



Saint Lucia Forests and Lands Resources Department Strategy 2015–2025



Saint Lucia Forests and Lands Resources Department: Strategy 2015–2025

Cover photographs by Jenny Daltry (signboard, Lansan tree tapper), Duncan Gregor (Latille Waterfall), Alfred Prosper (tree nursery near Millet) and Adams Toussaint (White-breasted Thrasher).

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The 2015–2025 Strategy was developed through a participatory process that entailed extensive consultation and review by employees of the Forests and Lands Resources Department, the Ministry of Sustainable Development, Environment Science and Technology, and representatives from a wide range of collaborating government agencies and non-governmental organisations, other experts and the public. This process began in mid-2014 and the final draft of the Strategy was completed in December 2015.

This document was compiled by Michael Appleton (Forest Management Planning Adviser to Fauna & Flora International, FFI), Adams Toussaint (Chief Forest Officer) and Alfred Prosper (Deputy Forest Officer), who jointly designed and facilitated the planning process.

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Supported by



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Summary

This document presents a new strategy for the Saint Lucia Forests and Lands Resources Department (commonly known as the Forestry Department) to address the changing responsibilities of the Department and the demands on its resources over the next 10 years.

The 2015–2025 Strategy was developed through a participatory process that involved all members of the staff of the Department, senior members of the Ministry of Sustainable Development, Environment, Science and Technology, representatives of other Ministries and Departments, NGOs, experts and the wider public.

The main elements of the Strategy are summarised in **Table 1**.

Table 1 Summary of Vision, Mission and Strategic Goals

<p><u>Vision</u></p> <p>‘A healthy natural environment for a healthy and productive nation’</p> <p><u>Mission</u></p> <p>‘Collaboration and partnership for the preservation and sustainable use of forests, nature and the benefits they provide’</p>		
<p><u>Strategy 1</u></p> <p>Maintaining healthy ecosystems and thriving species.</p> <p><u>Management policy</u></p> <p>The Forestry Department will work towards ensuring the conservation of the species and natural communities of Saint Lucia and the integrity of the ecosystems that provide critical services for the country.</p>	<p>Goal 1.1</p> <p>Goal 1.2</p> <p>Goal 1.3</p> <p>Goal 1.4</p> <p>Goal 1.5</p>	<p>Viability is enhanced of populations of threatened, endemic species and sub-species, inside and outside the Forest Reserve.</p> <p>Every natural habitat type in Saint Lucia is represented in connected areas under legally based and effective means for conservation management.</p> <p>Innovative, collaborative approaches to conserving and restoring flora, fauna and habitats on private and public lands are identified, tested and implemented.</p> <p>Impacts of alien invasive species on priority species, habitats and ecosystems are eliminated or substantially reduced.</p> <p>Measures are in place for monitoring, documenting and reporting on the status of species, habitats and ecosystems, and on the impact and effectiveness of management measures.</p>
<p><u>Strategy 2</u></p> <p>Ensuring sustainable flows of products that support both local economies and biodiversity conservation.</p> <p><u>Management policy</u></p> <p>The Forestry Department will work with partners to enable regulated and sustainable use of defined forest areas in support of local livelihoods and</p>	<p>Goal 2.1</p> <p>Goal 2.2</p> <p>Goal 2.3</p>	<p>Forest management in Saint Lucia is aligned with international standards for Sustainable Forest Management.</p> <p>Timber production in the Forest Reserve is well regulated, sustainable, and has minimal ecological and environmental impact.</p> <p>Private forest owners have access to support and incentives for the development and approval of sustainable forest management and expansion plans.</p>

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<p>economies, while maintaining the biodiversity, recreational and aesthetic values of the forest and the environmental services it provides.</p>	<p>Goal 2.4 Sustainable non-timber forest product (NTFP) projects are delivering benefits to local communities and the wider economy.</p> <p>Goal 2.5 Illegal drug cultivation in the Forest Reserve is controlled and reduced.</p>
<p style="text-align: center;"><u>Strategy 3</u></p> <p>Protecting water supplies, soils and coastal zones and ensuring resilience to climate change.</p> <p style="text-align: center;"><u>Management policy</u></p> <p>The Department will work in partnership with other stakeholders to establish integrated programmes that sustain and enhance the vital regulating services provided by Saint Lucia’s forests and other ecosystems. The Department will also work to ensure that Saint Lucia participates in and benefits from global initiatives to address climate change and its impacts.</p>	<p>Goal 3.1 The Department is actively engaged in global and regional initiatives to address climate change and its impacts.</p> <p>Goal 3.2 Management strategies and plans are in place for all priority watersheds.</p> <p>Goal 3.3 Effective measures are in place for forest protection, restoration and management.</p> <p>Goal 3.4 Coastal wetlands and mangroves are under effective protection and managed sustainably.</p>
<p style="text-align: center;"><u>Strategy 4</u></p> <p>Promoting awareness, visitation and cultural enrichment.</p> <p style="text-align: center;"><u>Management policy</u></p> <p>The Department should ensure that all stakeholders are aware of its work and the benefits that it brings to Saint Lucia. It should make parts of the Forest Reserve available for non-motorised access and nature-based recreation and provide basic access facilities. The provision of visitor services should be contracted out, to benefit local communities and the wider economy, and to provide an income to the Department to support monitoring and maintenance.</p>	<p>Goal 4.1 Awareness is raised across all stakeholder groups about biodiversity, the Forest Reserve and other natural areas.</p> <p>Goal 4.2 The operation of the trail systems is contracted out to community and/or private sector enterprises.</p> <p>Goal 4.3 Tourism activities in the Forest Reserve are monitored and regulated.</p> <p>Goal 4.4 Protection of cultural heritage in and around the Forest Reserve, protected areas and project areas.</p>
<p style="text-align: center;"><u>Strategy 5</u></p> <p>Organisational strengthening</p> <p style="text-align: center;"><u>Management policy</u></p> <p>The Department should review and strengthen its organisational structure and working practices, and build the capacity of its personnel to implement Strategies 1–4.</p>	<p>Goal 5.1 The Department’s operational functions and programmes are revised in line with the Strategy.</p> <p>Goal 5.2 The Department’s management, planning and administrative functions are revised in line with the Strategy.</p> <p>Goal 5.3 Staff capacity development is developed to enable the Strategy to be implemented.</p> <p>Goal 5.4 Resources are secured and mobilised to enable the Strategy to be implemented.</p> <p>Goal 5.5 Governance, administration and financial management are effective and efficient.</p>

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Abbreviations used in the text

ACTP	Association for Conservation of Tropical Parrots
BIOPAMA	Biodiversity and Protected Areas Management Project (coordinated by IUCN)
CBD	Convention on Biological Diversity
CANARI	Caribbean Natural Resources Institute
CARICOM	Caribbean Community
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
DVRP	Disaster Vulnerability and Reduction Project
Durrell	Durrell Wildlife Conservation Trust
EIA	Environmental Impact Assessment
ECMMAN	Eastern Caribbean Marine Managed Areas Network (programme coordinated by TNC)
EU	European Union
FAO	Food and Agricultural Organisation of the United Nations
FD	Forestry Department (Forests and Lands Resources Department)
FFI	Fauna & Flora International
GEF	Global Environment Facility
GIS	Geographical Information System
IICA	Inter-American Institute for Cooperation on Agriculture
INGO	International non-governmental organisation
IUCN	International Union for the Conservation of Nature and Natural Resources
IWEco	Integrating Water, Land & Ecosystems Management in Caribbean Small Island Developing States
MEA	Multilateral Environmental Agreement
MSDEST	Ministry of Sustainable Development, Environment, Science and Technology
MTHCI	Ministry of Tourism Heritage and Creative Industries
NGO	Non-governmental organisation
NTPF	Non-timber forest product
OECS	Organisation of Eastern Caribbean States
PS	Permanent Secretary
REDD	Reducing Emissions from Deforestation and forest Degradation
RSPB	Royal Society for the Protection of Birds
SGP	Small Grant Project
SIDS	Small Island Developing State(s)
SLAFY	Saint Lucia Agricultural Forum for Youth
SLNT	Saint Lucia National Trust
TNC	The Nature Conservancy
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFF	United National Forum on Forests
UNODC	United Nations Office on Drugs and Crime
UWI	University of the West Indies
WRMD	Water Resources Management Department

1 Introduction

This document defines a ten-year strategy for the Saint Lucia Forests and Lands Resources Department ('Forestry Department'), defining its vision, mission, guiding principles and strategic directions. The strategy was developed over a period of 18 months through a number of stages. First, an institutional study was compiled, providing an overview of the current state of the Department and its role within the Ministry for Sustainable Development, Energy, Science and Technology. As part of that process, representatives from a wide range of stakeholder groups in Saint Lucia were consulted, and the Department held two internal workshops. A further internal workshop held by the Department identified the structure and the main elements of the 2015–2025 Strategy, leading to the production of a first draft. This draft was presented, discussed and modified at a national workshop held in January 2015, resulting in a second draft. Following final consultations, the final draft strategy was produced.

The strategy is intentionally quite short, at the request of the Department and the Ministry, so as to be readily accessible for all staff of the Department, the Ministry and its partners. The strategy is intended to serve as the framework for more detailed plans to implement its main programmes.

The development of the Strategy was supported by '*Strengthening Governance and Management of Forest Biodiversity and Natural Resources Throughout Saint Lucia*': an initiative of the Saint Lucia Forests and Lands Resources Department and Fauna & Flora International, funded by Halcyon Land and Sea.

Background

The Forests and Lands Resources Department is a department of the Ministry for Sustainable Development, Energy, Science and Technology (MSDEST) and reports directly to the Permanent Secretary (PS) within the Ministry. In practice, the shorthand of 'Forestry Department' (FD) is almost universally used, and will be used interchangeably in this document. The FD was transferred to the MSDEST from the Ministry of Agriculture, Forestry, Lands & Fisheries in 2013. It is the official body responsible for direct management of Saint Lucia's Forest Reserves, for oversight of the management of all forests on Saint Lucia, and for the protection and management of Saint Lucia's terrestrial wildlife.

An internal institutional assessment of the Forestry Department conducted in 2014 identified a number of important issues, summarised as follows:

- The Department has a commendable tradition and record of forest protection and natural resource management in Saint Lucia. This is well recognised and respected across the country.
- The Department is undergoing a challenging period of change. Whereas its original purpose and prevailing strategic approach revolved around forest protection and production, its actual role is more complex, encompassing the conservation of rare and endangered species, sustainable rural development, disaster prevention and mitigation, provision of tourism and recreation opportunities, and maintenance of essential ecosystem services, vital for the continued social and economic well-being of the country.
- While the basic legal functions and mandates of the Department are quite well defined in the legislation, this legislation is becoming increasingly outdated with respect to the evolving roles of the Department.

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- The threats to the natural resources that are the responsibility of the Department are increasing in extent and severity, particularly outside the Forest Reserve.
- The Department has adequate personnel and a limited, but fairly secure budget for the recurrent costs of fulfilling its obligations. However operational budgets are low, and human and material resources are not being effectively and efficiently deployed with respect to the main duties and obligations of the Department.
- The Department has been subject to numerous strategies and plans over the last 20 years, and while elements of all of these have been adopted to some extent, none have really been fully assimilated into the operations of the Department since 2002. There is a general perception within the Department that it has not fully 'owned' any of these strategies.
- Saint Lucia has also developed and, in some cases, fully endorsed and adopted several other strategies and plans that are relevant to the work of the Department, but they have not always been fully assimilated into its work and plans.
- The Department has been effective in developing productive partnerships and securing international project funding for its activities, but some of these projects have been driven more by the needs of donors than by the identified priorities of the Department.
- The Department has a generally well-educated staff, but opportunities for higher education and advancement are limited for junior staff. There is a concern that as senior staff retire, there will be a growing 'capacity gap', leading to a requirement for succession planning. There is also a problem with low morale and motivation among some staff as a result of sometimes difficult working conditions, lack of resources, and lack of a clear, motivational and shared direction.
- Information management and use of information to inform planning, decision-making and adaptive management are underdeveloped and are hampering effective management.
- The transfer of the Department to the MSDEST has presented both challenges and opportunities. The Department needs to establish its role and value in its new parent Ministry because there is a widespread view that the Department has 'fallen behind' in terms of its influence and status. Alignment to the sustainable development agenda should enable the Department to emphasise its value in ensuring vital ecosystem services for sustainable development, provision of essential natural resources (particularly water), and adaptation and mitigation to the impacts of climate change.
- There are internal differences of opinion within the Department about its role and functions and the directions it should be taking, particularly in relation to forest use.

