



Resilient Ecosystems Adaptation Strategy and Action Plan (REASAP) 2020–2028

Saint Lucia's Resilient Ecosystems Adaptation Strategy and Action Plan 2020–2028 (REASAP) seeks to drive the implementation of effective actions to safeguard Saint Lucia's natural capital from the impacts of climate change while harnessing biodiversity, ecosystems, and ecosystem services to reduce vulnerability and build resilience.

Climate change threatens biodiversity, ecosystems, and ecosystem services by inducing rapid changes in the environmental conditions where species survive and thrive. According to their tolerance to the new conditions, species may migrate, stay, or disappear, affecting the composition, structure, and function of ecosystems. More frequent and extreme weather events will test ecosystem resilience. Any decline in ecosystem health will affect the goods and services that they offer and have a profound effect on the well-being, livelihoods, and economy of Saint Lucians. Fresh water, clean air, fertile and stable soils, healthy fisheries, native forest foods, medicines, fibres, and wildlife all depend on healthy ecosystems.

The cost of inaction on climate change in Saint Lucia has been calculated at 12.1% of GDP by 2025, rising to 24.5% by 2050 and 49.1% by 2100.¹

IMPLEMENTATION AND FUNDING

The execution of the REASAP's measures is expected to occur mostly as a consequence of their inclusion in projects and programs funded by both national and international sources, including climate finance for EbA. However, it is also assumed that, over time, adaptation will become immersed in all new development projects in the sector and that the national institutions involved will be able to generate revenue from their regulatory functions (e.g., user fees, royalties, licences, etc.) that can possibly be directed to help supplement other support received for adaptation. **To support fundraising efforts, the REASAP is complemented by a series of project concept notes, incrementally added over time, that reflect prioritized measures.**

STRATEGY

The REASAP consists of **58 measures** considered essential for adaptation and prioritized by national stakeholders. For each measure, the REASAP determines whether its **implementation** should start in the **short term (2020–2023), medium term (2023–2026)**, or long term (2026–2028), according to the measure's level of urgency. As funding becomes available, short-term goals are the most urgent.

The REASAP measures were formulated to:

1. Strengthen national policy and institutional and legislative frameworks (including incentives) to improve natural resource management for securing ecological resilience and ecosystem-based adaptation to climate change.
2. Strengthen environmental research information generation, knowledge management, and monitoring systems for adaptation to climate change.
3. Enhance public awareness and influence behavioural changes on the importance of maintaining healthy ecosystems, their biodiversity, and services for climate change adaptation and mitigation, all while building capacity.
4. Scale up the protection and sustainable management (including the conservation, sustainable use, and equitable sharing of benefits arising from the use of resources) of critical ecosystems for building resilience to climate change.
5. Address the drivers of current and future ecosystem degradation.
6. Accelerate the use of ecosystem-based solutions to climate change-related hazards.

¹ 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 BIODIVERSITY AND ECOSYSTEM CONTEXT

Saint Lucia is rich in terrestrial, coastal, and marine species and ecosystems. Tourism, agriculture, and fisheries—three key sectors to the country's economy and livelihood—heavily rely on this natural capital. The island's numerous beaches, together with the coral reefs, are among the country's most valued tourism products. Indeed, stretching along its coast are highly productive coral reefs, mangrove forests, and seagrass beds. These provide breeding grounds and nursery habitats for marine fisheries and protect the island's coasts and infrastructure from the direct impact of tropical storms and storm surges. Inland, nine types of forests occupy approximately one third of the country's landmass. They regulate water and climate, prevent soil erosion and landslides, and capture carbon. Saint Lucia's ecosystems offer critical habitat to wildlife, as well as endangered and commercial species, and generate a multitude of goods, tourism opportunities, and additional services to the country.

EXPECTED OUTCOMES

1. An enhanced enabling environment for ecosystem-based adaptation and sustainable natural resource management under a changing climate.
2. Enhanced ecosystem integrity for the sustainable supply of essential ecosystem goods and services to society under a changing climate.
3. Strengthened ecosystem-based adaptation and disaster risk reduction.

CHALLENGES TO BIODIVERSITY AND ECOSYSTEMS

1. Destruction of and damage to ecosystems and habitats with more frequent extreme weather events.
2. Changes in species' physiology, including life cycles, breeding patterns, and migration patterns with higher temperatures.
3. Changes in the distribution of species and in the composition, structure, and productivity of ecosystems due to the compounding effects of climate change. Some species will be lost.
4. Higher risk of forest fires with higher temperatures and extended drought periods.
5. Higher risk of terrestrial, freshwater, and marine pest and disease outbreaks with higher temperatures.
6. Reduced availability of food and water for wildlife.
7. Damage to coral reefs and mangroves due to higher temperatures and increased sediment and nutrient deposition (during more frequent flooding events).
8. Physical damage to and reduced abundance of corals and crustaceans with ocean acidification.
9. Food chains affected by the loss of plankton and other species due to ocean acidification.
10. Declining integrity and health of coral reefs and mangroves, leading to the loss of fish nurseries and breeding grounds and loss of coastal defences for land-based resources, communities, and infrastructure.
11. Higher risk of algal blooms with larger amounts of nutrients (from fertilizers and overflow of sewage and greywater) reaching the sea during flooding events.
12. Degradation of beaches, wetlands, and other low-lying ecosystems with sea-level rise.

Saint Lucia's people, identity, culture, and economy are very closely associated with the island's terrestrial, coastal, and marine ecosystems. Meeting the nation's economic growth and development goals in the near, middle, and long terms requires a thorough understanding of existing and emerging challenges to its natural environment. It also requires the collaboration of all relevant stakeholders in strategically planning and implementing urgent actions to minimize environmental degradation and to restore, conserve, and sustainably manage the country's natural capital to build resilience.



United States In-Country National Adaptation Plan (NAP) Support Program

Gift of the United States Government



Implemented by:



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