5. Natural Resource Management

6. Education

7. Health

8. Tourism\*





National Adaptation Plan

Development of Sectoral Adaptation Strategies and Action Plans (SASAPs) with detailed Sectoral Adaptation Measures





# NAP SUPPLEMENTS

- **DEVELOPED WITH SUPPORT FROM...**
- **The Government of Japan through the United Nations Development Program's Japan Caribbean Climate Change Partnership (UNDP/JCCCCP)**
- **The United States In-Country National Adaptation Plan Support Program through International Institution for Sustainable Development (IISD)**

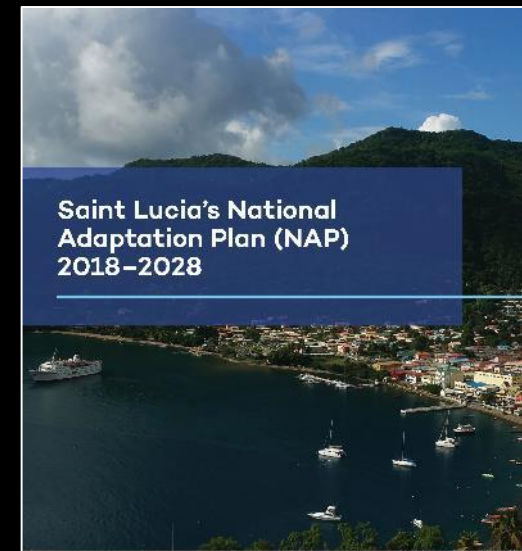




## Saint Lucia's National Adaptation Plan Stocktaking, Climate Risk and Vulnerability Assessment Report

## Saint Lucia's National Adaptation Plan Roadmap and Capacity Development Plan 2018-2028

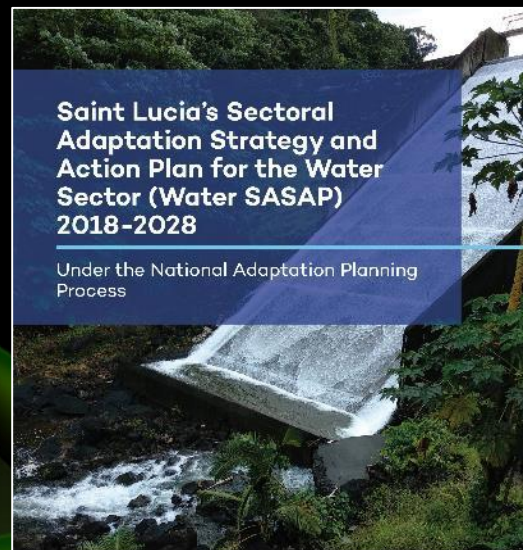








## Saint Lucia's National Adaptation Plan (NAP) 2018-2028

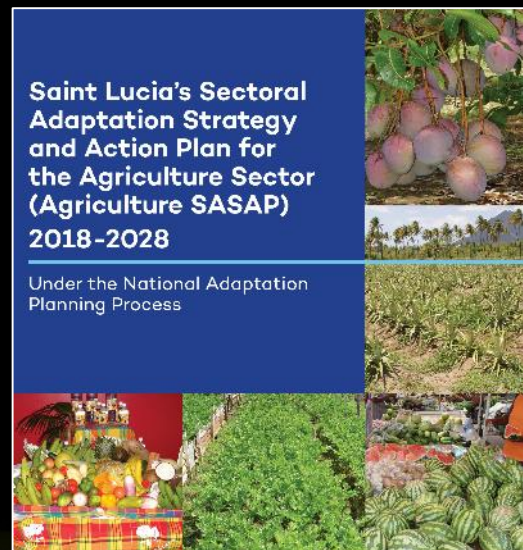




## Saint Lucia's Sectoral Adaptation Strategy and Action Plan for the Water Sector (Water SASAP) 2018-2028

Under the National Adaptation Planning Process

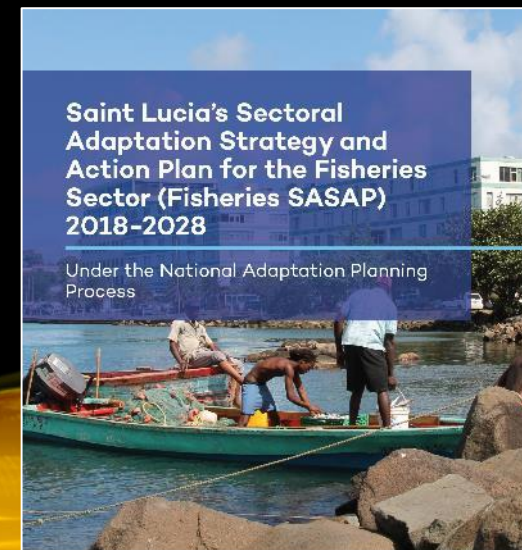




## Saint Lucia's Sectoral Adaptation Strategy and Action Plan for the Agriculture Sector (Agriculture SASAP) 2018-2028

Under the National Adaptation Planning Process

## Saint Lucia's Sectoral Adaptation Strategy and Action Plan for the Fisheries Sector (Fisheries SASAP) 2018-2028

Under the National Adaptation Planning Process

## Saint Lucia's Portfolio of Project Concept Notes for the Water Sector 2018-2028

Under the National Adaptation Planning Process



United States - Caribbean National Adaptation Plan (NAP) Support Program  
IISD

## Saint Lucia's Portfolio of Project Concept Notes for the Agriculture Sector 2018-2028

Under the National Adaptation Planning Process



United States - Caribbean National Adaptation Plan (NAP) Support Program  
IISD

## Saint Lucia's Portfolio of Project Concept Notes for the Fisheries Sector 2018-2028

Under the National Adaptation Planning Process



United States - Caribbean National Adaptation Plan (NAP) Support Program  
IISD