The Department needs a new strategic approach that is commonly understood by all staff, is supported by its parent Ministry and partners, and reflects its changing role. The new strategy differs from previous ones. It is designed to be concise, simple and clear. It aims to reflect and address the issues currently faced by the Department, and to provide commonly understood, well justified and prioritised directions.

Above all personnel of the Department should feel ownership of this strategy and should be motivated to invest the extra time and effort required to implement it. This will require dynamic, committed and consistent leadership from the senior management team.

2 Strategic Overview

Vision

‘A healthy natural environment for a healthy and productive nation’

This vision is also reflected in the Department’s long established motto “*La foway et terre se la vie*” (“forest and land is life”).

Mission

‘Collaboration and partnership for the preservation and sustainable use of forests, nature and the benefits they provide’

Guiding Principles

In addition to the principles and values established in the Strategic Plan of the Ministry for Sustainable Development, Energy, Science and Technology, the Forestry Department has agreed the following guiding principles for its work:

Core values and beliefs

- Saint Lucia’s forests, waters, wildlife and habitats are vital for the social, economic and cultural well-being of the country. They should be preserved and wisely used for enjoyment and benefit of future generations.
- Saint Lucia is home to many species that occur nowhere else in the world. We have a special responsibility to ensure that these unique plants and animals survive and thrive.
- All citizens have the right to enjoy the sustained benefits of well-managed forest and wildlife resources. Equally, they have a duty to exercise responsibility for ensuring that such natural resources are properly protected, effectively managed and used sustainably.
- The Department should work strategically, efficiently, effectively, adaptively and equitably within national laws and regulations and within regional and international conventions and agreements to which Saint Lucia has given its commitment.
- In addition to the forest, trees outside the forest have an important role to play in conservation and sustainable development.
- The work of the Department should not adversely impact upon the poorest sectors of society, and should wherever possible bring benefits to those whose livelihoods depend on use of natural resources.

Way of working

- The performance of the Department is dependent on a committed, skilled, motivated, well supported and resourced workforce.
- Partnerships and collaborations with other government departments, stakeholders, national and international NGOs and donors are essential for fulfilling the mission of the Department.
- Decisions are most effective when they are made transparently with inputs from stakeholders and based on sound advice, valid technical information and shared values.
- The use of non-native species and the introduction of alien invasive species are not conducive to the effective conservation of Saint Lucia’s biodiversity
- Sound science, reliable data and evidence-based approaches should, wherever possible, underpin decision-making. Where adequate evidence is not available, the precautionary principle should apply.
- Public awareness and education are essential elements for ensuring understanding and cooperation, and to build a critical mass of well-informed and committed stakeholders.

3 Strategic Directions

Based on the Vision and Mission, and in line with the guiding principles, the Department has agreed the following overall strategic directions:

Overall Strategy

The Department should significantly redefine itself, its image and its work from ‘forestry’ to ‘management of the terrestrial ecosystems of Saint Lucia and the services they provide’. This change reflects the actual functions and duties of the Department today, which extend far beyond what is conventionally understood as forestry. Indeed ‘forestry’ in its traditional sense is only a minor part of the Department’s work and is likely to remain so.¹

The overall approach taken in the 2015–2025 Strategy is based around the Ecosystem Approach and the maintenance of the ecosystem services provided by Saint Lucia’s natural environment (see **Box 1**).

¹ There is a good case for stopping the use of the term ‘Forestry Department’ because it does not reflect the actual duties and responsibilities of the Department. However, the full name ‘Forest and Lands Resources Department’ is too long to be used on a daily basis. It would be useful to define a new ‘shorthand’ title for the Department that would strengthen understanding of the work that it does.

Box 1 The ecosystem approach and ecosystem services

Twelve Principles of the Ecosystem Approach

The Ecosystem Approach is a strategy that promotes conservation and sustainable use of natural resources in an equitable way through the integrated management of land, water and living resources. It is the primary framework for action under the Convention on Biological Diversity and comprises 12 principles that are complimentary and interlinked. When applying the Ecosystem Approach, these elements should be taken into account:

1. Recognise objectives as Society's choice.
2. Aim for decentralised management (i.e. subsidiarity).
3. Consider the extended impacts, or externalities.
4. Understand the economic context and aim to reduce market distortion.
5. Prioritise ecosystem services.
6. Recognise and respect ecosystem limits.
7. Operate at an appropriate scale, spatially and temporally.
8. Manage for the long-term, considering lagged effects.
9. Accept change as inherent and inevitable.
10. Balance use and preservation.
11. Bring all knowledge to bear.
12. Involve all relevant stakeholders.

Ecosystem Services

The Millennium Ecosystem Assessment Report (2005) defines ecosystem services as '*benefits people obtain from ecosystems*', and distinguishes four categories of ecosystem service:

- **Provisioning** services are the products that are obtained from ecosystems, such as food, fibre, fuel, genetic resources, biochemicals, natural medicines, pharmaceuticals, water, and building materials.
- **Regulating** services are the benefits obtained from the regulation of ecosystem processes, including air quality maintenance, climate regulation, water regulation and purification, erosion control, waste treatment, regulation of human diseases, biological control, pollination, and protection from extreme weather and climatic events.
- **Cultural** services are nonphysical benefits that humans obtain from ecosystems through spiritual enrichment, cognitive development, reflection, recreation, and aesthetic experiences. These services are connected to human behaviour and values, as well as institutions and patterns of political, social and economic organisation. Cultural services include cultural diversity, spiritual and religious values, knowledge systems, educational values, inspiration, aesthetic values, social relations, sense of place, cultural heritage values, and tourism.
- **Supporting** services are necessary for the production of all other ecosystem services. They differ from other services in that their impacts on humans are indirect or occur over a long time period. Some services, such as erosion control, can be categorised as both a supporting and regulating service (depending on the time scale and immediacy of their impact on humans). Examples of supporting services include the production of atmospheric oxygen (through photosynthesis), primary production, soil formation and retention, nutrient cycling, water cycling and provisioning of habitat.

Strategy 1: Maintaining healthy ecosystems and thriving species (Sustaining supporting services)

Overall Policy

The Forestry Department will work towards ensuring the conservation of the species and natural communities of Saint Lucia and the integrity of the ecosystems that provide critical services for the country.

Rationale

The maintenance of healthy and intact ecosystems and plant and animal communities is important in its own right, is an obligation of Saint Lucia under the Convention on Biological Diversity and other international agreements, and is fundamental to supporting all the services provided to the country by its ecosystems.

A detailed assessment of the terrestrial biodiversity values of Saint Lucia, and a general strategy and action plan for its conservation, was prepared in 2009 and is still largely valid². Along with the National Biodiversity Strategy and Action Plan, this forms the basis of this part of the 2015–2025 Strategy. The draft protected area system plan prepared by the Saint Lucia National Trust in 2009³ proposes a substantial expansion of the protected area system in Saint Lucia to make it more comprehensive and representative. However, the plan has not been officially adopted, and expansion of the protected area system and establishment of stricter protected zones are likely to be a challenge in the near future, given the current economic situation and other pressures on land and resources. Accordingly, a range of voluntary and multifunctional protection arrangements will be required to increase the area under effective sustainable management and to demonstrate that strict protection is not the only option for area-based conservation.

The following species and habitats (ecosystems) have been identified as requiring specific conservation measures:

Endemic and threatened species requiring active conservation measures

* = species for which a conservation action plan exists or is under development.

Fauna

- Saint Lucia racer (*Erythrolamprus ornatus*) *
- Saint Lucia threadsnake or worm snake (*Tetracheilostoma breuili*)
- Saint Lucia fer-de-lance or pitviper (*Bothrops caribbaeus*) *

² Daltry, J.C. (2009) *Biodiversity Assessment of Saint Lucia's Forests, With Management Recommendations*. Technical Report No. 10 to the National Forest Demarcation and Bio-Physical Resource Inventory Project, FCG International Ltd, Helsinki, Finland.

https://www.researchgate.net/publication/261133149_Biodiversity_Assessment_of_Saint_Lucia's_Forests_With_Management_Recommendations

³ Haffey, D. (2009) *A Systems Plan for Protected Areas in Saint Lucia*. OECS Protected Areas and Associated Livelihoods Project. Saint Lucia.

<https://www.conservationgateway.org/ConservationByGeography/NorthAmerica/Caribbean/science/planning/Documents/ST%20LUCIA%20SYSTEMS%20PLAN%20FINAL.pdf>

- Saint Lucia whiptail (*Cnemidophorus vanzoi*) *
- Saint Lucia iguana (*Iguana cf. iguana*) *
- Saint Lucia parrot (*Amazona versicolor*) *
- Saint Lucia white-breasted thrasher (*Ramphocinclus brachyurus sanctaeluciae*) *
- Saint Lucia oriole (*Icterus laudabilis*)
- Saint Lucia nightjar (*Antrostomus rufus otiosus*)
- Saint Lucia blackfinch (*Melanospiza richardsoni*)
- Semper's warbler (*Leucopeza semperi*)
- Saint Lucia forest thrush (*Turdus lherminieri sanctaeluciae*)
- Saint Lucia wren (*Troglodytes aedon mesoleucus*)

Flora

- Pencil cedar (*Juniperus barbadensis* var. *barbadensis*)
- *Bernardia laurentii*
- Acajou or red cedar (*Cedrela odorata*)
- Arkokwa (*Zanthoxylum flavum*)
- Gayak or lignum vitae (*Guaiacum officinale*)
- *Lobelia santa-luciae*
- Latanyé (*Coccothrinax barbadensis*)

Native 'problem species' requiring active management

- Lesser Antillean bullfinch (*Loxigilla noctis*)
- Carib grackle (*Quiscalus lugubris*)
- Shiny cowbird (*Molothrus bonariensis*)

Non-native 'problem species' requiring strong control/eradication

- Feral pig (*Sus scrofa*)
- Green iguana (*Iguana iguana*)
- Small Asian mongoose (*Herpestes javanicus*)
- Rats (*Rattus rattus* and *R. norvegicus*), especially on offshore islands)

Priority habitats (ecosystems) for improved protection and management

- Pointe-Sable Environmental Protection Area. Especially the Maria Islands, which contain rare endemic reptiles and important seabird colonies.
- Piton Management Area. This area requires an integrated conservation management plan to complement tourism and public use plans and activities.
- Iyanola/ Northeast Dry Forest. This area should be prioritised for a project establishing 'ridge to reef' connectivity.
- La Paradis/ Mandele Dry Forest. Highly important for threatened birds.
- Offshore Islands. Management plans exist for Dennery and Praslin islands and are required for all other islands.
- Government Forest Reserve. This requires a detailed management plan.
- Freshwater swamp forest and other wetlands.
- Riparian zones/ gallery forest.

- Plantation forests. The intention is to improve the biodiversity values of existing plantations, rather than to create more plantations.
- Mangroves.

Ten-Year Goals

(See Section 4 ‘Implementation Plan’ for specific actions for each goal).

