ST. VINCENT AND THE GRENADINES

SIXTH NATIONAL REPORT

TO THE CONVENTION ON BIOLOGICAL DIVERSITY

This report has been prepared in fulfillment of St. Vincent and the Grenadines' reporting obligations as a Party to the Convention on Biological Diversity. It provides a review of progress in the implementation of the Strategic Plan for Biodiversity 2011-2020 and towards the Aichi Biodiversity Targets.

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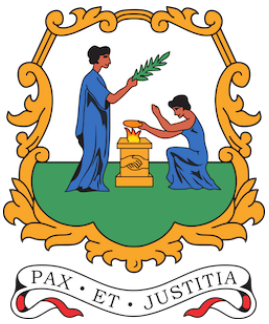

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ACRONYMS AND ABBREVIATIONS

6NR	Sixth National Report to the Convention on Biological Diversity	**GNMPA**	Grenadines Network of Marine Protected Areas
ABS	Access and Benefit-Sharing	**IICA**	Inter-American Institute for Cooperation on Agriculture
ABT	Aichi Biodiversity Target	**IWMP**	Integrated Watershed Management Plan
BIOPAMA	Biodiversity and Protected Areas Management	**IUCN**	International Union for Conservation of Nature
BIP	Biodiversity Indicators Partnership	**IUU**	Illegal, unreported, and unregulated
CBD	Convention on Biological Diversity	**KBA**	Key biodiversity area
CBO	Community-based organization	**LEK**	Local ecological knowledge
CEPA	Communications, education, and public awareness	**MPA**	Marine Protected Area
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora	**NAEP**	National Avian Education Programme
CWSA	Central Water and Sewerage Authority	**NBSAP**	National Biodiversity Strategy and Action Plan
EC$	Eastern Caribbean dollars	**NDC**	Statement of Nationally Determined Contributions
ECMANN	Eastern Caribbean Marine Managed Areas Network	**NESDP**	National Economic and Social Development Plan
EIA	Environmental impact assessment	**NGO**	Non-governmental organization
EPIC	Environmental Protection in the Caribbean	**NOP**	National Ocean Policy
FAO	Food and Agriculture Organization of the United Nations	**OECS**	Organisation of Eastern Caribbean States
GEF	Global Environment Facility	**PIF**	Project identification form

SCIENCE	Science Initiative for Environmental Conservation and Education	**SVGPF**	St. Vincent and the Grenadines Preservation Fund
SCMCA	South Coast Marine Conservation Area	**TCMP**	Tobago Cays Marine Park
SVG	St. Vincent and the Grenadines	**UNFCCC**	United Nations Framework Convention on Climate Change
SVGCF	St. Vincent and the Grenadines Conservation Fund		

EXECUTIVE SUMMARY

This sixth national report (6NR) has been prepared in fulfillment of St. Vincent and the Grenadines' obligations as a Party to the Convention on Biological Diversity (CBD), and is a description and assessment of the country's implementation of the CBD and the global Strategic Plan for Biodiversity 2011-2020.

Parties' 6NRs to the CBD are of particular significance, as they will inform the final review of the Strategic Plan for Biodiversity and the development of a new post-2020 international biodiversity framework.

The 6NR was prepared using a participatory process that engaged and involved over 40 organizations, including government agencies, non-governmental organizations (NGOs), community-based organizations (CBOs), and the private sector.

Key Findings

Some of St. Vincent and the Grenadines' biodiversity success stories are:

- Mainstreaming biodiversity values into national development strategy via the National Economic and Social Development Plan 2013-2025 (NESDP);
- Drafting of new policies to support the sustainable management and use of ocean biodiversity and living marine resources;
- The establishment and operation of innovative new funding mechanisms for biodiversity conservation and management, such as the St. Vincent and the Grenadines Preservation Fund (SVGPF);
- The ongoing restoration of Ashton Lagoon, the country's largest remaining mangrove ecosystem and a globally recognized key biodiversity area (KBA).

Areas that require additional resources, capacity, and attention include:

- Integrating biodiversity and ecosystem-based approaches into national climate change adaptation and resilience strategies;
- Taking action to reduce deforestation and enhance climate-change mitigation via land-use, land-use change and forestry activities;
- Managing and controlling introduced and invasive species and their ecological and economic impacts, including impacts on agriculture;
- Improving the availability, sharing, and application of scientific data and promoting science-based decision making;

- Implementing biodiversity-friendly incentives/subsidies and reforming/removing biodiversity-harmful incentive/subsidies, with consideration of how incentive reform could increase financing for biodiversity.

Further findings are summarized in the below 6NR synopsis table. St. Vincent and the Grenadines' progress is evaluated with reference to the 20 Aichi Biodiversity Targets (ABTs). In the Strategic Plan for Biodiversity, these Targets are clustered under five strategic goals:

A. Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society;

B. Reduce the direct pressures on biodiversity and promote sustainable use;

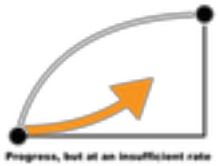
C. improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity;

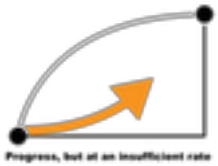
D. Enhance the benefits to all from biodiversity and ecosystem services;

E. Enhance implementation through participatory planning, knowledge management and capacity-building.

In St. Vincent and the Grenadines, the greatest degree of progress has been observed towards Strategic Goal A, addressing the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society. The highlight in this regard is the extensive incorporation of biodiversity-related objectives in the NESDP and other national polices (some of which are still in draft). The NESDP includes objectives relevant to 15 of the 20 Aichi Biodiversity Targets, indicating policy recognition of the value of biodiversity for St. Vincent and the Grenadines' sustainable development. The inclusion of biodiversity values in the NESDP provides a basis for mobilizing and leveraging resources to support initiatives for biodiversity conservation, management, and sustainable use.

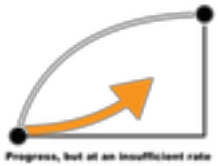
Least progress has been made in relation to Strategic Goal E, enhancing implementation through participatory planning, knowledge management, and capacity-building. This goal relates to the institutional frameworks for biodiversity management, and the lack of progress in this area reflects the technical and institutional capacity challenges that characterize small island developing states such as St. Vincent and the Grenadines. Actions in relation to Strategic Goal E (particularly in the areas of sustainable financing and knowledge management) are likely to have substantial knock-on effects for progress toward the other four strategic goals.

Biodiversity Target	Progress towards Target	Measures Taken	Effectiveness of Measures	Challenges and Needs
1: Awareness increased		▪ iAmBiodiversity campaign ▪ Outreach by government departments and non-governmental organisations, including via social media ▪ Biodiversity education programmes implemented by the Science Initiative for Environmental Conservation and Education	Partially effective	<u>Challenges</u> ▪ Lack of data with which to assess baseline awareness and knowledge of biodiversity and therefore to design effective awareness-raising campaigns <u>Needs</u> ▪ A comprehensive national biodiversity communications strategy ▪ Training in biodiversity communication, education and public awareness, including digital and social media strategy

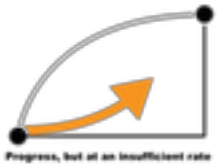
2: Biodiversity values integrated		▪ 75% of the Aichi Biodiversity Targets reflect in NESDP ▪ Drafting of new biodiversity-related policies, e.g. National Ocean Policy, Fisheries and Aquaculture Policy ▪ Economic valuations of coastal and marine ecosystems	Partially effective	<u>Challenges</u> ▪ Lack of national biodiversity-sensitive policies in key sectors ▪ Inadequate monitoring, evaluation, and reporting on implementation of existing policies ▪ Lack of capacity for natural resource valuations and environmental accounting <u>Needs</u> ▪ Updated sectoral policies ▪ Monitoring and evaluation frameworks ▪ National environmental statistics system

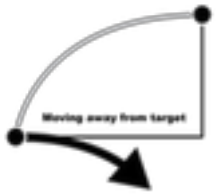
3: Incentives reformed		▪ Establishment of biodiversity-positive included as a goal in the NESDP and Fisheries and Aquaculture Policy	Unknown	<u>Challenges</u> ▪ Incentives and subsidies are generally designed to promote economic growth, rather than biodiversity conservation <u>Needs</u> ▪ Guidance materials, including best practice examples, on implementation of biodiversity-positive incentives ▪ Technical support to identify biodiversity-harmful incentives and opportunities for biodiversity-positive incentives ▪ Capacity building for strategic environmental assessment
4: Sustainable consumption and production		▪ Actions to promote health diets based on local foods	Partially effective	<u>Challenges</u> ▪ Absence of national criteria for sustainability in key productive sector <u>Needs</u> ▪ Definitions of sustainability/ safe ecological limits for productive sectors ▪ Technical support to develop criteria and indicators for sustainable production

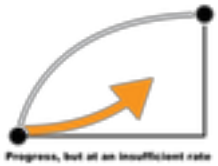
5: Habitat loss halved or reduced		▪ Tree-planting and reforestation ▪ Coral restoration	Unknown	<u>Challenges</u> ▪ Lack of reliable baseline data on habitat status and habitat loss, including the lack of an up-to-date forest survey <u>Needs</u> ▪ Technical support to identify, assess, and digitally map key natural habitats (including forests) and their condition ▪ Technical assistance to identify and evaluate key drivers and pressures causing ecosystem loss, degradation, and fragmentation

6: Sustainable management of living marine resources		▪ Drafting and adoption of relevant policies, e.g. National Ocean Policy, Fisheries and Aquaculture Policy ▪ Fisheries management measures in legislation ▪ Prohibition on the taking of sea turtles ▪ Establishment of a National Fisherfolk Organisation and corresponding improvements in participatory resource management	Partially effective	<u>Challenges</u> ▪ Large marine territory makes thorough surveillance and enforcement difficult ▪ Shortage of staff with necessary technical specialties ▪ Dated fisheries legislation <u>Needs</u> ▪ Increasing the staff complement of the Fisheries Division to include ecologists, marine biologists, fisheries scientists, data specialists ▪ Technical support to carry out a national fisheries census ▪ Revision of the Fisheries Act and regulations ▪ Capacity-building for marine spatial planning and use of geographic information systems for fisheries ▪ Capacity-building for fisherfolk

7: Sustainable agriculture, aquaculture, and forestry		▪ Inclusion of agriculture-related goals in the NESDP ▪ Cooperation with international and regional agriculture organisations ▪ Development of a proposal for a Global Environment Facility project *Conserving biodiversity and reducing land degradation using a Ridge-to-Reef approach* ▪ Richmond Vale Academy Model Garden project	Partially effective	<u>Challenges</u> ▪ Lack of reliable documented information about patterns and trends in agricultural practices in SVG ▪ Lack of national criteria and indicators for sustainable in agriculture <u>Needs</u> ▪ An updated national farm census ▪ Strengthening agricultural extension services ▪ Enhance technical capacity in the Ministry of Agriculture, including in areas related to botany, microbiology, plant genetics, livestock management ▪ Regular training and capacity-building for farmers, e.g. via community-based field schools ▪ Development of biodiversity-related indicators for sustainable agriculture

8: Pollution reduced		▪ Expanded polystyrene ban ▪ Suspension on importation and sale of glyphosate-containing pesticides ▪ Ban on phosphate detergents ▪ Disposal of obsolete pesticides ▪ Draft chemicals management policy and legislation	Partially effective	<u>Challenges</u> ▪ Poor enforcement of anti-pollution laws ▪ Lack of data on pollution levels ▪ Inadequate waste management facilities <u>Needs</u> ▪ Technical support to identify priority sources of pollution ▪ Implementation of effluent standards ▪ Development of routine pollution monitoring programmes ▪ Training (including for police force and judiciary) in environmental surveillance, enforcement, and prosecution ▪ Port reception facilities for waste from vessels

9: Invasive alien species (IAS) prevented and controlled		▪ Participation in regional Global Environment Facility project *Preventing Costs of Invasive Alien Species in Barbados and the OECS Countries* ▪ National lionfish action plan	Unknown	<u>Challenges</u> ▪ Absence of national laws, policies, and action plans to strategically address IAS <u>Needs</u> ▪ Technical support to develop a national IAS situational assessment ▪ Formulation of a national IAS strategy ▪ Development and implement of biosafety protocols to prevent spread of IAS across internal boundaries ▪ IAS monitoring and control/ eradication programmes for habitats of endangered and endemic species
10: Pressures on vulnerable ecosystems reduced		▪ Inclusion of related objectives (e.g. coastal zone management) in the NESDP and National Ocean Policy ▪ Proposed project *Conserving biodiversity and reducing land degradation using a Ridge-to-Reef approach* includes measures to reduce pressured from land-based sources of pollutions	Partially effective	<u>Challenges</u> ▪ Absence of dedicated national policies and programmes for management of coral reefs <u>Needs</u> ▪ Technical assistance and support is needed for the establishment of a national coral reef conservation and management programme, with dedicated funding and personnel

11: Protected areas increased and improved		▪ Drafting of new Parks and Protected Areas regulations ▪ Capacity-building under regional projects ▪ Proposals in the project *Conserving biodiversity and reducing land degradation using a Ridge-to-Reef approach* for expanding protected areas coverage and improvement management ▪ Participation in the Grenadines Network of Marine Protected Areas	Partially effective	<u>Challenges</u> ▪ Protected areas system plan does not address the full range of protected area management objectives as per international best practice ▪ Gaps, overlaps, inconsistencies and conflicts in the legal framework for protected areas management <u>Needs</u> ▪ Review and update of the protected areas system plan ▪ Rationalisation of the regulatory framework for protected areas management ▪ Capacity-building for protected areas managers and staff, including in the areas of marine spatial planning, ecological monitoring, information management, grant proposal writing

12: Extinction prevented		▪ Ban on hunting of sea turtles ▪ Union Island Gecko Initiative ▪ The proposed project *Conserving biodiversity and reducing land degradation using a Ridge-to-Reef approach* includes objectives related to reducing the risk of extinction of endangered endemic species	Unknown	<u>Challenges</u> ▪ Lack of reliable data about endangered species populations and habitats ▪ Absence of species recovery and action plans for endangered endemic species ▪ Lack of capacity for monitoring, surveillance and enforcement of wildlife protection legislation ▪ Not all endangered endemic species are formally protected by law <u>Needs</u> ▪ Research and monitoring to determine populations, distributions, habitat status for endangered and threatened endemic species ▪ Research to identify major threats and risks to species ▪ Development and implementation of species action plans ▪ Laws and policies to protect species and their habitats ▪ Training for Forestry staff in conservation science

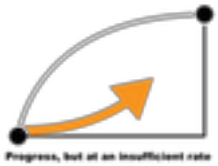
13: Genetic diversity maintained		▪ No significant measures taken	No significant measures taken	See 2008 Second Country Report on the State of Plant Genetic Resources for Food and Agriculture

14: Ecosystems and essential services safeguarded		▪ Implementation of the Integrated Watershed Management Planning and Forest Reserve Protection Project in the Cumberland Valley ▪ Inclusion of integrated watershed management as a priority objective in the NESDP ▪ Inclusion of integrated watershed management as a component of the proposed project *Conserving biodiversity and reducing land degradation using a Ridge-to-Reef approach* ▪	Partially effective	<u>Challenges</u> ▪ Changing climate conditions are affecting water-related ecosystems services ▪ Fragmented policy and institutional framework for water resources management ▪ Absence of a national Integrated Water Resources Management policy <u>Needs</u> ▪ Review and rationalisation of the policy, legislative and institutional framework for water resources management ▪ Research on the current status of watersheds ▪ Pollution monitoring ▪ Adoption and enforcement of integrated land use planning approaches; ▪ Development of adaptation and climate resilience strategies for the water sector

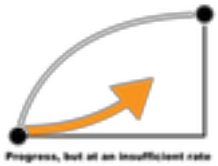
15: Ecosystems restored and resilience enhanced		▪ Restoration of Ashton Lagoon ▪ Coral reef restoration ▪ Tree-planting and reforestation	Partially effective	<u>Challenges</u> ▪ Lack of reliable baseline data (including forest data) on ecosystem status and trends <u>Needs</u> ▪ Technical support to develop baseline data, including spatial data, on the location, extent and impacts of ecosystem degradation ▪ Technical support to assess ecosystems' carbon sequestration potential and associated contribution to climate mitigation ▪ An updated forest survey ▪ Identification and prioritisation of degraded ecosystems for restoration ▪ Incentive programmes for ecosystem restoration activities on privately owned lands

16: Nagoya Protocol in force and operational		▪ No significant measures taken	No significant measures taken	<u>Needs</u> ▪ Awareness-raising including for high-level decision makers, about the Nagoya Protocol on Access and Benefit-Sharing (ABS), highlighting the potential commercial value of St. Vincent and the Grenadines' genetic resources ▪ Development of national ABS policy, legislative framework, and administrative procedures ▪ Training for government officials to support implementation of ABS measures ▪ Training for legal and technical officers in the negotiation of mutually agreed terms and the drafting of ABS permits and contracts

17: NBSAPs adopted as a policy instrument		▪ Revised NBSAP prepared and submitted to the Secretariat of the Convention on Biological Diversity, but not yet adopted as a national policy instrument	Ineffective	<u>Challenges</u> ▪ Poor alignment of the NBSAP with the NESDP ▪ Non-adoption of the NBSAP as a whole-of-government policy <u>Needs</u> ▪ Support, post-2020, to revise and align the NBSAP with the post-2020 global biodiversity framework, as well as with national development priorities and objectives ▪ Increased awareness amongst biodiversity stakeholders about the NBSAP ▪ Monitoring and evaluation of NBSAP implementation

18: Traditional knowledge respected		▪ Documentation of traditional biodiversity practices ▪ Initiatives to support the development of sustainable livelihoods based on traditional biodiversity practices such as beekeeping and sea-moss harvesting ▪ Establishment of a traditional medicinal garden and publication of the Ethnobotany of Rose Hall, spearheaded by the Rose Hall Cultural and Development Organisation	Partially effective	<u>Challenges</u> ▪ Loss of traditional awareness and knowledge about traditional biodiversity practices ▪ Possibility that commercialisation of traditional practices (e.g. hunting) is adversely affecting biodiversity <u>Needs</u> ▪ Support to promote good practices of conservation and sustainable use, and incorporate these into national training and extension programmes ▪ Action to conduct research and collect data on traditional knowledge and practices related to biodiversity ▪ Development of CEPA campaigns highlighting traditional biodiversity knowledge and practices as a part of SVG's heritage ▪ Enhanced capacity for citizen science and community involvement in biodiversity monitoring and management

19: Knowledge improved, shared and applied		▪ Environmental monitoring by government agencies ▪ NGO-driven citizen science initiatives ▪ Private data collection (e.g. by the Mustique Company)	Ineffective	<u>Challenges</u> ▪ Lack of data is a major constraint of efforts towards biodiversity management, conservation, and sustainable use ▪ Inadequate technical capacity (human resources, equipment, hardware, software) for environmental data collection and management ▪ Paper-based data management and other institutional obstacles to effective sharing and analysis of data ▪ Fragmentation in data collection responsibilities results in data gaps and may also result in duplications of effort <u>Needs</u> ▪ Comprehensive assessment of national capacity, gaps and needs ▪ Determine of a national suite of basic environmental indicators, in keeping with international guidance ▪ Formulation of a national environmental data collection regime

20: Financial resources from all sources increased		▪ Increase in biodiversity funding from new sources, e.g. St. Vincent and the Grenadines Preservation Fund, Mustique Charitable Fund, Philip Stephenson Foundation ▪ Establishment of the St. Vincent and the Grenadines Conservation Fund	Partially effective	<u>Challenges</u> ▪ Lack of information about national biodiversity expenditures and funding gaps ▪ Constraints on public sector financing for biodiversity <u>Needs</u> ▪ Best practice examples of biodiversity funding from other Caribbean small island developing states ▪ Baseline data and ongoing monitoring of biodiversity expenditures, funding needs and shortfalls ▪ Technical support to assess possibilities for incentive reform to complement efforts to increase biodiversity financing ▪ Awareness raising for decision-makers about the economic costs of biodiversity loss

NATIONAL BIODIVERSITY TARGETS

This section of the report presents information on the national biodiversity targets that St. Vincent and the Grenadines has adopted in line with the Strategic Plan for Biodiversity 2011-2020 (paragraph 3(b) of decision X/2).

St. Vincent and the Grenadines has adopted five national biodiversity targets in support of its implementation of the CBD. The targets, which used the ABTs as a reference, were devised and agreed upon during the development of the country's revised National Biodiversity Strategy and Action Plan (NBSAP). The national targets that were agreed upon by St. Vincent and the Grenadines' NBSAP Steering Committee are as follows:

1. By 2020, at least 50% of the population of St. Vincent and the Grenadines is knowledgeable about the values of biodiversity and the steps they can take to conserve and use it sustainably.

2. By 2020, St. Vincent and the Grenadines will have completed studies to quantitatively establish the status of all natural habitats and the rate of habitat loss, including forest, and would have developed and [be] in the process [of implementing] a strategy to reduce the rate of habitat loss.

3. By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment.

4. By 2020, at least 17 percent of terrestrial and inland water, and 20 percent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.

5. By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 percent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.

These five targets correspond to ABT 1, *Awareness increased*, ABT 5, *Habitat loss halved or reduced*, ABT 9, *Invasive alien species prevented and controlled*, ABT 11, *Protected areas increased and improved,* and ABT 15, *Ecosystems restored and resilience enhanced*.

Subsequent to preparation of the NBSAP, but before its official adoption, there was a change in Ministerial portfolios and the Ministry with responsibility for coordinating the NBSAP became the Ministry of Economic Planning. At that time, it was recognized that the draft NBSAP was not sufficiently aligned with other national plans, such as the NESDP, which also contain biodiversity-related goals relevant to the ABTs. The draft NBSAP was therefore considered to be inadequate for full adoption, but it was decided that it could be adopted as an interim, provisional document, until a more comprehensive biodiversity strategy could be developed to reflect the imminent post-2020 biodiversity framework.

Given the limited coverage and draft status of St. Vincent and the Grenadines' provisional NBSAP, the government has taken the decision that progress should be reported against the full range of ABTs, as this will allow a more complete presentation of the strategic actions that St. Vincent and the Grenadines is taking towards the protection, conservation and sustainable use of biodiversity. It will also allow a fuller assessment of what is being done and what needs to be done in order to address these global targets at the national level.

IMPLEMENTATION

This section of the report describes measures taken in St. Vincent and the Grenadines in respect of each of the twenty ABTs. It presents an assessment of the effectiveness of those measures, highlights the connections with national biodiversity targets, and summarizes obstacles and capacity needs related to the measures taken.

AICHI BIODIVERSITY TARGET 1: AWARENESS INCREASED

ABT 1 corresponds to the first target in St. Vincent and the Grenadines' provisional NBSAP:

> ***By 2020, at least 50% of the population of St. Vincent and the Grenadines is knowledgeable about the values of biodiversity and the steps they can take to conserve and use it sustainably.***

The actions in the NBSAP related to this target are:

- Harmonizing the educational and public awareness programmes of various agencies to focus on this national target; and
- Conducting a national knowledge, attitudes, and perceptions (KAP) survey before the launch of the educational programme and near the end of the plan period to evaluate the extent to which the target has been met.

Neither of these actions has yet been implemented.

Measures taken

As part of the NBSAP process a national biodiversity awareness campaign was implemented, with the theme "I am Biodiversity". Activities and outputs of this campaign included a biodiversity expo, a photo competition, newspaper articles on biodiversity, an iAmBiodiversity Facebook page, and the distribution of posters, pamphlets and other information materials. This campaign was executed over the period 2014-2015. The I Am Biodiversity Campaign was spearheaded by the Ministry of Health, Environment and Wellness.

Another major national project-based awareness campaign was carried out under the Eastern Caribbean Marine Managed Areas Network (ECMANN) project. Key products of this campaign included a song and music video calling for stewardship of St. Vincent

and the Grenadines' natural environment, and a mural in central Kingstown, the nation's capital, highlighting the beauty and value of marine biodiversity.

Biodiversity Mural in Kingstown, St. Vincent. Photo courtesy of Stina Herberg.

In addition to these project-based initiatives, several key biodiversity stakeholders engage in routine activities intended to raise awareness about biodiversity and to promote its conservation and sustainable use. In particular, there has been a notable effort by government agencies to reach audiences via social media. The Forestry Department, Fisheries Division, National Parks, Rivers and Beaches Authority, St. Vincent Botanical Gardens, and Ministry of Agriculture all maintain Facebook pages where messages on biodiversity are incorporated and transmitted. National Parks also maintains a Twitter page and the Fisheries Division has opened an Instagram account.

NGOs such as the Richmond Vale Academy and Sustainable Grenadines are also active in biodiversity awareness-raising and education via social media, print media, outreach to churches and community groups, and activities in primary and secondary schools. Some illustrative examples of communications, education, and public awareness (CEPA) activities implemented by biodiversity stakeholders in St. Vincent and the Grenadines are described below.

National Parks, Rivers and Beaches Authority

The National Parks, Rivers and Beaches Authority has made a concerted effort to deliver education and awareness-raising activities for youth. These have included summer camp activities, field trips, tree planting exercises, beach clean-ups, biodiversity exhibitions, and presentations to schools.

One of the Authority's flagship programmes in this regard is the South Coast Marine Conservation Area (SCMCA) Reef Guardians Schools Pilot Project, which was officially launched in December 2016. The Project, which is funded by the Government of Australia through its Direct Aid Program, targets schools in the SCMCA with the intention of providing nature-based environmental education experiences that are firmly rooted in local coastal environments, thus fostering a new generation of environmentally-minded students.

In March 2017, the Authority launched a monthly newsletter, available on the Authority's website, which provides information about important ecosystems, habitats, and species in St. Vincent and the Grenadines, as well as about action being taken by the Authority and its partners to conserve and sustainably manage biodiversity.

Forestry Department

The Forestry Department also engages in awareness-raising activities targeted specifically at young people, by presentations at schools, organizing field visits to forests, and a summer programme that specifically targets young people in rural communities close to forested areas.

The Forestry Department organizes an annual week of activities known as Forest Focus. Each year's Forest Focus week is based around a theme that is either linked to the theme for International Day of Forests or that is specifically chosen to resonate in the national context. Forest Focus raises awareness about the value of the forests and the public's role in forest management.

Fisheries Division

The Fisheries Division focuses its awareness-raising on fisherfolk and fishing communities. Fisherman's Day is celebrated annually, and the Fisheries Division arranges a corresponding month of fisheries-related activities, centred around slogans and themes related to conservation and sustainable fisheries. The Division's Public Education Unit does outreach to schools, including via career day events. The Division also organizes a summer programme for youth from fishing communities and fisherfolk's families.

Science Initiative for Environmental Conservation and Education

The Science Initiative for Environmental Conservation and Education (SCIENCE) is currently implementing a variety of biodiversity education programmes, with a particular emphasis on education about the birdlife of St. Vincent and the Grenadines. SCIENCE's activities include the Junior Birders Programme, the Junior SCIENCEist programme, and the National Avian Education Programme (see case study 1 below). In

the past five years, over 500 students between the ages of 6 to 14, as well as 25 primary and secondary school teachers, have participated in SCIENCE's biodiversity education activities.

Case study 1: The National Avian Education Programme

The National Avian Education Programme (NAEP) is implemented by the non-profit organization Science Initiative for Environmental Conservation and Education (SCIENCE), with funding support from the St. Vincent and the Grenadines Preservation Fund (SVGPF). The NAEP's special focus is on seabirds, in particular the seabirds that inhabit and utilize the many islets and cays of the Grenadines. The NAEP aims to:

- educate students and the general public on bird conservation;
- educate fishermen on the importance of seabirds in order to reduce illegal harvesting of seabirds and their eggs;
- conduct research/data collection on the birds of St. Vincent and the Grenadines.

Activities undertaken under the NAEP include school presentations, birdwatching exercises, community outreach, radio discussions, and a summer programme for students held under the theme "There's Science in Everything". As part of the NAEP, a two-day workshop was held in collaboration with the Ministry of Education, aimed at introducing educators to the BirdSleuth curriculum developed by BirdsCaribbean and promoting the use of the curriculum in schools. SCIENCE also offers free community birding tours to raise awareness about the value of St. Vincent and the Grenadines' birdlife.

A complementary activity to the NAEP is a bird conservation project also funded by the SVGPF and implemented by SCIENCE. This project involves outreach to fisherfolk in St. Vincent and the Grenadines who harvest seabirds and their eggs, particularly on outcrop islets in the Grenadines. The project aims to produce behaviour change by educating fishers about the value of birds and why they should conserve them.

Case study 2: Environment Online Treelympics

In 2014 and 2015 the Richmond Vale Academy, Ministry of Health, Wellness and the Environment, and Ministry of Education partnered to organize national involvement in the Environment Online Treelympics. The Treelympics was a global school-based movement that aimed to plant 100 million trees between 2014 and 2017. In St. Vincent and the Grenadines, tree-planting exercises were accompanied by lessons for primary and secondary school children about trees and the need for environmental conservation.

In two years, the programme reached 90% of schools in St. Vincent and the Grenadines. Over 6,000 students and teachers were exposed to awareness-raising and education about the value of trees and forests, and over 3,500 trees were planted. In both years, St. Vincent and the Grenadines was recognized as the most active Treelympics country, i.e. the country with the highest proportion of participating schools.