## Monitoring and Evaluation Plan of Saint Lucia's National Adaptation Planning Process



## Saint Lucia's Climate Change Communications Strategy

Under the National Adaptation Planning Process



United States - Caribbean National Adaptation Plan (NAP) Support Program  
IISD

## Guidelines for the Development of Sectoral Adaptation Strategies and Action Plans (SASAPs)

Saint Lucia's Experience under the National Adaptation Planning Process



United States - Caribbean National Adaptation Plan (NAP) Support Program  
IISD

SNAPSHOT OF

# Saint Lucia's National Adaptation Plan (NAP) 2018–2028



Saint Lucia is highly vulnerable to climate change due to its small land area, its location along the Atlantic hurricane corridor, its economic reliance on climate-sensitive tourism and agriculture, and its limited financial capacity to reconstruct and reactivate its economy after climate-related shocks. With climate change, the island faces the prospects of sea-level rise, overall drier conditions, recurrent drought but stronger rainfall events, and more intense hurricanes. These changes represent major threats to national development and economic growth that will increasingly affect every aspect of life on the island if no effective, timely adaptation measures are implemented.

**The cost of inaction on climate change in Saint Lucia has been calculated at 12.1 per cent of GDP by 2025, rising to 24.5 per cent by 2050 and 49.1 per cent by 2100.<sup>1</sup>**

Saint Lucia's NAP has been defined as a 10-year plan (2018 to 2028), consisting of both cross-sectoral and sectoral measures, to enable and stimulate climate change adaptation in all development sectors and areas and at all levels of society. The NAP will be complemented, as funding becomes available, with sectoral adaptation strategies and action plans (SASAPs) for key priority sectors/areas, which will refine and expand the sectoral measures included in the NAP. The NAP and SASAPs are living documents, resulting from the detailed analyses of adaptation needs, based on transparent and highly participatory consultation processes and aligned with Saint Lucia's Climate Change Adaptation Policy. The NAP and SASAPs will be reviewed during the ten-year time frame, and their implementation will be monitored and evaluated.