Goal 1.1 Viability is enhanced of populations of threatened, endemic species and sub-species, inside and outside the Forest Reserve

This will require a range of different approaches, according to the specific nature of the threats and needs of the species listed in section 3.2.2. Necessary measures will include:

- Update and expand the report ‘*Biodiversity Assessment of Saint Lucia’s Forests, With Management Recommendations*’ (Daltry, 2009).
- Maintain a range of measures for protected priority species and their habitats, including:
 - Eradication of alien invasive species.
 - Habitat protection and restoration.
 - Conservation zoning of protected areas.
 - Conservation breeding and reintroduction.

Conservation action plans exist for several of the most threatened species, providing detailed prescriptions for their management and recovery that should be implemented by the Forestry Department and its partners. Action plans should be prepared for the remaining priority species.

Goal 1.2 Every natural habitat type in Saint Lucia is represented in connected areas under legally based and effective means for conservation management

This goal is based around the step-wise implementation of the draft Protected Area System plan, as well as measures to extend the ‘effective protected area’ into privately owned lands.

In some cases, securing effective conservation management may require expansion of the Forest Reserve and the protected area estate. However, it is acknowledged that this option is only likely to be acceptable for the highest priority areas, or areas subject to major threats that cannot be resolved by other means. Wherever possible therefore, the creation of voluntary management agreements with landowners and the establishment of multifunctional managed landscape areas will be prioritised.

Legal establishment of a new designation of ‘managed landscape area’ (or equivalent) would help to secure the achievements of the Iyanola Project and future landscape scale initiatives. It would enable creation of co-managed multi-ownership and multifunctional ‘protected areas’ that would support conservation, sustainable use and visitation without altering land ownership. This would enable significant expansion of the effective size of the national protected area system without requiring land acquisition or imposing purely protective regimes.

There is a need to develop regulations for the Wildlife Act and to review and update the regulations of the Forest Act to enable a wider range of protected area categories to be adopted. The establishment of comprehensive regulations for Environmental Impact Assessments would also help to secure effective long term protection of important areas subject to development pressure.

Goal 1.3 Innovative, collaborative approaches to conserving and restoring flora, fauna and habitats on private and public lands are identified, tested and implemented

Following on from Goal 1.2, it will be necessary to develop a range of innovative management agreements with landowners, with Crown Estates and with other natural resource managing agencies that balance economic use with protection. The Iyanola Project presents an opportunity to develop and test model agreements, and there is an opportunity to develop a similar project for the South East. There are also other areas where such an approach can be adopted and /or supported, such as the UNDP GEF Small Grant (SGP) supported Canaries watershed ‘ridge to reef’ project and other projects for land stabilisation.

Goal 1.4 Impacts of alien invasive species on priority species, habitats and ecosystems are eliminated or substantially reduced

A priority is the country-wide implementation of key elements of the *National Invasive Species Strategy*⁴ and related activities that address threats to native flora, fauna and ecosystems. This requires both legal measures to enable implementation of the plan, and supporting its adoption and implementation across all relevant sectors.

Specific measures for the eradication and control of alien invasive species should continue and be expanded, not only on offshore islands, but also in at least one experimental ‘mainland island’.

Goal 1.5 Measures are in place for monitoring, documenting and reporting on the status of species, habitats and ecosystems and on the impact and effectiveness of management measures

Credibility and reliability of conservation interventions need to be supported by focused, management-oriented research and monitoring that produces evidence based conclusions and recommendations. The status of all priority species and habitats should be regularly and consistently monitored, and the results collated. These should be used to inform government policies and decisions, operational plans of the Department and public education and awareness.

Research projects by organisations and individuals from Saint Lucia and internationally should be encouraged, but the Department should strongly encourage projects that further the implementation of this strategic plan.

⁴ Chase, V. et al. (2011) *Saint Lucia National Invasive Species Strategy 2012–2021*. Ministry of Agriculture, Lands, Forestry and Fisheries, Castries, Saint Lucia. <http://www.ciasnet.org/wp-content/uploads/2013/05/NISS-SLU-final-reformat-v6.pdf>

Strategy 2: Ensuring sustainable flows of products that support both local economies and biodiversity conservation (Sustaining provisioning services)

Overall policy

The Forestry Department will work with partners to enable regulated and sustainable use of defined forest areas in support of local livelihoods and economies, while maintaining the biodiversity, recreational and aesthetic values of the forest and the environmental services it provides. In pursuit of this, the work of the Department should make use of the United Nations Forum on Forests' instruments for sustainable forest management.

Rationale

Maintaining a purely protectionist regime for all the forests is impractical and will lead to conflict and loss of essential cooperation and support. The Department should therefore develop and promote carefully designed and monitored sustainable use programmes, which are based on sound science and participatory principles, in defined areas of the Forest Reserve and on privately owned forest:

Non-timber forest products. Conservation priorities and the application of the precautionary principle will require significant areas of the Forest Reserve to remain 'closed' to use and exploitation, but there is potential for regulated harvesting of timber and non-timber forest products in certain areas. While this is unlikely to generate substantial income for the Department, it should bring significant benefits in three major ways:

- Providing sources of income and meeting local demand for forest products will increase goodwill and support for the work of the Department from local communities who live around the forest.
- Legalising and regulating certain activities will help meet demand and reduce illegal harvesting and forest clearance for illegal plantations.
- Entitled users will have a 'stake' in the resource and are more likely to help defend it from illegal and irrational exploitation by others.

There are several existing programmes for non-timber forest product (NTFP) harvesting that can be further developed. These include collection of Lansan (resin of the tree *Protium attenuatum*), Latanyé (*Coccothrinax barbadensis* palm leaves, for brooms) and Mauby (bark of the tree *Colubrina elliptica*, for herbal teas). An innovative project for charcoal production also has great potential for expansion.

Commercial timber production. The National Forest Demarcation and Bio-Physical Resource Inventory Project (2008–2009) proposed rotational management for timber production of five blocks of 10 hectares in each forest range. A generic process for planning and managing the blocks was proposed, but no detailed management or business plans were prepared. Given the relatively limited area of native forest, its ecological importance, and application of the precautionary principle, exploitation should not be assumed to be permissible where such forest persists. There is a need for a more detailed assessment of the demand for 'cultural use' of timber trees and the impact of harvesting. Eventually it is envisioned that some limited harvesting will be allowed, but this needs to be under clear and consistently applied regulations and guidelines.

The Forest Reserve also includes 388 hectares of plantations, which have not been maintained to maximise their productive potential. It is not certain whether rehabilitation and commercial harvesting would be economically viable or should be a priority for the Department. More detailed management and business planning actions are required before any further work is done.

Protection and production in private forests. The difficult economic situation has seen an increase in environmentally damaging demand for construction wood from private forests. However, expansions of the Forest Reserve or the protected area system are unlikely to be approved if these areas are subject to purely protective regimes, and forest owners are more likely to protect forest if they see benefits from it.

Therefore, wider application of the voluntary approach will be required, and the Department should seek partnerships and management agreements with owners of forest in critical areas that maintain forest cover and connectivity, enable sustainable use and increase the contribution of private forest towards national development. Legal interventions to ensure the protection of privately owned forest may still be necessary, but should be a last resort.

Ten-Year Goals

(See Section 4 'Implementation Plan' for specific actions for each goal).

Goal 2.1 Forest management in Saint Lucia is aligned with international standards for sustainable forest management

Saint Lucia is an active participant in the United Nations Forum on Forests (UNFF). The Department should work towards achieving sustainable forest management as promoted by the UNFF and towards achieving the objectives set out in the *UN Non-Legally Binding Instrument on all Types of Forests*⁵ (2007), as well as related processes and agreements.

Goal 2.2 Timber production in the Forest Reserve is well regulated, sustainable and has minimal ecological and environmental impact

For the natural forest in the Forest Reserve, the precautionary principle should, in the first instance, apply and at present there should be a moratorium on any harvesting. This does not exclude future sustainable use, but if resumption of harvesting is allowed, a detailed (and participatory) assessment is required of the demand for and impact of cultural use of timber trees, and clear regulations should be developed and agreed.

For the plantation areas, the first requirement is a detailed feasibility study covering:

- Technical aspects of management, harvesting and recovery/replanting.
- Practical arrangements for management.

⁵ See [Http://www.un.org/esa/forests/pdf/notes/bali_081207_pc.pdf](http://www.un.org/esa/forests/pdf/notes/bali_081207_pc.pdf)

- Processing and end-use and marketing of the product.
- Maximising biodiversity values of the area.
- A detailed business plan.

As a first step, a pilot study and plan should be prepared and implemented for one of the plantation areas and harvesting can be resumed if the study indicates that it is feasible, and economical to do so.

Goal 2.3 Private forest owners have access to support and incentives for the development and approval of sustainable forest management and expansion plans

The Department should be proactive in encouraging and providing technical and practical support to forest owners in critical and sensitive areas to develop and implement management plans for forest protection, restoration, establishment and sustainable use. Such support should include development of management plans, access to extension advice, access to planting material and financial incentives for entering into management agreements.

Goal 2.4 Sustainable non-timber forest product (NTFP) projects are delivering benefits to local communities and the wider economy

The Department should not directly engage in harvesting and processing forest products, but should encourage and support innovative NTFP projects that support its goals and objectives and that benefit local people. Projects should integrate sustainable harvesting with, in the first instance, priority given to the following:

- **Lansan project.** This project is showing significant potential for benefitting local people, meeting a cultural need for incense, and engaging local communities in forest production.
- **Charcoal production project.** This initiative has great potential for reducing unsustainable harvesting of the dry forest area for charcoal production.
- **A new project for sustainable production of small round wood poles.** Pole harvesting is currently the most immediate threat to vulnerable dry forest areas on private and Crown lands, driven by the high price of imported materials. The Department should address this threat directly by researching in detail the demand and end-use of poles, identifying alternative products that could be used (e.g. bamboo), exploring the possibility of rotational harvesting and of establishing plantations of fast-growing species. Alongside this stricter controls should be implemented over the illegal harvesting and transportation of poles and other timber resources.
- **A new project for growing and harvesting Christmas trees using the native pencil cedar.** The Department has recently stopped direct production of Christmas trees using non-native *Acacia* and is currently encouraging local communities to adopt Christmas tree production. However, cultivation and production of native Christmas trees using the native pencil cedar (*Juniperus barbadensis*) could both create a distinctive national product and help to bolster populations of this Critically Endangered species.

Goal 2.5 Illegal drug cultivation in the Forest Reserve is reduced

Illegal plantations of marijuana are considered a major threat to the Forest Reserve and to the security of Department personnel. Despite some successes and good collaboration with the police, staff of the Department are ill-equipped to deal with the problem and threats it places on fulfilling their duties and to their personal security. Addressing this difficult issue will require active law enforcement, with better training and equipment for Department staff, and, in the medium term, provision of viable alternatives for poor local people.

Alongside improved law enforcement, livelihood support activities should be established that directly benefit the rural poor and forest edge dwellers—the groups most likely to become engaged in illegal cultivation.

Support for this work may be available through the Caribbean Regional Programme of the United Nations Office on Drugs and Crime (UNODC).

Strategy 3: Protecting water supplies, soils and coastal zones and ensuring resilience to climate change (Sustaining regulating services)

Overall Policy

The Department will work in partnership with other stakeholders to establish integrated programmes that sustain and enhance the vital regulating services provided by Saint Lucia's forests and other ecosystems. The Department will also work to ensure that Saint Lucia participates in and benefits from global initiatives to address climate change and its impacts.

Rationale

Saint Lucia's forest ecosystems provide the following main regulating services, which are likely to become increasingly important for the economic and social well-being of the country and to address the impacts of climate change:

- **Climate regulation and resilience to the impacts of climate change.** Forest cover can maintain high levels of humidity and promote rainfall. Forests are also vital for stabilising slopes and preventing soil erosion and landslides caused by extreme weather events. There is at present no comprehensive, up to date assessment of the relationship between forests and climate change issues in Saint Lucia.
- **Water collection and storage.** Saint Lucia's intact, forested watersheds are essential for the collection and storage of water for domestic, industrial and agricultural use, and for maintaining the quality of the water supply. Irregular and declining precipitation in recent years has amplified the need for this essential ecosystem service, making it probably the most important function of the nation's forests.