6NR Communications Strategy

A communications strategy (see Annex IV) has been developed to accompany the 6NR. The strategy contains actions which could be adapted and expanded to form the basis of a broader national (inter-agency and cross-sectoral) biodiversity communications strategy.

Effectiveness of measures taken

The measures taken have been assessed as **partially effective**. Effectiveness was assessed using the following indicators:

- Existence of a national biodiversity communications strategy
- Number of biodiversity-related CEPA activities
- Number of participants in biodiversity-related CEPA activities
- Has a national KAP survey been carried out?

- (Trends in) % of Vincentians who are knowledgeable about the values of biodiversity and the steps they can take to conserve and use it sustainably

There is currently no national strategy or similar plan that would harmonize biodiversity-related CEPA actions and messaging by stakeholders. However, government agencies do engage in some informal cooperation and collaboration on public awareness activities related to days of international significance, e.g. World Environment Day and International Day for Biological Diversity.

Records of CEPA activities, including details of topics covered, key messages, and numbers of participants/people reached are not well-managed. It is evident from newspaper reports, websites, social media accounts, and interviews with stakeholders that numerous activities are being carried out, but there is a shortage of systematic quantitative data about their frequency and reach/impact.

KAP surveys have not been carried out, and therefore there is no objective information available about levels of knowledge and whether/how they are changing. In interviews with biodiversity practitioners in St. Vincent and the Grenadines, there was a general consensus that the level of awareness about biodiversity has increased over the past decade, particularly among youth. However, most of those interviewed were of the opinion that awareness-raising has not resulted in a significant commensurate shift towards more biodiversity-friendly behaviour.

Obstacles and scientific and technical needs related to the measures taken

A major obstacle related to CEPA measures is the lack of data with which to assess baseline awareness and knowledge of biodiversity and therefore to design effective communications campaigns in order to address specific areas where there is a low level of awareness. There is also a lack of data with which to assess the number, reach, and impact of CEPA activities.

There is a need for more consistent biodiversity messaging via television, radio, and internet. Although several organizations have made an effort to deliver biodiversity messaging via social media, audiences are small (most of the government agencies with Facebook pages have fewer than 1,000 followers) and the levels of engagement are low. Reliable and sustainable funding for awareness-raising is necessary to increase the reach and impact of biodiversity messaging.

Support and assistance are needed to:

- carry out biodiversity-oriented KAP surveys, as outlined in the NBSAP;
- develop informative and persuasive messaging for key target audiences, including high-level decision makers, users of biodiversity resources, and the poor and vulnerable;
- develop a national biodiversity communications strategy for collaborative implementation by governmental and non-governmental (NGOs and private sector) stakeholders;
- develop a cohesive national biodiversity education curriculum for use in schools;
- develop a digital biodiversity education kit containing biodiversity messages that are simple and palatable for young people but also appealing for older persons;
- provide training in digital and social media strategy (e.g. website management, social search engine marketing, and digital advertising) for communications officers in government agencies and NGOs;
- provide training for reporters and journalists in environmental journalism with an emphasis on biodiversity;
- produce video content (e.g. a series of 15-minute features on aspects of St. Vincent and the Grenadines' biodiversity) for broadcast via television, YouTube. and social media platforms.

There is also a need to improve data collection on CEPA, via standardized approaches to keep track of information such as:

- number of activities;
- implementing organization(s);
- location(s) of activities;
- number of participants;
- age and gender of participants
- participants' feedback on activities;
- social media metrics such as views (e.g. website and YouTube), engagement (reactions and comments), and shares.

Recording such information can help to understand which groups are being reached by CEPA activities, which groups may be being overlooked and require more targeted attention, and how activities are being received by the target audiences.

AICHI BIODIVERSITY TARGET 2: BIODIVERSITY VALUES INTEGRATED

There is no target corresponding to ABT 2 in St. Vincent and the Grenadines' provisional NBSAP. Nonetheless, some actions have been taken to integrate biodiversity considerations into national policies and to assess the values of biodiversity to economic sectors.

Measures taken

Integration of Biodiversity Values in the National Economic and Social Development Plan 2013 - 2025

The NESDP was adopted as a national policy document in 2013. It provides the overarching development planning and policy framework for St. Vincent and the Grenadines, outlining the country's long-term strategies for national development, and offering a vision for improving the quality of life for all Vincentians. The NESDP places an emphasis on the sustainable use of natural resources, including land, water, flora, and fauna, that are used to maintain livelihoods.

The NESDP defines 5 overarching strategic national goals. Under these goals are a total of 38 strategic objectives and 218 strategic interventions. Of these, 35 objectives/ interventions align directly with ABTs. The NESDP also establishes strategic sectoral goals, including in the areas of Agriculture and Fisheries, Environmental Sustainability and Solid Waste Management, Land Use Planning, and Water. In these areas as well, the strategic objectives and interventions are aligned with the ABTs.

The correspondence between the ABTs and the goals, objectives, and interventions in the NESDP is summarized in Annex I.

In total, the NESDP 2013 - 2025 aligns with 15 of the 20 ABTs: 1, 2, 3, 4, 5, 6, 7, 8, 10, 11, 14, 15, 17, 18, and 19.

National Ocean Policy and Strategic Plan

St. Vincent and the Grenadines' National Ocean Policy (NOP) and accompanying Strategic Plan, which was adopted in 2018, incorporates biodiversity values in its approach to the management of marine resources and ocean activities. The NOP's vision is "to maintain healthy and richly biodiverse oceans by securing, enforcing, and sustainably managing the space in an integrated way so as to promote social, cultural, and economic development".

The NOP contains ten guiding policies and 21 related goals. Of these goals, nine can be directly correlated to the ABTs. The Strategic Plan contains 11 strategic objectives and 62 related strategic actions. Of these, at least 32 objectives and actions can be correlated to ABTs, as summarized in Annex I.

The NOP and Strategic Plan integrate the principles of 15 of the ABTs, including two targets not addressed by the NESDP: 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 14, 15, 16, 18, and 19.

Fisheries and Aquaculture Policy and Action Plan on Illegal, Unreported and Unregulated Fishing

In 2018, a revised Fisheries and Aquaculture Policy was produced, as was an Action Plan on Illegal, Unreported, and Unregulated (IUU) Fishing. The contents of these documents are discussed in greater detail under the measures related to ABT 6. In addition to integrating the objectives of ABT 6, the IUU Fishing Action Plan and the Fisheries and Aquaculture Policy also incorporate the principles of ABTs 1, 4, 6, 7, 8, 11, 15, 18, and 19.

Statement of Nationally Determined Contributions to the United Nations Framework Convention on Climate Change

The value of biodiversity is reflected in St. Vincent and the Grenadines' Statement of Nationally Determined Contributions (NDC) to the United Nations Framework Convention on Climate Change (UNFCCC). The NDC, which was submitted in November 2015, recognizes that the loss and degradation of ecosystems, including forests, sand dunes, mangroves, and coral reefs, are exacerbating the impacts of climate change in St. Vincent and the Grenadines.

Reforestation, afforestation, reduced deforestation, and reduced forest degradation are identified as significant components of the national approach to climate change mitigation. Biodiversity-related adaptation strategies outlined in the NDC include promoting organic agriculture and good agricultural practices, and the restoration of coral reefs and coastal ecosystems.

National Parks and Protected Areas System Plan 2010-2014

The National Parks and Protected Areas System Plan and Policy is still informally in effect, despite its original plan duration having expired. The goal of the National Parks and Protected Area System Plan and Policy is to establish and manage a national protected areas system that will provide for the sustainability of biodiversity and other ecosystems services and support socio-economic growth and sustainable development.

The goals and objectives of the Plan and Policy are aligned with nine ABTs: 4, 6, 7, 10, 11, 12, 14, 19, and 20.

Natural Resources Valuation and Accounting

An economic valuation of the services provided by coastal and marine ecosystems in St. Vincent and the Grenadines was carried out in 2012 (see case study 3 below). The results of the valuation study have resulted in some improvements in the management of coastal resources.

In the NESDP, the Government of St. Vincent and the Grenadines has identified the economic valuation of natural resources and natural resources accounting as key strategic actions for conservation and effective use of the country's natural resources.

Case study 3: valuation of coastal and marine ecosystem services

In 2012, the Government of St. Vincent and the Grenadines commissioned a national-level Economic Valuation Study of the environmental services provided by marine habitats in St Vincent and the Grenadines. This valuation study included estimates of the benefits that could be attained from different policy interventions used to improve marine protected areas (MPAs). Based on this analysis, it was predicted that stopping land-based pollution on the South coast of St. Vincent would generate the greatest ecosystem services benefits (EC$279,000 /yr).

The study also estimated the economic benefits associated with controlling sewage, preventing sand mining, protecting against damage to coral, and introducing no-take fishing zones. In the Tobago Cays, it was predicted that the stopping of overfishing would result in the highest economic benefit (EC$21,000 /yr). Across all MPAs in St. Vincent and the Grenadines, the highest value benefits are associated with stopping sand mining and coral extraction (EC$1,571,000 /yr) and stopping over-fishing (EC$905,000 /yr).

Subsequent to this valuation, measures have been taken to regulate beach sand mining in St. Vincent and the Grenadines, including prohibitions on mining at certain beaches and steps towards formulating a comprehensive sand-mining policy.

Effectiveness of measures taken

The measures taken have been assessed as **partially effective**. Effectiveness was evaluated using the following indicators:

- Number of post-2011 national development/sectoral plans/policies that explicitly incorporate biodiversity values and considerations;
- Number/% of ABTs reflected in these plans/policies;
- Extent to which these plans/policies have been implemented;
- Extent to which economic values of ecosystems and ecosystems services have been assessed;
- Extent to which the values of ecosystems and ecosystem services have been integrated into national accounting and planning (including economic planning and resource management planning).

It is significant that the NESDP, which is an overarching national long-term strategic planning document for the country, specifically makes reference to the importance of protecting, conserving, restoring and sustainably using the country's biodiversity and ecosystems. In addition to the NESDP, sectoral plans in the areas of oceans governance, climate change, protected areas, and fisheries and aquaculture also incorporate biodiversity values and considerations.

However, there are a number of policy gaps yet to be addressed, in particular the absence of up-to-date biodiversity-sensitive policies/strategic plans for sustainable agriculture, disaster management and risk reduction, forestry, land use planning and physical development, tourism, and water resources management.

Of the 20 ABTs, 15 (75%) are integrated into the NESDP. Notable omissions are Targets 9 on invasive alien species, 12 on preventing extinction, 13 on maintaining genetic diversity, 16 on the Nagoya Protocol, and 20 on sustainable financing for biodiversity. Three of these are addressed in other sectoral plans reviewed—in total 18 (90%) of the ABTs have been integrated into national/sectoral policy and planning. ABTs on genetic diversity and sustainable financing for biodiversity are not well integrated into national/sectoral policy.

Some of the plans/policies described here have only recently been adopted as national policy documents, and it is too soon to attempt to assess the extent and effectiveness of their implementation. In the cases of other plans and strategies, the absence of a robust programme of monitoring, evaluation, and reporting hampers evaluation of their effectiveness. Interviews with national experts in the relevant sectors indicate that some

progress has been made in implementation, but not sufficient to deem the measures fully effective.

Economic valuations of ecosystem services in St. Vincent and the Grenadines have been limited to valuations of coastal and marine ecosystems, with specific attention being given to tourism-related values. Insufficient attention has been given to terrestrial ecosystems and other types of ecosystems services (water supply, food production, climate change resilience, etc.).

No action has yet been taken to integrate the value of ecosystems and ecosystem services into national accounting and economic planning. Some limited action (see case study 3) has been taken to implement resource management actions based on the results of valuation studies.

Obstacles and scientific and technical needs related to the measures taken

Obstacles related to ABT 2 measures include:

- The lack of national biodiversity-sensitive strategies for key economic sectors, such as agriculture, disaster management and risk reduction, forestry, land use planning and physical development, tourism, and water resources management;
- Inadequacy of monitoring, evaluation, and reporting regimes to evaluate whether the integration of biodiversity into existing national strategies is effective in practice;
- The few ecosystems valuations studies that have been completed are limited in the ecosystems and services that they cover, and have not produced clear policy-relevant recommendations;
- Inadequate awareness about and capacity for implementing national resource accounting and systems of environmental-economic accounting.

In order to overcome some of these obstacles, St. Vincent and the Grenadines requires support to:

- develop and implement a monitoring, evaluation, and reporting framework for the NESDP, provisional NBSAP, and other sectoral plans, strategies and polices;
- develop/update national sectoral policies that integrate the value of biodiversity and ecosystems services;
- improve awareness and develop capacity of biodiversity practitioners and economic planners in the areas of natural resource valuation, natural capital

accounting, and increase awareness of how these practices can inform policy development and implementation;

- build capacity of public sector biodiversity practitioners to develop sound and convincing messages for high-level policy and decision makers on the values of biodiversity and ecosystem services;
- carry out policy-relevant assessments of the values of key terrestrial ecosystems and the services that they provide;
- develop geo-spatial data on the values of ecosystems and ecosystems services;
- develop and implement a national environmental statistics system to reliably compile a core set of environment statistics, in keeping with the guidance of the United Nations Statistics Division, as a basis for environmental-economic accounting.

AICHI BIODIVERSITY TARGET 3: INCENTIVES REFORMED

There is no target corresponding to ABT 3 in St. Vincent and the Grenadines' provisional NBSAP.

Measures taken

Policy recognition of the need for incentive reform

There has been some recognition in recent policies of the need to develop incentives that encourage the conservation and sustainable use of biodiversity, and to phase out incentives that have harmful effects on biodiversity. Strategic actions outlined in the NESDP, for example, include:

- establishing incentive regimes to encourage compliance with land use policy;
- providing incentives to the protection and restoration of natural resources;
- developing fiscal and other policy incentives to encourage environmentally sustainable imports and the use of local products with degradable content.

The NOP calls for limiting the introduction of new subsidies that contribute to overcapacity and overfishing, and for refraining from extending or enhancing existing subsidies of that kind.

The Fisheries and Aquaculture Policy states that consideration will be given to providing incentives to encourage conservation of natural resources and specifically indicates that action will be taken to:

- provide incentives and training to encourage uptake of new, more energy efficient and environmentally friendly technology and exploitation of new and under-utilized species;
- examine fiscal incentives in terms of sustainable fishing practices and energy efficiency ("green" subsidies);
- identify, reduce, and ultimately eliminate the economic incentives derived from IUU fishing at the national, regional, and global levels.

Overall, the incentive measures outlined in these policies have yet to be implemented.

There are systems of incentives, subsidies and concessions in place that are designed to enhance productivity and growth of economic sectors, such as agriculture and fisheries, that are directly reliant on biodiversity. For example, farmers and fishers are eligible for duty-free concessions and subsidies on materials, vehicles, and equipment related to their work. The price of local timber is subsidized to encourage its local purchase. The NESDP proposes the implementation of additional incentive programmes to increase productivity, particularly in the field of agriculture.

In the fisheries sector, the Fleet Expansion Programme incentivizes fishers to upgrade their boats with better technology so they can fish further at sea for longer periods and target higher value species such as tuna. In addition to enhancing fishers' livelihoods, this programme also seeks to diversify the sector and to reduce pressure on heavily-fished nearshore resources. In this sense, it could be considered an incentive programme designed, in part, to bring about a biodiversity-positive effect in the fishing sector. However, the Fisheries and Aquaculture Policy indicates that there has been poor uptake of the support available under the Fleet Expansion Programme, and there is little data to indicate the extent to which it has been beneficial for the sustainable management of marine living resources.

Stakeholders in the agriculture sector have indicated that since the decline of the banana industry, farmers do not receive the same level of subsidies and concessions on inputs and equipment that they used to, and that this has resulted in a reduction in the use of chemical pesticides and fertilizers. Stakeholders report that this has had an observably positive impact on biodiversity on farms and in adjacent forested areas. Consequently, they have cited this as an example of an adjustment to the agricultural incentive regime

which, although arising from economic rather than environmental considerations ,has had unanticipated biodiversity benefits.

Despite these individual examples, there has not yet been a systematic approach to identifying and reforming incentives harmful to biodiversity, nor to creating positive incentives to promote conservation and sustainable use.

Effectiveness of measures taken

The effectiveness of measures taken in relation to this target has been assessed as **unknown**. Indicators relevant to these measures are:

- Has there been assessment of systems of subsidies and incentives and their impacts on conservation and sustainable use of biodiversity?
- Number, value, and impact of biodiversity-positive incentives introduced or expanded;
- Number, value, and impact of biodiversity-negative incentives that have been removed or reformed.

There has been no systematic assessment of incentives programmes and their impacts, whether positive or negative, relative to biodiversity.

Informants in the Ministry of Finance have indicated that biodiversity impacts are not currently used as a criterion for the introduction or adjustment of incentives, subsidies, and concessions. They have also indicated that there have been no proposals for new incentives or incentives reform principally on the basis of biodiversity impacts. It is possible that changes made to the incentive regime for other reasons have nonetheless had either positive or negative impacts on biodiversity, but information is not available to allow for assessment in this regard.

Obstacles and scientific and technical needs related to the measures taken

A key obstacle related to ABT 3 is that incentives and subsidies are largely designed to promote growth of target economic sectors, rather than to promote conservation of natural resources, or to include biodiversity safeguards.

In order to improve effectiveness of measures related to ABT 3, St. Vincent and the Grenadines needs, *inter alia*:

- guidance materials, including examples of best practices in small island developing states, on the development and implementation of biodiversity-positive incentives;
- technical support to identify incentives and subsidies that have perverse impacts, including assessment of the full economic, social, and environmental costs of such incentives and subsidies;
- technical support to identify and assess the opportunities and constraints to removing, reforming or phasing out harmful incentives;
- support to formulate biodiversity-positive incentive programmes in key economic sectors (agriculture, tourism, fisheries), in keeping with the NESDP, NOP, and Fisheries and Aquaculture Policy;
- technical guidance to incorporate the value of biodiversity as an asset, as well as risks to biodiversity, in country risk profiles for insurance and disaster risk reduction purposes;
- guidance on how to build environmental safeguards into the design and implementation of fiscal policy;
- guidance and examples of best practice on incentivizing and promoting corporate social responsibility;
- capacity-development to enable effective implementation of Strategic Environmental Assessment, to help ensure that biodiversity and other environmental considerations are adequately taken into account in national planning and policy-making.

Stakeholders also expressed the view that measures taken with respect to incentives should be supported by action related to disincentives, i.e. the development of an actively enforced framework of fines and penalties for biodiversity-harmful actions and behaviour, with the proceeds being applied directly to biodiversity conservation.

AICHI BIODIVERSITY TARGET 4: SUSTAINABLE CONSUMPTION AND PRODUCTION

There is no target corresponding to ABT 4 in St. Vincent and the Grenadines' provisional NBSAP. Measures related to sustainable production in the fisheries, agriculture, and forestry sectors are described in the section related to ABTs 6 and 7 respectively.

Measures taken

Promoting sustainable consumption for food and nutrition security

In relation to sustainable consumption, significant action is being taken to encourage Vincentian consumers to consume local foods, with a focus on safety, wholesomeness, and nutritional value. Related strategic actions are outlined in the NESDP under the objectives of increasing market access for agriculture produce and sustainable national food and nutrition security. Promoting the consumption of local foods not only supports local farmers and encourages diversification of the agriculture sector, it also contributes to reducing St. Vincent and the Grenadines' food import bill, food miles, and ecological footprint.

As part of an overall national programme to promote the consumption of healthy and nutritional local foods, the Ministry of Agriculture, Forestry, Fisheries, Rural Transformation, Industry and Labour has established a nutritional unit and has developed awareness-raising campaigns to positively influence consumer choices in relation to nutrition and diversity of diet. The Ministry is developing platforms to present consumers with local alternatives to imported vegetables and legumes.

The Ministries responsible for Agriculture, Health, and Education are collaborating to transform the national school meals programme in line with the goal of promoting healthy diets based on local foods. A pilot programme has been launched, and new nutritionally-balanced school meals menus have been developed, with an emphasis on locally produced items. Community-based agricultural cooperatives in the vicinity of participating schools have been engaged to supply produce for the school meals. The Ministries responsible for Agriculture and Health are also cooperating to update the national food-based dietary guidelines, and it is anticipated that this will lay the groundwork for a national "buy local, eat local" campaign.

Effectiveness of measures taken

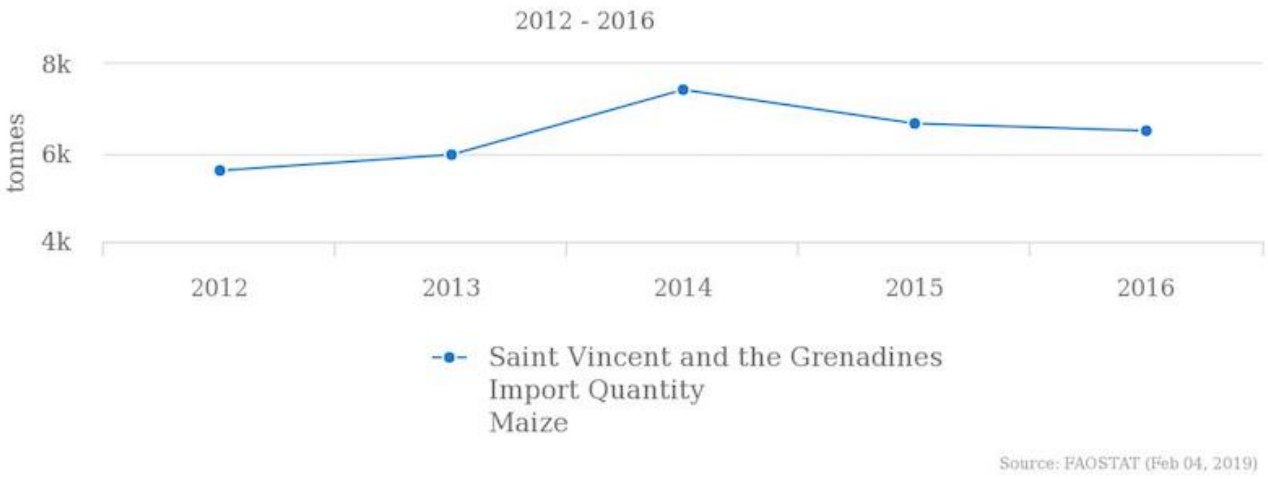
Measures taken have been assessed as **partially effective**. Indicators for assessing the effectiveness of these measures are:

- The extent to which efforts have been made to keep resource use in key economic sectors (agriculture, fisheries, tourism) within safe ecological limits;
- Trends in ecological footprint;
- Trends in quantities of staple food imports.

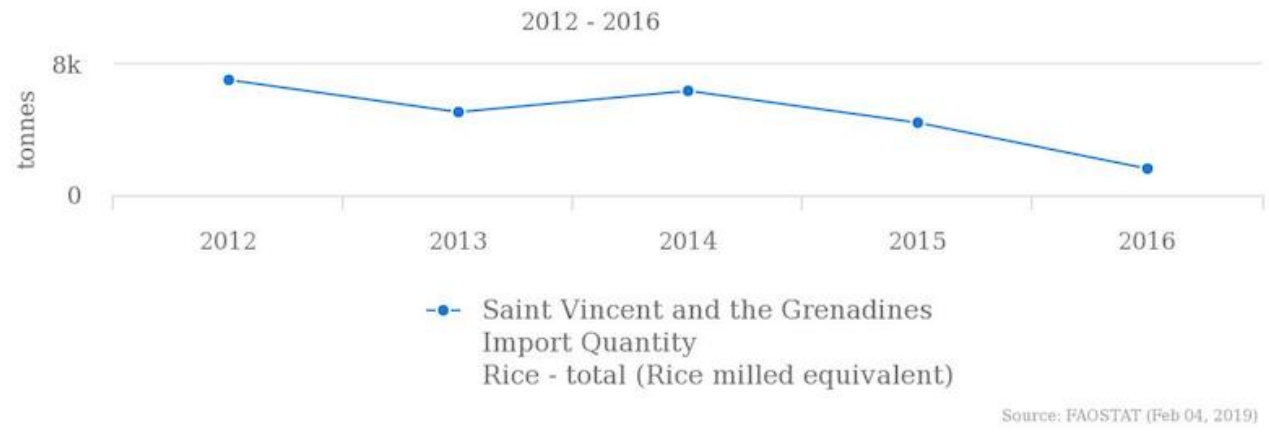
Information is unavailable about national policies or definitions relating to safe ecological limits/limits of sustainability in the agriculture sector. As described in the section related to sustainable management of living marine resources, the Fisheries Division is beginning to take steps to assess the limits and sustainability of the fisheries sector, however relevant data is not yet available. In the tourism sector, limits have been established for the carrying capacity of ecotourism sites and the nature of activities permissible at these sites, but there has not been sufficient monitoring to be able to determine whether these limits have successfully protected the sites' ecological integrity.

There is no data available (e.g. through the Biodiversity Indicators Partnership dashboard) on trends in St. Vincent and the Grenadines' ecological footprint.

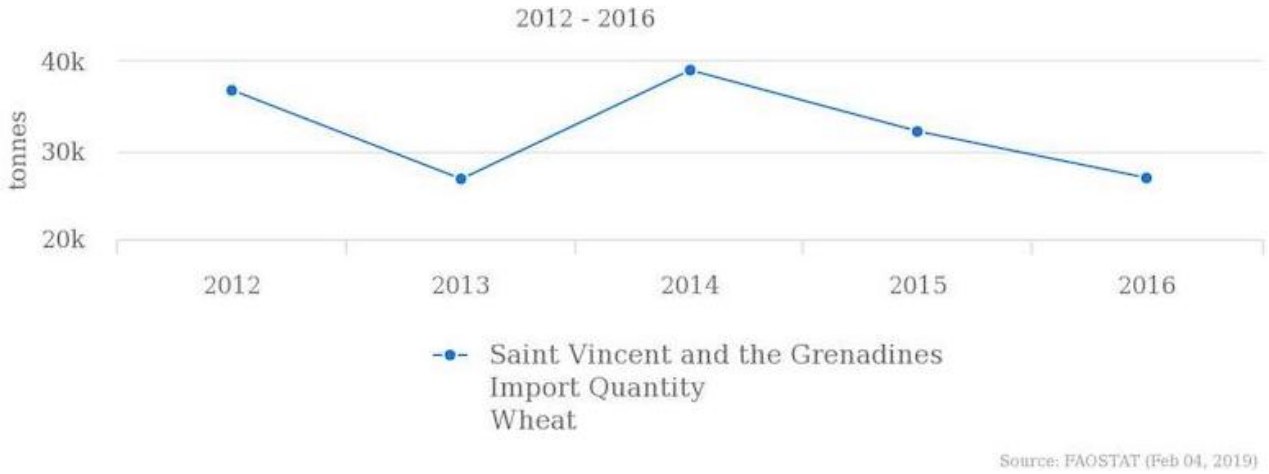
A 2015 report by the Food and Agriculture Organization of the United Nations (FAO) indicates that the main staple food imports in Caribbean Community countries are maize, rice, and wheat. Over the period 2012 to 2016, St. Vincent and the Grenadines' imports of maize increased in quantity by 16%, but imports of rice and wheat declined in quantity by 77% and 27% respectively (see charts below; note that the increase in imports in 2014 is attributable to the occurrence of catastrophic severe weather at the end of 2013, which had acute effects on the agriculture sector).



Trends in import quantity (tonnes) of maize, 2012 to 2016. Source: FAOSTAT



Trends in import quantity (tonnes) of rice, 2012 to 2016. Source: FAOSTAT



Trends in import quantity (tonnes) of wheat, 2012 to 2016. Source: FAOSTAT

Overall, imports of these three staples decreased by 29%, from 49,425 tonnes to 35,002 tonnes. Over the same period, the rate of undernourishment has declined steadily from 6.8% to 5.7%. This suggests that actions to encourage sustainable food consumption based on nutritious local foods have achieved some measure of success.

Obstacles and scientific and technical needs related to the measures taken

The main obstacles to effectiveness of measures to achieve sustainable production relate to the lack of national definitions of, criteria/indicators for, and assessments of ecological sustainability in the major productive sectors. To overcome these obstacles, St. Vincent and the Grenadines requires:

- technical support to help identify and map key areas (terrestrial and marine) for sustainable agriculture, fisheries, and tourism;
- definitions of safe ecological limits for these key sectors and key productive areas;
- technical support to develop criteria and indicators for assessing sustainable production in key sectors.

In relation to improving the effectiveness of the measures being taken with respect to sustainable consumption as it related to food and nutrition security, additional progress could be made with the benefit of:

- guidance and technical support to develop appealing and effective messaging for consumers on sustainable food consumption choices;
- exchange of best practices with other countries in the Caribbean re the promotion of sustainable food consumption, including (as per the NESDP) strengthening linkages between the agriculture and tourism sectors.

AICHI BIODIVERSITY TARGET 5: HABITAT LOSS HALVED OR REDUCED

ABT 5 corresponds to the second target in St. Vincent and the Grenadines' provisional NBSAP:

> ***By 2020, St. Vincent and the Grenadines would have completed studies to quantitatively establish the state of all natural habitats, and the rate of habitat loss, including forest, and and would have developed and [be] in the process [of implementing] a strategy to reduce the rate of habitat loss.***

The actions in the NBSAP related to this target are:

- Design and implement a baseline study on habitats;
- Develop and implement the strategy and specific activities for reducing habitat loss; and
- Operationalize and maintain a biodiversity clearing-house mechanism.