<sup>1</sup> Buono, R., Herzfeld, C., Stanton, E.A., & Ackerman, F. (2008). *The Caribbean and Climate Change: The Costs of Inaction*. Medford, Massachusetts: Stockholm Environment Institute – US Center, Global Development and Environment Institute, Tufts University.

SNAPSHOT OF

# The Sectoral Adaptation Strategy and Action Plan for the Water Sector 2018–2028

(Water SASAP)



Saint Lucia's water sectoral adaptation strategy and action plan SASAP seeks to drive the implementation of effective adaptation actions across all sectors and at all levels of society to safeguard Saint Lucia's water resources and services under a changing climate.

**Climate change threatens water availability and quality.**

The increasingly warmer temperatures, lower annual rainfall but stronger rain events, more intense tropical storms, more frequent flooding and landslides, and recurrent drought expected in the coming decades imperil the availability and sustainable provision of the fresh water needed for people and the national economy. Additionally, multiple water-related climate change impacts will bear on all productive sectors and will affect vulnerable groups the most. Examples include malnutrition and food insecurity resulting from decreasing agricultural yields and more frequent health emergency situations brought about by flooding and by water- and vector-borne disease outbreaks.

**The cost of inaction on climate change in Saint Lucia has been calculated to be 12.1 per cent of GDP by 2025, rising to 24.5 per cent by 2050 and 49.1 per cent by 2100.<sup>1</sup>**

**STRATEGY**

This SASAP consists of a set of measures considered essential for adaptation and prioritized by stakeholders in the sector. The SASAP determines for each measure whether its implementation should start in the short term (2018 to 2021), medium term (2021 to 2024) or long term (2024 to 2028), according to the measure's level of urgency, and as funding becomes available, with short term being the most urgent.

<sup>1</sup> Buono, R., Herzfeld, C., Stanton, E.A., & Ackerman, F. (2008). *The Caribbean and Climate Change: The Costs of Inaction*. Medford, Massachusetts: Stockholm Environment Institute – US Center, Global Development and Environment Institute, Tufts University.

**The SASAP measures were formulated to:**

1. Improve the national policy, legal and regulatory framework to facilitate climate adaptation in the water and water-dependent sectors.
2. Scale-up national human capacity for the design and implementation of water-related climate adaptation projects.
3. Increase public awareness on integrated water resource management.
4. Strengthen integrated watershed management to build climate resilience.
5. Promote the sustainable use of alternative water sourced to ensure water availability in a changing climate.
6. Improve wastewater management to reduce pollution and increase water availability in a changing climate.
7. Set and scale up water quality and pollution control in a changing climate.
8. Improve water infrastructure to build climate resilience.
9. Encourage water efficiency under a changing climate by improving water pricing, water utility revenues and water conservation incentives.
10. Promote climate-smart agriculture.
11. Improve hydrometeorological monitoring, emergency planning and decision making.
12. Minimize water-related climate change risks by adopting ecosystem-based adaptation solutions.
13. Promote climate-resilient business development.

SNAPSHOT OF

# The Sectoral Adaptation Strategy and Action Plan for the Agriculture Sector 2018–2028

(Agriculture SASAP)



Saint Lucia's agriculture sectoral adaptation strategy and action plan (SASAP) seeks to overcome policy, regulatory, institutional, technical, financial, business and social barriers to facilitate the adoption and scaling up of climate-resilient agriculture best practices and businesses for enhancing food and nutrition security in Saint Lucia under a changing climate.

**Climate change threatens Saint Lucia's agriculture** through the direct effects on crop production of increasing temperatures, changes in precipitation patterns (including more frequent and intense drought episodes), increasing storm intensity (and flooding), and high winds. Shifts in crop suitability of agricultural land and increased incidence of pests, weeds and disease, along with water stress and increased soil erosion, are also expected to increasingly affect the sector in the coming decades.