Maintaining and extending natural, diverse and resilient forest cover should therefore be an absolute priority. The Department will have a crucial role to play in the planned initiative for desilting and restoring the John Compton dam and its catchment in the Forest Reserve.

- **Coastal zone protection and fish nurseries provided by coastal wetlands and mangroves.** It is not entirely clear which agency (Fisheries or Forestry) has responsibility for the management of wetlands and for mangroves. This uncertainty is reflected in a lack of coordinated management and protection.

None of these vital services can be maintained by the actions of the Forestry Department alone. They require an integrated approach, working with other agencies, landowners and stakeholders, and operating at ecosystem, watershed and landscape scales. There is a need to clarify which agencies should take the lead in these actions, to avoid overlap, duplication and other inefficiencies. Based on discussions within and outside the Department, the best approach for the Forestry Department to meet its obligations is for it to take a lead on designing and implementing multistakeholder, watershed catchment-scale initiatives.

Saint Lucia has 37 watersheds. Of these, the following are proposed by the Department as priorities for preparation and implementation of watershed management plans, being areas of either high strategic importance, high vulnerability and or particular biodiversity importance:

First priority watersheds

- ***Millett and Roseau.*** This area includes a major dam essential for water supply, as well as substantial areas of the Forest Reserve.
- ***Marquee and Grande Anse/Louvet.*** This area coincides with the conservation priority North East Dry Forest Area, which is one of the least developed parts of the country, comprises habitats for many rare and protected species, and retains linkages from ridge to reef.
- ***Soufriere.*** This area is critical for supplying water to the Soufriere region.
- ***Vieux Fort.*** A new dam and reservoir is planned for this catchment outside the forest reserve. Special measures will be required to prevent erosion and siltation of the reservoir.
- ***Fond D'or.*** This includes in its upper parts the eastern part of the vulnerable Barre de L'Isle forests.

Second priority watersheds

- ***Cul de Sac.*** This includes in its upper parts the western part of the vulnerable Barre de L'Isle forests.
- ***Doree, Piaye and Belambouche.*** There is sufficient intact habitat in this catchment to ensure potential connectivity from Ridge to Reef.
- ***Dennery, Riviere Gales/Trois Isles and Maniku/Patience.*** This area is dominated by dry forest of particular conservation significance. It is also a target area for resort development, which would require sensitive design and management.

Ten-Year Goals

(See Section 4 'Implementation Plan' for specific actions for each goal).

Goal 3.1 The Department is actively engaged in global and regional initiatives to address climate change and its impacts

Various studies have been conducted in the past decade, but there is no up to date synthesis of the current and likely impacts of climate change with respect to the forests on Saint Lucia, or of the potential services that these forests (both inside and outside the Forest Reserve) provide in terms of climate regulation, impact mitigation and maintenance of resilience to current and future impacts.

The Department requires a more detailed analysis of the risks and vulnerabilities and a clear framework for proactive interventions and responses. This should lead to development of a wider range of climate change-related projects implemented by the Department and its partners. To support such projects, the Department should become more involved in international climate change initiatives relevant to Saint Lucia. These include the World Bank-supported Saint Lucia Disaster Vulnerability Reduction Project (DVRP), pilot projects for climate resilience, and carbon-related initiatives such as REDD+. A number of international obligations are also applicable to climate change mitigation and watershed management, such as the Convention on Biological Diversity (CBD) and the United Nations Convention to Combat Desertification.

To support this work, there is a need for much improved awareness and technical understanding of climate change issues within the Department and among its partners.

Goal 3.2 Management strategies and plans are in place for all priority watersheds

A range of initiatives are already underway for various approaches to management of most of the priority watersheds. These initiatives adopt slightly different approaches and involve different combinations of implementing agencies and different roles for the Forestry Department. It is therefore important that the various projects adopt, as far as possible, compatible approaches. At least they should make best use of existing information and stakeholder consultations to identify priority values and threats, to define basic management zones and regulations, to specify the actions required from all relevant agencies and stakeholders, and determine reliable indicators and protocols for monitoring. It is particularly important that the Forestry Department is directly involved in all plans and decisions affecting forest and associated resources.

To support all watershed projects, the Department should commission an overall study of the economic contribution of intact forests to the economy of Saint Lucia and of the implications of forest loss and degradation.

Goal 3.3 Effective measures are in place for forest protection, restoration and management

Within the watersheds, a range of specific activities are required to manage the forest resource, inside the Forest Reserve, on private lands and other areas. These include measures for protection, restoration, planting and regeneration. Priority projects identified by the Department are:

- Protection and establishment of belts of riparian forest the entire length of all watercourses in priority watersheds.
- Protection of upper catchments, especially above current and future reservoirs.
- Protection of slopes in vulnerable areas (especially where important infrastructure is located).
- Establishment and maintenance of forest corridors and treescapes through urban and developed areas.
- Promoting and supporting tree planting and agroforestry initiatives on farmlands.

These measures will require developing the material and technical capacity of the Department and increasing production from tree nurseries, maintained both directly by the Department and by local communities.

Goal 3.4 Coastal wetlands and mangroves are under effective protection and managed sustainably

The Department has been conducting a national survey and assessment of wetlands. When this is completed, there is a need for management action plans for all priority sites. For this to be successful, an agreement is required which clarifies how the Forestry Department will cooperate with the Fisheries Department to protect and manage these areas, which are likely to become more important and more threatened as a result of impacts of climate change (sea level rise, increase in storms).

Strategy 4: Promoting awareness, visitation and cultural enrichment (Maintaining cultural services)

Overall Policy

The Department should ensure that all stakeholders are aware of its work and the benefits that it brings to Saint Lucia. This is necessary to improve support for its work and ensure cooperation with its partners. Furthermore, the Forest Reserve is an excellent venue for improving awareness among residents and visitors. The Department should make parts of the Forest Reserve available for informal non-motorised access and nature-based recreation and provide basic access facilities (entrance points and trails). The provision of visitor services using these facilities should be contracted out to local communities and the private sector, to benefit local communities and the wider economy, and to provide an income to the Department to support monitoring and maintenance.

Rationale

Awareness and education. Saint Lucia's forest and environment are an important resource for raising awareness about a wide range of environmental and social issues. These not only concern the intrinsic value of nature but how intact forests and watersheds contribute to the social and economic well-being of Saint Lucia. Raising awareness is important for visitors and tourists, and essential for all stakeholders, decision makers and the wider public.

Awareness and environmental education should also be important elements of all the Department's work and need to be integrated into projects and plans under all the strategies in this document. The work of the Department should also build on the MSDEST's strategy for awareness, education and public relations.

Tourism and recreation. The most relevant cultural service managed by the Department is tourism and recreational activities within the Forest Reserve. Forest-based tourism has declined in Saint Lucia in recent years, apparently due to inadequate planning, lack of infrastructure, insufficient marketing and the emergence of competing attractions. The current approach benefits few visitors, and imposes substantial costs on the Department in terms of human and physical resources. The potential for increasing forest visitation and diversifying Saint Lucia's tourism is recognised by the tourism authorities, but the Department has neither the expertise nor the resources to operate as a tourism service provider; indeed, its current tourism management activities are diverting staff from other very important activities. All future tourism services should be provided by private sector and by supported local communities, while the role of the Department should be to maintain the Forest Reserve as a venue for visitation and recreational activities, and to provide basic access infrastructure.

Cultural and spiritual values. Many communities in Saint Lucia have long-standing relationships with the forest and nature, which are culturally and spiritually important and could contribute to long-term sustainable protection and management. When planning public use, the Department should take into consideration the values held by local people alongside those held by international guests and tour operators.

Saint Lucia's forests and coasts also include sites of archaeological and cultural importance whose protection should be taken into consideration in management plans.

Ten-Year Goals

(See Section 4 ‘Implementation Plan’ for specific actions for each goal).

Goal 4.1 Awareness is raised across all stakeholder groups about biodiversity, the Forest Reserve and other natural areas

Awareness activities should be targeted at a range of focal groups:

- **Visitors.** The Department should encourage visitation, enjoyment and awareness-raising in and around the Forest Reserve. The Department should give a clear message that the Forest Reserve and protected areas are not just for the enjoyment of international tourists, and should actively encourage Saint Lucians to enjoy natural places in a responsible way. Measures to be taken should include promoting opportunities for visitation, holding open days, encouraging educational visits. The Department should work with contractees operating the forest trails to design packages that will attract visitors and generate income. Guidance should also be provided on development and maintenance of appropriate infrastructure and on guiding and interpretation.
- **Primary stakeholders.** These include landowners and other resource owners and users, local communities and other stakeholders with a direct influence on the management of the resources under the responsibility of the Department. These groups need to understand the functions and responsibilities of the Department and relevant laws and regulations, and be encouraged to work cooperatively with the Department to implement this strategy.
- **Government agencies and other resource management entities.** Implementing this strategy requires active collaboration with a many of the land and resource management agencies in Saint Lucia. They need to be aware of the strategy and how it interacts with their own mandates, strategies and plans.
- **The general public (including school children).** If Saint Lucians are more aware of the value of their natural heritage and the benefits it brings, they are more likely to support and cooperate with the work of the Department.

To improve the awareness of all these groups, the Department should continue to develop a range of targeted awareness and advocacy campaigns, aimed at addressing specific threats and issues. **Table 2** shows the priority programmes that have been identified by the Department, covering all the main focal groups.

In addition, the Department should produce a regular flow of awareness products, promoting its work and achievements and the work of all its projects. These should include:

- Press and media releases.
- Radio and TV interviews and features.
- Leaflets and brochures.
- Active use of social media.
- Special events and celebrations.

Table 2 Priority awareness campaigns

MESSAGE	FOCAL AUDIENCE	PURPOSE	MEDIA AND APPROACH
<i>La foway se la vie.</i>	General Public. Visitors. Schools.	Create national pride and awareness of the importance of forests and wildlife.	Community meetings, workshops, TV, radio, social media.
Forest: our natural capital.	Government, Planners and developers. Private Sector.	Explain economic values of forests for Saint Lucia. Prevent planning and development decisions that negatively impact services provided by the forests. Raise awareness of climate change.	Meet with key partners. Provide maps and information about priority forest and watershed areas. Provide studies and evidence of the values of forests.
Leave nothing but footprints take nothing but photos, kill nothing but time.	Users of forest. Cultural users. Eco tourists.	Mitigate and prevent negative impacts of visitation and cultural usage.	Website, brochures, regulations, signage. Information provided by guides and tour operators.
Saint Lucia is all my world.	General public and visitors. Schools.	Promote national pride in conservation and endemic species. Build support for controlling invasive species.	TV website, posters, billboards, social media, popular theatre.
Rivers of life	Farmers alongside watercourses. General public.	Promote understanding of the impacts of bad land management and water abstraction on essential water supplies of the country. Educate people in better management of riverine areas.	TV, posters, media coverage. Awareness extension work with farmers and local communities.

Goal 4.2 The operation of the trail systems is contracted out to community and/or private sector enterprises

The policy of the MSDEST is that Department should cease operating as a tourism services provider. This is not its core business, it does not have the resources to develop tourism as a profitable business, and staff would be much more productively engaged in implementing other elements of this strategy. The Department should define a detailed process for contracting out trail operation, for selection and supervision of appointed operators.

Goal 4.3 Tourism activities in the Forest Reserve are monitored and regulated

Tourism in the Forest Reserve will not be viable unless there are suitable opportunities and products, an adequate demand, suitable facilities and effective marketing. Although the intention is to contract out operation of the trails, the Department should support the contractees to increase their chances of success. Activities are likely to include:

- Developing clear and comprehensive regulations for all public users of the Forest Reserve and for tourism service providers.
- Advising on and, if necessary continuing, trail and infrastructure maintenance.