Measures taken

No action has yet been taken to comprehensively establish the state of St. Vincent and the Grenadines' natural habitats, nor to operationalize a national biodiversity clearing-house mechanism. Although there is no overarching national strategy for reducing

habitat loss and degradation, some measures have been implemented to achieve this objective. These are described in the sections of this report related to ABTs 11, 14, and 15, and in case study 4 below.

Case study 4: Medicinal Cannabis Industry Act

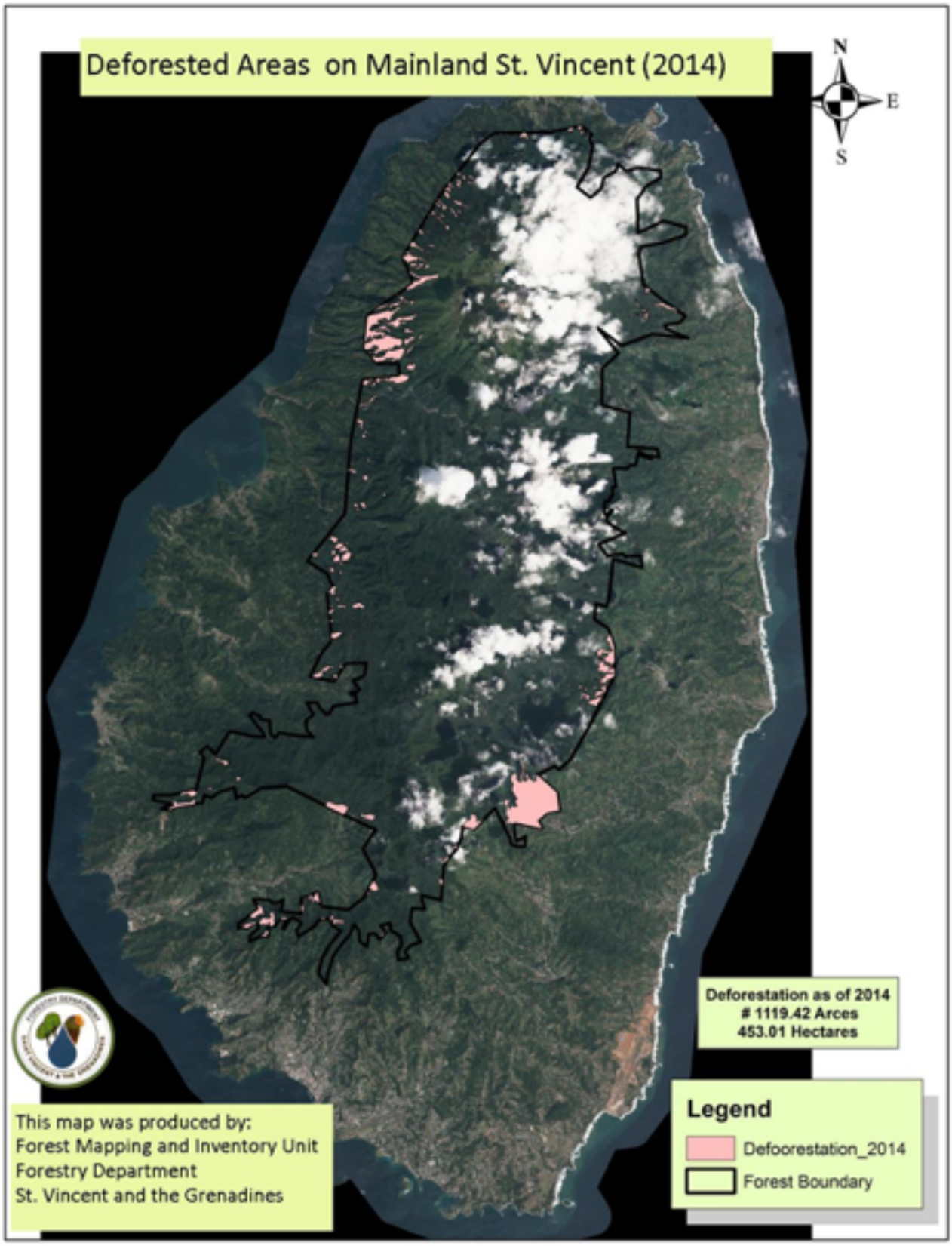
In December 2018, St. Vincent and the Grenadines passed the Medicinal Cannabis Industry Act, which legalizes the cultivation of marijuana for medicinal and research purposes. The Act allows for licensed and regulated cultivation of marijuana, including special provisions for traditional cultivators. There are also provisions for licence fees to be used for reforestation of lands previously used for illicit marijuana cultivation. Biodiversity stakeholders are optimistic that this new regulatory dispensation will reduce the rate of deforestation associated with marijuana cultivation.

Effectiveness of measures taken

The effectiveness of measures taken in relation to this target has been assessed as **unknown**. Indicators used to assess effectiveness of measures towards this target are:

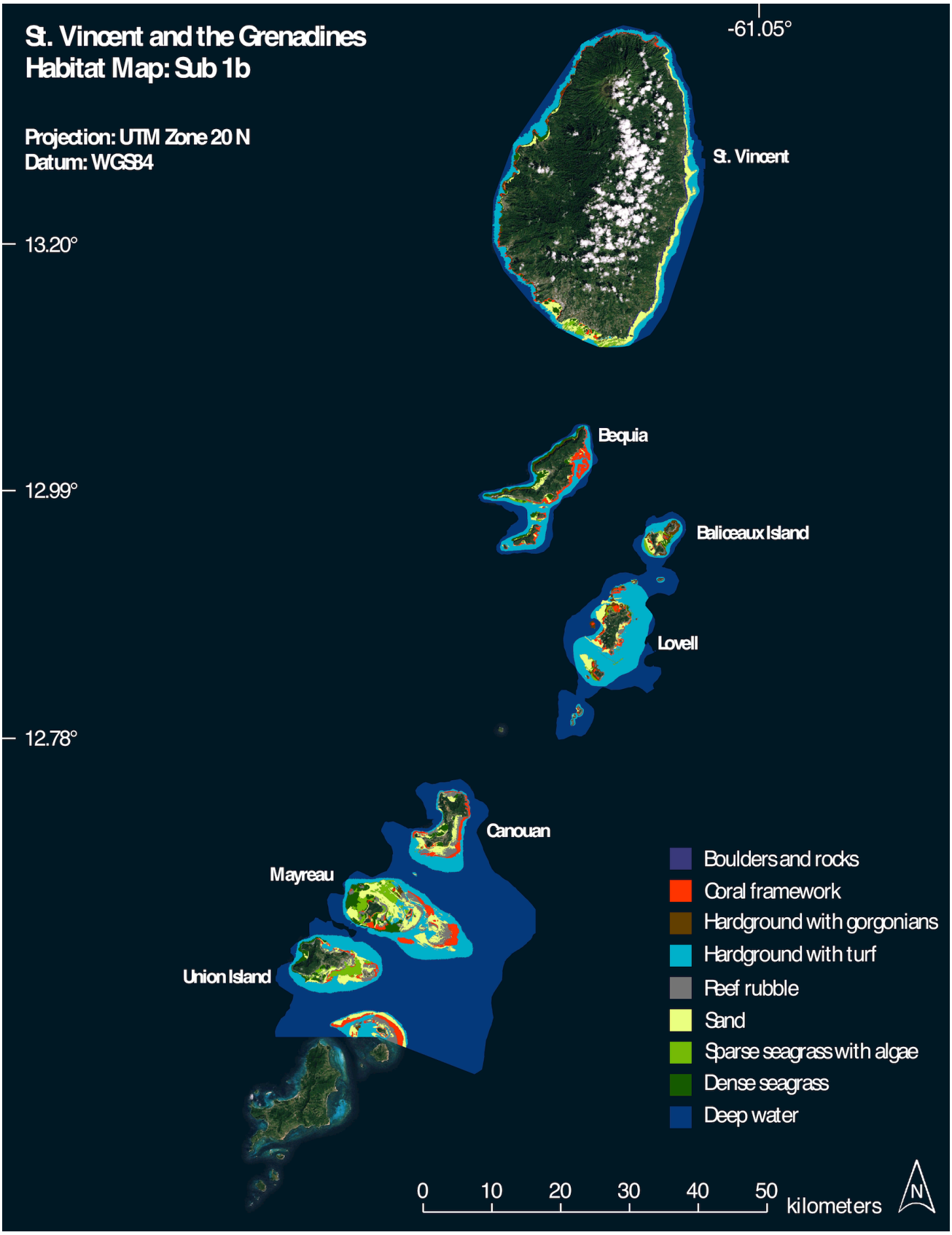
- Have natural habitats, including forests, been identified, assessed, and spatially mapped, as a baseline for monitoring trends in habitat loss, fragmentation, and degradation?
- Have major drivers of habitat loss been documented, assessed, and spatially mapped?
- The rate of loss of habitats, including forests.

There has been no action to comprehensively identify, assess, and map natural habitats in St. Vincent and the Grenadines as a basis for subsequent monitoring. There has not been a national forest inventory since 1993. However, the Forestry Department has identified and mapped the locations and extent of deforested areas within the St. Vincent forest reserve.



Deforested areas within the national forest reserve as of 2014 superimposed on 2014 remote image. Source: St. Vincent and the Grenadines Forestry Department.

In 2015, The Nature Conservancy surveyed and mapped benthic habits across St. Vincent and the Grenadines.



Benthic habitat map for St. Vincent and the Grenadines. Source: The Nature Conservancy

There have been some assessments of coral reef habitats, but these have been sporadic and limited in coverage. Information is not available about the status (including trends in habitat loss, fragmentation, and degradation) of other habitats.

Published documents, including the Fifth National Report and the NDC, indicate that causes of habitat loss include squatting, poor agricultural techniques, poorly planned physical development, pollution, and illegal clearance of land for agriculture, charcoal and fuelwood. However, the information sources used in these reports are often over a decade old, and assessments of habitat loss and drivers are descriptive and sometimes even speculative, rather than quantitative and verifiable.

There are no data available with which to conclusively determine trends in the rate of loss of habitats.

Obstacles and scientific and technical needs related to the measures taken

The greatest obstacle with relation to ABT 5 is the continued absence of reliable quantitative and spatial information about natural habitats in St. Vincent and the Grenadines. Namely: what are the major habitats? what is their condition and areas? what are the current rates of habitat loss? what are the causes of habitat loss? which areas are being most affected?

The absence of relevant data makes it difficult to develop effective strategies to reduce habitat loss and fragmentation, and makes it impossible to measures progress towards the target. It also affects St. Vincent and the Grenadines' ability to assess its contribution to climate change mitigation under the UNFCCC Paris Agreement: the lack of good quality forest data hampers the ability to implement and quantify mitigation actions that are based on developing forest-based greenhouse gas sinks.

This being the case, St. Vincent and the Grenadines is in pressing need of technical and scientific assistance to:

- Identify, delineate, and digitally map natural habitats including, but not limited to, forests, coral reefs, mangroves and other wetlands, seagrass beds, key biodiversity areas (e.g. important bird areas);
- evaluate and map the importance of these habitats for biodiversity, ecosystem services, and human wellbeing;
- assess and map the condition (ecosystem health, degree of degradation, and/or fragmentation) of natural habitats;

- identify, evaluate (including assessments of severity and impact), and map key drivers and pressures that are causing ecosystem loss, degradation, and fragmentation;
- determine and map habitats of highest priority.

This information will provide the necessary basis for the development of strategies, including land-use planning, to reduce habitat loss, fragmentation, and degradation.

Technical assistance will also be required to develop and launch a programme of routine habitat monitoring, in order to evaluate trends in habitat loss and the effectiveness of measures to reduce habitat loss.

Development and effective implementation of a strong regulatory framework for participatory environmental impact assessment (EIA) would also be beneficial, along with a commitment by decision-makers to use EIAs as a tool to support preservation of ecosystems, habitats, and species.

AICHI BIODIVERSITY TARGET 6: SUSTAINABLE MANAGEMENT OF MARINE LIVING RESOURCES

There is no target corresponding to ABT 6 in St. Vincent and the Grenadines' provisional NBSAP. Nonetheless, several measures have been taken in relation to this target.

Measures Taken

Development of New Policies and Action Plans related to Management of Marine Living Resources

Since 2011, St. Vincent and the Grenadines has developed several new policies and action plans relating to the management of marine living resources. These include:

- the Plan of Action to Prevent, Deter and Eliminate IUU Fishing;
- the Fisheries and Aquaculture Policy for St. Vincent and the Grenadines; and
- the NOP.

The NOP was approved by the Cabinet of Ministers in 2018. One of the main strategic areas identified for implementation of the NOP was to improve the productivity, viability, and sustainability of living marine resources via the following actions:

- Support the development of small-scale fisheries, enhance facilities for fisheries workers and promote initiatives that add value to outputs from small-scale fisheries;
- Enhance access to regional and international markets for small scale fisheries products;
- Improve food security by increasing the availability of marine living resources as human food by reducing wastage, post-harvest losses and discards;
- Assess the potential of marine living resources, including under-utilized or unutilized stocks and species, by developing inventories, where necessary, for their conservation and sustainable use;
- Develop and implement evidence-based management plans which may include reducing or suspending fishing catch in particular locations commensurate with the status of the stock;
- Reduce the adverse ecosystem impacts from fisheries by eliminating destructive fishing practices;
- Limit the introduction of new subsidies that contribute to overcapacity and overfishing;
- Explore the scope for expanding recreational and tourist activities based on marine living resources, including those for providing alternative sources of income.

There has also been a review of fisheries-related legislation, as part of the FAO project *Strengthening Fisheries Legislation in St. Vincent and the Grenadines - focus: IUU fishing*. This review produced recommendations for the revision of the Fisheries Act and regulations, and the High Seas Fishing Act and regulations.

Fisheries Management Measures

Measures in place to ensure conservation and sustainable use of living marine resources including the implementation of closed seasons (for lobster), and size limits (for lobster, conch and dolphin fish, *Coryphaena hippurus*), establishment and enforcement of no-take zones, and restrictions or prohibitions on certain fishing methods (use of trammel nets is illegal, spear fishing is forbidden in marine conservation areas, there are restriction on net mesh size). The taking of sea turtles has been prohibited with effect from January 1, 2017, and restrictions on the taking of cetacean species have been strengthened.

Several measures have also been taken to reduce pressure on the heavily exploited inshore fishery by promoting exploitation of offshore resources, including through employing fish aggregating devices and implementing the national fleet expansion

programme. This programme aims to help fishers upgrade their fishing vessels, so that they can fish further at sea for longer periods.

Two of the main commercial species harvested in St. Vincent and the Grenadines, and the main species exported, are lobster and conch. The Division has launched the process of stock assessments for these two fisheries; the results of the assessments will inform the development of new/revised measures to manage these fisheries.

The Fisheries Division has developed a training manual for fishers; the manual is used to deliver basic training for new entrants to the sector and refresher training for experienced fishers.

Fisherfolk Organization

The establishment, in 2014, of a National Fisherfolk Organization, as a complement to local fisherfolk cooperatives, has facilitated a more participatory approach to fisheries management. Regular meetings are held between the Fisheries Division and the Fisherfolk organizations, and these meetings are venues for information sharing, identification of needs and priorities, dialogue on challenges and opportunities with respect to fisheries management, and engagement with fishers on sustainability issues.

The national organization has played a significant role in resource mobilization, capacity-building, advocacy, and project management for the benefit of the fishing community. It has fostered a sense of empowerment and cooperation amongst fishers, enabling them to take a stronger and more active role in fisheries management, and to promote and adopt sustainable resource use practices.

Effectiveness of measures taken

Measures taken have been assessed as **partially effective**. Indicators used to assess effectiveness are:

- Is there national policy/legislation on sustainable management of living marine resources?
- Extent and distribution of areas under sustainable fisheries management;
- Status and trends in stock of target species;
- Existence and implementation of management/recovery plans for key marine species;
- Trends in area, frequency and/or intensity of destructive fishing practices.

Both the Fisheries and Aquaculture Policy and the NOP address issues related to sustainable management of living marine resources. The Fisheries Act and accompanying regulations are intended to achieve "optimal utilization of fisheries resources ... for the benefit of St. Vincent and the Grenadines."

There are marine conservation areas designated under the Fisheries Act. However, surveillance and enforcement are challenging, particularly in the areas distant from mainland St. Vincent. There is currently no good fish stock data available, but plans are underway to carry out stock assessments for lobster and conch.

Following the lobster and conch stock assessments, management/recovery plans are to be developed based on the assessment findings. The Fisheries Act outlines fishery conservation measures for certain marine species, and in recent years the take of some species has been prohibited altogether.

Data is not available to evaluate trends in destructive fishing practices. Fisheries legislation restricts certain fishing methods, including spear fishing and the use of tangle nets. However, the Fisheries Division has indicated that there have been increasing reports of unauthorized spear fishing, including in marine conservation areas.

Overall, a number of policy and practical measures have been taken towards sustainable management of living marine resources in St. Vincent and the Grenadines. Experts from the Fisheries Division and the National Fisherfolk Organization indicate that there is a good level of awareness among fishers about the need for sustainable practices, and that compliance with conservation measures is generally good and continues to improve. However, the shortage of scientific data means that it is difficult to assess whether the measures taken are sufficient and comprehensive enough to achieve sustainability in the sector.

Obstacles and scientific and technical needs related to the measures taken

During consultations, fisheries experts in St. Vincent and the Grenadines indicated that the legislation could be strengthened by including a stronger emphasis on conservation and sustainable use of fisheries resources. This is in line with recommendations in the FAO review of Fisheries and Related Legislation in St. Vincent and the Grenadines. The review also recommends strengthening capacity for monitoring, control, surveillance, and enforcement in relation to fisheries management, which is also in keeping with experts' identification of weaknesses in the national legislative and policy framework.

St. Vincent and the Grenadines' archipelagic nature and the transboundary nature of the lobster and conch fisheries in particular pose challenges for monitoring and enforcement of fisheries conservation measures, particularly in the more remote waters of the Southern Grenadines. Anecdotal evidence from experts in the Grenadines suggests that there is a substantial undocumented take of and trade in lobster and conch between St. Vincent and the Grenadines and Grenada, which could affect the sustainability of the fisheries. Additional human resources, financial resources, and equipment are required to strengthen surveillance and enforcement.

Areas where financial, scientific, and technical assistance are required include:

- increasing the technical staff complement of the Fisheries Division to include additional ecologists, marine biologists, data specialists, and fisheries scientists;
- carrying out a national fisheries census (according to a 2014 FAO report, the last complete census was carried out in 2002);
- revision of the Fisheries Act and accompanying legislation;
- building capacity for monitoring, surveillance, and enforcement of the law;
- building capacity for effective participation in international fisheries negotiations;
- species and stock assessments;
- collecting data on catch per effort;
- marine spatial planning, use of geographic information systems for spatial mapping of resources and resource use, data management and analysis, and the provision of hardware, software, and software licences to support better data and information management.

Additionally, assistance is required in several areas to strengthen the fishing community's ability to participate in sustainable resource management. These areas include:

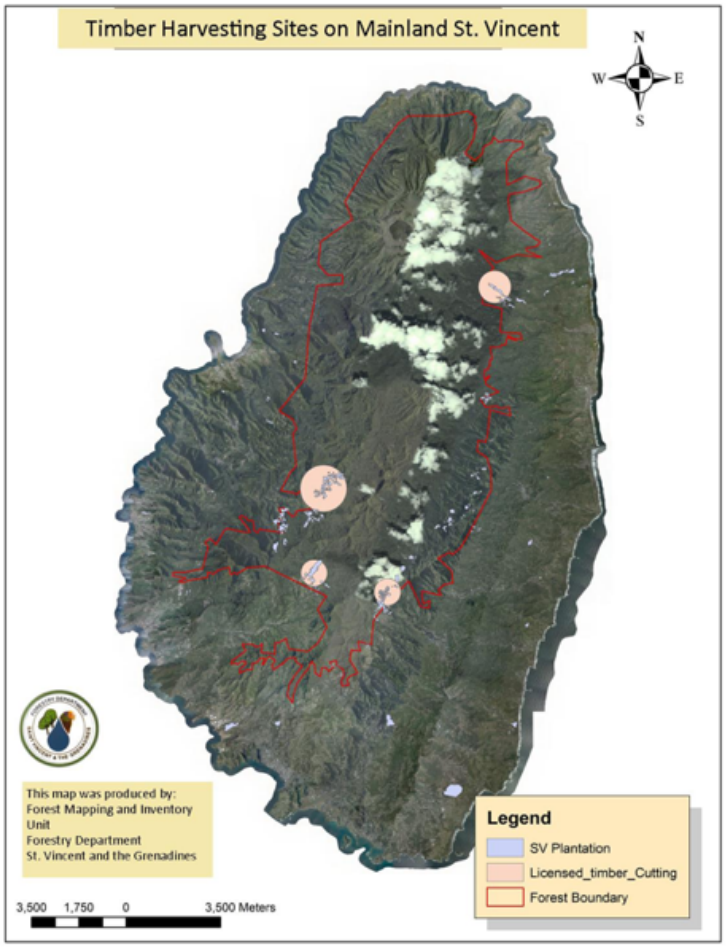
- development of business management expertise for fisherfolk;
- building capacity for community organizations' advocacy and representation in national policy development;
- training and capacity-building for community co-management of living marine resources, including by means of local fisheries management areas as outlined in the law.

AICHI BIODIVERSITY TARGET 7: SUSTAINABLE AGRICULTURE, AQUACULTURE, AND FORESTRY

There is no target corresponding to ABT 7 in the provisional NBSAP.

Measures taken

Measures related to ABT 7 in St. Vincent and the Grenadines focus primarily on sustainable agriculture. There are currently no significant aquaculture operations. Forestry is a small cottage industry (the number of woodcutters is estimated to be fewer than a dozen). Harvesting takes place mainly in managed timber plantations, as shown in the image below.



Timber-harvesting sites and forest plantations on St. Vincent. Source: St. Vincent and the Grenadines Forestry Department

Promoting Sustainable Agriculture

Agriculture has long been a mainstay of the economy of St. Vincent and the Grenadines. In recent years there have been several programmes and initiatives undertaken to promote the environmental sustainability and climate resilience of the sector. The NESDP outlines a number of strategic objectives and interventions related to sustainable agriculture. These include:

- enactment and enforcement of appropriate legislation for agro-ecological zoning;
- development and enforcement of regulations and practices prohibiting agricultural activities and systems of production that are environmentally degrading; and
- promoting local foods to consumers focusing on safety, wholesomeness, and nutritional quality.

The FAO Country Programme Frameworks for 2012 - 2015 and 2016 - 2019 reflect the priority placed on sustainable agriculture, by including objectives related to conserving the natural environment, increasing biodiversity, and achieving sustainable natural resources management.

Since 2010 the St. Vincent and the Grenadines work programme of the Inter-American Institute for Cooperation on Agriculture (IICA) has focused on promoting climate resilient agriculture. This has included promoting and building capacity for good water management practices, such as rainwater harvesting. Such practices reduce overexploitation of water resources while maintaining water supply in periods of water scarcity or agricultural drought. One of the observed impacts of climate change in St. Vincent has been an increased incidence of extreme rainfall events, which causes severe soil erosion on the island's steep terrain. IICA has been encouraging the adoption of soil conservation techniques that reduce erosion, and thus diminish adverse impacts of runoff and sedimentation in watersheds and nearshore coastal environments. Reducing the use of pesticides and inorganic fertilizers has also been promoted as a soil amelioration measure, improving soil health while lessening pollution of watersheds. Overall IICA's work has sought to address the needs and challenges identified in the 2014 Vulnerability Assessment of St. Vincent and the Grenadines' Agriculture Sector.

Agriculture has been identified as one of the priority sectors for action for national adaptation planning in St. Vincent and the Grenadines. The United Nations Development Programme and the Japan Caribbean Climate Change Partnership are providing the government of St. Vincent and the Grenadines with technical assistance in the development of a National Adaptation Plan for agriculture.

Case study 5: Richmond Vale Academy's Pass-It-On Home Gardens

In 2017 the Richmond Vale Academy's model organic farm was recognized by IICA as an outstanding example of climate smart agriculture in the Eastern Caribbean. In addition to avoiding the use of chemical inputs, this model entails the adoption of water management methods such as rainwater harvesting and drip irrigation. Mulching and composting are used to improve soil health. In June 2017, the Academy launched the Pass-It-On Home Garden project, which assists families and farmers to adopt the sustainable principles and practices implemented and refined at the model farm. The project specifically targets household headed by single mothers, and its aims include:

- teaching families and farmers how to grow crops using permaculture principles;
- increasing communities' understanding of permaculture as a strategy for climate resilience;
- increasing communities' self-sufficiency and expanding options for sustainable livelihoods;
- reducing the adverse impacts of chemical-dependent conventional agriculture;
- promoting crop diversification and encouraging more diverse diets.

So far under the Pass-It-On project, fifty home gardens have been established in the villages of Fitz Hughes, Chateaubelair, Petit Bordel, Rose Bank, Rose Hall and Troumaka. Project partners include the Ministry of Agriculture, Forestry, Fisheries, Rural Transformation, Industry and Labour, the Ministry of Finance, Economic Planning, Sustainable Development and Information Technology, Chatoyer Gardens, the GEF Small Grants Programme, Canada Fund for Local Initiatives, and the St. Vincent and the Grenadines Preservation Fund.

Government, non-governmental and inter-governmental organizations have been seeking to encourage diversification of the agriculture sector in St. Vincent and the Grenadines away from conventional banana mono-cropping, which has adverse impacts on biodiversity, soil quality, slope stability, and water quality. The Ministry of Agriculture

and the FAO have been encouraging agroforestry approaches, as well as the cultivation of both traditional and non-conventional crops such as arrowroot, cocoa, coconuts, root vegetables and tubers, and other vegetable crops. As a result of the efforts of the Windward Islands Farmers' Association, many of the farmers who continue to earn their livelihood from the banana industry in St. Vincent and the Grenadines are now fair-trade producers, which means that they must meet established principles and criteria for socially and environmentally responsible production. In support of this initiative, national standards for good agricultural practice have been formulated.

Several civil society organizations in St. Vincent and the Grenadines have undertaken projects to promote organic/low input sustainable agricultural practices. These have incorporated training for farmers and households on sustainable agricultural practices and organic backyard gardening, establishment of model gardens and demonstration sites, and awareness-raising and education for consumers. The Richmond Vale Academy Model Garden and Pass-It-On Home Gardens (see case study 5 above) are examples of such initiatives.

The proposed GEF project *Conserving biodiversity and reducing land degradation using a Ridge-to-Reef approach* also proposes the establishment of model gardens/farms to promote the adoption of sustainable land management and climate smart agriculture. The project aims to train at least 150 farmers in sustainable land management and climate smart agriculture techniques, including use of protected structures, cultivation of climate resilient crops, use of organic fertilizers, and irrigation/water management.

Effectiveness of measures taken

Measures taken have been assessed as **partially effective**. Indicators used are:

- Is there a national policy on sustainable agriculture?
- Proportion of farmers using sustainable and environmentally friendly practices;
- Area of agricultural land under sustainable management, ensuring conservation of biodiversity;
- Extent of implementation of sustainable agriculture projects and programmes.

There is not a specific sustainable agriculture policy. However, it is clear from documents such as the NESDP, the FAO and IICA country programmes, GEF project fiches and the annual strategic priorities of the Ministry of Agriculture, Forestry, Fisheries, Rural Transformation, Industry and Labour, that improving the sustainability and climate resilience of the country's agricultural sector are national policy priorities. It would be helpful to establish a national definition of and indicators/criteria for

environmentally sustainable agriculture, particularly in regard to impacts on biodiversity. Without a guiding definition and associated metrics, it is difficult to objectively assess the sustainability in the sector.

Quantitative data is not available on the proportion of farmers using sustainable practices. However, there is consensus amongst agricultural experts and stakeholders that more farmers are adopting environmentally friendly practices. Amongst older farmers this is seen largely as a return to traditional sustainable practices (see also the section on ABT 18). Younger farmers are actively seeking out information and training on environmentally friendly techniques and innovations in areas such as organic agriculture, integrated pest management, and permaculture.

Quantitative data is not available on the area of land under sustainable management. However, it may be assumed that if the number of farmers adopting sustainable, biodiversity-friendly practices is increasing, then the area of land under sustainable management is also increasing. Stakeholders in the agriculture sector indicate that some biodiversity benefits of the increase in sustainable agriculture have been observed, most notably an increase in populations of pollinators (bees and butterflies).

Government agencies, regional and international organizations, CBOs, and NGOs are actively carrying out programmes and projects to improve the sustainable management of areas under agriculture. Quantitative and spatial data on the overall area of land covered by these programmes and projects is not available.