**The cost of inaction on climate change in Saint Lucia has been calculated to be 12.1 per cent of GDP by 2025, rising to 24.5 per cent by 2050 and 49.1 per cent by 2100.<sup>1</sup>**

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**The SASAP measures were formulated to:**

1. Improve the national legal, regulatory and institutional framework.
2. Strengthen research and development in climate-resilient agriculture.
3. Enhance human and institutional capacity for the design, implementation, monitoring and evaluation of agriculture-related climate adaptation projects.
4. Promote climate-resilient crop and livestock production.
5. Strengthen resilience of ecosystem services through integrated land and watershed management.
6. Improve rainwater harvesting and water-storage infrastructure.
7. Improve water and soil conservation best practices.
8. Promote climate resilience through sustainable wastewater management by reducing, reusing and recycling agro-waste resources.
9. Forge a strong public-private partnership to scale up climate-resilient agriculture best practices and business.
10. Leverage private sector resources by improving access to resilient financial and business support and best practices for scaling up crop and livestock production.
11. Improve agro-meteorological data monitoring, emergency planning and informed decision making.
12. Minimize agriculture-related climate change risks by adopting ecosystem-based adaptation solutions.
13. Scale up climate-resilient agricultural infrastructure to reduce climate impacts.

SNAPSHOT OF

# Saint Lucia's Fisheries Sectoral Adaptation Strategy and Action Plan 2018–2028

(Fisheries SASAP)



Saint Lucia's Fisheries SASAP seeks to drive the implementation of effective adaptation actions for strengthening the sustainability of the country's fisheries and fishery-dependent businesses and the security of fisheries-dependent livelihoods under a changing climate.

**STRATEGY:**

This SASAP consists of a set of measures considered essential for adaptation and prioritized by stakeholders in the sector. The SASAP determines for each measure, whether its implementation should start in the short term (2018–2021), medium term (2021–2024) or long term (2024–2028), according to the measure's level of urgency, and as funding becomes available, with short term being the most urgent.

**The SASAP measures were formulated to:**

- Improve the national policy, legal, regulatory and institutional framework
- Facilitate climate adaptation
- Enhance human and institutional capacities for the design, implementation, monitoring and evaluation of fisheries-related climate adaptation projects
- Improve productivity through climate-resilient fisheries management systems
- Promote climate-resilient aquaculture production
- Promote alternative livelihoods creation and development
- Improve access to financial and business support
- Strengthen climate monitoring and communication for emergency planning and informed decision making
- Strengthen and expand climate resilient fisheries infrastructure



# HOW WILL THIS BE FUNDED?

## Government through National Budgetary Allocations

- Green Climate Fund-GCF
- Adaptation Fund
- Private Sector
- **Multilateral & bilateral arrangements**