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- Mobilising support for local community operators for establishing infrastructure, business planning and enterprise marketing and management.
- Marketing the opportunities for trail tourism through the Department website, and providing links to the contracted operators.

When trail operations are contracted out, the Department will still have major responsibilities for ensuring that contractees comply with their contracts, and that the impacts of public use fall within acceptable limits. This will include the following:

- Regular trail monitoring by Department staff.
- Monitoring the quality of guiding and interpretation.
- Verifying reports and financial accounts provided by contractees.
- Ongoing dialogue with contractees on management issues.
- Taking actions to address problems and improve compliance and protection. The Department should retain the right to close or divert trails in case of exceptional problems, hazards or impacts.
- Reviewing and approving proposals from the contractees for infrastructure development and interpretation.

Goal 4.4 Protection of cultural heritage in and around the Forest Reserve, protected areas and project areas

All management activities conducted by the Department should take into consideration sites and objects of cultural and historical importance, and should at least prevent damage or deterioration. In addition, the Department should take into consideration Saint Lucia's intangible cultural heritage (e.g. traditions, knowledge, cultural practices, art and design).

Strategy 5: Organisational strengthening

Management Policy

The Department should review and strengthen its organisational structure and working practices, and build the capacity of its personnel to implement Strategies 1–4.

Rationale

The Department’s organisational structure is not optimally aligned to the goals and objectives of the 2015–2025 Strategy, and some of the changes envisaged as a result of this document will require changes in how the work of the Department is structured and organised. For example, contracting out the operation of the visitor trails should release a significant number of staff from tourism-related duties, freeing them up to take on other work.

Implementing the 2015–2025 Strategy will also require some additional resources. The Department needs to determine what can be achieved with existing internal resources, what can be built into current or planned donor assisted projects, and what will require new investment.

Ten-Year Goals

(See Section 4 ‘Implementation Plan’ for specific actions for each goal).

Goal 5.1 The Department’s operational functions and programmes are revised in line with the Strategy

As part of the process of developing the 2015–2025 Strategy, the Department has reviewed its structure and functions and identified the main elements of its operational work, as shown in **Box 2**. The sections that follow describe each function in more detail.

Box 2 Revised main operational functions of the Forests and Lands Resources Department

- a) Site management, protection and monitoring
 - Forest Reserve.
 - Forest on private lands.
- b) Watershed management.
- c) Wildlife and habitat management.
- d) Enforcement, observance of the law and emergency response.
- e) Green enterprise and partnerships (including tourism).
- f) Awareness, education and public relations.
- g) Plant propagation and herbarium management (‘germplasm’).

a) *Site management, protection and monitoring*

This function can be divided into two main areas. For each, planning should be coordinated by a central team (in collaboration with the Range Officers), and implemented by the relevant range (watershed) offices with support from centrally based staff:

- **Forest Reserve management.** This involves the preparation of a detailed management plan for the Forest Reserve and its implementation by the Department through its range offices, technical teams and partners.
- **Forests on private lands.** The Department needs to increase its work with private landowners to protect, restore and establish forests on their land. This is vital for both biodiversity conservation and for ensuring the maintenance of vital ecosystem services in Saint Lucia. The current Iyanola Project (“Natural Resource Management of the North East Coast”) presents an excellent opportunity to develop model arrangements for owner and community-based management agreements for priority forest and wildlife habitat areas.

b) *Watershed management*

Watershed scale management is vital for implementing the most elements of this strategy. The Department has been given a major responsibility by the MSDEST for watershed management and planning, in collaboration with the Water Resources Management Department (WRMD).

Planning should be coordinated by a central team in collaboration where necessary with the WRMD. Actions should be implemented by the relevant range (watershed) offices with support from centrally based staff.

c) *Wildlife and habitat conservation and management*

This comprises fulfilling the mandate of the Department for wildlife and habitat protection throughout Saint Lucia. This work should be coordinated by a central team. Some tasks should be implemented by the relevant range (watershed) offices, and others by centrally based staff. Many activities will also be implemented with partners.

The main areas of activity are likely to include.

- Preparation of an updated plan for conservation of priority ecosystems, species and their habitats (based on the 2009 report ‘*Biodiversity Assessment of Saint Lucia’s Forests, with Management Recommendations*’¹).
- Management or co-management of protected areas (e.g. offshore islands, mangroves etc.) with various partners.
- Developing management partnerships and voluntary agreements with private landowners, Crown estates and other resource holders.
- Development and management/co-management of species conservation programmes with various partners.
- Development and management/co-management of invasive species control and eradication projects with various partners.

d) *Enforcement, observance of the law and emergency response*

Law enforcement is becoming an increasing challenge for the Department, mainly with respect to illegal marijuana cultivation in the Forest Reserve. While staff have the legal powers to act against this and have received good support from the police, they do not have the capacity and resources to address this problem safely. A particular concern is the personal security of Department staff engaged in locating, reporting and eradicating illegal plantations.

This work should be coordinated by a central team, in collaboration the Saint Lucia Police force and with Range (watershed) offices.

The main areas of activity are likely to include:

- Preparing a detailed strategy, plan and set of operating procedures for law enforcement, including personal security. This should be done in collaboration with the Police.
- Training and equipping the central Patrol Team and field staff to implement the Strategy.

e) *Green enterprise and partnerships (including tourism)*

This involves the range of commercial and sustainable development activities managed by the Department. It includes timber management and harvesting in the plantation areas, support for NTFP collection partnerships, and management of tourism and recreation facilities and partnerships.

The programme should be coordinated by a central team.

The main areas of activity are likely to include:

- Preparing detailed plans and procedures for contracting out operation of forest trails to community or private enterprises.
- Preparing a feasibility study for resumption of silvicultural operations in plantation areas.
- Preparing a detailed plan for extending and strengthening non-timber forest product harvesting and processing, focusing on projects that will benefit local communities.
- Initiating the process for contracting out operation of forest trails (see Strategy 4).

f) *Awareness, education and public relations*

This involves developing and implementing thematic programmes of awareness based on the implementation of the Strategy. This work should be coordinated by a central team but implemented as a cross-cutting programme involving all relevant elements of the Department.

g) *Plant propagation, herbarium, animal husbandry (ex situ conservation)*

The Department will need to continue its work on plant propagation and husbandry, to support the implementation of all the main strategies. The herbarium and specimen collections also require good curation. There are also responsibilities for managing the small number of captive animals, but this aspect should not be expanded. This work should be conducted by a central team.

Goal 5.2 The Department’s management, planning and administrative functions are revised in line with the Strategy

The main functions for management, planning and administration are shown in **Box 3** and described in the sections that follow:

Box 3 Management, planning and administrative functions of the Department

- a) Planning, project development and management.
- b) Forest range administration and management.
- c) Monitoring, research, information and data management.
- d) Partnership and collaboration.
- e) Formal international cooperation.

a) *Planning, project development and management*

The senior management team will need to devote considerable time to developing plans required for the 2015–2025 Strategy to be implemented, identifying potential donors and working with them to develop projects which will support the Strategy. It should focus initially on:

- Developing management plans for watersheds and the Forest Reserve.
- Developing work programmes with all operational units to implement the 2015–2025 Strategy.
- Tracking, monitoring and reporting on implementation of the 2015–2025 Strategy.
- Identifying potential for donor/partner assisted projects and preparing proposals and applications.
- Integrating implementation of the 2015–2025 Strategy into existing projects.
- Establishing teams to implement elements of the Strategy and other projects.

b) *Monitoring, research, information and data management*

The Department requires a much more integrated system for recording, storing, analysing and making use of information from its activities. Such a system requires a number of elements:

- **Long term monitoring.** Alongside continuous data collection, more specific long-term scientific monitoring programmes will be required, especially for endangered species.
- **Centralized data collation and GIS.** All monitoring data should be processed and stored by a central data collation and GIS unit. The unit should also provide regular summaries and reports across the Department and be able to respond to particular requests for data maps and analyses.
- **Management activity and project monitoring.** It is vital that the Department monitors the extent to which the intended activities in plans and projects are implemented, and the results and impacts of implementation. This information will enable the Department to determine whether planned actions are

effective and efficient in producing the desired results, and to provide comprehensive, evidence-based reports to the Ministry on its activities.

- **Standard formats for reporting.** Monitoring and record keeping will be greatly improved if standard formats and procedures for reporting are developed and implemented, both internally and for reporting to the MSDEST and the Government of Saint Lucia.

c) Forest range administration

Forest range boundaries are currently not aligned with watersheds: they mainly follow watercourses rather than ridges. It would be more logical and practical if the forest range management units were aligned with watersheds and could take responsibility for integrated management of those watersheds. This exercise will not require major changes and could be conducted relatively easily with the support of GIS.

The teams based in the range/watershed offices should be responsible for day-to-day operations and monitoring in their areas, as well as participating in centrally managed projects and programmes.

d) Partnership and collaboration

Implementing the 2015–2025 Strategy will not be possible using only the current resources available to the Department, but may reduce some inefficiencies and free up resources for other activities. The Department needs to build productive working and funding partnerships, both nationally and internationally. The following will be particularly important:

1. Building synergistic collaborations with other Government ministries and departments and with the Saint Lucia National Trust to prevent overlaps contradictions and inefficiencies. This will require both agreeing joint plans and methods of working (for example the watershed management strategies), and regular formal and informal contact and exchanges of information.
2. Developing and maintaining positive relations with local communities and user groups. This will become more important as the Department implements the 2015–2025 Strategy, develops more sustainable use projects, and works to establish multiple-use landscape management areas. The Department should establish formal consultative groups for specific projects and for area-based management initiatives.
3. Further developing partnerships with regional and international NGOs. The Department has been successful in establishing long-term, productive partnerships with international conservation NGOs such as Durrell Wildlife Conservation Trust and Fauna & Flora International. These partnerships should be strengthened and supported by formal MoUs. Other similar partnerships should be sought, particularly with organisations specialising in sustainable use and community development.
4. Developing partnerships with major multilateral and bilateral donors based on implementation of the 2015–2025 Strategy. The Department should ensure that major projects from multilateral and bilateral programmes (e.g. GEF) are driven by and aligned with Saint Lucia’s priorities rather than by donor agendas or generalised regional programmes.
5. Developing partnerships in the Caribbean region. The Department has already been reaching out and exchanging knowledge and information with other countries in this region. This should continue, and be further developed, both directly with sister departments in other countries and through regional

organisations and initiatives (e.g. CANARI, IUCN Regional World Commission on Protected Areas, BirdsCaribbean).

e) *Implementing multilateral environmental agreements*

The responsibilities of the Department include meeting obligations with respect to Multilateral Environmental Agreements (MEAs) to which Saint Lucia is a Party; for example, the Convention on Biological Diversity (CBD), the Framework Convention on Climate Change, the United Nations Convention to Combat Desertification (UNCCD), the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and the Cartagena Convention. Senior members of the Department are assigned responsibility to act as focal points for various agreements and to attend and formally represent Saint Lucia at meetings and Conferences of Parties.

The Department needs to improve its capacity to fulfil this role in the following ways:

- Assessing the commitments associated with MEAs and developing strategies for meeting those commitments.
- Ensuring that Saint Lucia benefits appropriately from engagement with MEAs.
- Developing criteria for focal points for MEAs and building the capacity of staff to understand MEAs, work with national authorities to develop positions for implementing MEAs, and formally represent Saint Lucia at Conferences of Parties.

Goal 5.3 Staff capacity development is developed to enable the Strategy to be implemented

Special efforts are required to maintain a skilled, motivated and empowered workforce to implement the 2015–2025 Strategy. Establishing and maintaining the necessary skills and competences is a challenge, largely because of the declining opportunities for advanced study outside Saint Lucia. However, there are many options for building competence apart from short-term training or higher education abroad. Another particular challenge is ‘succession planning’, given that many of the Department’s most experienced staff are due to retire during the next few years.

A comprehensive, competence-based capacity needs self-assessment was completed by 65 staff from all sections and at all levels of the Forestry Department in 2015. The main recommendations from this exercise are shown in **Table 3**.