Obstacles and scientific and technical needs related to the measures taken

Areas where financial, technical and scientific support are needed to improve the sustainable management of areas under agriculture include, but are not limited to:

- update of the national farm census, including geospatial mapping of census data;
- improving technical capacity in the Ministry of Agriculture, including in the areas of botany, microbiology, plant genetics, livestock management;
- improving the Ministry's analytical laboratory, including via provision of equipment and materials and training of personnel;
- improving extension services staffing, and providing training and continuing professional education for extension services officers;
- strengthening capacity for local and community representation and advocacy, for example via agricultural cooperatives;

- developing environment/biodiversity-related indicators for sustainable agriculture;
- research and monitoring to facilitate science-based decision-making;
- creation and dissemination of vulnerability maps for the agriculture sector;
- a national inventory of plant genetic resources;
- enhance access to and engagement with regional institutions, such as the Organisation of Eastern Caribbean States (OECS), and strengthened participation in regional agriculture initiatives.

Additionally, agriculture stakeholders in both state and non-state sectors strongly emphasized the need for an increased emphasis on outreach, communication, awareness-raising, capacity-building, and the effective provision of extension services in order to:

- document, update and share local good practices;
- encourage (especially amongst older farmers) the uptake of environmentally friendly innovations;
- encourage (especially amongst younger farmers) re-adoption of sustainable traditional practices;
- disseminate information to farmers using relatable, non-technical messaging grounded in local knowledge;
- deliver regular training and capacity-building for farmers, especially through community-based field schools.

AICHI BIODIVERSITY TARGET 8: POLLUTION REDUCED

There is no target in the provisional NBSAP that correlates to ABT 8. However, several measures have been taken that contribute to progress towards this target.

Measures taken

New comprehensive chemicals management policy and draft legislation

In 2013, a national Chemicals Management Policy for St. Vincent and the Grenadines was prepared. The main objective of this policy is to prevent or minimize the human health and the environment risks associated with the importation, exportation, transportation, handling, distribution, collection, storage, and disposal of toxic chemicals and hazardous wastes. This policy lay the groundwork for the development of

a comprehensive Chemicals Management Act, which would address the current dispersed state of legislation relevant to hazardous materials management. Subsequent to the formulation of the Chemicals Management Policy, legislation has been drafted to provide an overarching regulatory mechanism for the control and sound management of toxic substances and hazardous wastes in St. Vincent and the Grenadines.

Prohibition of the import, manufacture, sale and use of polluting substances

In 2017, St. Vincent and the Grenadines took action to reduce terrestrial and marine plastic pollution by passing the Environmental Health (Expanded Polystyrene Ban) Regulations, which

- prohibit the importation, manufacture, and sale of Styrofoam/expanded polystyrene food service products in St. Vincent and the Grenadines;
- prohibit the use or provision of expanded polystyrene foods service products in St. Vincent and the Grenadines;
- promote and encourage the use of biodegradable, recyclable, and other environmentally friendly containers or packaging for food *in lieu* of expanded polystyrene.

In his 2018 national budget address, the Minister of Finance, Mr. Camillo Gonsalves, referred to the success of the expanded polystyrene ban, saying, "the amount of garbage clogging our drains and waterways has been markedly reduced, and the ecological benefits are undeniable." He indicated the intention to take further action to reduce plastic pollution in St. Vincent and the Grenadines, including by "severely curtailing the free availability of single-use plastic bags in supermarkets and other retail centres."

In September 2018, St. Vincent and the Grenadines suspended the importation of glyphosate-containing pesticides. Restrictions on the importation, manufacture and sale of phosphate-containing detergents also came into effect in 2018.

Private sector and NGO initiatives

In 2018, one of the major supermarket chains in St. Vincent and the Grenadines stopped distributing single-use plastic bags to shoppers for free. This measure is intended to reduce the use of single-use plastic and subsequent plastic pollution. All Islands Recycling, a private company, collects used plastic bottles and ships them overseas for recycling. The operations of the company are supported by a government levy on imported plastic containers.

Several non-governmental organizations have organized clean-up events to remove solid waste from beaches, rivers, and waterways. As an example of the success of such efforts,

clean-ups organized by the Richmond Vale Academy in partnership with the Rose Hall Cultural and Development Organization (RHCDO), with support from the Central Water and Sewerage Authority and other agencies and businesses, have collected and sent to landfill over 20 tons of trash, with average participation of over 100 people per event.

Disposal of Obsolete Pesticides, Promotion of Alternatives, and Strengthening Pesticides Management

St. Vincent and the Grenadines is one of 12 Caribbean countries participating in the GEF-funded FAO project *'Disposal of Obsolete Pesticides including POPs, Promotion of Alternatives and Strengthening Pesticides Management in the Caribbean*'. One of the main objectives of this project was to reduce the environmental risk posed by stockpiles of obsolete chemicals. Such stockpiles were found to be maintained in insecure conditions, with a high risk of environmental contamination, which would be heightened in the event of severe weather conditions such as heavy rainfall, flooding, or land slippage. Under this project, in 2017 over 4 tons of obsolete pesticides were identified, safeguarded, and shipped to the United Kingdom for environmentally sound disposal in keeping with the Basel and Stockholm Conventions, thus eliminating their threat to the environment and ecosystems.

Preventing discharge of pollutants

One of the foci of the NOP is preventing, reducing, and controlling degradation of the marine environment from land-based and sea-based activities. Guidelines have been formulated to prevent the discharge of untreated wastewater from both land- and sea-based sources. Guidelines for wastewater treatment for coastal developments have been developed, along with draft effluent standards for wastewater treatment plants. There are also guidelines to prevent pollution from yachts and other vessels, particularly in the Tobago Cays Marine Park (TCMP).

However, these policies are guidelines rather than regulations with legally enforceable status. This makes it difficult to ensure compliance, a challenge which is exacerbated by limited capacity and resources (monitoring and enforcement staff, boats and other equipment, money for the purchase of fuel) for monitoring compliance, particularly in the Grenadines.

Effectiveness of measures taken

Measures taken have been assessed as **partially effective**. Indicators used to assess these measures are:

- Is there national pollution prevention and control legislation?
- Trends in actions to limit or reverse pollution;
- Trends in pollutant levels.

Items of legislation to prevent and control pollution include, but are not limited to, the Management of Ship Generated Solid Waste Act, the Dumping at Sea Act, the Litter Act, the Waste Management Act, the Environmental Health Services Act, and the recently passed Environmental Health (Expanded Polystyrene Ban) Regulations. However, stakeholders consulted during the preparation of this report indicated that these laws are ineffective and infrequently enforced. This was attributed to various factors, including a lack of capacity for monitoring and enforcement, insufficiently severe penalties for contravention of the law, and the low priority accorded to violations of environmental law. Several new guidelines and standards to combat pollution have been prepared, but do not have legally binding status.

There has been an increase in the number of actions taken by government, private sector, and NGOs to limit and reverse pollution, in particular solid waste and plastic pollution.

Lack of data means that it is not possible to confidently assess trends in levels of pollutants, such as pesticides, fertilizers, and wastewater, from land-based and sea-based sources. There was a general consensus amongst stakeholders that there has been a visible reduction in solid waste and plastic pollution as a result of recent initiatives. In particular, it was remarked that the quantities of plastic bottles and Styrofoam litter in rivers, on beaches, and in the nearshore environment of mainland St. Vincent have been substantially reduced.

However, stakeholders also reported that there are pressing waste management challenges still to be addressed, particularly in the small islands of the Southern Grenadines, where solid waste management facilities are insufficient to accommodate growing populations and changing land uses.

Obstacles and scientific and technical needs related to the measures taken

Obstacles to achievement of ABT 8 include the absence of environmental data with which to identify priorities for action, low levels of enforcement of existing legislation, and inadequate waste management services and facilities, particularly in the islands of the Southern Grenadines.

Support and assistance are needed to:

- Identify and prioritize the main sources of pollution, including point and non-point sources and land- and ship-based sources;
- Conduct legislative review and analysis with a view to revising/updating the regulatory framework for pollution control;
- Refine and implement effluent standards and water quality standards;
- Develop and implement programmes and procure equipment to monitor pollution and its impact on the environment;
- Train relevant government officers, members of the Police Force and Coast Guard, and members of the judiciary in environmental enforcement and prosecution;
- Expand surveillance and enforcement capacity, particularly in the TCMP and other protected areas, e.g. by increasing the number of park wardens and monitoring and enforcement vessels;
- Construct and operate port reception facilities for the collection of waste (including solid waste, waste oil, and chemical residues) from ships;
- Effectively inform the public about less toxic alternatives to polluting substances, and to promote (including via the use of incentives) the uptake and use of these alternatives.

In all cases, attention should be paid to addressing the particular pollution challenges faced by communities in the Southern Grenadines.

AICHI BIODIVERSITY TARGET 9: INVASIVE ALIEN SPECIES PREVENTED AND CONTROLLED

ABT 9 correlates to the third target in the provisional NBSAP:

> ***By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment.***

There are three actions related to this target in the provisional NBSAP:

- Identify all invasive species of marine and terrestrial fauna and flora and establish baselines on the extent of the invasion(s);
- Prioritize species for eradication based, for example, on their impact on native species and livelihoods;
- Develop and implement eradication strategies, ensuring systematic monitoring and documentation of the rate(s) and extent of decline up to 2020.

Measures taken

Identifying and controlling invasive species

The Fifth National Report identifies 24 invasive alien species (IAS) that are present in St. Vincent and the Grenadines. The project identification form (PIF) for the Project *Preventing Costs of Invasive Alien Species in Barbados and the OECS Countries* provides a partial and indicative list of IAS in St. Vincent and the Grenadines, totalling 32 species. The Global Register of Introduced and Invasive Species lists 127 introduced and invasive species verified as being present in St. Vincent and the Grenadines.

There has been significant expenditure to control and eradicate IAS that are also agricultural pests, such as Black Sigatoka and Moko. Some action has been taken to encourage hunting and capture of invasive wildlife, such as the nine-banded armadillo, which have adverse effects on natural habitats and ecosystems.

Lionfish control

A national Lionfish Action Plan has been drafted, which draws on the Regional Strategy for the Control of Invasive Lionfish in the Wider Caribbean prepared by the International Coral Reef Initiative. The Plan includes provisions related to coordination, early detection and rapid response, control and management, research, information management, education and public awareness, and resource mobilization. The Plan has yet to be formally adopted for implementation. In the meantime, marine park wardens, dive operators, and fishers have received training in the safe hunting and handling of lionfish, and there have been some control activities, such as lionfish derbies.

Public awareness campaigns have been carried out, and efforts are being made to encourage consumption of lionfish and development of a commercial lionfish industry. Evidence on the presence and impacts of lionfish is largely anecdotal, from divers and fishers, but suggests that populations are not widely distributed and ecosystems impacts are not severe. Experts from the Fisheries Division indicate that there has been no

substantial decrease in fish landings as a result of the presence of lionfish, and that fishers have not reported any associated impacts on their catches and livelihoods.

Preventing Costs of Invasive Alien Species

St. Vincent and the Grenadines is currently participating in a GEF-funded project, launched in the latter half of 2018, *Preventing Costs of Invasive Alien Species in Barbados and the OECS Countries*. This project, which is being executed by the Centre for Agriculture and Bioscience International, aims to, *inter alia*:

- improve port surveillance and increase rates of IAS interception at ports of entry;
- build awareness pertaining to IAS prevention, management, and early detection and rapid response;
- enhance capacity for IAS identification;
- establish systems for data exchange among Eastern Caribbean countries.

The project is scheduled for completion in 2021.

Effectiveness of measures taken

The effectiveness of the measures taken has been assessed as **unknown**. Indicators applied to this target are:

- Are there national IAS laws, policies and/or plans/programmes?
- Extent to which IAS have been identified and prioritized;
- Extent to which pathways have been identified, prioritized, and managed;
- Extent to which ecosystem and socio-economic impacts/costs of IAS have been quantified;
- Trends in the number, introduction, distribution, and impacts of IAS.

St. Vincent and the Grenadines does not currently have an overarching policy framework for IAS. The control of plant and animal pests and diseases are addressed to some extent by the Plant Protection Act and the Animals (National and International Movement and Disease Prevention) Regulations. There is a draft Lionfish Action Plan, but it has not been officially adopted/endorsed.

Lists of IAS in St. Vincent and the Grenadines have been compiled, but these are partial and indicative, and there are inconsistencies between lists from different sources. Comprehensive action, as recommended in the NBSAP, has not yet been taken to identify terrestrial and marine IAS and to document their distribution. There has been

no prioritization of IAS and pathways for control, but *de facto* priority is given to introduced/invasive species that have impacts on the agriculture sector.

Precise information on the costs and impacts of IAS are not available, but impacts on the agriculture industry have been significant. The 2012 Budget allocated in excess of EC$ 3 million to control the spread and impacts of Black Sigatoka in the banana sector. Invasive pests have hampered trade in agricultural commodities and are affecting farm productivity. Available information is not sufficient to allow evaluation of trends in IAS-related costs.

Data is not available to allow reliable identification of trends in the number, introduction, distribution and impacts of IAS. In particular, there is a lack of data about IAS that are not also crop pests.

Ultimately, it is not possible to evaluate the effectiveness of IAS control measures, due to a shortage of necessary supporting information.

Obstacles and scientific and technical needs related to the measures taken

A leading obstacle is the lack of data to inform decision-making and policy development on IAS. Closely related is the absence of policies/action plans to strategically address IAS. It is anticipated that the project *Preventing Costs of Invasive Alien Species in Barbados and the OECS Countries* will address some of these issues. In addition to the interventions under that project, St. Vincent and the Grenadines needs technical and financial support to:

- develop a national IAS critical situation analysis;
- establish a baseline of information on the status and distribution of IAS and formulate a programme for detecting change, including changes in range and impacts;
- identify and quantify the impacts and costs of IAS;
- prepare a national invasive species strategy;
- raise awareness of the impacts (including economic and ecosystem impacts) of IAS and generate support for IAS control and eradication action;
- build capacity for risk assessment and prioritization;
- develop and implement biosafety protocols to prevent the spread of IAS across internal borders (e.g. between the islands of St. Vincent and the Grenadines);

- implement IAS monitoring and control/eradication programmes for habitats of endangered and endemic species;
- eradicate/control IAS on the uninhabited islets and cays of the Grenadines, particularly those that are Important Bird Areas;
- incorporate IAS information, including spatial data on status, distribution, and impacts, into a national biodiversity clearing-house.

Biodiversity stakeholders in St. Vincent and the Grenadines have also called for clear technical and policy distinctions to be made, based on risk and impact assessments, between introduced/alien species and invasive species, so that resources can be appropriately directed to the management of invasive species as a matter of priority.

AICHI BIODIVERSITY TARGET 10: PRESSURES ON VULNERABLE ECOSYSTEMS REDUCED

There is no target in the provisional NBSAP that directly corresponds to ABT 10.

Measures taken

Management of coral reefs and other vulnerable coastal and marine ecosystems

Responsibility for management of St. Vincent and the Grenadines' coastal zone is jointly shared by the Fisheries Division and the National Parks, Rivers, and Beaches Authority. The definition of fish in the Fisheries Acts includes coral, and removal of coral is prohibited except with permission of the Chief Fisheries Officer. Under the National Parks Act, the National Parks, Rivers and Beaches Authority's responsibilities include replenishment and rehabilitation of damaged coral reefs.

One of the strategic objectives in the NESDP is the development and implementation of an integrated coastal zone management plan, which would include provision for the sustainable management of coral reefs, mangroves, and other vulnerable coastal ecosystems.

The NOP calls for action to be taken to protect natural coastal features such as coral reefs, mangroves and beaches to act as natural buffers to storm surges and to reduce wave-damage from storms.

In the PIF for the proposed GEF project *Conserving biodiversity and reducing land degradation using a Ridge-to-Reef approach*, land-based sources of pollution are identified as the most immediate threat to coral reef ecosystems. The project is intended to address

these threats by promoting sustainable land management and agricultural practices such as soil conservation and reduced use of fertilizers and pesticides.

Measures taken to reduce pressures on vulnerable ecosystems, including coral reefs and mangroves, are complementary to the measures taken to restore such ecosystems. Restoration measures are treated separately, under ABT 15.

Measures focused on reducing pressures from land-based sources of pollution will also support progress towards ABT 8.

Effectiveness of measures taken

The measures taken have been assessed as **partially effective**. Relevant indicators include:

- Is there a national integrated coastal zone management policy or law?
- Is there a national plan/strategy/policy framework for the protection and conservation of coral reefs?
- Coral reef cover;
- Coral reef health.

St. Vincent and the Grenadines does not have a national coastal zone management policy, plan, or law. The Fisheries and National Parks Acts include only limited provisions for the protection and conservation of coral reefs.

A 2016 assessment of St. Vincent and the Grenadines' reefs indicated average coral cover of 21%, which is higher than the Caribbean average. Coral cover was assessed at 4 (good) on a scale of 0 to 5. On a scale of 0 to 5, overall coral reef health was assessed at 2.8, or fair. This assessment is based on limited data, as there has not historically been a consistent programme of coral reef monitoring in St. Vincent and the Grenadines. Several organizations, including the National Parks, Rivers, and Beaches Authority, the TCMP Authority, and the Mustique Company, are endeavouring to implement regular coral reef surveys to improve the availability of data on coral reef health.

In general, although there has been policy recognition of the need for the protection of coral reefs and other vulnerable ecosystems, there has not yet been sufficient time for these policies to have been translated into effective strategic action.

Obstacles and scientific and technical needs related to the measures taken

The lack of dedicated national policies and programmes for management of coral reefs are a major constraint towards effective implementation of measures in respect of ABT 10. Given the extent and uniqueness of St. Vincent and the Grenadines' reefs, and their importance to the economy via fisheries and tourism, technical assistance and support is needed for the establishment of a national coral reef conservation and management programme, with dedicated funding and personnel.

AICHI BIODIVERSITY TARGET 11: PROTECTED AREAS INCREASED AND IMPROVED

This ABT correlates to the fourth target in the provisional NBSAP:

> ***By 2020, at least 17 percent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.***

The two related actions outlined in the NBSAP are to:

- Conduct assessments of the terrestrial and coastal and marine ecosystems to establish the percentage of territory that is most beneficial and feasible for protection, as well as the most appropriate level/category of protection needed; and
- Develop and implement, on a phased basis, the process for Protected Areas designation, ensuring enforcement of the relevant legislation.

These actions have not yet been fully implemented but relevant steps are being taken, as described below.

Measures taken

National Parks and Protected Areas Policy and System Plan

In 2010 St. Vincent and the Grenadines adopted a National Parks and Protected Areas Policy, and a National Park and Protected Areas System Plan. The objectives of the National Parks and Protected Areas Policy were:

- To maintain the country's rich diversity of flora and fauna by conserving and protecting all island endemic plant and animal species, such as the St. Vincent Parrot (*Amazona guildingii*) and Whistling Warbler (*Catharopeza bishopi*);
- To conserve all wilderness areas and critical habitats necessary for the maintenance of animal and plant species, as well as the environmental quality and productivity of the coastal zone which are essential to health, fisheries, tourism, and recreation;
- To sustain productivity and quality of critical ecosystems, particularly in relation to forestry, fisheries, and tourism, by stimulating the rational use of limited resources and the restoration of degraded lands;
- To provide natural and cultural places for recreation, enjoyment, and inspiration and thereby encourage research, knowledge and understanding of the natural and cultural heritage of the country;
- To establish and maintain the National Parks Authority which will establish criteria for the protected areas systems; classify, reclassify, and declassify protected areas; establish guidelines for management plans and reporting requirements; and facilitate compliance and enforcement, funding mechanisms, and regional cooperation, through linkages of national protected area coordinating bodies within the planning Ministry, recognizing protected areas as an integral element of national planning and development.

The System Plan sets out, *inter alia*, the following management objectives:

- Sustainable development;
- Protection of biodiversity;
- Protection of ecosystem function;
- Meeting obligations under international conventions;
- Financial sustainability;
- Improvement in the state of knowledge, information and data.

Strengthening the Regulatory Framework for Protected Areas

The 35 existing protected areas in St. Vincent and the Grenadines have been established under several different pieces of legislation, which afford varying types and levels of conservation protection. The somewhat disjointed nature of the legal framework for protected areas has posed a challenge for effective management. The National Parks, Rivers and Beaches Authority reports that new Parks and Protected Areas regulations are being prepared. It is anticipated that these regulations will considerably harmonize the protected areas framework and strengthen enforcement of the National Parks Act.

The regulations are intended to, by means of declaration orders, bolster the legal status of protected areas and other area-based conservation measures. Under the new regulations the National Parks, Rivers and Beaches Authority will better be able to control uses of protected areas in order to avoid adverse impacts on biodiversity and ecosystems. The Authority will have greater enforcement powers and will be able to impose fines for violation of the regulations. The regulations will also allow for the Authority to charge park entrance fees, which will generate sustainable financing for protected areas management.

Capacity Building to Improve Protected Areas Management

Since the adoption of the National Parks and Protected Areas Policy and System Plan, action has been ongoing to improve management of protected areas in St. Vincent and the Grenadines. Several key capacity-building measures, including training , increases in staffing, and supply of equipment, were implemented as part of the ECMANN project (see case studies 6 and 7), with a focus on the TCMP and the South Coast Marine Conservation Area (SCMCA). There has also been training and capacity development under the Biodiversity and Protected Areas Management (BIOPAMA) programme being implemented by the International Union for Conservation of Nature.

Efforts to Expand Protected Areas Coverage

The main measures taken by St. Vincent and the Grenadines to expand the coverage of the national system of protected areas and other effective area-based conservation measures relate to ongoing efforts towards the official designation of the SCMCA on St. Vincent. The ECMANN project contributed to these efforts. It laid the groundwork for the completion of a marine spatial plan for St. Vincent and the Grenadines, building on previous similar work in the Grenadine islands.

St. Vincent and the Grenadines is a participating country in the Caribbean Challenge Initiative and is therefore working towards the goal of effectively conserving and managing at least 20 percent of its marine and coastal environment by 2020. This will be

a challenge, as the country's exclusive economic zone is over 27,000 sq. km., nearly eighty times larger than its total land area. Currently less than 5% of the coastal and marine territory is incorporated in protected areas and other area-based conservation measures. Terrestrial protected areas coverage is approximately 22%.

Case study 6: Participation in the Climate-Resilient Eastern Caribbean Marine Managed Areas Network (ECMMAN) Project

Over the period 2013 to 2017, St. Vincent and the Grenadines was one of the six ECMMAN project countries. The ECMMAN project aimed to establish a regional network of effectively marine managed areas in the Eastern Caribbean. The principal project site in St. Vincent and the Grenadines was the TCMP. The TCMP includes the populated island of Mayreau, five uninhabited cays, and three islets. Significant ecosystems and habitats in the TCMP include coral reefs, sea turtle nesting sites and feeding areas, and small systems of mangroves.

The ECMMAN project contributed to improving the management of the TCMP by, *inter alia*:

- Developing a strategic compliance, surveillance, training and enforcement plan, including training of rangers in enforcement strategies;
- Conducting monitoring of priority resources, including queen conch and sea turtles;
- Conducting water quality monitoring training and assessments;
- Conducting biophysical assessments;
- Supporting scuba diving training for rangers;
- Supporting annual meetings of the Grenadines Network of Marine Protected Areas.

Transboundary Marine Protection

In 2011, the Grenadines Network of Marine Protected Areas (GNMPA) was established. The GNMPA is one of only three transboundary MPA networks in the wider Caribbean. Initially launched with the participation of three marine protected areas, the network has grown to include six marine protected areas in St. Vincent and the Grenadines and Grenada. These are: the Molinière-Beauséjour MPA, the Woburn/Clarke's Court MPA, and the Sandy Island/Oyster Bed MPA in Grenada, and the

TCMP, Mustique Marine Conservation Area, and SCMCA in St. Vincent and the Grenadines.

Sustainable Grenadines, an NGO based in St. Vincent and the Grenadines, facilitates the operation of the network. Members of the GNMPA cooperate and collaborate on matters related to MPA governance, management planning, monitoring, and enforcement. Exchange programmes and information sharing between members of the network allow for capacity-building and sharing of best practices.

In 2012, under the Grenadines Marine Resource and Space Use Information System project, a draft marine multi-use zoning plan for the Grenadine Bank was developed, incorporating all six MPAs. This plan was developed via a participatory process that recognized and respected traditional uses of the marine resources in the plan area. The plan has not yet been officially endorsed by either of the two national governments under whose jurisdiction the Grenadine Bank falls. However, the outputs of the project served to inform the development of St. Vincent and the Grenadines' NOP, which was approved by the Cabinet in 2018. One of the actions areas in the NOP relates to establishing a network/system of "effectively and equitably managed, ecologically representative and well-connected protected areas and other effective area-based conservation measures in order to reduce the rate of biodiversity loss in the marine environment".

Conserving biodiversity and reducing land degradation using a Ridge-to-Reef approach

A national project has been developed for GEF funding, with the objective being "to enhance biodiversity conservation and ecosystems services conservation through an expanded and strengthened protected areas system, and with sustainable land management measures integrated in a ridge-to-reef approach". Intended project outputs include:

- update of protected areas and natural resources conservation legislation, to cover gaps and overlaps;
- revision of the National Parks and Protected Areas System Plan to achieve Caribbean Challenge targets;
- an enhanced financial sustainability framework for the protected areas system;
- training in, *inter alia*, protected areas planning and management;
- expansion, gazetting, demarcation and operationalization of the Central Mountain Range Forest Reserve;

- establishment and operationalization of the Leeward Coast Marine Managed Area;
- demarcation, gazetting, and operationalization of the Chatham Bay National Park.

The project concept has been approved by the GEF and the project is being further developed for full approval and subsequent implementation.

Case study 7: Listing of the Tobago Cays Marine Park as SPAW Protected Area

The ECMMAN project supported the designation of the TCMP as a regionally recognized protected area under the Protocol Concerning Specially Protected Areas and Wildlife (SPAW) in the Wider Caribbean Region. In 2014, at the Eighth Meeting of the Contracting Parties to the SPAW Protocol, the Park was approved for listing as a protected area under the Protocol. The listing confirms that the TCMP meets SPAW Protocol criteria related to conservation value, rarity, naturalness, diversity, existence of critical habitats, resilience, productivity and socio-economic benefits.

The Park is now part of a Caribbean-wide network of protected areas that have been identified as being of particular importance to the Wider Caribbean region, that are to be accorded priority for scientific and technical research and mutual assistance, and that are to be protected from activities that would undermine the purposes for which they were listed.

Effectiveness of measures taken

Measures taken have been assessed as **partially effective**. Indicators used are:

- Is there a legal, policy, and institutional framework for protected areas management?
- Extent to which terrestrial, freshwater, coastal, and marine areas are conserved via systems of protected areas and other area-based conservation measures;
- Trends in protected area coverage of key biodiversity areas;
- Trends in protected area connectedness index;

- Trends in protected area representativeness index;
- Extent of activities to strengthen protected areas management effectiveness.

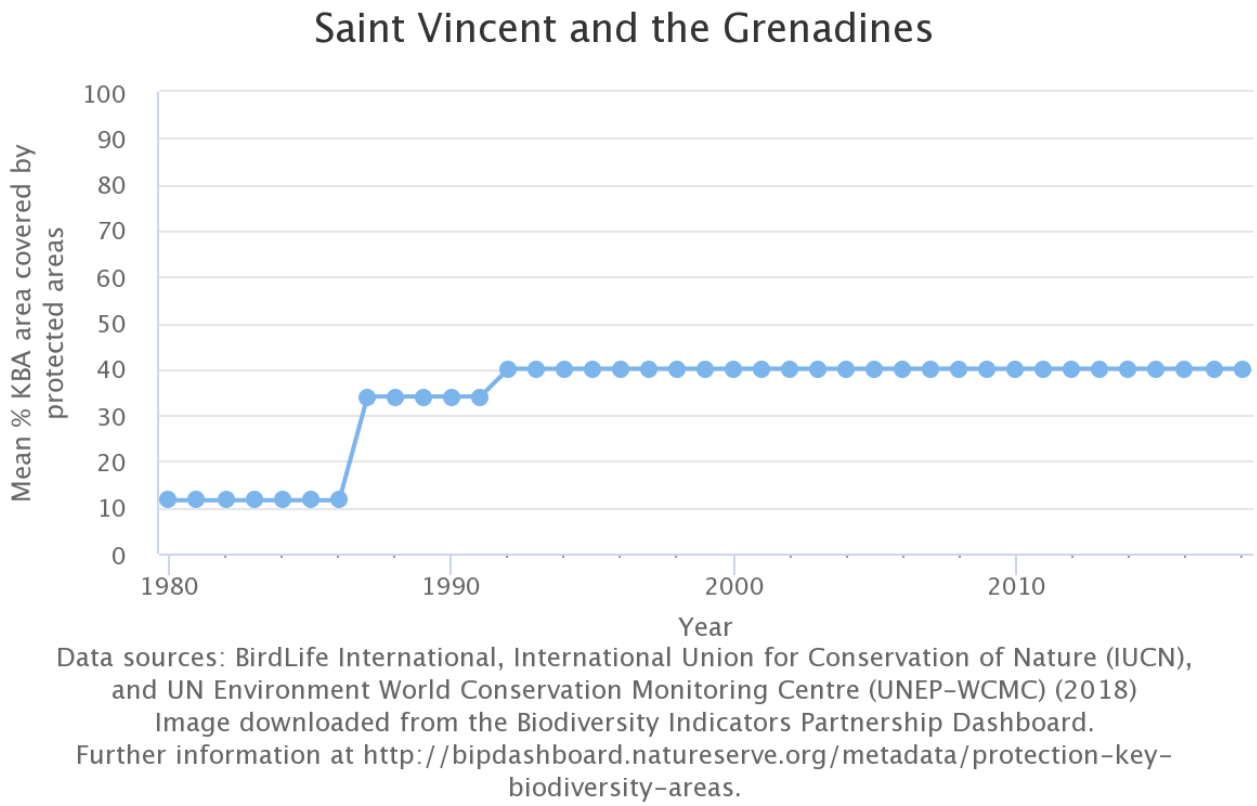
There are 13 laws that govern protected areas management in St. Vincent and the Grenadines. There is no overarching protected areas legislation. According to the PIF for the proposed project *Conserving biodiversity and reducing land degradation using a Ridge-to-Reef approach*:

> There [are] insufficient comprehensive policy, legal, and regulatory mechanisms to ensure effective management of SVG's protected areas or integrated landscape level planning. Key policy gaps include the lack of ... a protected area policy to inform natural resources, biodiversity conservation, and protected areas priorities. ...Historically SVG's legally gazetted protected areas were established under various legislations. Though the updated National Parks (Amended) Act 2010 established all multiple protected areas categories under law, there are no supporting regulation to terrestrial PAs... Many Acts that support protected areas, natural resources, and biodiversity have no supporting regulations, and insufficient enforcement abilities..."