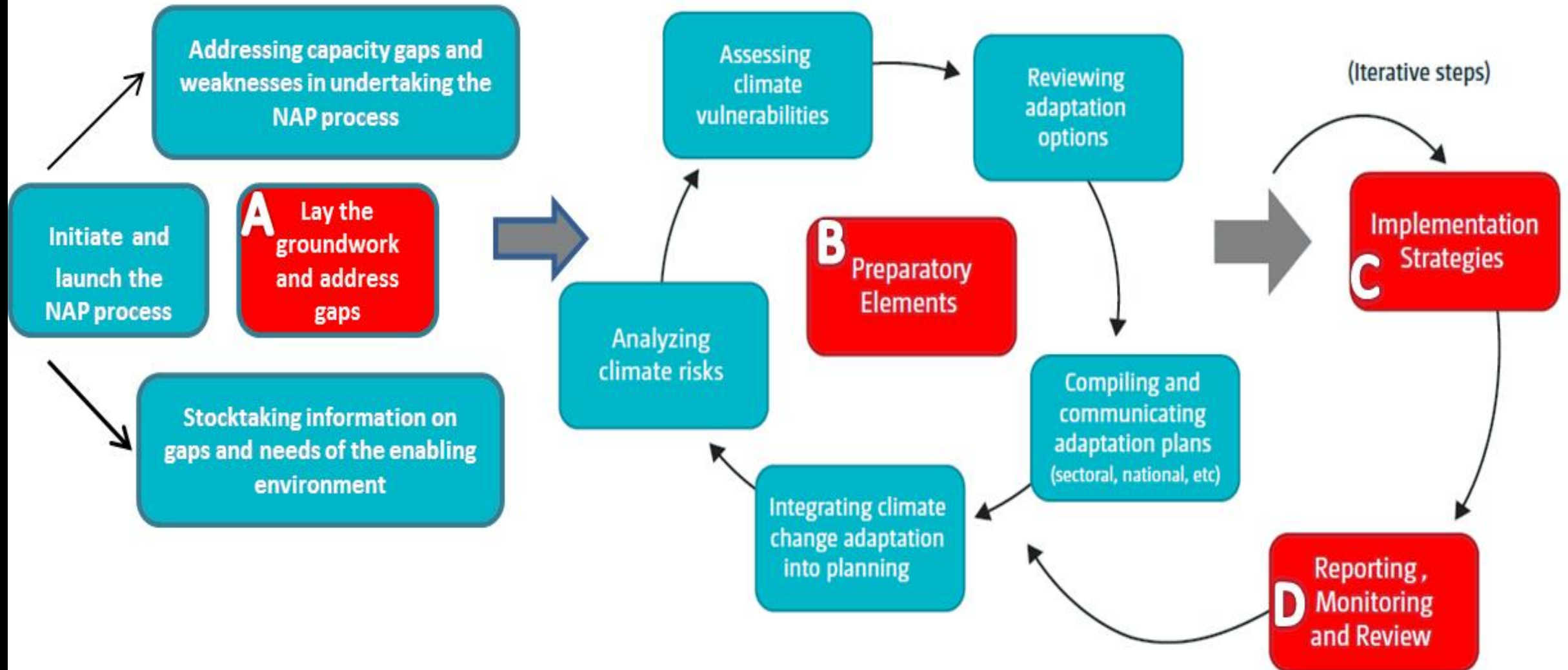
# COORDINATING MECHANISM

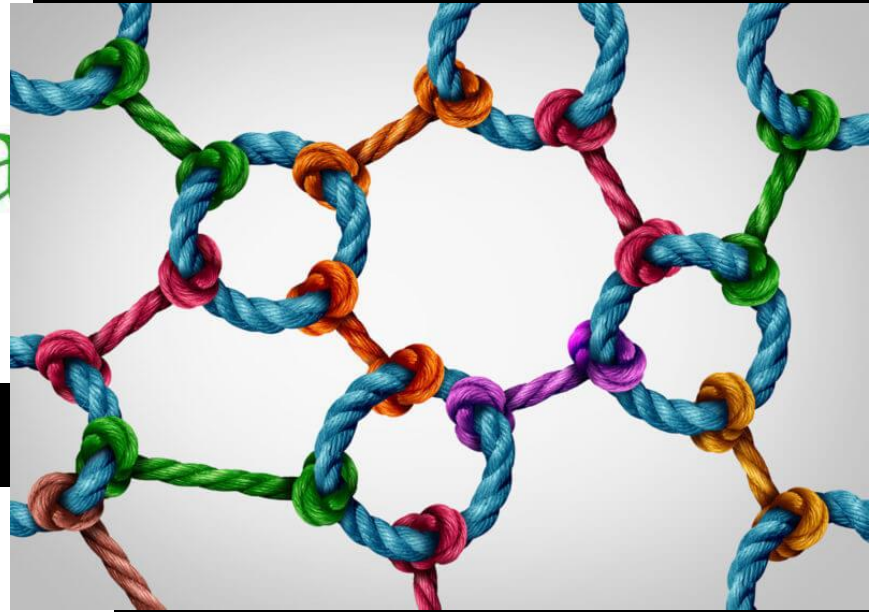
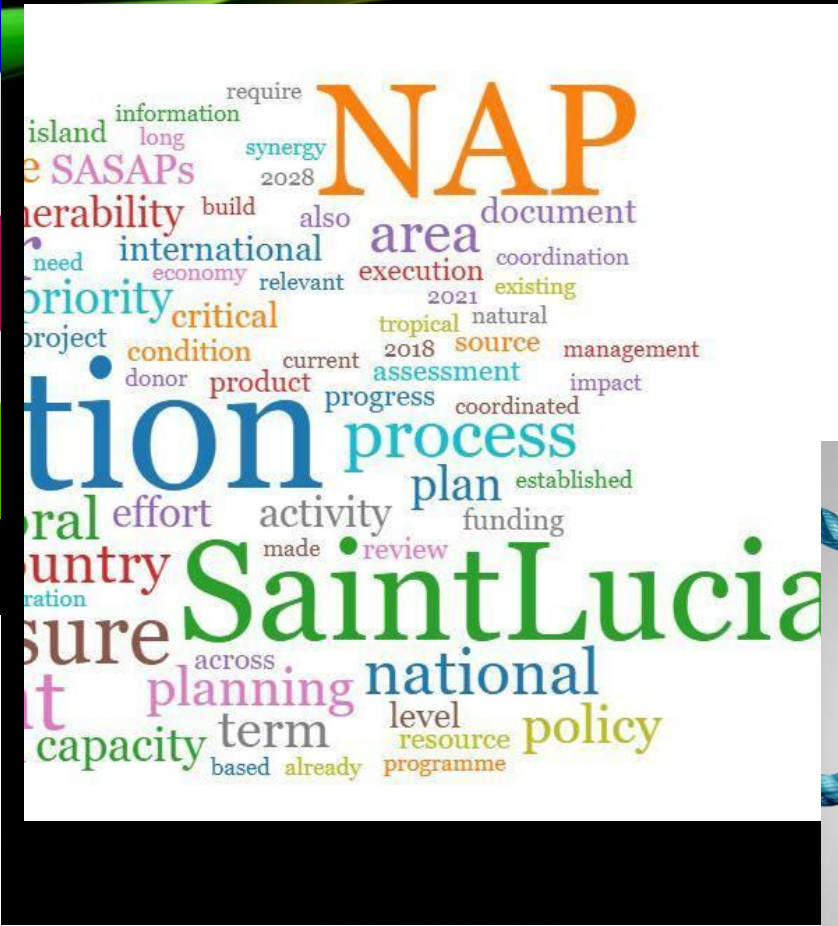
- Strengthened Cabinet-appointed **National Climate Change Committee-NCCC** –operating since 1998 (revised and strengthened in 2017)
- **Department of Sustainable Development-Saint Lucia's climate change focal point.**
- The **implementation** of sectoral adaptation measures in the **NAP** and **Sectoral Strategies & Action Plans (SASAPs)** will be **LED BY INSTITUTIONS IN CHARGE OF RESPECTIVE SECTORS.**

# LIVING DOCUMENTS; LIMITATIONS

- **Complemented, AS FUNDING BECOMES AVAILABLE, with Sectoral Adaptation Strategies & Action plans (SASAPs) for key priority sectors/areas**
- The NAP & SASAPs will be **reviewed during the 10-year time frame**
- Implementation will be **monitored & evaluated**
- **Limits to adaptation** (IMPACT project)

# A CONTINUOUS PROCESS







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***Addressing climate change: One  
community, one sector, one household, one  
enterprise, one person at a time***

**<http://www.climatechange.govt.lc/>**