To start to implement these recommendations the Department should appoint a senior member of staff as ‘Capacity Development Officer’, with responsibility for coordinating all capacity development activities. This person should focus on:

- Identifying competences required by all key personnel and developing learning plans for them.
- Identifying and developing diverse opportunities for access to training and learning.
- Establishing systems of support and mentoring for staff.
- Securing resources for training and learning from the central budget of the Department, through special projects and through incorporating resources for capacity development into all donor-funded projects.

Table 3 Recommendations from the capacity needs assessment for the Forestry Department in 2015

OVERALL RECOMMENDATIONS FOR THE DEPARTMENT		
1. Capacity development should be a major priority for the Forestry Department	1.1	Include the summary results and recommendations from this assessment in the new strategic plan being developed by the Department [<i>this document</i>].
	1.2	Raise the issue of succession planning for the Department with the MSDEST and seek official support for the measures recommended in this assessment.
	1.3	Adopt new innovative approaches to building the capacity of existing staff, maximising use of skills and resources currently available.
2. Support staff to achieve higher level qualifications	2.1	Formally allow time off during work hours for part-time study on approved courses.
	2.2	Provide some support for participation in distance learning and self-study courses.
	2.3	Provide staff with improved access to learning resources, computers and internet connections to support self-directed study.
	2.4	Offer mentoring support by senior staff to staff who take up learning programmes.
	2.5	Seek and advertise opportunities for scholarships.
3. Engage with the University of West Indies (UWI) to support staff development	3.1	Contact the University of the West Indies Open Campus to discuss options for building the capacity of Forest Officers in generic management skills.
	3.2	Contact the University of the West Indies in Barbados to discuss development of high level conservation courses and options for participation.
4. Ensure inclusion of relevant capacity development support in donor funded projects	4.1	Require donors to complement short term training courses with support for participation of participants from the Department in longer term study leading to recognised qualifications.
	4.2	Require donor-assisted projects to invest in sustainable improvements of internal capacity development within the Department.
	4.3	Seek donor support for a specific programme to build capacity and address the succession issue.
5. Develop a new policy and operating procedures for law enforcement	5.1	Work with staff, the police and other relevant authorities to develop a new policy and operating procedures for dealing with illegal activities, to protect the forest and ensure the security of staff.
	5.2	Once the new operating procedures have been agreed, train all staff to apply them.
6. Complete updating of the Forest Officers' Handbook	6.1	The new version of the handbook should include practical guidance on all aspects of the new strategy being adopted by the Department.
	6.2	When the handbook is completed it should be formally launched to the staff of the Department.
7. Improve internal capacity development within the forestry department	7.1	Appoint a senior staff member to act as the capacity development officer as part of his/her duties.
	7.2	Train selected members of the Department as trainers and mentors.
	7.3	Establish a formal programme of internal training and skills sharing in the Department.
8. Collaborate in capacity development with the Saint Lucia National Trust and other organisations	8.1	Work with the National Trust to develop and implement commonly needed capacity development events.
	8.2	Make an agreement with the National Trust to invite each other's staff to join relevant capacity building events, if space is available
9. Develop a register of core competences required in the Department	9.1	Identify the core competences required for key staff positions in the Department.
	9.2	Develop detailed job descriptions for all positions based on the agreed competences.
10. Improve information management in the Department	10.1	Develop an internal system for storing, cataloguing and retrieving documentation and reference materials through a central sever.
	10.2	Train staff to use the new system.

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SPECIFIC CAPACITY DEVELOPMENT RECOMMENDATIONS	
11. Provide training in first aid, safety and security	11.1 Provide and regularly update approved first aid training for all staff.
	11.2 Provide specialist safety and security training for all staff working in the field.
12. Develop a common foundation programme for all staff of the department	12.1 Develop a 2- or 3-day core skills course for all staff of the Department and train a team from the Department to deliver it.
	12.2 Completion of the course should be certificated and documented in the personnel records of staff.
13. Improve the capacity of forest workers	13.1 Identify forest workers with the willingness and potential for advancement. Ensure their inclusion in training programmes and encourage range officers to mentor them.
	13.2 Investigate and address impediments to promotion for forest workers.
	13.3 Make available literacy support for staff who express a need.
14. Build capacity for working with communities	14.1 Develop and deliver a training programme for staff in community outreach.
	14.2 Hold skills-sharing sessions in which trained community outreach workers and those who have attended short courses can pass on their knowledge to other staff.
15. Build capacity for protected area and forest management planning, monitoring and reporting	15.1 Use the participatory development of site management plans as the basis for a course in site management planning for Levels 2 and 3 staff.
16. Maintain and update skills and knowledge of law enforcement and protection	16.1 Develop an internal course on law enforcement skills and procedures based on the law enforcement policy of the Department.
	16.2 Deliver the course to all staff engaged in law enforcement work.
17. Build capacity for applied conservation biology and conservation management	17.1 Work with partners to develop a comprehensive training course in applied biodiversity conservation.
	17.2 Hold skills-sharing sessions in which trained conservation biologists and those who have attended short courses can pass on their knowledge to other staff.
18. Build capacity for sustainable forest use and management	18.1 Identify and support a small group of forest officers to study sustainable forest management.
	18.2 Hold skills-sharing sessions in which trained foresters can pass on their knowledge to other staff.
19. Improve management, leadership and communication skills in the department	19.1 Meet with the UWI Saint Lucia Centre to discuss options for providing training in human resources management, leadership and communication, either through existing courses or a bespoke course.
	19.2 Seek support from the MSDEST for up to five middle managers to undergo formal training.
20. Improve information technology skills	20.1 Provide basic information training for all staff who require it.
	20.2 Seek support for training a group of Forest Officers in use of information technology in conservation.
	20.3 Extend and upgrade information technology resources in the Department.
21. Build skills of the senior management team	21.1 Hold a regular series of thematic learning and skills sharing sessions for senior managers on key topics related to the leadership and administration of the Department.

Goal 5.4 Resources are secured and mobilised to enable the Strategy to be implemented

Implementing the 2015–2025 Strategy will require considerable attention to ensuring that resources (human, material and financial) are secured and efficiently and effectively deployed. Resources are likely to come from a range of sources:

- Use of resources allocated to the Department. The Department should work with the MSDEST to negotiate improved annual budgets based on implementation of key elements of the Strategy.
- Projects implemented by the Department whose project objectives and activities align with the goals of the Strategy.
- Encouraging partners to invest in implementing elements of the Strategy with their own resources. Relevant partners could include other ministries and departments, the Saint Lucia National Trust, and national and international NGOs with relevant programmes.
- Developing new projects for submission to donors to support specific elements of the Strategy.
- Ensuring that goods and services provided by the Department at least recover the full costs of provision:
 - The contracting out of tourism services (see Goal 4.2) should seek to cover the costs of supervision and monitoring and, where commercial operators are in place (e.g. Chassin “Skyride”), generate a net income.
 - Provision of timber and non-timber forest products should at least cover their management costs and ideally yield an income for the Department.
 - The Department should also investigate other income-generating opportunities, for example through the development of forest management plans for private owners.

Goal 5.5 Governance, administration and financial management are effective and efficient

a) Routine administration

The official responsibilities and requirements for finance and administration are clearly defined by national regulations and the procedures of the MSDEST and the Civil Service, and are fulfilled by the administrative staff of the Department. The Department should ensure that all required procedures are well understood and followed by responsible staff.

Those responsible for finance and administration must have a good understanding of the 2015–2025 Strategy and its goals and should be involved in developing budgets and administrative procedures for projects and other activities, to ensure good communication and best deployment and use of resources.

b) Planning and management

To ensure more efficient planning and management, the Department is introducing a new system for internal management and decision making, as shown in **Table 4**, with the inclusion of some additional elements. It is

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essential that all meetings are adequately minuted, that action points and responsibilities are recorded, and that minutes are circulated. For efficiency, all monthly meetings could be held on the same day.

Good governance, participation and partnership are essential to the successful work of the Department, and this requirement will increase as work extends more widely beyond the Forest Reserve. Therefore, the cycles of meetings should ensure that relevant stakeholders are invited, particularly for project management and Range management meetings.

In addition, a multistakeholder Advisory Group should be formed to meet annually to solicit feedback on the performance of the Department, to discuss suggestions for future actions and to ensure good coordination with other stakeholders.

Table 4 Committees and meetings of the Forestry Department

Forum	Frequency	Membership	Purpose
Advisory Group	Annual	CFO (Chair). Senior Officers. Representatives of main partners and stakeholders.	Overview of the work of the Department. Recommendations for future directions and priorities. Coordination with other stakeholders.
Planning Committee	3 months.	CFO (chair). Senior officers. Appointed minutes taker.	Strategic direction of the work of the Department Review of all activities for from the previous quarter. Decision on priorities for the next quarter. Review of work plans. Meetings minuted and minutes circulated.
Operational Committee	1 month.	ACFO (Chair). All work team leaders. All range officers. All project managers. Invited partners/stakeholders as required. Appointed minutes taker.	Brief review of activities from the last month. Brief presentations on planned activities for the next month. Coordination and integration of work plans, activities and resources. Meetings minuted and minutes circulated.
Team meeting (Sections, range offices and projects)	1 month (or as required)	Work team leader and team; or Range officer and team; or Project manager and team. Invited partners/stakeholders as required. In particular Range team meetings should include relevant stakeholders. Appointed minutes taker.	Brief review of activities of the section/range/project from the last month. Brief presentations on planned activities for the next month. Identification of issues affecting management. Preparation of work plans (quarterly). Meetings minuted and minutes circulated.
Project steering committee	Normally 3 months.	Project manager (chair). Project team members. Partners/stakeholders. Appointed minutes taker.	To review and plan specific project activities.
Ad hoc coordination meetings	As required	As required.	To coordinate special activities. To resolve specific issues.

c) Information management

A major impediment to effective and efficient management has been internal communication within the Department. Important information and documentation are not always readily available and there is no central system—digital or physical—for managing documentation and information related to operational work. In some cases, not all affected staff are aware of important decisions, projects and plans, and work plans are not well integrated.

To improve information management and availability, the Department should as a priority establish a basic central filing and information management system, along with protocols for its use. Ideally this would make use of a central computer server, but alternatively an online server (e.g. Google Docs) could be used.

d) Monitoring and reporting

The Department is currently not adequately documenting and reporting on its activities and achievements, and therefore not demonstrating its impact on forest management and biodiversity conservation in Saint Lucia.

As a priority, the Department should develop a standard set of performance and impact indicators that can be used to demonstrate the success and effectiveness of its work. These indicators should then be applied to all the work of the Department, including the projects that it implements, and to its reports to the MSDEST. By monitoring and reporting in this way, the Department will be able to provide quantified evidence of:

- Status of environmental assets.
- Status of threats.
- Inputs (in terms of effort and resources).
- Results of its activities.
- Impacts of its activities.

e) Long term planning

The current strategy should be revised after 5 years and a new implementation plan developed.

4 Implementation Plan

The following tables specify the main actions required for implementing the 2015–2025 Strategy over its first five years. The tables also indicate the main implementation partners and potential sources of funding for each action.

Progress in implementing the plan should be formally reviewed after five years and a new implementation plan prepared for the next five years.

Saint Lucia Forests and Lands Resources Department: Strategy 2015–2025

Vision: ‘A healthy natural environment for a healthy and productive nation’.