Actions are outlined in the project proposal to address the obstacles summarized above.

According to the World Database of Protected Areas, 22% of St. Vincent and the Grenadines' terrestrial area and <1% of its coastal and marine area is conserved via systems of protected areas. It should be noted that there is some uncertainty about these figures, as there are inconsistencies between the list of protected areas in the World Database of Protected Areas and lists of protected areas maintained at the national level.

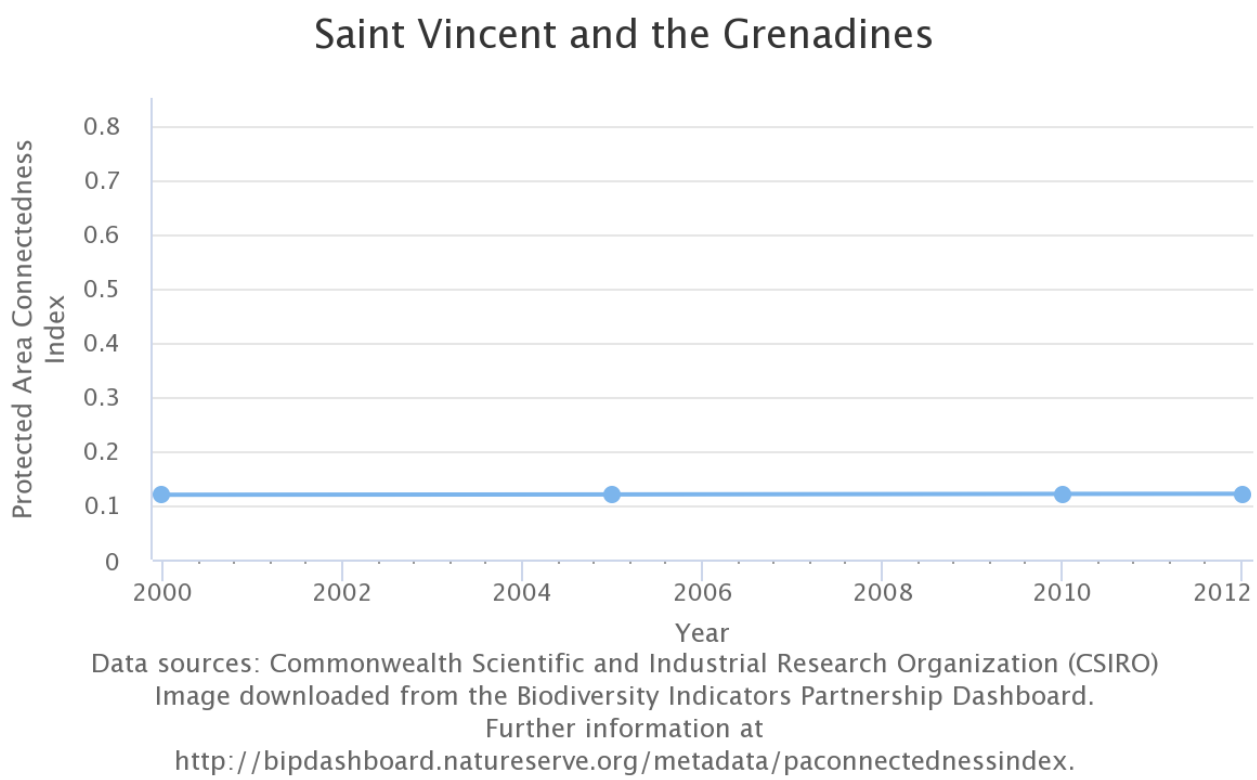
Protected area coverage of key biodiversity areas (KBAs) has remained constant at 40.5% for over 25 years. This is consistent with the fact that no new protected areas have been formally/legally established since 1992.



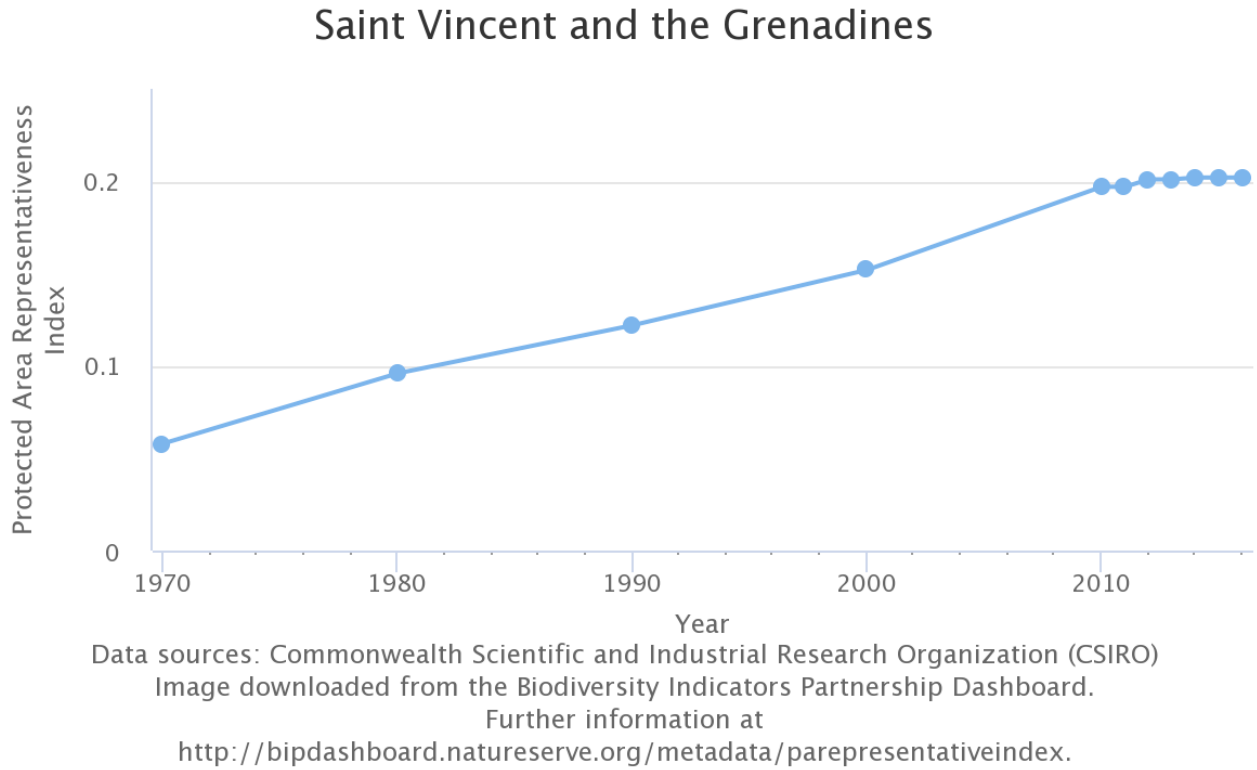
Trend in % of KBA areas covered by protected areas, 1980 to 2018. Source: Biodiversity Indicators Partnership (BIP)

Between 2000 and 2012 (the most recent year for which a figure is available) St. Vincent and the Grenadines' protected areas connectedness index improved marginally, from 0.1193 to 0.1211.

Over the period 2010 to 2016, the protected areas representativeness index stayed roughly the same, with a minor increase from 0.197 to 0.202.



Trend in protected area connected index, 2000 to 2012. Source: BIP



Trend in protected area representativeness index, 1970 to 2016. Source: BIP

Despite the constraints, including human resources, financial, and technical constraints, that have been identified in the literature and by in-country experts, there have been substantial efforts made to improve protected areas management effectiveness, including through development of new regulations, training and capacity development, monitoring and evaluation programmes, improved reporting, use of marine spatial planning approaches, and project development and implementation. Protected areas managers and stakeholders generally agree that these efforts have produced results, although there is still much room for improvement.

Obstacles and scientific and technical needs related to the measures taken

Protected areas administrators and managers in St. Vincent and the Grenadines have identified the following areas where technical and scientific support and capacity-development are needed:

- Database and information management, including establishment of national and regional protected areas clearing-house mechanisms;
- Marine spatial planning;
- Marine biodiversity management and conservation;
- Project management, including monitoring and evaluation;
- Ecological monitoring, particularly for marine protected areas and coral reefs;
- Marine science;
- Grant proposal writing.

Additionally, there are a number of fundamental policy, legislative, and institutional issues and constraints that should be addressed in order to improve protected areas management in St. Vincent and the Grenadines. Many of these were identified and described in the 2007 *Review of the Policy, Legal and Institutional Frameworks for Protected Areas Management in St. Vincent and the Grenadines* carried out under the OECS Protected Areas and Associated Livelihoods Project. Although this review was carried out over a decade ago, the majority of the findings, conclusions and recommendations contained therein are still relevant. In this regard, St. Vincent and the Grenadines would benefit from technical support in the following areas:

- Review and rationalization of the existing national parks and protected areas system, in keeping with international guidance and best practice on the purposes and categories of protected areas. The current system plan was formulated in the context of a tourism development project and reflects an emphasis on the linkage

between protected areas and tourism development. However, the system plan does not adequately account and provide a framework for managing other relevant protected areas objectives such as biodiversity conservation and protection, maintenance of ecosystem services, education, climate change adaptation, disaster risk reduction, etc.

- Review, revision, and harmonization of laws and regulations (which include at least a dozen items of legislation) for protected areas management, with an eye to eliminating overlap, gaps, inconsistencies, and conflicts in the law. Keeping in mind that national parks constitute only one of several categories of protected area, it may be useful to consider replacing the National Parks Act (and protected area provisions in other national laws) with an overarching protected areas law.
- Design of a collaborative (including civil society and the private sector) institutional mechanism for protected areas management, and corresponding rationalization and restructuring of protected area management responsibilities and institutional mandates.
- Protected areas planning and designation to ensure representativeness, connectivity, and conservation and protection of important species, habitats, and ecosystems services.

AICHI BIODIVERSITY TARGET 12: EXTINCTION PREVENTED

There is no target corresponding to ABT 12 in St. Vincent and the Grenadines provisional NBSAP.

Measures taken

Conservation and protection of species threatened with extinction

Recent efforts to strengthen the protection and conservation of species threatened with extinction have included the implementation, in 2017, a prohibition on hunting of all species of sea turtles. Prior to the ban, St. Vincent and the Grenadines had been assessed as being among the world's top ten countries with the highest legal take of sea turtles. In 2018, former turtle fishers were invited to turn in their nets as a symbol of their willingness to comply with the new legislation. Fishers received financial compensation for handing in their nets, with the expectation that the money would be used to help them launch alternative sustainable livelihoods. In 2016, Colonarie beach was announced

by the National Parks, Rivers and Beaches Authority as a Protected Turtle Nesting Habitat.

In 2015, the Union Island Gecko Initiative (see case study 8) was launched to improve the conservation status of the critically endangered Union Island Gecko (*Gonatodes daudini*), which is endemic to St. Vincent and the Grenadines.

Case study 8: Union Island Gecko Initiative

The Union Island Gecko (*Gonatodes daudini*) is a critically endangered reptile that is endemic to Union Island in the Grenadines. Its known range, which is limited to the forested slopes above Chatham Bay on Union Island, is less than one square kilometre. Discovered in 2005, the Union Island Gecko is one of St. Vincent and the Grenadines' most endangered species. Since its discovery, it has been targeted by wildlife poachers for the commercial pet trade in Europe and North America. In 2015, the St. Vincent and the Grenadines Forestry Department, in partnership with Fauna & Flora International and the Virginia Zoo, launched the Union Island Gecko Initiative, with the aim of preventing the gecko's extinction.

Activities under the Initiative have included:

- a rapid field assessment of the gecko's range and population
- the development of a Conservation Action Plan for the gecko, in consultation with community stakeholders
- establishment of a forest warden patrol.

As a result of these efforts, in 2017, a reptile poacher was arrested and convicted. St. Vincent and the Grenadines is seeking to further combat poaching for trade by having the Union Island Gecko listed in Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), and a justification for such a listing is being prepared.

The St. Vincent Amazon parrot (*Amazona guildingii*), which is endemic to St. Vincent, is a flagship species in St. Vincent and the Grenadines, and sustained conservation efforts have been successful in arresting the species' decline towards extinction.

SCIENCE, with the support of regional and international partners, has been implementing seabird conservation actions in globally significant Important Bird Areas in the Grenadines (see case study 9).

Case study 9: Seabird conservation in the Grenadines

Seabird surveys in 2004 and 2009 revealed that the Grenadine islands are home to significant breeding colonies of at least 18 species of seabirds. Two islands in particular, Battowia and Petit Canouan, have been designated as Important Bird Areas in recognition of their value as habitats for globally important colonies of Brown boobies (*Sula leucogaster*), Laughing gulls (*Larus atricilla*), Magnificent frigatebirds (*Fregata magnificens*), Roseate terns (*Sterna dougallii*), Royal terns (*Thalasseus maximus*) and Sooty terns (*Onychoprion fuscatus*). However, the level of protection afforded to the birds and the habitats that support them was negligible, and the birds and their habitat faced a number of threats, including overgrazing, invasive species, burning of vegetation, and human predation of birds and eggs. Challenges to conservation include a lack of monitoring and enforcement, as well as the remoteness of the islands.

Since 2014 SCIENCE has been working with Environmental Protection in the Caribbean (EPIC) and BirdsCaribbean to mobilize community-based conservation efforts. Fishers and other concerned citizens have formed volunteer patrols and have been trained and empowered to champion seabird conservation in their communities. With support from EPIC and BirdsCaribbean, SCIENCE has developed a citizen science programme which involves fishers in monitoring seabird populations, using forms specially designed for easy use by fishers while they are out at sea. Arrangements also exist for fishers to submit monitoring data or information about bird sightings using their mobile phones. A principal focus for the organization now, via the NAEP, is promoting behaviour change and curb the indiscriminate hunting and harvesting of birds and their eggs. Breaking long-standing traditions is challenging, but progress has been made. Some fishers and former hunters who have observed with concern the decline in seabird numbers have become advocates amongst their peers for seabird conservation.

A national project *Conserving biodiversity and reducing land degradation using a Ridge-to-Reef approach* has been developed for funding by the GEF. This project aims to reduce risks of species extinction by, *inter alia*, developing species recovery and action plans for globally threatened endemic species (*Amazona guildingii*, *Catharopeza bishopi*, *Chironius vincenti*, and *Pristimantis shrevei*) in the Central Mountain Range Forest Reserve, and formally designating a national park to protect the habitat of the Union Island Gecko. The project concept has been approved by the GEF, and full project approval for implementation is pending.

Effectiveness of measures taken

The effectiveness of measures related to ABT 12 has been assessed as **unknown**. Indicators used to assess effectiveness of these measures include:

- Number of vulnerable, endangered and critically endangered species for which active conservation actions have been reported;
- Trends in population/conservation status of vulnerable, endangered, and critically endangered endemic species;
- Trends in populations of species for which protection/conservation actions have been taken;
- Trends in Red List Index of species survival.

There are six vulnerable, endangered, or critically endangered species on the International Union for Conservation of Nature (IUCN) Red List that are endemic to St. Vincent and the Grenadines. There are another two species that are endemic to the Grenada Bank/Grenadines (i.e. St. Vincent and the Grenadines and Grenada). Of these total eight endemic species, active conservation efforts have been reported for two: the St. Vincent Amazon and the Union Island Gecko. Forestry experts in St. Vincent and the Grenadines have indicated that because the Whistling Warbler (*Catharopeza bishopi*), an endangered endemic species of bird, occupies much of the same habitat as the St. Vincent Amazon, efforts to protect the Amazon's habitat may also indirectly benefit the Warbler.

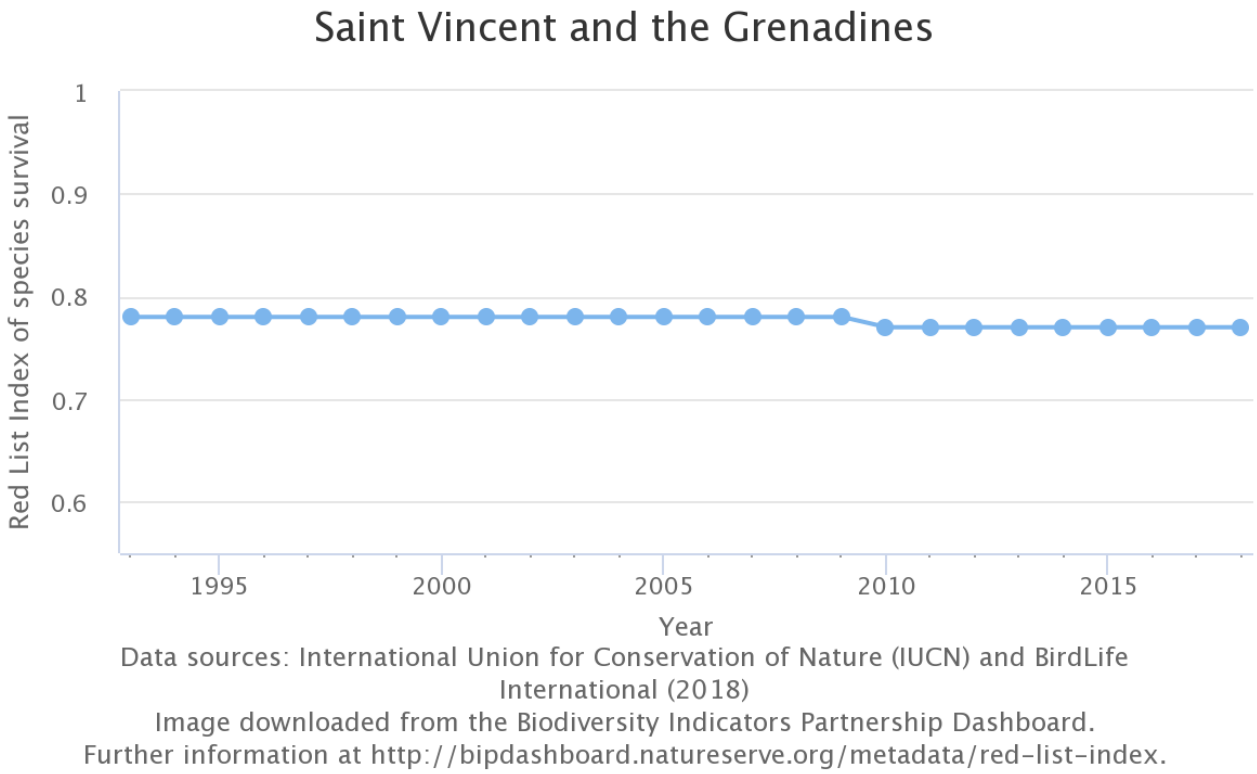
It should be noted that conservation measures (via legal protection) have recently been enacted for a number of Red List species that are not endemic to St. Vincent and the Grenadines.

Of the eight vulnerable, endangered, or critically endangered endemic species, the St. Vincent Amazon is the only one recorded in the IUCN Red List as showing an increasing population trend. The population of the Union Island Gecko is assumed to be

stable, although biodiversity experts in St. Vincent and the Grenadines are concerned that the Gecko's habitat is likely to be affected by future tourism development on Union Island. Three of the eight species are recorded as having declining populations, and for the remaining three, data is insufficient to assess or estimate population trends.

The measures to protect sea turtles have only recently been enacted, and population data is not available with which to assess their impacts. The conservation programme for the St. Vincent Amazon has resulted in a steady increasing population trend.

The Red List index of species survival for St. Vincent and the Grenadines has been relatively constant at 0.77 since 2010, indicating that there has been no significant change in the overall level of species extinction risk.



Trend in Red List index of species survival, 1993 to 2018. Source: BIP

Overall, the information available makes it difficult to assess the effectiveness of measures to prevent species extinctions in St. Vincent and the Grenadines. This is in part due to the unavailability of data with which to assess population trends. Further to this, it appears that so far insufficient measures have been taken to address extinction risks for the species that arguably should be among those of unique and highest concern for St. Vincent and the Grenadines, i.e. the globally threatened species that are endemic to the country.

Obstacles and scientific and technical needs related to the measures taken

Lack of relevant data to inform decision-making and evaluate progress is one of the key obstacles in relation to this target. Another is the lack of attention given to reducing the risk of extinction of endemic species, some of which have a very narrow range, e.g. limited to a small area on a single island in the Grenadines. Human resources shortages (which are in part a result of a shortage of financial resources) present challenges for conservation monitoring, surveillance, and enforcement.

Information in the IUCN Red List about research and conservation actions needed for critically endangered, endangered, and vulnerable species in St. Vincent and The Grenadines gives an indication of areas where technical and scientific cooperation and capacity-building are needed, e.g.:

- research and monitoring to determine population size, distribution and trends;
- research and monitoring to assess habitats, habitat status, and trends;
- research to identify major threats and risks to species;
- development and implementation of species conservation and recovery plans;
- formulation of laws and policies to protect species and their habitats;
- communications, education, and public awareness, including formal education and training in conservation science.

There is also a need to carry out assessments for species that are recorded as being endemic to St. Vincent and the Grenadines but which are not yet included in the IUCN Red List, such as the Cook's tree boa (*Corallus cookii*).

Support and assistance to build productive partnerships with international conservation organizations would substantially increase St. Vincent and the Grenadines' capacity to prevent the extinction of endemic endangered species.

AICHI BIODIVERSITY TARGET 13: GENETIC DIVERSITY MAINTAINED

There is no target in the provisional NBSAP that correlates to ABT 13.

Measures taken

Stakeholders report that there is strong policy and public opposition to the importation of genetically modified seeds and crops into St. Vincent and the Grenadines. There are some farmers and NGOs with an interest in preserving local varieties of tree crops, vegetables, and herbs. For example, the Richmond Vale Academy has established a seed bank that preserves local seeds of 25 varieties of vegetable and herbs. These small-scale initiatives notwithstanding, no significant national measures have been taken in respect of this target.

With respect to the genetic diversity of agricultural crops, wild plants for food production, and wild relatives, the current situation in St. Vincent and the Grenadines is largely unchanged from that described in the Second Country Report on the State of Plant Genetic Resources for Food and Agriculture, which was prepared in 2008.

Effectiveness of measures taken

No significant measures have been taken.

Obstacles and scientific and technical needs related to the measures taken

The obstacles, constraints, and needs outlined in the Second Country Report on the State of Plant Genetic Resources for Food and Agriculture still apply. It should be noted that any international partnerships for research on agricultural genetic diversity should be established and maintained in keeping with best practices for access and benefit-sharing.

AICHI BIODIVERSITY TARGET 14: ECOSYSTEMS AND ESSENTIAL SERVICES SAFEGUARDED

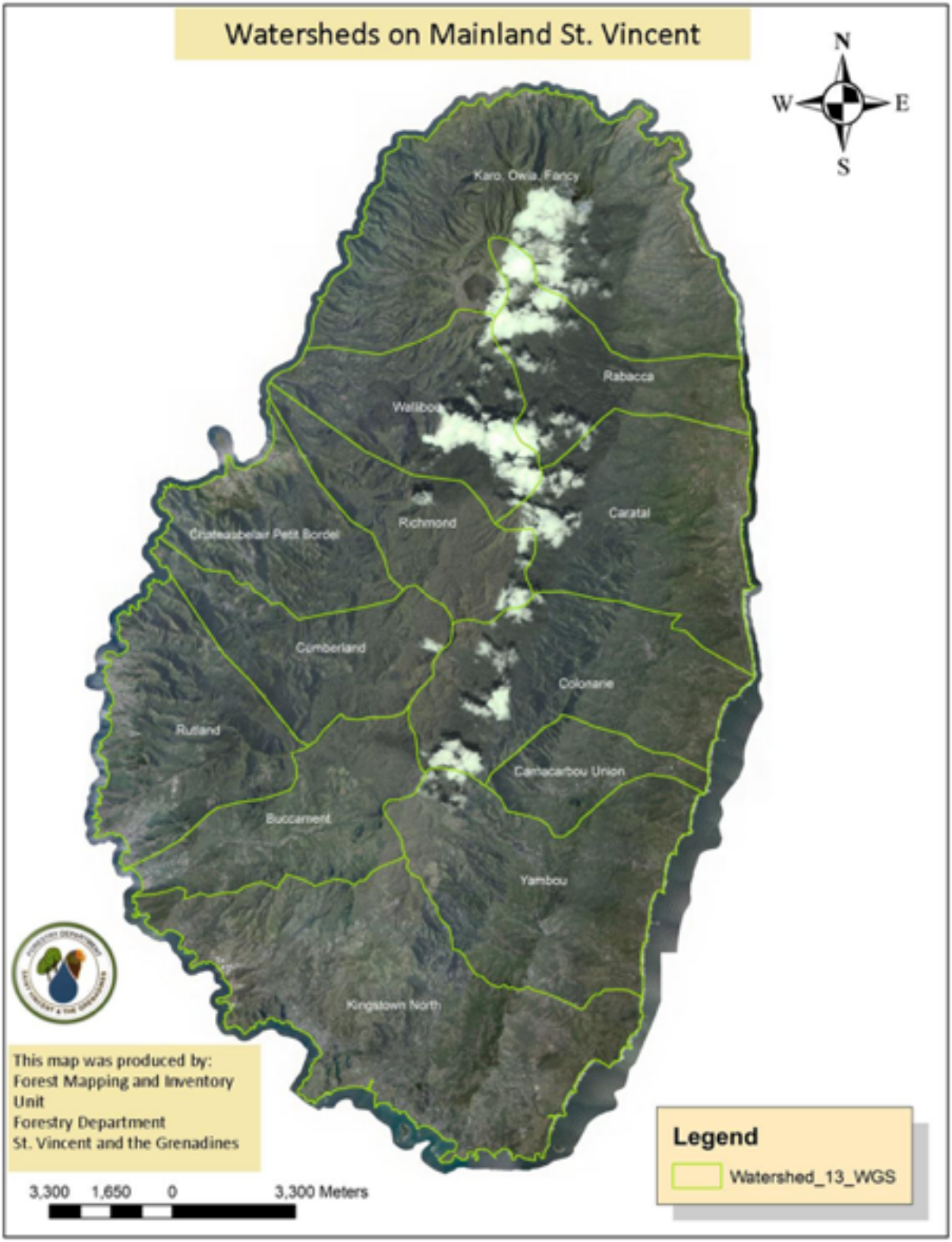
There is no national target corresponding to ABT 14 in the provisional NBSAP.

Measures taken

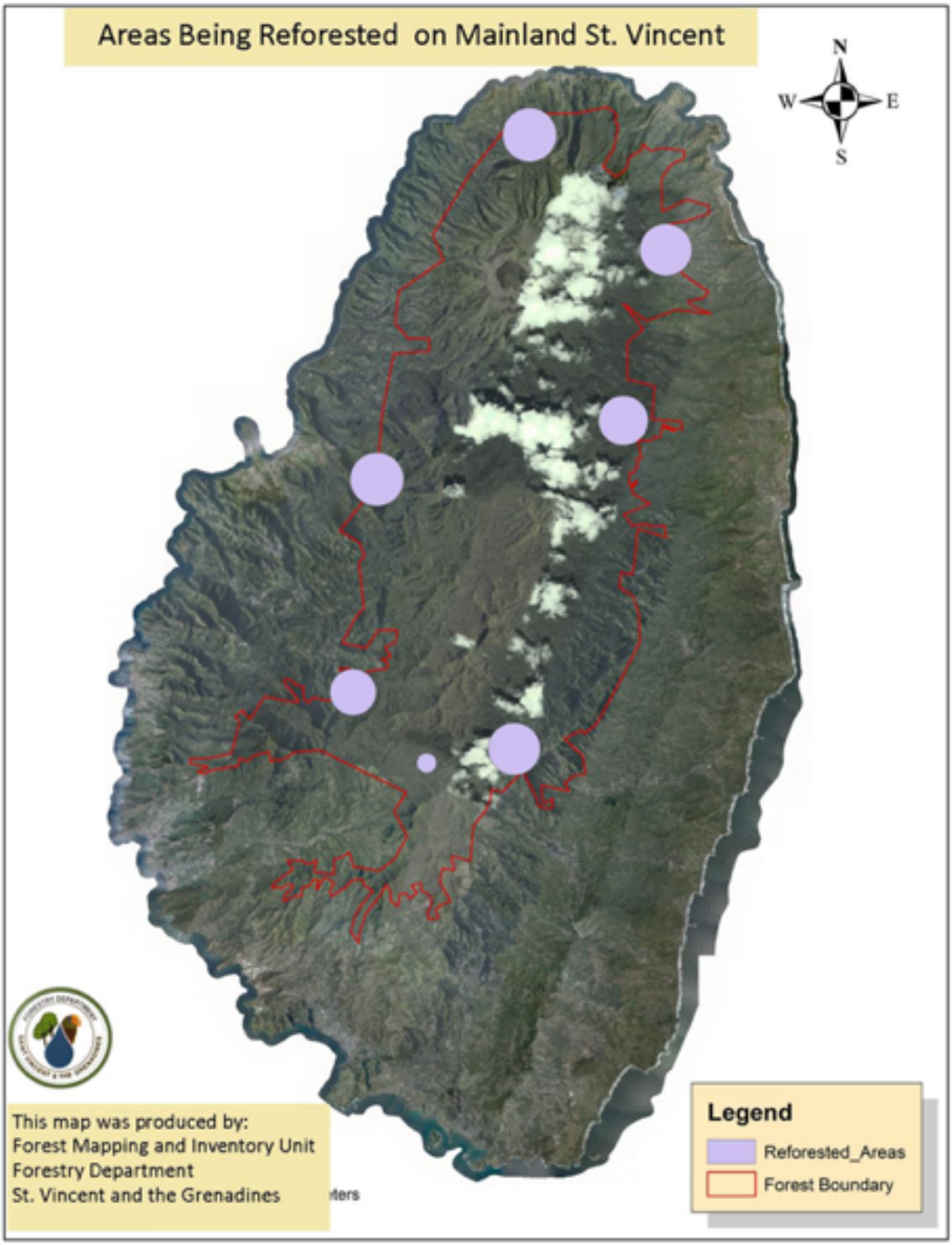
Integrated Watershed Management

Integrated watershed management is a priority strategic objective in the NESDP 2013-2025. The NESDP identifies measures (including reforestation and soil conservation) to conserve biodiversity and protect watersheds as essential to ensure sustainable use of land and forestry resources, as well as to ensure an adequate, safe, reliable, and sustainable supply of water for potable, agricultural, and industrial (including hydroelectricity) use. A key measure towards achievement of this national goal was the Integrated Watershed Management and Forest Reserve Protection Project (see case study 10).

The Forestry Department plays a key role in watershed management on St. Vincent, where surface water is the principal source of freshwater (in the island of the Grenadines, the main source of freshwater is rainwater harvesting). An important aspect of their work is the planting of forest species that help to protect and preserve the water supply, both in terms of quantity and quality. Examples of strategies practised by the Department include the removal of stands of Blue Mahoe (*Talipariti elatum*) in critical watershed areas, and its replacement with lower water-use species. The Department also engages in strategic revegetation and reforestation as a means of soil conservation and erosion control. The images below show the locations of 13 watershed on mainland St. Vincent and the main target sites for the Department's reforestation efforts.



Watersheds on mainland St. Vincent. Source: St. Vincent and the Grenadines Forestry Department.



Main areas of reforestation activity on mainland St. Vincent. Source: St. Vincent and the Grenadines Forestry Department

Case study 10: Integrated Watershed Management and Forest Reserve Protection

Between September 2013 and June 2014, the National Parks, Rivers and Beaches Authority embarked on an Integrated Watershed Management Planning and Forest Reserve Protection Project in the Cumberland Valley of St. Vincent. The project was funded by the Critical Ecosystem Partnership Fund, executed through the Caribbean Natural Resources Institute with the involvement from Global Parks, an international NGO. The aim of the project was to develop an Integrated Watershed Management Plan (IWMP) for the Cumberland Forest Reserve. Project components included:

- Development of a Rapid Biodiversity Inventory;
- Development of a Wildlife Conservation Strategy, with emphasis on the Key Biodiversity Assets;
- Silvicultural Plan to improve forest management and ecosystem service functions;
- Development of a cooperation agreement between watershed stakeholders;
- Recommendations and interventions specific to upper watershed soil and water conservation;
- Recommendations as regards key livelihoods activities based on use of watershed resources to promote sustainability and conservation of watershed resources;
- Capacity-building for staff and other key watershed stakeholders to support the implementation of the IWMP and long-term watershed management.

The Central Water and Sewerage Authority (CWSA) partners with the Forestry Department in tree planting initiatives, and also works with the Department to educate the public about watershed protection and management. The CWSA routinely monitors climatic conditions, rainfall, water levels and streamflow in strategic watersheds across

St. Vincent. This information is shared with the Forestry Department to support effective watershed management planning and action.

Integrated watershed management is a component of the proposed national GEF project *Conserving biodiversity and reducing land degradation using a Ridge-to-Reef approach.*. The project includes measures to improve sustainable land management practices in three upper watershed landscapes in and surrounding the Central Mountain Forest Reserve. Activities will include native forest restoration, improving rangeland management, and participatory development and implementation of watershed management plans.

Effectiveness of measures taken

Measures taken have been partially effective. Indicators used to assess effectiveness include:

- Have ecosystems providing essential services been identified been identified and mapped?
- Extent to which ecosystems providing essential services are being safeguarded and restored;
- Extent to which protection and restoration of ecosystems take into account the needs of women, local communities, the poor and the vulnerable;
- Trends in health of ecosystems providing essential services;
- Trends in quality of essential services, including services related to water, provided by ecosystems.

There has been identification and mapping of watersheds, particularly on mainland St. Vincent. However, biodiversity experts and stakeholders indicated that there is need for a further consideration of the diverse types of essential services (e.g. food, raw materials, livelihoods, cultural, recreational, disaster risk reduction) provided by ecosystems, as well as for greater recognition of the services that specific ecosystems (e.g. salt ponds and freshwater ponds on Union Island) provide for local communities in their vicinity.

Along with ongoing programmes of work, several specific projects have been developed and carried out to protect and restore ecosystems providing essential services related to water. There have also been activities implemented to safeguard the ecosystems services provided by coral reefs and mangroves. Field, forestry and watershed management experts, based on assessments in the field, evaluate these initiatives as having been fairly effective in the areas where they were implemented. However, there is a need for

stronger legislative protection of these key ecosystems, and for stronger surveillance and enforcement. Additionally, there is some concern that some important ecosystems services (and the ecosystems that provide them) are being overlooked. In particular, there was a sense that the ecosystems in the Grenadines are receiving less attention than ecosystems on the mainland, despite the importance of the services they provide to local communities; stakeholders from the Grenadines saw progress toward ABT 14 as being closely linked to ABT 18 on understanding of and respect for traditional knowledge and practices of local communities.

Projects for ecosystem services management are generally designed to involve local communities and to enhance local livelihoods. However, representatives from community-based organizations expressed the view that such programmes and projects could be improved by placing a greater emphasis on traditional and local knowledge about ecosystems and processes; by strengthening efforts to incorporate and promote communities' customary sustainable use of ecosystems and the services they provide; and by developing clearer understanding of the heterogeneity of communities, so that programmes and projects can be better designed to address the needs of the most vulnerable (e.g. female headed households, children, the elderly) and to protect ecosystems on which vulnerable groups are most dependent.

A major obstacle to assessing effectiveness of measures taken in respect of Target 14 is the inadequacy of criteria and data by which status of and trends in ecosystem health can be measured.

The quality of many ecosystem services in St. Vincent and the Grenadines is being affected by forces outside the scope of national influence. For example, changing climate conditions, including long periods of drought and increasing incidence of intense rainfall events, are affecting the supply of water in St. Vincent. At intervals in the past three years, streamflow in major rivers has been measured at 35% to 75% lower than the five-year average. A longer-term perspective on water availability and the occurrence of water shortages will be necessary to identify trends and determine whether measures being taken to manage and protect watersheds are adequate to protect water-related ecosystem services in a changing climate; this extends to the provision of other essential services as well.

Obstacles and scientific and technical needs related to the measures taken

The policy and institutional framework for water resources management in St. Vincent and the Grenadines is spread over several agencies, under several different pieces of

legislation, with several gaps and overlaps in authority. Similarly, responsibility for the collection of data related to watersheds and water resources is allocated in a somewhat piecemeal fashion to several different agencies. A more coherent, harmonized, and systematic approach to water resources management is essential; the development of a national integrated water resource management policy and supporting legislation is a priority in this regard. Support is also needed for the formulation and official adoption of a National Forest Policy and the development and implementation of Forest Management Plans, as mandated by the Forest Resources Conservation Act.

Related scientific and technical needs are:

- collection and analysis of water quality data to identify trends and develop management strategies;
- research on the current status of watersheds;
- pollution monitoring at source;
- adoption and enforcement of integrated land use planning approaches;
- development of adaptation and climate resilience strategies for the water sector.

More generally, technical assistance is needed to

- identify and map ecosystems and the services that they provide, across St. Vincent and the Grenadines;
- evaluate the main pressures on ecosystems that provides essential services;
- research and monitor the status of ecosystems that provide essential services;
- assess the social benefits of ecosystems and the services they provide, and improve understanding of how local communities and vulnerable groups depend on ecosystems for health, nutrition, well-being and livelihoods;
- prioritize ecosystems for safeguarding and/or restoration.

AICHI BIODIVERSITY TARGET 15: ECOSYSTEMS RESTORED AND RESILIENCE ENHANCED

This target corresponds to the fifth target in the provisional NBSAP:

> ***By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks have been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded***

ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.

Related actions in the provisional NBSAP are:

- Conclude and legally adopt a national policy on climate change, including strategies for adaptation and mitigation;
- Conduct baseline studies on carbon sequestration by various ecosystems (forests, coastal, and marine);
- Monitor ecosystem change and corresponding carbon sequestration changes to compile data to facilitate reporting on contributions to mitigation;
- Prepare and execute an implementation plan for the NDC, including plans for the forestry sector.

The national climate change policy is currently in development and will be accompanied by sectoral adaptation strategies. Implementation of the other actions proposed in the provisional NBSAP has not yet commenced. In the NDC, reforestation, afforestation, reduced deforestation, and reduced forest degradation are identified as significant components of the national approach to climate change mitigation, but it is mentioned that the development of policies and actions in this regard must be preceded by the preparation of a new, good quality forest inventory.

Measures taken

Ecosystems restoration projects

A variety of stakeholders in St. Vincent and the Grenadines are involved in action to restore degraded ecosystems. Restoration initiatives include:

- restoration of Ashton Lagoon (see case study 11);
- coral restoration on the reefs around Petit St. Vincent, with a focus on Elkhorn coral, *Acropora palmata,* a collaborative project between the Centre for Livelihoods, Ecosystems, Energy, Adaptation and Resilience in the Caribbean and the Philip Stephenson Foundation;
- coral restoration by the Mustique Company in the Mustique Conservation Area, in collaboration with the Coral Restoration Foundation;

- rehabilitation of the coral reefs and shorelines in the South Coast Marine Conservation Area in order to improve ecosystem health, increase fish biomass, and building ecosystems resilience to climate change;
- replanting of mangroves on the windward and leeward sides of St. Vincent;
- replanting of trees, including mangroves, on Mustique;
- the revegetation of the Dark View Falls site after damage by severe weather in December 2013;
- distribution of 10,000 moringa trees for planting in 20 communities, funded by the Mustique Charitable Trust and Richmond Vale Academy;
- revegetation, using trees and vetiver grass, of landslide-prone areas in North Leeward after damage by severe weather in December 2013, an initiative funded by the Mustique Charitable Trust and the Richmond Vale Academy.

Actions are also being taken to restore forest ecosystems on mainland St. Vincent, particularly in watershed areas. These are described in the preceding section on ABT 14. Ecosystems restoration activities are often accompanied by CEPA activities that highlight the value of the ecosystems being restored and of biodiversity generally.

Effectiveness of measures taken

Measures taken have been deemed **partially effective**. Indicators used are:

- Is there a national climate change policy?
- Has data been collected on carbon sequestration by various terrestrial and marine ecosystems?
- Number and extent of ecosystem restoration projects;
- Trends in health of restored ecosystems.

The development of a national climate change policy is in progress.

There have been no baseline assessments or routine monitoring of carbon sequestration by terrestrial and marine ecosystems in St. Vincent and the Grenadines.

There are a substantial number of ecosystems restoration projects being undertaken. These include terrestrial, coastal and marine projects; projects being implemented by government agencies, NGOs, and the private sector; and project on mainland St. Vincent and in the Grenadines. In general, spatial information on the location and area of most of these ecosystem restoration projects is not available.

Case study 11: Restoration of Ashton Lagoon

In 2015, the project for the restoration of Ashton Lagoon began. Ashton Lagoon, located on Union Island, is the largest bay in the Grenadines and is the site of the largest remaining mangrove habitat in St. Vincent and the Grenadines. In 1994, a tourism-related development was initiated within the lagoon, despite the area's designation as marine conservation area and the likely ramifications identified in the environment impact assessment. The project was abandoned after a year, but the activities conducted had already caused severe damage to the lagoon. Dredging and the construction of the marina causeway blocked water circulation within the lagoon and has led to the loss of significant coastal resources. Ecological and economic impacts include loss of habitat for wintering and migratory seabirds, water birds, shorebirds, and land birds, stagnant and turbid water in the lagoon, and cascading effects on fisheries, seagrass beds, corals and other marine life. Restoration works in Ashton Lagoon began in November 2017, and significant improvements in water circulation and clarity in the Lagoon have been observed. The restoration project will enhance wildlife habitat potential for birds, fishes and other marine organisms, while also strengthening and enhancing local livelihoods through sustainable tourism development, education and outreach. The restoration project is being implemented by Sustainable Grenadines Inc., a local conservation NGO, in collaboration with the Ministry of Agriculture, Forestry, Fisheries, Rural Transformation, Industry and Labour. Funding partners include the German Development Bank, the Caribbean Community Climate Change Centre, the Nature Conservancy, the Philip Stephenson Foundation, and the Grenadines Partnership Fund.

Restoration projects are still in the early stages of implementation, and quantitative data was not yet available to show impacts of the restoration efforts. Although improvements in ecosystem health have already been observed at some of the targeted sites, additional time will be necessary for the full range of anticipated beneficial outcomes to be observed.

Obstacles and scientific and technical needs related to the measures taken

As mentioned in the NDC, the absence of good quality forest data is hampering the development of policies for incorporating reforestation and afforestation into the

national climate change mitigation programme. As previously mentioned in the section on ABT 5, there has not been a national forest inventory since the early 1990s. St. Vincent and the Grenadines requires technical and financial assistance to develop a comprehensive up-to-date forest inventory, to be used as the basis for calculating and developing the potential for carbon sequestration and climate change mitigation via the land use, land-use change and forestry sector.

Assistance and capacity-building are also needed to:

- conduct assessments on carbon sequestration by forests and other ecosystems and develop corresponding carbon stock values;
- develop spatial data on the location, extent and impacts of ecosystem degradation;
- monitor progress and effectiveness of ecosystem restoration projects;
- train young people in coral restoration techniques;
- develop spatial data on the location, extent, and impacts of ecosystem restoration projects;
- identify and prioritize degraded ecosystems for restoration, based on *inter alia*, levels of degradation, ecosystem types, and ecosystem services provided;
- develop incentive programmes for ecosystem restoration activities on privately owned lands.

Guidance in the form of success stories and best practices from other small island developing states, particularly in the Caribbean, would be beneficial, as would opportunities for practical field-based sharing of techniques and lessons learned.

AICHI BIODIVERSITY TARGET 16: NAGOYA PROTOCOL IN FORCE AND OPERATIONAL

There is no target in the provisional NBSAP that correlates to ABT 16.

Measures taken

One of the actions listed in the NOP to strengthen national oceans governance is to "ratify the Nagoya Protocol on Access and Benefit-Sharing and establish the necessary legal and institutional provisions". However, no progress has been made towards this

end. Ratification and implementation of the Nagoya Protocol are not identified as priority goals in the provisional NBSAP.

Effectiveness of measures taken

No significant measures have been taken.

Obstacles and scientific and technical needs related to the measures taken

Support is needed to:

- Improve stakeholder awareness and understanding of the Nagoya Protocol and the principles of access and benefit-sharing (ABS);
- Develop briefs for high-level decision makers advocating ratification of the Protocol, based on experiences of countries that have already implemented ABS and/or ratified the Protocol, and highlighting the potential commercial value of St. Vincent and the Grenadines' genetic resources;
- Formulate national ABS procedures in keeping with the requirements of the Nagoya Protocol;
- Review, update and/or develop legislative measures for ABS;
- Train government officials and technical officers in the implementation of ABS legislative, administrative or policy measures;
- Train government legal and technical officers in the negotiation of mutually agreed terms and the drafting of ABS permits and contracts;
- Establish institutional arrangements and coordinating mechanisms for implementing ABS legislative, administrative or policy measures, working with national organizations to enhance synergies.

AICHI BIODIVERSITY TARGET 17: NBSAPS ADOPTED AS POLICY INSTRUMENT

Measures taken

St. Vincent and the Grenadines' revised NBSAP was completed in 2017 and submitted to the CBD Secretariat in 2018. The NBSAP was designed to be implemented over the period 2015-2020. As of May 2019, the NBSAP had not yet been adopted by the Cabinet

of Ministers as a whole-of-government policy instrument, and is therefore still considered a provisional document at the national level.

The development of the NBSAP was overseen by a national steering committee, and the action contained in the NBSAP was created in consultation with key institutions tasked with biodiversity conservation. The Sustainable Development Unit is intended to take the lead in coordinating the implementation of the Action Plan. Actual execution of activities in the NBSAP is to be the responsibility of, *inter alia*, the Forestry Department, the Fisheries Division, and the National Parks, Rivers, and Beaches Authority.

Effectiveness of measures taken

Measures taken have been assessed as **ineffective**. Indicators used to assess effectiveness were:

- Is there a post-2010 NBSAP that reflects the goals and targets of the Strategic Plan for Biodiversity 2011-2020?
- Has the NBSAP been endorsed by the Cabinet as a whole-of-government policy instrument?
- Number of national and sectoral policies, strategies and plans that reference the NBSAP and the national biodiversity goals and targets;
- Extent of implementation of the biodiversity actions outlined in the NBSAP.

St. Vincent and the Grenadines has a final post-2010 NBSAP that takes account of the Strategic Plan for Biodiversity 2011-2020 and explicitly incorporates five of the 20 ABTs.

This NBSAP has not yet been adopted by the Cabinet as a national biodiversity policy instrument.

None of the national and sectoral policies, strategies, and plans reviewed during preparation of the 6NR make reference to the NBSAP. Further, biodiversity stakeholders' interviews did not refer to the NBSAP as a guiding policy document for the biodiversity conservation and management actions.

Action has been taken in relation to three of the 19 activities outlined in the NBSAP, an initiation rate of 15%. However, none of the activities listed in the NBSAP has yet been successfully completed.

Obstacles and scientific and technical needs related to the measures taken

The provisional status of the NBSAP and its correspondingly low profile as a national biodiversity programme of action are prime obstacles to effective implementation. The NBSAP is not as closely aligned as it could be with the objectives of the NESDP, which preceded it. Several of the biodiversity objectives in the NESDP are not reflected in the NBSAP. It is likely that there would be more support for NBSAP implementation if it could be clearly demonstrated that the NBSAP gives effect to the biodiversity-related goals and priorities in the NBSAP.

Further to this, although civil society plays a substantial role in biodiversity conservation, management, and sustainable use in St. Vincent and the Grenadines, the NBSAP centres around government institutions. There were no civil society or private sector representatives on the steering committee, and implementation is solely the responsibility of government and quasi-governmental agencies. Lack of involvement of and coordination with the non-state sector is a liability when it comes to broad-based national ownership and implementation of the NBSAP.

It is anticipated that within a few years, the NBSAP will be revised and updated in keeping with the post-2020 biodiversity framework. In this revision/update process, action should be taken, and support provided, to:

- explicitly align, to the greatest extent possible, the NBSAP with national and sectoral development plans, strategies, and priorities;
- raise awareness of the NBSAP amongst biodiversity stakeholders and public sector agencies, including by development of a multi-year national communications strategy to accompany the NBSAP;
- to meaningfully engage biodiversity stakeholders (in government, civil society, and the private sector) in NBSAP development and implementation;
- develop a monitoring and evaluation programmes for the NBSAP, including indicators that are largely within national capacity to assess and track;
- advocate for the NBSAP in national and sectoral policy, programme, and project development processes, ensuring that the objectives and principles of the NBSAP are taken into account.

In addition, national biodiversity stakeholders expressed the need for support and guidance for the establishment of a dedicated and adequately resourced biodiversity unit

within government to more effectively drive biodiversity action and NBSAP implementation.

AICHI BIODIVERSITY TARGET 18: TRADITIONAL KNOWLEDGE RESPECTED

There is no target corresponding to ABT 18 in the provisional NBSAP.

Measures taken

Sectoral experts have observed a return to traditional biodiversity practices in some areas. Agriculture stakeholders highlighted that with the decline of the banana industry, more farmers are re-adopting traditional methods of cultivation, such as terracing and contouring, intercropping, ploughing vegetation back into the soil to maintain soil health and yield, composting, and use of natural pest control methods. The practice of basket fishing in rivers is seeing a resurgence as an alternative to the detrimental practice of fishing with chemical poisons. This latter practice has been prohibited and an awareness campaign carried out to further deter its use.

Initiatives have been undertaken by NGOs and CBOs to support the development of sustainable livelihoods based on traditional biodiversity practices such as beekeeping and sea-moss harvesting. However, there is some concern that the growing commercialization of traditional practices can have an adverse impact on biodiversity. For example, wildlife hunting during the open season was previously done on a subsistence basis, but there is an increasing trend towards hunting for commercial sale, leading to an increase in the number of animals taken, possible beyond sustainable limits.

Overall, biodiversity stakeholders indicate that there is an emerging trend of respect for and documentation of traditional biodiversity knowledge and practices. Two examples are presented in the case studies below. Others include documenting the traditions of the country's indigenous peoples through story-telling and film, similarly documenting traditional subsistence whaling practices and replanting of traditional medicinal gardens and farming sites. This is in keeping with the goals in the NESDP of preserving, maintaining, and promoting the cultural heritage of St. Vincent and the Grenadines.

Effectiveness of measures taken

Measures taken have been deemed **partially effective**. Indicators used are:

- Extent to which traditional biodiversity practices are documented and preserved;

- Extent to which indigenous and local community representatives are actively participating in national biodiversity policy-making and management processes.

There has been an increasing number of projects to document, preserve, and share traditional biodiversity practices through via films, books, social media, planting of model gardens, and even establishment of private museums. The majority of these efforts are driven by NGOs, CBOs, or private individuals with an interest in the natural history and heritage of St. Vincent and the Grenadines. Several of them have been supported by the GEF Small Grants Programme.

Case study 12: Documenting and Preserving Vincentian Ethnobotany

The Rose Hall Cultural and Development Organization (RHCDO) has successfully implemented a project to document and preserve the ethnobotany of the Rose Hall Community. This project involved consulting with villagers in Rose Hall to solicit information about traditional plants and herbs and their medicinal and therapeutic uses. The plants were photographed and, with the assistance of expert resource persons, research was carried out to determine their scientific names.

The RHCDO has planted an organic community garden of traditional medicinal plants and, in January 2017, published a book *Ethnobotany of Rose Hall*, which is a "study of the traditional knowledge and customs of plants, and their medical, religious, and other uses". They have also produced YouTube videos about the garden and the plants cultivated there. The community garden is open to visitors, and the RHCDO offers guided tours to help educate visitors about the community's traditional knowledge. The Rose Hall Project was supported by funding from the United Nations Educational, Scientific and Cultural Organization and the GEF Small Grants Programme.

Biodiversity stakeholders have indicated that while these initiatives have had some effect, it would be even more beneficial for the documentation of biodiversity traditions to be positioned and actively promoted not just as a cultural record, but as examples of good practice in natural resource management and sustainable use, to be used for national awareness-raising and capacity-building.

There is some recognition in national policies of the value of community participation in natural resource management. For example, one of the strategic objectives relating to agriculture in the NESDP is to "develop an operational participatory mechanism to facilitate effective involvement of the farming community in policy formulation". The NOP recommends that "local communities should be encouraged to participate in planning and management strategies and share responsibility for the management of ocean resources".

Notwithstanding these policy provisions, community representatives have expressed the view that they are not sufficiently informed about and involved in government's biodiversity-related activities, and that their local knowledge and customary uses of resources are not sufficiently understood, respected and taken into account. This was voiced particularly by stakeholders from the southern Grenadines who expressed a sense of marginalization from central government/mainland-based biodiversity policy and management processes.

Obstacles and scientific and technical needs related to the measures taken

Measures to respect traditional knowledge and to integrate it into biodiversity conservation and sustainable use in St. Vincent and the Grenadines can be supported by technical and financial assistance and capacity-building to:

- with the cooperation and consent of local communities, conduct research and collect data on traditional knowledge and practices related to biodiversity;
- identify and promote traditional good practices of conservation and sustainable use, and incorporate these (with appropriate credit) into national training and extension programmes;
- increase staffing (and therefore community outreach and liaison capacity) in the agriculture, fisheries, forestry, and wildlife extension services;
- design and implement citizen science programmes to encourage local community participation in biodiversity monitoring and research;
- develop communications strategies, products, and campaigns that highlight the value of traditional biodiversity knowledge and practices as a part of St. Vincent and the Grenadines' history and heritage.

In all cases, care must be taken to give consideration to, respect, and address the needs, customs, and traditions of communities both on mainland St. Vincent and in the islands of the Grenadines.

Case study 13: Documenting and preserving Local Ecological Knowledge in the Grenadines

The *Birds of the Transboundary Grenadines* project aims to create a comprehensive, user-friendly avian field guide to the avifauna of the Grenadine islands, drawing on local ecological knowledge (LEK) and folklore from residents of the Grenadines to ensure that the guide represents the culture of the Grenadines, and is useful to Grenadines communities. The project is being undertaken by a team of two scientists who have lived and worked in the Grenadines, and its specific goals of the project include:

- Preserving LEK and cultural heritage unique to the Grenadine islands;
- Instilling a sense of pride, ownership, and community-driven stewardship for the natural resources of the Grenadines;
- Educating tourists about the natural history of the region, while promoting Grenadines-specific environmentally conscious and sustainable tourism initiatives;
- Producing a valuable resource for local participation in conservation and management initiatives (e.g. monitoring) by compiling several regionally specific multi-disciplinary datasets; and
- Continuing the existing momentum of participatory research and community outreach in the region.

In 2014, meetings were held with over 50 individuals and small groups across the Grenadines, in both St. Vincent and the Grenadines and Grenada, in order to collect LEK and cultural knowledge related to birdlife and habitats in the islands. LEK surveys collected previously undocumented local folklore, names, behaviour, ecology, threats, and conservation barriers, as well as the human uses and values of birds by both residents of, and regular visitors to, the Grenadines. A draft of the field guide was used in 2016 for seabird conservation training in order to raise participants' awareness of how seabirds have been integral to Grenadines' cultural heritage for many centuries, providing additional conservation rationale rooted in a cultural context. The project team is currently raising funds to publish the final version of the field guide, and to provide Grenadine locals involved in this project, as well as schools, with free/low cost copies.

AICHI BIODIVERSITY TARGET 19: KNOWLEDGE IMPROVED, SHARED AND APPLIED

St. Vincent and the Grenadines' provisional NBSAP does not contain a target that correlates directly to ABT 19. However, there are actions under several of the national targets that relate to improving the availability, quality and use of biodiversity related information. These include:

- Design and implement baseline studies on habitats;
- Operationalize and maintain a biodiversity clearing-house mechanism;
- Identify all invasive species of marine and terrestrial fauna and flora and establish baselines on the extent of the invasion(s);
- Conduct assessment of the terrestrial and coastal and marine ecosystems to establish the percentage of territory that is most beneficial and feasible for protection, as well as the most appropriate level/category of protection needed;
- Conduct baseline studies on carbon sequestration by various ecosystems;
- Monitor ecosystem change and corresponding carbon sequestration changes to compile data to facilitate reporting on contributions to mitigation.

Overall, it is recognised in the provisional NBSAP that sound and reliable data and information are essential for effective policy action. The NBSAP therefore prioritizes data gathering as a cross-cutting activity, particularly for the purpose of establishing baselines and monitoring impacts of subsequent interventions. The NBSAP also calls for information to be shared, by means of a national clearinghouse mechanism.

Most of the actions outlined in the provisional NBSAP have yet to be implemented in a systematic manner. However, there have been individual actions taken by organizations, both governmental and non-governmental, to collect some biodiversity-related data.

Measures taken

Environmental Monitoring

The National Parks, Rivers, and Beaches Authority has carried out a number of environmental monitoring programmes and projects which have collected information on, *inter alia*, sea turtle nesting, and coastal and marine water quality. Various agencies with an interest in water resources management monitor parameters related to water quality and quantity. The Fisheries Division collects data on fish landings and has recently commenced a project to carry out stock assessments for spiny lobster and queen

conch. The TCMP Authority also collects data on environmental quality in the MPA. Via the GNMPA, arrangements have been made to establish three long-term monitoring sites in three MPAs in St. Vincent and the Grenadines, and to share monitoring results amongst members of the Network.