Mission: ‘Collaboration and partnership for the preservation and sustainable use of forests, nature and the benefits they provide’

Strategy 1. Maintaining healthy ecosystems and thriving species

Management policy								
The Forestry Department will work towards ensuring the conservation of the species and natural communities of Saint Lucia and the integrity of the ecosystems that provide critical services for the country.								
Goal	Action	Time Scale					Potential Partners	Funding source
		1	2	3	4	5		
Goal 1.1 Viability is enhanced of populations of threatened, endemic species and sub-species, inside and outside the Forest Reserve.	1.1.1 Prepare a detailed plan for biodiversity conservation, based on this strategy and on the 2009 report ‘ <i>Biodiversity Assessment of Saint Lucia’s Forests, With Management Recommendations</i> ’.						FFI Durrell SLNT	GEF VI project GEF Small Grant Programme INGO partners Donor funds
	1.1.2 Complete action plans for all priority species that do not yet have them.						Durrell FFI SLNT	INGO partners ACTP (Association for Conservation of Tropical Parrots)
	1.1.3 Implement and review annually species actions plans.						Durrell FFI SLNT	INGO partners ACTP
	1.1.4 Organise surveys to determine the status of Semper’s warbler.						RSPB (UK)	RSPB (UK)
Goal 1.2 Every natural habitat type in Saint Lucia is represented in connected areas under legally based and effective means for conservation management.	1.2.1 Contribute to a plan for the incremental implementation of the protected areas system plan.						MSDEST Biodiversity Office, Protected Areas Office SLNT	Internal resources GEF EU/IUCN BIOPAMA Project

Goal	Action	Time Scale					Potential Partners	Funding source
		1	2	3	4	5		
	1.2.2	Compile and implement management plans for all offshore islands and other important conservation sites.					Durrell FFI SLNT	INGO partners Incorporated into relevant projects
	1.2.3	Legally establish ‘managed landscape area’ (or equivalent) as a new designation of conservation area (IUCN Category V).					MSDEST	Internal resources. Iyanola Project
	1.2.4	Develop regulations for the Wildlife Act and review and revise regulations for the Forest Act to allow for new types of protected area.					MSDEST	Internal resources. Iyanola Project
	1.2.5	Continually identify and assess further areas that can be designated as key biodiversity areas.					Durrell FFI SLNT	Various.
	1.2.6	Develop regulations, methodologies and guidelines for Environmental Impact Assessment (EIA).					MSDEST	To be determined
	Goal 1.3 Innovative, collaborative approaches to conserving and restoring flora, fauna and habitats on private and public lands are identified, tested and implemented.	1.3.1	Develop and test management agreements with private owners within the Iyanola project.					Iyanola Project partners
1.3.2		Support and advise the project for integrated ridge to reef management in the Canaries Watershed.					Canaries watershed project	GEF SGP
1.3.3		Develop and implement a collaborative project for land stabilisation in the Soufriere Watershed.					MSDEST	Disaster Vulnerability Reduction Project (DVRP)
1.3.4		Develop a new GEF project for integrated management of the South East part of Saint Lucia (based on the Iyanola Project).					MSDEST Biodiversity Office SLNT	MSDEST GEF VI
Goal 1.4 Impacts of alien invasive species on priority species, habitats and ecosystems are eliminated or substantially reduced.	1.4.1	Prepare draft regulations and laws for implementing the National Alien Invasive Species Strategy.					MSDEST Biodiversity Office	Internal resources MSDEST
	1.4.2	Develop a project to support implementation and cross sectoral adoption of the Alien Invasive Species Strategy.					MSDEST Biodiversity Office	To be confirmed
	1.4.3	Eradicate alien invasive species and maintain biosecurity on all offshore islands.					Durrell FFI SLNT	INGO partners Incorporated into relevant projects
	1.4.4	Establish a mainland island free of invasive species.					Durrell FFI SLNT	INGO partners Incorporated into relevant projects

Goal	Action	Time Scale					Potential Partners	Funding source
		1	2	3	4	5		
Goal 1.5 Measures are in place for monitoring, documenting and reporting on the status of species, habitats and ecosystems and on the impact and effectiveness of management measures.	1.5.1	Develop a set of standard result and impact indicators for all the conservation work of the Forestry Department.					Durrell FFI	Internal resources
	1.5.2	Identify specific indicators and monitoring regimes for the status of all priority species and habitats.					Durrell FFI	Internal resources.
	1.5.3	Ensure that monitoring indicators and plans are included in all species action plans and projects. See Goal 1.1						Internal resources
	1.5.4	Ensure that monitoring indicators and plans are included in all site and area management plans and projects.						Internal resources
	1.5.5	Develop a list of priority topics for research work and encourage national and international collaborators to conduct research activities based on national priorities.					Durrell FFI	Various

Strategy 2. Ensuring sustainable flows of products that support both local economies and biodiversity conservation

Management policy								
The Forestry Department will work with partners to enable regulated and sustainable use of defined forest areas in support of local livelihoods and economies, while maintaining the biodiversity, recreational and aesthetic values of the forest, and the environmental services it provides.								
Goal	Action	Time Scale					Potential Partners	Funding source
		1	2	3	4	5		
Goal 2.1 Forest management in Saint Lucia is aligned with international standards for Sustainable Forest Management.	2.1.1	Conduct a study on the alignment of forest management in Saint Lucia with the criteria and indicators of the Montreal Process of the United Nations Forum on Forests (UNFF)					UNFF, Economic and Social Council of the United Nations)	Facilitative process of the United Nations Forum on Forests (UNFF)
	2.1.2	Prepare a programme for formal adoption of Sustainable Forest Management in Saint Lucia (as defined by the UNFF).					UNFF	UNFF
Goal 2.2 Timber production in the Forest Reserve is well regulated, sustainable and has minimal ecological and environmental impact.	2.2.1	Establish a moratorium on harvesting of timber from the Natural Forest in the Forest Reserve (until the new regulations and guidance are agreed).					MSDEST	Internal resources
	2.2.2	Conduct a study on the viability of resuming selective tree harvesting in the natural forest and establish clear criteria and procedures for allowing and regulating cultural use.					Local communities	Internal resources

Goal	Action	Time Scale					Potential Partners	Funding source
		1	2	3	4	5		
	2.2.3 Assess feasibility for resumption of production in the plantation forest and prepare a forest management plan for systematic management of the plantations.						Internal	Internal resources
	2.2.4 Resume harvesting if feasible and acceptable, according to agreed plans and regulations.						Harvesting contractors Timber buyers Local communities	Self-sustaining
Goal 2.3 Private forest owners have access to support and incentives for the development and approval of sustainable forest management and expansion plans.	2.3.1 Develop and offer a service for preparing forest management plans for owners.						Internal	Internal resources. Cost recovery for large owners
	2.3.2 Provide an extension advice service for forest owners.						Internal	Internal resources
	2.3.3 Identify and mobilise a range of incentives for owners to adopt and implement management plans.						Agriculture Dept. Watershed and agricultural development projects	Incentives may be available through the Agricultural Incentives act or through tax concessions
	2.3.4 Ensure provision of suitable planting material for afforestation/reforestation.						Local community nurseries	Internal resources. DVRP
Goal 2.4 Sustainable non-timber forest product (NTFP) projects are delivering benefits to local communities and the wider economy.	2.4.1 Continue and extend the current project on sustainable Lansan harvesting: <ul style="list-style-type: none"> Pilot harvesting in trial plots with registered tappers. Establishing registration of Lansan as Saint Lucian frankincense (protected geographical indication). Market development. 						FFI (Lansan Project)	FFI Self-sustaining
	2.4.2 Encourage and support initiatives for sustainable production of charcoal. <ul style="list-style-type: none"> Conduct study on demand and feasibility. Upscale current Saint. Lucia Agricultural Forum for Youth (SLAFY) charcoal project to a GEF VI project. Investigate charcoal production using invasive species. 					Saint Lucia Agricultural Forum for Youth (SLAFY) Charcoal producers Community groups	GEF UNDP FAO Inter-American Institute for Cooperation on Agriculture (IICA)	
	2.4.3 Identify means for sustainable production of round wood poles using local species and for eliminating illegal cutting. Activities include: <ul style="list-style-type: none"> Demand and use survey. Trial plots of fast growing species. Trial treatments to increase durability of poles. 						Community groups	To be determined GEF SGP

Goal	Action	Time Scale					Potential Partners	Funding source
		1	2	3	4	5		
	2.4.4 Establish a project for sustainable production of Christmas trees using the native pencil cedar.						Community groups Local experts	FFI
	2.4.5 Improve control and regulation of movement of cut timber and poles.						MSDEST Saint Lucia Police	Own resources
	2.4.6 Work with local groups to promote and enable sustainable use of other products (e.g. Latanyé, Mauby, cut flowers, mushrooms, essential oils).						Community groups Local businesses	GEF CARICOM projects
Goal 2.5 Illegal drug cultivation in the Forest Reserve is controlled and reduced.	2.5.1 Establish a dialogue with the cultivators through an independent third party mediator.						Local communities Independent mediation service	Green Climate Fund of the Caribbean Development Bank Caribbean regional programme of the United Nations Office on Drugs and Crime (UNODC)
	2.5.2 Focus alternative livelihood projects on illegal cultivators.						Local communities Various donors and projects	Other projects under programmes 2 and 4
	2.5.3 Strengthen measures for detecting and stopping illegal cultivation and sanctions for illegal cultivation (forest destruction)						Saint Lucia Police MSDEST	Caribbean Regional programme of the UNODC
	2.5.4 Develop clear guidance and measures to ensure safety and security of FD staff operating in cultivations areas.						Saint Lucia Police MSDEST	Caribbean Regional programme of the UNODC

Strategy 3. Protecting water supplies, soils and coastal zones and ensuring resilience to climate change

Management policy								
The Department will work in partnership with other stakeholders to establish integrated programmes that sustain and enhance the vital regulating services provided by Saint Lucia’s forests and other ecosystems. The Department will also work to ensure that Saint Lucia participates in and benefits from global initiatives to address climate change and its impacts								
Goal	Action	Time Scale					Potential Partners	Funding source
		1	2	3	4	5		
Goal 3.1 The Department is actively engaged in global and regional initiatives to address climate change and its impacts.	3.1.1 Commission a major study to: <ul style="list-style-type: none"> i. Review all previous studies and findings and synthesise latest knowledge in the context of Saint Lucia ii. Summarise main likely impacts to Saint Lucia iii. Estimate the cost to Saint Lucia of climate change impacts iv. Outline main options for avoidance, mitigation, adaptation v. Prepare a report and summary factsheet. 						All environmental and land use agencies	Green Climate Fund Forest Investment Programme
	3.1.2 Adapt current and develop new projects and management measures based on the findings from 3.1.1.						Various	Various
	3.1.3 Establish measures to monitor the potential impacts of climate change on forests and wildlife, e.g.: <ul style="list-style-type: none"> • More detailed monitoring of permanent forest plots • Impacts on threatened species (e.g. Saint Lucia parrot). 						Various	Various
	3.1.4 Increase awareness among FD staff and decision makers of the impacts of climate change and the importance of forests in increasing resilience and in adaptation mitigation.						Various	Various
	3.1.5 Establish REDD+ in Saint Lucia: <ul style="list-style-type: none"> • Conduct a scoping study • Develop a full REDD+ project. 						MSDEST Other Ministries Local communities	Various
Goal 3.2 Management strategies and plans are in place for all priority watersheds.	3.2.1 Prepare a management plan for the Bois d’Orange watershed.						Government agencies Local communities	EU Global Climate Change Alliance Organisation of Eastern Caribbean States (OECS)
	3.2.2. Participate actively in the project for managing the Vieux Fort watershed (in particular for reforestation of the upper watershed).						Water Resources Management Department (WRMD)	Caribbean Development Bank