NGOs and Citizen Science

SCIENCE and Sustainable Grenadines have been making a concerted effort to use citizen science approaches to improve the quality and availability of information about St. Vincent and the Grenadines' birdlife. Data collected by Junior Birders, Junior SCIENCEists, fisherfolk in the NAEP, and other community participants is compiled and submitted to several regional and international organizations and databases, including EPIC, BirdsCaribbean, and eBirds. The results of this effort can be seen the increase in the number of annual bird records for St. Vincent and the Grenadines in the eBirds database, from fewer than five in 2011 to over 70 in 2018.

Private Sector Data Collection

The Mustique Company, which is responsible for the management of Mustique Island, participates in monitoring of coral reefs, turtle nesting and marine water quality within the Mustique Conservation Area (which includes the entire island and extends 1,000 yards offshore). Environmental information is published in an annual report to the Company's Board and can be shared with the government of St. Vincent and the Grenadines on request. The Mustique Conservation Area is part of the GNMPA and is the location of one of the three GNMPA monitoring sites in St. Vincent and the Grenadines. Through the GNMPA, knowledge and technical skills for coral reef restoration have been shared with MPAs in Grenada.

Effectiveness of measures taken

Measures taken in regard to this target have been assessed as largely **ineffective**. Indicators used in this assessment are:

- Is there a national biodiversity clearing-house?
- Are national biodiversity and/or state of the environment reports published regularly?
- Existence of baseline studies on habitats, IAS, ecosystems, and carbon sequestration, as outlined in the provisional NBSAP;
- Existence and effectiveness of programmes to generate information, share, and apply biodiversity-related information and knowledge.

There is no national biodiversity clearing-house for St. Vincent and the Grenadines.

Apart from reports to the CBD, there is no programme for preparing and issuing national reports on the state of biodiversity and/or the state of the environment.

The baseline studies required by the NBSAP have not been carried out.

While individual organizations are making efforts to gather biodiversity-related data, these efforts are severely constrained by organizations' limited human and financial resources and technical capacities. Individual monitoring programmes each only address small components of the overall need to expand the availability and quality of knowledge about biodiversity and its values, functioning, status, and trends. During interviews and focus groups with biodiversity stakeholders, particularly those in the public sector, the lack of reliable scientific data for use in decision making and programme implementation was repeatedly identified as one of the leading obstacles to better biodiversity management in St. Vincent and the Grenadines.

Obstacles and scientific and technical needs related to the measures taken

St. Vincent and the Grenadines faces a number of difficulties in relation to gathering and using relevant information to identify threats to biodiversity and determine management priorities and action. Chief amongst these is the persistent shortage of human and financial resources. The size of the archipelago presents a challenge, particularly when it comes to monitoring and data collection in the Grenadine islands, islets, and cays at some distance from St. Vincent.

The shortage of supplies and equipment, including computer hardware and software, for data collection and management is also an obstacle. For example, agencies may have access to internationally-generated digital spatial data on ecosystems and resources, but lack the know-how, equipment, and/or software to be able to make effective use of the data. According to stakeholders, storage of nationally-generated data is often paper-based, or in formats that do not easily lend themselves to sharing and analysis.

There is a need for an overall coordinated and strategic approach to data collection, management, and use, based on the determination of key/priority indicators and parameters. Some data is collected, but this is not done in a coherent manner. Fragmentation in data collection responsibilities results in data gaps and may also result in duplications of effort. Some stakeholders have indicated that biodiversity information is not readily shared amongst government departments, partly due to the ways in which that information is stored.

Areas where support is needed are myriad and include, but are not limited to:

- Carrying out a comprehensive national capacity, gaps and needs assessment;
- Determination and prioritization of a basic national set of biodiversity-relevant indicators and monitoring parameters, in keeping with the guidance produced by the United Nations Statistics Division on the Basic Set of Environment Statistics;
- Formulation of a national regime of data collection, management, and reporting, with an emphasis on minimizing gaps, avoiding duplication of effort, and maximizing efficient use of human, technical, and financial resources;
- Purchase of equipment for requisite environmental monitoring (e.g. air quality, freshwater quality monitoring, marine water quality monitoring, hydro-meteorological monitoring);
- Training in environmental monitoring and the collection of field data;
- Purchase of hardware (e.g. desktop computers, laptops, database and network servers) and software (including for geographic information systems, statistical analysis, and environmental data management);
- Training in environmental statistics;
- Digitization of existing paper-based records;
- Financial resources and technical cooperation to support the design, setting up, and maintenance of a national biodiversity clearing-house;
- Development and implementation of protocols and systems for data sharing and information exchange among government agencies and between the state and non-state sectors;
- Guidance on good practices and success stories in citizen science, particularly for the NGO sector;
- Guidance and training on the effective use (including communication) of biodiversity information to support sound science-based policy- and decision-making;
- Formulation of national policies on citizens' access to environmental information;
- Preparation and publication of regular national state of the environment reports;
- Development of overarching national biodiversity research priorities to guide further capacity-building and technical cooperation, including South-South cooperation.

Additional obstacles and needs related to biodiversity information in specific sectors (e.g. fisheries, forestry, protected areas) are outlined in the discussion of the ABTs related to those sectors (i.e.. ABTs 6, 7, 11).

AICHI BIODIVERSITY TARGET 20: FINANCIAL RESOURCES FROM ALL SOURCES INCREASED

There is no target directly related to ABT 20 in the provisional NBSAP.

Measures taken

Additional biodiversity funding from new sources

Since 2010 both government and civil society organizations working towards the conservation and sustainable use of biodiversity in St. Vincent and the Grenadines have been able to access new and additional sources of funding through charitable funds and grant-making foundations. These include the SVGPF (see case study 14) and the Philip Stephenson Foundation, whichprovides funding for marine exploration, protection and security, with a primary focus on U.S. and Eastern Caribbean coastal regions. (For an example of an initiative funded by the Philip Stephenson Foundation, please see the case study 11.) The Mustique Charitable Trusts have also provided funding for reforestation in St. Vincent after severe weather events, supporting the planting of 10,000 moringa trees in affected communities.

As a participating country in the Caribbean Challenge Initiative, St. Vincent and the Grenadines has committed to the goal of putting in place fully functioning sustainable finance mechanisms that will provide long-term and reliable funding for the conservation and sustainable management of marine and coastal resources and the environment. To this end, the St. Vincent and the Grenadines Conservation Fund (SVGCF) has been established. An operating manual and grant-making framework for the SVGCF have been formulated. The SVGCF was officially launched in 2019, and a partnership/financing agreement was signed with the Caribbean Biodiversity Fund. The SVGCF is currently in the process of developing mechanisms for generating funds to match the Caribbean Biodiversity Fund contribution.

Stakeholders have indicated that the private sector in St. Vincent and the Grenadines is beginning to make a contribution to biodiversity financing as part of corporate social responsibility programmes. Financial support from the private sector may be available, if

requested; requests needs to be designed to appeal to corporate interests, partly in relation to visibility of the corporate contributions.

Case study 14: St. Vincent and the Grenadines Preservation Fund

In 2015, the SVGPF was established to support and promote the creation of marine protected areas, local food production, the preservation of endangered species of the islands, the protection of the islands' forests, rivers, mangroves and beaches, and renewable energy solutions.

The SVGPF was set up by musician Bryan Adams, who resides on Mustique Island in the Grenadines, Ben Goldsmith, a long-time visitor to the island, and Louise Mitchell, a Vincentian lawyer and conservationist.

Since its founding, the Fund has provided grants to support a variety of biodiversity related initiatives in St. Vincent and the Grenadines, including, but not limited to,

- the Union Island Gecko Initiative;
- bird conservation and the NAEP;
- capacity-building for conservation of sea turtles;
- propagation of rare and nationally-significant tree species;
- supporting transitions from whaling and small cetaceans hunting to economically and environmentally sustainable alternative livelihoods.

Beneficiaries of the SVGPF have included both government agencies and civil society organizations.

Effectiveness of measures taken

Measures taken have been assessed as **partially effective**. Indicators used to assess effectiveness are:

- Has information been submitted to the CBD financial reporting framework?
- Has implementation of the NBSAP been costed and have financing strategies been formulated?
- Establishment of new biodiversity financing mechanisms;

- Amount of biodiversity funding disbursed via these mechanisms;
- Trends in the amount of national GEF funding utilized for projects in the biodiversity focal area;
- Has expenditure on biodiversity-related actions, including public and private expenditure, project and programmatic expenditure, and development assistance been assessed?

St. Vincent and the Grenadines has not submitted information to the CBD financial reporting framework.

The implementation of the provisional NBSAP has been costed; it is estimated that implementation will cost approximately US$ 3.1 million over 5 years. Strategies for mobilizing financial resources have not been presented in detail in the NBSAP, but the NBSAP does outline potential internal, external, and innovative sources of financial support for achieving the five national biodiversity targets.

The principal new biodiversity financing mechanisms are the SVGPF, the SVGCF, and the Philip Stephenson Foundation. The SVGCF has not started to disburse funds. Information is not available about the amounts of money disbursed via the SVGPF and the Philip Stephenson Foundation. However, in interviews and focus groups with biodiversity stakeholders in St. Vincent and the Grenadines, a large proportion of the informants reported that their organization had accessed funding from the SVGPF for biodiversity-related projects. This was the case for both governmental and non-governmental stakeholders.

The amount of GEF funding utilized by St. Vincent and the Grenadines in the biodiversity focal area has fluctuated from just over US$ 2.4 million under GEF-4 to US$ 500,000 under GEF-5 to just over US$ 2.4 million under GEF-6. No clear trend is observable.

Interviewees at the Ministry of Finance indicated that there has been no comprehensive assessment of expenditure on biodiversity, and that it was be difficult to extract figures on biodiversity-specific public expenditure from the overall government budget.

Biodiversity stakeholders in St. Vincent and the Grenadines generally expressed the view that measures in relation to ABT 20 had been partially effective. Organizations working in the biodiversity realm in St. Vincent and the Grenadines have been able to access increased financial resources from new funding mechanisms in St. Vincent and the Grenadines, as well as from bilateral aid (e.g. the government of Australia's Direct Aid Programme), and these resources have substantially enhanced their ability to implement

biodiversity-positive actions. However, it is clear that lack of funding remains a major obstacle, if not the major obstacle, to progress towards the national biodiversity targets and the ABTs.

Obstacles and scientific and technical needs related to the measures taken

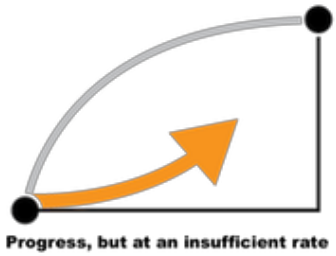
The lack of information about national biodiversity expenditures makes it difficult to assess progress in the area of financial resource mobilization. The information shortage also presents challenges for the development of resource mobilization strategies, as there is not clear information about amounts of expenditures, where funding gaps exist and the size of these gaps. It was noticeable that while stakeholders reported increases in funding from international donors, conservation funds, charitable trusts, and the private sector, there was little corresponding mention of an increase in biodiversity spending by the government. It should be noted that lack of financial resources in the public sector is a principal cause of a lack of human resources which in turn hampers effective biodiversity monitoring, management, and enforcement. St. Vincent and the Grenadines needs support to:

- carry out a baseline assessment and keep track of biodiversity expenditures, funding needs and shortfalls;
- explore, develop, and implement new and innovative approaches to mobilizing financial resources;
- examine and raise awareness of resource mobilization case studies and best practices from other small island developing states;
- evaluate how incentive reform can be carried out so as to complement efforts to increase biodiversity financing;
- raise awareness, especially among high-level decision makers in the ministries of finance and economic affairs, about the economic values of biodiversity and the costs of biodiversity loss, as a rationale for increasing biodiversity spending.

PROGRESS ASSESSMENT

This section of the 6NR provides an assessment of progress towards each of the ABTs.

AICHI BIODIVERSITY TARGET 1: AWARENESS INCREASED



Significant progress towards this target has been made, but the rate of **progress is insufficient** for the target to be met by 2020 unless further measures are taken.

Quantitative data are not available to determine trends in the levels of awareness of biodiversity values. A wide range of CEPA activities have been carried out by various organizations, and these stakeholders (including the implementing organizations) are in agreement that levels of awareness have increased among activity participants and target audiences. However, there was the sense that there is more progress to be made in terms of awareness-raising that is focussed on promoting positive behaviour change. High-level decision-makers and policy-makers were consistently identified as an important target audience for biodiversity-related CEPA action.

To improve future availability of information to assess progress towards this target (and the related national target in the provisional NBSAP), it is recommended that organizations implementing CEPA activities and events maintain records of:

- activities/events and their topics/objectives;
- the locations of activities;
- the target audiences;
- the number of participants (preferably disaggregated by age, gender, and other demographic categories).

It would also be useful for organizations to ask participants in CEPA activities to complete brief pre- and post-event questionnaires to assess changes in knowledge/understanding as a result of the CEPA interventions. In the absence of national KAP surveys, these questionnaires could provide some measurable information about if/how levels of awareness are changing.

Indicators and other tools used in assessing progress

The key indicator in relation to the target is:

- Trends in the number and % of Vincentians who are knowledgeable about the values of biodiversity and the steps they can take to conserve and use it sustainably.

There was no data available with which to assess progress using this indicator. As a result, the progress was assessed based on consultation with biodiversity experts and stakeholders.

Level of confidence in the assessment of progress

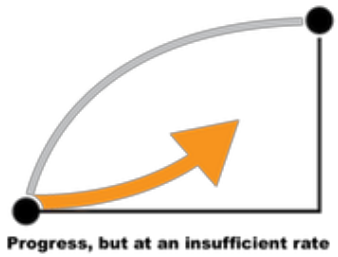
There is limited quantitative information with which to assess progress towards this target; as a result, this assessment draws heavily on expert opinions.

In the absence of comprehensive quantitative data with which to assess progress towards this target, consultations were carried out with national biodiversity stakeholders, including via interviews and focus groups. Approximately 40 stakeholders were consulted, including representatives of government departments, regional organizations, NGOs, and community-based organizations.

Adequacy of monitoring information to support assessment

There is no formal monitoring system that can be used to assess progress towards this target. Recommendations for future monitoring are provided above.

AICHI BIODIVERSITY TARGET 2: BIODIVERSITY VALUES INTEGRATED



Significant progress towards this target has been made, but the rate of **progress is insufficient** for the target to be met by 2020 unless further measures are taken.

Of the 20 ABTs, 15 are reflected in the goals and strategies of the NESDP, which is an indication that there is some formal recognition and inclusion of biodiversity values in the national development and planning process.

As described in the Section on Implementation, biodiversity values are also reflected in a number of recently drafted sectoral plans or policy statements. However, there are other

key biodiversity sectors (e.g. the Forestry sector) for which draft policies/plans have been prepared, in keeping with legislative requirements, but have languished for years without being officially adopted and implemented.

Information is not available about the extent to which biodiversity values are reflected in actual implementation of these policies, strategies and plans. In the case of the NESDP, this is because the necessary monitoring, evaluation, and reporting have not been done. In other cases (e.g. the NOP) it is because the policies/plans have only recently been adopted and are still in very early stages of implementation.

The lack of resources and capacity (financial, human, technical) to give practical effect to biodiversity-related objectives in national and sectoral plans is a major obstacle to progress towards this ABT. Monitoring, evaluation, and reporting are also hampered by the lack of resources. The delay in adopting policies that have been drafted may be an indication that biodiversity is not a high priority on the national development agenda.

Indicators and other tools used in assessing progress

The following indicator was used:

- Number of ABTs reflected in the strategic objectives and goals of the NESDP.

In addition to the indicator above, consideration was also given to whether biodiversity values were included and integrated into sectoral policies and plans and to the extent to which this was reflected in implementation of these national and sectoral policies and plans.

This was done by reviewing policy and plan documents, by interviewing with experts and stakeholders in relevant sectors, and by reviewing relevant published reports

Level of confidence in the assessment of progress

Some information and indicators exist for assessing progress towards this target, but information limitations exist. As a result, this assessment was based on partial indicator information and expert opinion.

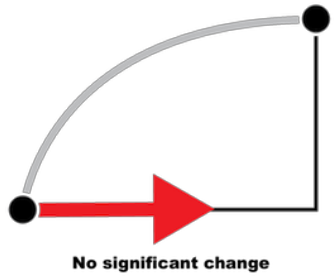
The number of ABTs reflected in the NESDP and other national policies was quantitatively assessed.

Due to the unavailability of information about measures of implementation and effectiveness of national policies, this component of the assessment was based primarily on opinions gathered from sectoral experts and stakeholders, as well as from qualitative assessments in the published literature.

Adequacy of monitoring information to support assessment

There is no monitoring system in place to assess progress towards this target. Monitoring, evaluation, and reporting for the national policies and plans that include biodiversity values would be useful to inform future assessment of progress.

AICHI BIODIVERSITY TARGET 3: INCENTIVES REFORMED



No significant changes have been observed in relation to this target.

No significant measures have been taken towards this target.

Experts interviewed indicated that although incentives exist that may have impacts on biodiversity, there have been no changes to the national programmes of subsidies and incentives specifically with the aim of encouraging biodiversity-positive behaviour or discouraging biodiversity-harmful behaviour.

To improve future assessments of progress towards this target there is a need for systematic assessment of systems of subsidies and incentives and their impacts on conservation and sustainable use of biodiversity. Additionally, proposals for introduction or removal of subsidies and incentives should, as part of the decision-making process, be subject to strategic environmental assessment to allow for evaluation of their potential impacts on biodiversity and the environment.

Indicators and other tools used in assessing progress

The following indicators were used:

- Number, value, and impact of biodiversity-positive incentives introduced/ expanded;
- Number, value, and impact of biodiversity-negative incentives that have been removed or reformed.

Level of confidence in the assessment of progress

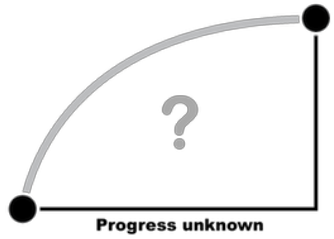
There is limited quantitative information with which to assess progress towards this target; as a result, this assessment draws heavily on expert opinions.

Information about changes to incentives regimes was obtained via interviews with officers in the Ministry of Finance, Economic Planning, Sustainable Development and Information Technology, as well as with officers in the government agencies responsible for fisheries, forestry, agriculture, and tourism.

Adequacy of monitoring information to support assessment

There is no monitoring system in place to assess progress towards this target.

AICHI BIODIVERSITY TARGET 4: SUSTAINABLE CONSUMPTION AND PRODUCTION



Progress towards attainment of this target is **unknown**.

Criteria and indicators are not available to operationalize the concept of safe ecological limits, nor is there consistent monitoring and reporting to assess the extent to which the use of natural resources in the country is sustainable.

To improve future assessments of progress towards this target, practical and cost-effective criteria and indicators for sustainability in productive sectors should be defined, based on international good practice (e.g. FAO guidance on criteria and indicators for sustainable forest management, guidance on Fisheries Performance Indicators). Systems for regular monitoring and reporting should be established and maintained.

Indicators and other tools used in assessing progress

Indicators considered for use were:

- The extent to which resource use in key economic sectors is within safe ecological limits;
- Trends in ecological footprint.

However, data was not available to assess progress using the proposed indicators. As a result, the progress assessment was informed primarily by interviews with experts in key sectors (agriculture, tourism, forestry, fisheries) as well as focus groups with sectoral stakeholders.

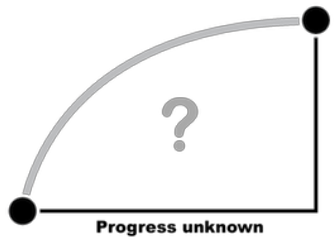
Level of confidence in the assessment of progress

There is limited quantitative information with which to assess progress towards this target; as a result, this assessment draws heavily on expert opinions.

Adequacy of monitoring information to support assessment

There is no monitoring system in place to assess progress towards this target.

AICHI BIODIVERSITY TARGET 5: HABITAT LOSS HALVED OR REDUCED



Progress towards attainment of this target is **unknown**.

The last comprehensive forest survey in St. Vincent and the Grenadines was carried out in 1993. The rate of deforestation in St. Vincent and the Grenadines was then estimated to be between 3 to 5% per annum. Since then, FAO reports suggest that forest cover has actually increased at a rate of 0.3% per annum. However, forestry experts in St. Vincent and the Grenadines stress that these latter figures should be treated with great caution as they are derived largely from desk-based estimates, which include documented discrepancies. Expert opinion is that while the rate of deforestation is not as high as 3 to 5% per annum, it is questionable whether forest cover is on the increase, particularly given that there has been significant and observable deforestation in upland forests (due to illegal marijuana cultivation) and loss and fragmentation of coastal forests (due to residential and commercial development).

Information is similarly lacking about the loss of other key habitats.

Regular national forest surveys and habitat inventories are necessary to be able to confidently assess progress towards this target.

Indicators and other tools used in assessing progress

The following indicator was used:

- Trends in forest cover (as per the 2015 FAO Forest Resources Assessment).

In addition to the use of data from the Forest Resources Assessment, interviews were held with officers from agencies and organizations responsible for management of forestry and protected areas.

Level of confidence in the assessment of progress

Some information and indicators exist for assessing progress towards this target, but information limitations exist. As a result, this assessment was based on partial indicator information and expert opinion.

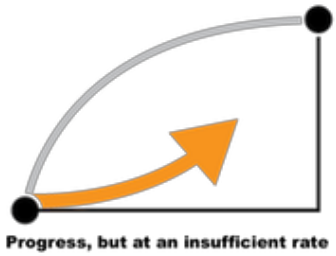
Although there is indicator information available, forestry experts in St. Vincent and the Grenadines pointed out that this information should be treated with caution, as the last national forestry inventory/survey was carried out over 25 years ago, and the information in the 2015 Forest Resources Assessment is based largely on desk-based estimates, which include documented discrepancies. Experts were able to provide some general views on rates of forest loss but emphasized that there is a dire need for field-based data in order to confidently assess status and trends.

Adequacy of monitoring information to support assessment

There is partial monitoring related to this target; the monitoring systems that are in place provide only a portion of the information required to assess progress.

To the extent possible, Forestry officers make observations and records of the status of forests as part of their routine fieldwork, but the information thus collected is not an adequate substitute for the findings of a national forest inventory.

AICHI BIODIVERSITY TARGET 6: SUSTAINABLE MANAGEMENT OF MARINE LIVING RESOURCES



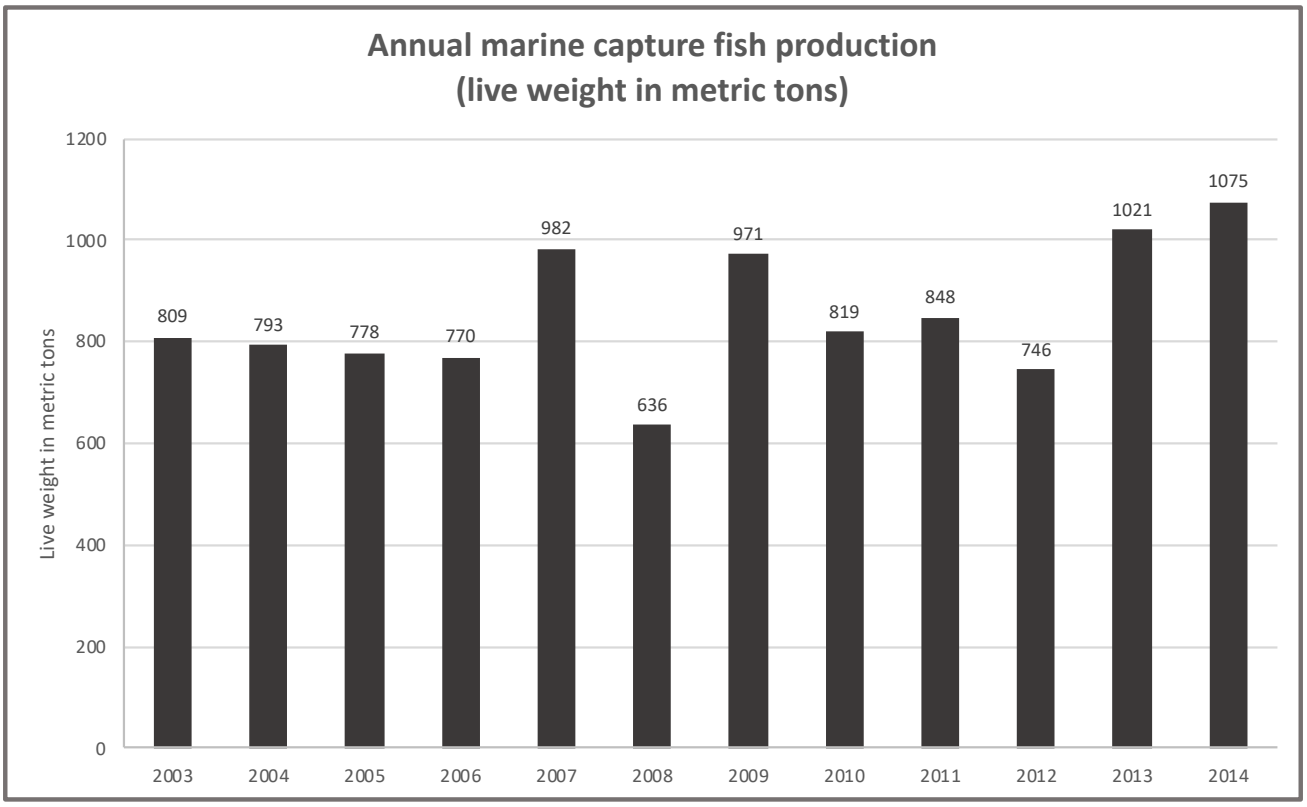
Significant progress towards this target has been made, but the rate of **progress is insufficient** for the target to be met by 2020 unless further measures are taken.

Policy measures aimed at sustainable management of living marine resources are included in the NOP and the draft Fisheries and Aquaculture Policy. The Fisheries Act also includes provisions related to fisheries conservation, including the designation of no-take marine conservation areas.

There are six designated marine reserves/marine conservation areas in St. Vincent and the Grenadines, covering approximately 9,431 ha of territory. However, resources and

capacity challenges constrain effective enforcement of conservation measures in these designated areas.

Over the period 2003 to 2014 (the last year for which data is available), annual marine capture fish production (measured as live weight in metric tons) increased by 32%, from 809 tons to 1075 tons.



Trend in annual marine capture fish production (live weight in metric tons). Source: Caribbean Regional Fisheries Mechanism

In the absence of stock assessments for exploited species, it is not possible to ascertain whether this increase in production represents a threat to sustainability of the sector.

Fisheries officials have identified a number of areas (refer to the section on Implementation) where action is needed to overcome obstacles to progress towards this target, and to improve monitoring for better assessments of progress.

Indicators and other tools used in assessing progress

The following indicators were used:

- Is there national policy/legislation on sustainable management of living marine resources?
- Extent and distribution of areas under sustainable fisheries management;

- Trends in fish production.

In addition to the two indicators used, interviews and focus groups were held with national and regional fisheries experts, and published literature on fisheries in St. Vincent and the Grenadines was reviewed.

Level of confidence in the assessment of progress

Some information and indicators exist for assessing progress towards this target, but information limitations exist. As a result, this assessment was based on partial indicator information and expert opinion.

The existence of national policies and fisheries conservation areas is objectively verifiable. In the absence of similarly verifiable and reliable data on other indicators of sustainability (e.g. trends in catch per effort; trends in population of target species), the progress assessment was informed by interviews and focus groups with fisheries experts and stakeholders.

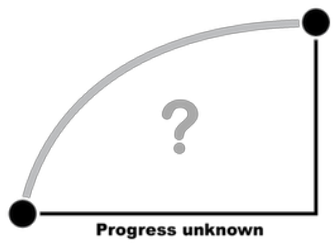
Adequacy of monitoring information to support assessment

There is partial monitoring related to this target; the monitoring systems that are in place provide only a portion of the information required to assess progress.

Landings data for target species is collected. However, research has indicated that landings recorded by the national fisheries administration substantially underestimate actual landings. Recommendations have been to improve monitoring, control and surveillance of landings, sales at sea, and exports.

Currently there is no monitoring of the biological status of the stocks of target species. This information is essential, not only for assessing progress toward ABT 6, but also to inform the development of sound strategies for sustainable use.

AICHI BIODIVERSITY TARGET 7: SUSTAINABLE AGRICULTURE, AQUACULTURE, AND FORESTRY



Progress towards attainment of this target is **unknown**.

Forestry experts in St. Vincent and the Grenadines indicate that habitat loss as a result of commercial forestry is minor: forestry in St. Vincent and the Grenadines is a small cottage

industry, the number of woodcutters is estimated to be fewer than a dozen. Most commercial forestry takes place in managed plantation forests established specifically for that purpose.

St. Vincent and the Grenadines does not currently have an aquaculture sector.