Goal	Action	Time Scale					Potential Partners	Funding source	
		1	2	3	4	5			
	3.2.3 Contribute to management programmes for the Fond D'Or watershed.						Government agencies Local communities	GEF IWeco (Integrating Water, Land & Ecosystems Management in Caribbean SIDS)	
	3.2.4 Contribute to management programmes for the Roseau watersheds.						Government agencies Local communities	GEF SGP Canaries Ridge to Reef Project Caribbean Development Bank	
	3.2.5 Ensure that plans are developed for the Marquee and Grande Anse Louvet watersheds under the Iyanola Project.						Iyanola Project partners	GEF Iyanola Project	
	3.2.6 Include the Dennerly and other relevant watersheds in the new project for management for SE Saint Lucia.							GEF	
	3.2.7 Seek resources for management plans for other watersheds (Cul de Sac, Doree Playe, Belambouche).							To be determined	
	3.2.8 Contribute to the development of guidelines for development of watershed management plans.						WRMD	DVRP	
	3.2.9 Commission a study of the economic contribution of forests to the economy of Saint Lucia.							To be determined	
	Goal 3.3 Effective measures are in place for forest protection, restoration and management.	3.3.1 Prepare practical guidelines for forest ecosystem management in Saint Lucia for landowners, other agencies, and projects.						Relevant agencies and organisations Forest owners	To be determined
		3.3.2 Train and update FD staff on the latest techniques, technologies and approaches for forest establishment, management and restoration.						Expert trainers	To be determined Integrated into existing and future projects.
3.3.3 Train and update FD staff on emergency response to major disasters (landslips, floods, fire etc.).							Expert trainers	Internal. Integrated into existing and future projects	
3.3.4 Initiate programmes for reforestation/forest restoration in vulnerable locations (along primary watercourses, upper area of water catchments and vulnerable slopes, including farmlands).								To be determined Integrated into existing and future projects.	
3.3.5 Establish a programme to research, test and promote agroforestry on farmlands.							Ministry of Agriculture Farmers	To be determined	
3.3.6 Formulate a programme for maintaining tree and forest cover and forest corridors in urban and developed areas.								To be determined	

Goal	Action	Time Scale					Potential Partners	Funding source
		1	2	3	4	5		
	3.3.7 Establish and maintain nurseries to ensure an adequate supply of suitable planting material.						Local communities	Internal Various projects
Goal 3.4 Coastal wetlands and mangroves are under effective protection and managed sustainably.	3.4.1 Complete survey and mapping of the wetlands of Saint Lucia.						TNC ECMMAN Project SLNT	TNC SLNT
	3.4.2 Identify priority sites for wetland management/restoration and prepare management plans and projects.						Fisheries Department TNC SLNT	TNC (ECMMAN project) Others to be determined
	3.4.3 Contribute to the development and implementation of a management plan by SLNT for the Mankote mangrove.						SLNT	GEF SGP
	3.4.4 Contribute to the revision of the Coastal Zone management plan for Saint Lucia to take into consideration new information and understandings.						MSDEST	To be determined
	3.4.5 Clarify jurisdiction and management responsibility affecting coastal wetlands.						MSDEST Fisheries Department Crown Lands	Internal

Strategy 4. Promoting awareness, visitation, and cultural enrichment

Management policy

The Department should ensure that all stakeholders are aware of its work and the benefits that it brings to Saint Lucia. This is necessary to improve support for its work and ensure cooperation with its partners. Furthermore, the Forest Reserve is an excellent venue for improving awareness among residents and visitors. The Department should make areas of the Forest Reserve available for informal non-motorised access and nature-based recreation and provide basic access facilities (entrance points and trails). Provision of visitor services using these facilities should be contracted out to local communities and the private sector, benefitting local communities and the wider economy, and providing an income to the Department to support monitoring and maintenance.

Goal	Action	Time Scale					Potential Partners	Funding source
		1	2	3	4	5		
Goal 4.1 Awareness is raised across all stakeholder groups about biodiversity, the Forest Reserve and other natural areas	4.1.1 Develop a range of specific packages for Saint Lucians to visit and learn about the forests and their wildlife.						Ministry of Tourism Heritage and Creative Industries (MTHCI)	To be determined
	4.1.2 Develop the conservation and education centre at Union as a destination for tourists, school and community groups.						Ministry of Tourism NGO Partners	ACTP Others to be determined
	4.1.3 Work with the tourist trail concessionaires to provide affordable opportunities for local people to visit (e.g. during the low tourist season).						Concessionaires Local communities	OECS
	4.1.4 Investigate holding summer camps for children in the Forest Reserve.						Community groups. Local NGOs	To be determined
	4.1.5 Update and extend the Forestry Department’s website and establish a social media presence.						MSDEST	To be determined
	4.1.6 Develop and implement a set of issue-based awareness programmes targeted at key stakeholder groups to generate understanding and support of the value of nature and the work of the Department.						MSDEST	To be determined
	4.1.7 Ensure regular awareness and visibility of Forestry Department activities through the media, online and in tourism promotions.						MSDEST	Internal
	4.1.8 Ensure that all projects and action plans have a communication, education and public awareness component.						All partners	Integrated into all funded project

Goal	Action	Time Scale					Potential Partners	Funding source
		1	2	3	4	5		
Goal 4.2 The operation of the trail systems is contracted out to community and/or private sector enterprises.	4.2.1 Engage a consultant to propose a system and timetable for contracting out trail operation.						MSDEST Communities Private sector	FFI
	4.2.2 Establish the legal and administrative system and procedures for contracting out the management of the trails.						MSDEST Contractors	Internal
	4.2.3 Prepare up to date maps of all the forest trails.							Internal
	4.2.4 Pilot the contracting out of trail operation in the Soufriere area.						MSDEST Contractors	Internal
	4.2.5 Extend the contracting process to other trails.						MSDEST Contractors	
Goal 4.3 Tourism activities in the Forest Reserve are monitored and regulated.	4.3.1 Establish an updated set of regulations for tourism and visitation in the Forest Reserve.						MSDEST MTHCI	Internal
	4.3.2 Appoint an officer responsible for tourism management and administration of concession contracts.						MSDEST	Internal
	4.3.3 Train range officers and staff to monitor and supervise concessions						MTHCI	Internal
	4.3.4 Monitor compliance with terms of trail operation contracts and the impacts of tourism on the forest.						Concessionaires	OECS
	4.3.5 Ensure regular guidance, support for and contact with concessionaires.						Concessionaires	OECS
Goal 4.4 Protection of cultural heritage in and around the Forest Reserve, protected areas and project areas.	4.4.1 Facilitate a survey of cultural heritage in the Forest Reserve and other protected areas.						MTHCI SLNT National experts	To be determined
	4.4.2 Facilitate a survey of cultural knowledge related to forests and natural resources.						MTHCI SLNT National experts/	To be determined
	4.4.3 Incorporate the conservation of tangible and intangible cultural heritage in relevant projects.						MTHCI SLNT	To be determined

Strategy 5. Organisational strengthening and management

Management policy								
The Department should review and strengthen its organisational structure and working practices and build the capacity of its personnel to implement strategies 1–4.								
Goal	Action	Time Scale					Potential Partners	Funding source
		1	2	3	4	5		
Goal 5.1 The Department’s operational functions and programmes are revised in line with the Strategy.	5.1.1 Establish units and teams for: a) <i>Site management, protection and monitoring</i> b) <i>Watershed management</i> c) <i>Wildlife and habitat management</i> d) <i>Enforcement, observance of the law and emergency response</i> e) <i>Green enterprise and partnerships (including tourism)</i> f) <i>Awareness, education and public relations</i> g) <i>Plant propagation and herbarium management.</i>							Internal
	5.1.2 Prepare detailed terms of reference for each unit and for all key positions.							Internal
	5.1.3 Identify, orientate and train leaders and personnel for each unit.							Internal
Goal 5.2 The Department’s management, planning and administrative functions are revised in line with the present strategy.	5.2.1 Establish units and teams (combining management and technical staff) for a) <i>Planning, project development and management</i> b) <i>Forest range (watershed) administration and management (range/watershed offices)</i> c) <i>Monitoring, research, information and data management</i> d) <i>Partnership and collaboration</i> e) <i>Formal international cooperation.</i>							Internal
	5.2.2 Prepare detailed terms of reference for each unit and for all key positions.							Internal
	5.2.3 Identify, orientate and train leaders and personnel for each unit.							Internal
	5.2.4 Realign Forest Range boundaries are realigned to coincide with watersheds.							Internal

Goal	Action	Time Scale					Potential Partners	Funding source
		1	2	3	4	5		
Goal 5.3 Staff capacity development is developed to enable the Strategy to be implemented	5.3.1 Appoint one senior member of staff as ‘Capacity Development Officer’, with responsibility for coordinating all capacity development activities.							Internal
	5.3.2 Develop a register of core competences required in for all key positions in the Department and incorporate these into job descriptions.						Capacity development specialist	Internal FFI
	5.3.3 Develop individual capacity development plans for all key personnel.						Capacity development specialist	Internal FFI
	5.3.4 Develop and deliver a foundation course and training package for all Forestry Department staff.						Capacity development specialist	Internal FFI
	5.3.5. Establish a range of collaborations to provide staff with access to opportunities for training and learning. <ul style="list-style-type: none"> • Participation in short courses. • Access to flexible in service training and qualifications through local colleges. • Access to online and distance learning. • Access to scholarships to support international study for higher degrees. 						University of the West Indies Agricultural College SLNT INGOs Projects	Various
	5.3.6 Incorporate resources for capacity development (based on the needs analysis) into all donor funded projects.						All donors/partners	All donors/partners
	5.3.7 Develop a system of mentoring for new recruits and less experienced personnel to enable them to advance in the Department.						Capacity development specialist	Internal FFI
	5.3.8 Include a basic programme of capacity development in annual work plans and budgets of the Department.						MSDEST	Internal
Goal 5.4 Resources are secured and mobilised to enable the Strategy to be implemented	5.4.1 Work with the MSDEST to secure a core budget to enable implementation of key elements of the Strategy.						MSDEST	Internal
	5.4.2 Ensure that all donor and partner funded projects include activities that directly support implementation of relevant elements of the Strategy.						All donors and partners	All donors and partners
	5.4.3 Prioritise unfunded elements of the Strategy in identification and design of future projects.						All donors and partners	All donors and partners

Goal	Action	Time Scale					Potential Partners	Funding source
		1	2	3	4	5		
	5.4.4 Encourage other agencies, projects and partners to include elements of the Strategy in their projects.						Other agencies SLNT	Various
	5.4.5 Ensure cost recovery in provision of goods and services provided/contracted out by the Department.						Tourism service providers Resource users	Tourism service providers Resource users
Goal 5.5 Governance, administration and financial management are effective and efficient	5.5.1 Ensure compliance with official procedures organisational, financial and human resource management.						MSDEST	Internal
	5.5.2 Establish a regular cycle of minuted meetings to endure effective planning, implementation and review of operational activities.						MSDEST	Internal
	5.5.3 Establish a multistakeholder advisory group for the Department.						MSDEST	Internal
	5.5.4 Ensure consultation with and participation of stakeholders in planning and decision making processes.						MSDEST Major stakeholders All project partners	Internal
	5.5.5 Establish an internal system of information storage and management and ensure that all staff make use of it.						Information management specialist	To be determined
	5.5.6 Review the Strategy and prepare a new implementation plan after 5 years.						MSDEST Major stakeholders All project partners	Internal

5 Supporting Documents

In support of this strategy and in the course of its implementation, a series of more detailed studies and plans will be developed. The following documents have already been prepared or are in preparation.

Tourism

Package in support of contracting out of tourism services on trails in the Forestry Reserve, compiled by James Crockett (Responsible Tourism Specialist) in 2015.

- Ecotourism Concessions Consultancy Final Report, June 2015.
- Concessions Contracting Process Outline
- Tourism Opportunities for Trails Summary.
- Forest Trail Concession EOI Advert Template.
- Hiking Trail Concession Application.
- Hiking Trail Concession Evaluation Matrix.
- Hiking Trail Concession Evaluation Template.
- Hiking Trail Concession Guidelines for Applicants.
- Hiking Trails Concessionaire Terms and Conditions.
- End User Code of Conduct.

Capacity development

Appleton, M.R. (2015) *Assessment of Capacity Development Needs of Conservation Staff in Saint Lucia*. IUCN Biodiversity and Protected Areas Management Programme, IUCN, Gland, Switzerland.