Several measures have been undertaken to improve the sustainable management of areas under agriculture, including by providing support to enhance climate resilience in the sector, minimize the use of agrochemicals, and reduce land degradation. In addition, objectives related to sustainable and ecologically friendly agriculture have been included in the NESDP. However, experts in the sector indicate that unsustainable practices persist, and emphasize the existence of significant illegal and unregulated cultivation which is responsible for substantial deforestation and other biodiversity loss in upper watershed areas. While there are anecdotal reports of improved practices in the sector, there are also anecdotal reports to the contrary. In the absence of national criteria, indicators, monitoring and reporting for sustainable agriculture, it is not possible to reliably assess status and trends in relation to the sustainable management of areas under agriculture.

Agriculture stakeholders in St. Vincent and the Grenadines have indicated that an essential next step for further progress towards this target is the development of a national demand and market for sustainably produced crops and food. In the absence of a market that adequately compensates farmers for the additional time, effort, and expense involved in using sustainable, biodiversity-friendly practices, there is little incentive for producers to adopt and maintain such practices. Further progress towards ABT 8 is therefore closely linked with ABT 4 on sustainable consumption and production, as well as with ABT 3 on incentives.

Indicators and other tools used in assessing progress

Quantitative information on the status and trends of areas of forestry and agriculture ecosystems under sustainable management was not available. In the absence of such information, progress was assessed qualitatively based on the interviews and focus groups with experts and stakeholders in the agriculture and forestry sectors, including representatives from NGOs and CBOs.

Level of confidence in the assessment of progress

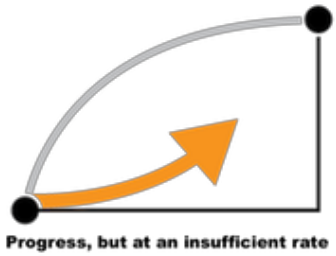
There is limited quantitative information with which to assess progress towards this target; as a result, this assessment draws heavily on expert opinions.

Assessment of progress towards the target was based on opinions of a range of agricultural experts and stakeholders in the agriculture sector, including representatives from the Ministry of Agriculture, IICA, the National Botanical Gardens, and agricultural NGOs and CBOs.

Adequacy of monitoring information to support assessment

There is no monitoring system in place to assess progress towards this target.

AICHI BIODIVERSITY TARGET 8: POLLUTION REDUCED



Significant progress towards this target has been made, but the rate of **progress is insufficient** for the target to be met by 2020 unless further measures are taken.

Several regulatory and voluntary measures have been taken to reduce pollution. There are at least six laws/regulations specifically intended to control terrestrial and marine pollution.

In the case of measures to reduce plastic pollution, stakeholders report that there has been an observable decrease in plastic pollution of waterways, watersheds, and beaches. However, information is not available to assess trends in levels of other pollutants, such as pesticides and nutrients, and there are still substantial gaps in the regulatory framework. In particular, stakeholders pointed out that wastewater treatment and effluent standards have been drafted but not formally adopted, and therefore are not legally enforceable. Overall, although there have been some steps towards reducing pollution, the consensus among stakeholders was that measures (including monitoring and enforcement) to reduce pollution have not been wide-ranging enough to achieve sufficient progress towards this target.

A leading cause of concern for stakeholders in St. Vincent and the Grenadines in respect of ABT 8 is agricultural pollution and its impacts on freshwater and coastal and marine ecosystems. Stakeholders called for the adoption and effective implementation of ridge-to-reef approaches, and for strong policy recognition of the impacts that land-based activities, especially agricultural activities in the lower watersheds, have on marine ecosystems and fisheries. Strong inter-sectoral collaboration between agencies responsible for agriculture, coastal area management, environment, fisheries, forestry,

oceans management, and water resources management will be essential for enhanced progress towards ABT 8.

Indicators and other tools used in assessing progress

The following indicators were used:

- Is there national pollution control legislation?
- Trends in pollutant levels.

Some data is collected that would potentially allow assessment of trends in levels of environmental pollution (specifically for freshwater and marine water), but such data is not available for analysis and inclusion in this report. Consequently, stakeholder input was solicited about the extent to which measures taken have been sufficient to reduce pollution.

Level of confidence in the assessment of progress

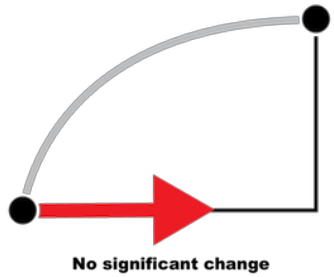
There is limited quantitative information available with which to assess progress towards this target; as a result, this assessment draws heavily on expert opinions.

The assessment is based on interviews and focus groups with stakeholders, including representatives from agencies and organizations responsible for physical planning, forestry, water resources management, marine protected areas, agriculture, and biodiversity.

Adequacy of monitoring information to support assessment

There is partial monitoring related to this target; the monitoring systems that are in place provide only a portion of the information required to assess progress. There is some monitoring of terrestrial and marine water quality, but the information thus obtained is not made publicly available.

AICHI BIODIVERSITY TARGET 9: INVASIVE ALIEN SPECIES PREVENTED AND CONTROLLED



No significant changes have been observed in relation to this target. No significant measures have been taken in relation to this target.

Indicators and other tools used in assessing progress

Progress towards this target was assessed based on consultation with stakeholders, as well as on review of available literature including project documents and unpublished reports.

Level of confidence in the assessment of progress

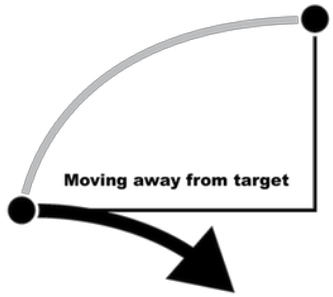
There is limited quantitative information available with which to assess progress towards this target; as a result, this assessment draws heavily on expert opinions.

The assessment of progress towards this target is based on information obtained from experts in the government departments with responsibility for agriculture and forestry.

Adequacy of monitoring information to support assessment

There is no monitoring system in place to assess progress towards this target.

AICHI BIODIVERSITY TARGET 10: PRESSURES ON VULNERABLE ECOSYSTEMS REDUCED



The issues this target is intended to address appear to be deteriorating, and St. Vincent and the Grenadines is **moving away from the target**.

The 2016 Coral Reef Report Card for St. Vincent and the Grenadines reported that coral cover in 2016 was lower than historic measurements, a finding corroborated by data presented in *Status and Trends of Caribbean Coral Reefs: 1970-2012*, which indicates declines in coral cover and reef health over the periods 2007 to 2009 for St. Vincent and 1976 to 2007 for the Grenadines. The Coral Reef Report Card also indicated that availability and quality of data must be improved to support continuing assessment of trends in the condition of St. Vincent and the Grenadines' coral reefs.

As of 2016 average coral cover for St. Vincent and the Grenadines was measured at 21%, which is higher than the Caribbean average. On a scale of 0 to 5, overall coral reef health was assessed at 2.8, or fair. Coral reef cover was good (4 out of 5). The main threats to key coastal habitat were identified as coastal development, sedimentation, poor water quality, direct removal and damage, unsustainable fishing, and the impacts, including extreme weather events and coral bleaching, of global climate change.

Managers of MPAs in St. Vincent and the Grenadines are making efforts to implement routine coral monitoring programmes in order to be better able to assess trends in coral reef coverage and health. Given the importance of coral reefs to St. Vincent and the Grenadines, a national monitoring programme should be implemented, including reefs both within and outside of protected areas.

Indicators and other tools used in assessing progress

The following indicators were used:

- Coral reef cover;
- Coral reef health.

Indicator information was obtained from published reports.

Level of confidence in the assessment of progress

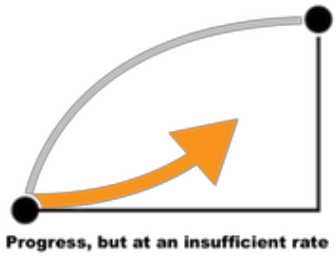
This assessment of progress is based on indicator information in published and peer reviewed assessments of coral reef health and cover in St Vincent and the Grenadines. However, there are documented limitations to these assessments in terms of the number and frequency of coral monitoring events on which the evaluations are based.

Adequacy of monitoring information to support assessment

There is partial monitoring related to this target; the monitoring systems that are in place provide only a portion of the information required to assess progress.

To date coral monitoring in St. Vincent and the Grenadines has been intermittent, with significant spatial and temporal data gaps. The 2016 Coral Reef Report Card includes recommendations for improved monitoring. National agencies are endeavouring to implement these recommendations but face financial and capacity constraints in doing so.

AICHI BIODIVERSITY TARGET 11: PROTECTED AREAS INCREASED AND IMPROVED



Significant progress towards this target has been made, but the rate of **progress is insufficient** for the target to be met by 2020 unless further measures are taken.

A number of policy measures have been taken to improve

equitable and effective management of protected areas in St. Vincent and the Grenadines. For enhanced progress towards this target, priority should be given to the timely adoption and implementation of revised national parks/protected areas legislation, including accompanying regulations.

Changes in protected area coverage, connectedness and representativeness since 2011 have been negligible (detailed data is presented in the section on Implementation). However, active efforts are being made to improve the proportion of protected areas that are protected through legally binding means, and to expand the protected areas system to enhance coverage and ecological representativeness.

Available data indicates that 22% of St. Vincent and the Grenadines' terrestrial area and <1% of its coastal and marine area is conserved via systems of protected areas. There is no quantitative information available about the extent to which the various types of terrestrial, freshwater, coastal and marine ecosystems in St. Vincent and the Grenadines are included in the national system of protected areas.

In order to better evaluate progress towards this target there is a need to develop criteria, standards, and monitoring and evaluation processes in relation to the condition and management effectiveness of protected areas. Protected areas managers are keenly aware of this need, and are working with national, regional and international partners to address it.

Indicators and other tools used in assessing progress

The following indicators were used:

- Is there a legal, policy, and institutional framework for protected areas management?
- Extent to which terrestrial, freshwater, coastal, and marine areas are conserved via systems of protected areas and other area-based conservation measures;
- Trends in protected area coverage of key biodiversity areas;
- Trends in protected area connectedness index;
- Trends in protected area representativeness index.

Quantitative indicator data was obtained via the World Database on Protected Areas and the BIP Dashboard. This information was supplemented by information obtained from interviews and focus groups with protected areas managers in St. Vincent and the Grenadines, and by review of available policies and literature.

Level of confidence in the assessment of progress

Some information and indicators are available for assessing progress towards this target, but information limitations exist. As a result, this assessment was based on partial indicator information and expert opinion.

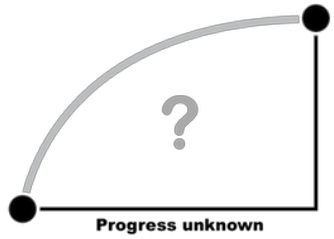
Information from relevant international databases was reviewed and complemented by local sources and by information from published literature on protected areas management in St. Vincent and the Grenadines. It was observed that there are some discrepancies between various sources of information about the number, location, and size of protected areas.

Adequacy of monitoring information to support assessment

There is partial monitoring related to this target; the monitoring systems that are in place provide only a portion of the information required to assess progress.

There is some monitoring of environmental quality in marine and terrestrial protected areas. PA managers are working to building capacity to improve this monitoring and to fully implement the Management Effectiveness Tracking Tool methodology for tracking and monitoring progress towards more effective management.

AICHI BIODIVERSITY TARGET 12: EXTINCTION PREVENTED



Progress towards attainment of this target is **unknown**.

Measures have been taken to protect endangered species in St. Vincent and the Grenadines from threats such as habitat loss and degradation, and hunting and poaching. New key biodiversity areas have been identified and conservation actions have commenced or been strengthened in those areas.

However, most (75%) of St. Vincent and the Grenadines' critically endangered, endangered, and threatened species are not being targeted by active conservation programmes.

Population trends for 75% of the critically endangered, endangered, and threatened species on the IUCN Red List are reported as either declining or unknown. Due to a lack of research and monitoring, there are deficiencies in data on species and their

habitats, which make it impossible to confidently evaluate the actual success to the conservation efforts being made, and therefore to assess progress towards this target.

Biodiversity and conservation stakeholders in St. Vincent and the Grenadines recognize that substantial progress is being made in other Eastern Caribbean countries with respect to endangered species conservation and species recovery. The sharing of success stories, experiences, strategies, and techniques from neighbouring countries could enable the adoption of conservation good practices that would improve progress towards ABT 12.

Indicators and other tools used in assessing progress

The following indicators were used:

- Number of vulnerable, endangered and critically endangered species for which active conservation actions have been reported;
- Trends in population/conservation status of vulnerable, endangered, and critically endangered endemic species.

Indicator information was obtained via review of published literature, including the IUCN Red List, as well as interviews with experts in the fields of forestry and wildlife management, and protected areas management.

Level of confidence in the assessment of progress

Some information and indicators are available for assessing progress towards this target, but information limitations exist. As a result, this assessment was based on partial indicator information and expert opinion.

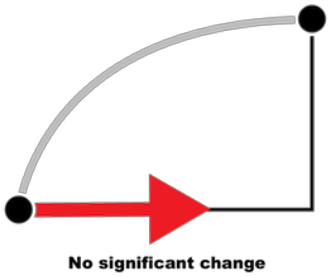
This assessment was informed by published reports on conservation action and the input from experts in St. Vincent and the Grenadines about the effectiveness of such conservation actions. Trends in IUCN conservation status for endemic species, and in the number of key biodiversity areas (important bird areas, endemic species habitats, protected turtle nesting habitats) were also taken into account.

Adequacy of monitoring information to support assessment

There is partial monitoring related to this target; the monitoring systems that are in place provide only a portion of the information required to assess progress.

Monitoring programmes have been established for some of the species targeted for conservation in St. Vincent and the Grenadines (e.g. sea turtles), but the majority of species have not been adequately researched or monitored.

AICHI BIODIVERSITY TARGET 13: GENETIC DIVERSITY MAINTAINED



No significant changes have been observed in relation to this target.

No significant measures have been taken in relation to this target.

Indicators and other tools used in assessing progress

This progress assessment was based on review of the Second Country Report on the State of Plant Genetic Resources for Food and Agriculture in St. Vincent and the Grenadines, and consultation with experts and stakeholders in the agriculture sector.

Level of confidence in the assessment of progress

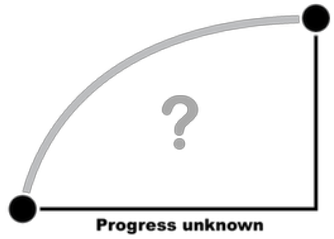
There is limited quantitative information available with which to assess progress towards this target; as a result, this assessment draws heavily on expert opinions.

Interviews and focus groups with agriculture experts and stakeholders consistently indicated that there have been no substantial changes in the status quo with respect to agricultural biodiversity since the preparation of the second PGRFA country report in 2008.

Adequacy of monitoring information to support assessment

There is no monitoring system in place to assess progress towards this target.

AICHI BIODIVERSITY TARGET 14: ECOSYSTEMS AND ESSENTIAL SERVICES SAFEGUARDED



Progress towards attainment of this target is **unknown**.

A number of major projects aimed at watershed protection and restoration have been implemented or are proposed for implementation. Project reports and information obtained from stakeholders indicate successes in project implementation. However, the impacts of climate on watersheds and water availability are changing the paradigm for watershed and water resource management in St. Vincent and the Grenadines, and it is not yet clear from the available data whether the current management approach will continue to be sufficient to respond to increased pressures on water-related ecosystems.

Indicators and other tools used in assessing progress

Indicators considered for use were:

- Extent to which ecosystems providing essential services are being safeguarded and restored;
- Trends in health of ecosystems providing essential services;
- Trends in quality of essential services, including services related to water, provided by ecosystems.

Indicator information was obtained from interviews and focus groups with relevant experts and stakeholders, as well as from reviews of reports on watershed and water resources management in St. Vincent and the Grenadines.

Level of confidence in the assessment of progress

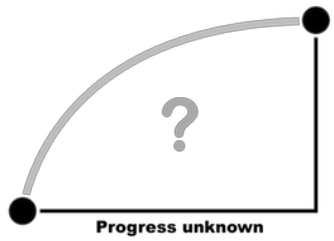
Some information and indicators exist for assessing progress towards this target, but there are information limitations. As a result, this assessment was based on partial indicator information and expert opinion.

The assessment of progress towards the target was based on input from experts in the fields of water resources management, forestry and watersheds management, and agriculture, as well as on information from literature. Due to unavailability of quantitative monitoring data related to the indicators used, input from relevant experts was used to qualitatively assess progress based on these indicators.

Adequacy of monitoring information to support assessment

There is no monitoring system in place to assess progress towards this target.

AICHI BIODIVERSITY TARGET 15: ECOSYSTEMS RESTORED AND RESILIENCE ENHANCED



Progress towards attainment of this target is **unknown**.

Several restoration projects are still in the early stages of implementation. Although implementing organizations indicate that improvements in ecosystem health have been observed at the targeted sites, additional time will be necessary for the full range of anticipated beneficial outcomes to be observed. Care should be taken to ensure that appropriate monitoring and reporting are done in order to be able to evaluate progress towards this target in the future.

There are several different organizations undertaking ecosystems restoration activities in St. Vincent and the Grenadines. While the Forestry Department is seen as focal agency for terrestrial restoration/reforestation activities, there is no similar core agency of organization for coral restoration efforts. Biodiversity stakeholders have voiced some concern about this situation and have called for the establishment of arrangements for information-sharing, including sharing of techniques, best practices and results, between the entities involved in marine ecosystems restoration. It is felt that this would lead to better coordination of efforts, for greater effectiveness.

In order to enhance progress towards ABT 15 action should be taken to consider opportunities and priorities for ecosystem restoration and enhancing ecosystem resilience as components of a national climate change mitigation and adaptation strategy.

Indicators and other tools used in assessing progress

The following indicators were used:

- Number and extent of ecosystem restoration projects;
- Trends in health of restored ecosystems.

Information relevant to the indicators was obtained from literature and from consultations with stakeholders, including organizations implementing ecosystems restoration projects.

Level of confidence in the assessment of progress

There is limited quantitative information available with which to assess progress towards this target; as a result, this assessment draws heavily on expert opinions.

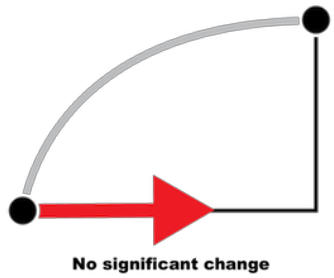
Monitoring information of the success of ecosystems restoration projects is not available, so assessments of the success of the projects and overall progress towards this target were largely informed by interviews with relevant stakeholders and experts.

Adequacy of monitoring information to support assessment

There is partial monitoring related to this target; the monitoring systems that are in place provide only a portion of the information required to assess progress.

Monitoring programmes have been formulated for some of the restoration projects described in the section on Implementation, but there is no overarching national system for monitoring and reporting on changes in ecosystem health, assessing ecosystem degradation, or evaluation effectiveness and impact of ecosystem restoration projects.

AICHI BIODIVERSITY TARGET 16: NAGOYA PROTOCOL IN FORCE AND OPERATIONAL



No significant changes have been observed in relation to this target.

No significant measures have been taken in relation to this target.

There are opportunities to learn from the experiences of other Caribbean countries that have become Party to the Nagoya Protocol and that have adopted and are implementing national ABS regulatory frameworks.

In anticipation of St. Vincent and the Grenadines becoming Party to the Nagoya Protocol, care should be taken to 'future-proof' new policies and programmes, e.g. in

relation to the development of the medicinal marijuana sector, to ensure that they are compliant with principles of ABS best practice.

Indicators and other tools used in assessing progress

The following indicators were used:

- Is the country Party to the Nagoya Protocol?
- Is there a national policy framework for access and benefit-sharing (ABS), in accordance with the Nagoya Protocol?
- Are there documented national ABS procedures?
- Number of ABS permits/internationally recognized certificates of compliance issued.

Indicator information was verified via consultation with the National ABS Focal Point.

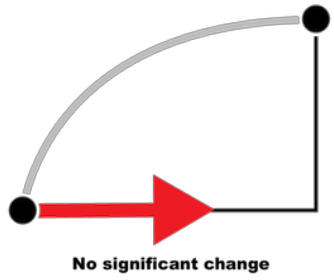
Level of confidence in the assessment of progress

This assessment of progress is based on objectively verifiable indicator information, confirmed via information received from the national CBD and ABS focal point.

Adequacy of monitoring information to support assessment

There is no monitoring system in place to assess progress towards this target.

AICHI BIODIVERSITY TARGET 17: NBSAPS ADOPTED AS POLICY INSTRUMENT



No significant changes have been observed in relation to this target.

An updated (post-2010) NBSAP for St. Vincent and the Grenadines has been developed and submitted to the CBD Secretariat. However, the NBSAP has not been officially endorsed by Cabinet as a national policy document, is not being implemented as a whole of government policy instrument, and is not cited in biodiversity-relevant policies. Overall, the actions taken with respect to revision of the NBSAP do not represent significant real progress towards achievement of ABT 17.

Indicators and other tools used in assessing progress

The following indicators were used:

- Is there a post-2010 NBSAP that reflects the goals and targets of the Strategic Plan for Biodiversity 2011-2020?
- Has the NBSAP been endorsed by the Cabinet as a whole-of-government policy instrument?
- Number of national and sectoral policies, strategies and plans that reference the NBSAP and the national biodiversity goals and targets;
- Extent of implementation of the biodiversity actions outlined in the NBSAP.

In addition to review of the provisional NBSAP and national/sectoral policy documents, consultations were held with staff in the CBD national focal point agency re the status of the provisional NBSAP.

Level of confidence in the assessment of progress

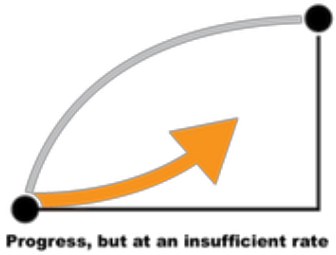
Limited information and indicators exist for assessing progress towards this target. As a result, this assessment was based on partial indicator information and expert opinion.

Assessment against the identified indicators is largely objectively verifiable and was complemented by information provided by the CBD focal point about the development and current status (of approval and implementation) of the provisional NBSAP.

Adequacy of monitoring information to support assessment

There is no monitoring system in place to assess progress towards this target. A programme of monitoring and evaluation for the provisional NBSAP would be useful for future progress assessments.

AICHI BIODIVERSITY TARGET 18: TRADITIONAL KNOWLEDGE RESPECTED



Progress, but at an insufficient rate

Significant progress towards this target has been made, but the rate of **progress is insufficient** for the target to be met by 2020 unless further measures are taken.

Review of national policies and other available literature, as well as interviews with stakeholders, indicate that there is a trend towards increasing recognition of the value of

community participation in biodiversity policy-making and management, with the operation of fisheries cooperatives and the National Fisherfolk Organization being a specific example of success in this regard.

However, stakeholders expressed the view that there is still room for improved progress by way of stronger mechanisms for community participation in governance, decision-making and project implementation; greater attention to customary uses of biodiversity; documentation of traditional sustainable uses as examples of best practice for awareness-raising and capacity-building; and greater efforts towards inclusion of communities in the Grenadines.

Indicators and other tools used in assessing progress

The following indicators were used:

- Extent to which traditional biodiversity practices are documented and preserved;
- Extent to which indigenous and local community representatives are actively participating in national biodiversity policy-making and management processes.

Information relevant to the indicators was obtained via literature review as well as via interviews and focus groups with biodiversity stakeholders.

Level of confidence in the assessment of progress

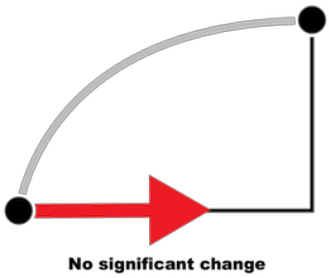
Some information and indicators are available for assessing progress towards this target, but information limitations exist. As a result, this assessment was based on partial indicator information and expert opinion.

This assessment was based on interviews with stakeholders in St. Vincent and the Grenadines, as well as on published information (including newspaper reports, medial releases, websites) on the documentation of biodiversity related traditional knowledge, and its incorporation into conservation and sustainable use initiatives.

Adequacy of monitoring information to support assessment

There is no monitoring system in place to assess progress towards this target.

AICHI BIODIVERSITY TARGET 19: KNOWLEDGE IMPROVED, SHARED AND APPLIED



No significant changes have been observed in relation to this target.

Sectoral reports and assessment and reports related to biodiversity and ecosystems services in St. Vincent and the Grenadines consistently refer to deficiencies in collection and availability of reliable, time-series data to evaluate environmental status and trends, and to inform science-based decision making. Some efforts are being made by individual organizations to improve the production and sharing of biodiversity data in specific areas of interest. However, these efforts are relatively new and address only a small component of the overall national need to improve the collection, management, and sharing of information about the values, functions, status and trends of biodiversity in SVG. Stakeholders indicate that there is still much work required to increase the amount and quality of biodiversity relevant information, to effectively share and communicate that information, and to make better use of that information in decision- and policy-making.

Indicators and other tools used in assessing progress

The following indicators were used:

- Is there a national biodiversity clearing-house?
- Are national biodiversity and/or state of the environment reports published regularly?
- Are there baseline studies on habitats, IAS, ecosystems, and carbon sequestration, as outlined in the provisional NBSAP?
- Existence and effectiveness of programmes to generate information, share, and apply biodiversity-related information and knowledge.

Information relevant to the indicators was obtained via reviews of relevant environmental literature and reports, and from consultation with biodiversity stakeholders in St. Vincent and the Grenadines.

Level of confidence in the assessment of progress

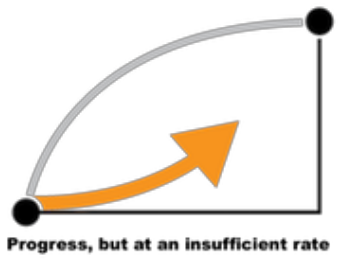
Some information and indicators exist for assessing progress towards this target, but information limitations exist. As a result, this assessment was based on partial indicator information and expert opinion.

This assessment is based on analyses in published reports on environmental issues, as well as on personal interviews with sectoral experts and stakeholders in St. Vincent and the Grenadines.

Adequacy of monitoring information to support assessment

There is no monitoring system in place to assess progress towards this target.

AICHI BIODIVERSITY TARGET 20: FINANCIAL RESOURCES FROM ALL SOURCES INCREASED



Significant progress towards this target has been made, but the rate of **progress is insufficient** for the target to be met by 2020 unless further measures are taken.

As reported in the section on Implementation, stakeholders have consistently reported that mobilization of financial resources for biodiversity has increased substantially, both as a result of a greater number of sources of funding and stronger efforts by stakeholders to access available funds.

However, interview respondents and focus group participants were reluctant to assess the category of progress as being "on track to achieve target". Despite the increase in resource mobilization it is clear that shortage of financial resources are still a major constraint to effective biodiversity action. Government agencies in particular identified lack of financial resources (which results in deficiencies in human resources and technical capacity)as a major obstacle to adequate fulfilment of their biodiversity-related mandates.

In order to better assess progress towards this goal, efforts towards Goal 1 of the Strategy for Resource Mobilization (CBD Decisions IX/11) should be increased in order to improve the national information base on funding needs, gaps, and priorities. Quantitative data on biodiversity funding and spending should also be monitored, and

the information used to assess the extent to which funding shortfalls, especially in priority areas, are being reduced. Guidance prepared by the Biodiversity Finance Initiative (http://biodiversityfinance.net) may be particularly useful for quantifying biodiversity expenditures, and in particular for determining how much of government expenditure in biodiversity-relevant sectors (environment, agriculture, fisheries, protected areas, forestry, etc.) can be classified as "biodiversity expenditures".

Indicators and other tools used in assessing progress

The following indicator was used:

- Number of new biodiversity financing mechanisms established.

Quantitative information was also sought on the amount of biodiversity financing accessed from various sources, but this information was not readily available. Instead, organizations, both state and non-state, implementing biodiversity-related programmes and projects were asked to provide a qualitative assessment of how their mobilization of financial resources for biodiversity had increased since 2011, and to provide input to the assessment of progress towards this target.

Level of confidence in the assessment of progress

There is limited quantitative information available with which to assess progress towards this target; as a result, this assessment draws heavily on expert opinions.

Information about new biodiversity funding mechanisms and trends in resource mobilization were obtained via interviews and focus groups with organizations implementing biodiversity projects, as well as with entities providing biodiversity funding. While there was general consensus that sources and availability of biodiversity funding have increased, confidence in this assessment would be improved by the use of quantitative data to identify trends in overall biodiversity financing and the proportions of financing that come from various sources (i.e. domestic budgets, charitable trusts, development assistant, private sector, etc.).

Adequacy of monitoring information to support assessment

There is no monitoring system in place to assess progress towards this target.

NATIONAL CONTRIBUTIONS TO THE ACHIEVEMENT OF EACH GLOBAL AICHI BIODIVERSITY TARGET

This section of the 6NR presents information on progress towards the global ABTs, and links implementation and progress at the national level to the global Targets.

AICHI BIODIVERSITY TARGET 1: AWARENESS INCREASED

Biodiversity stakeholders in St. Vincent and the Grenadines are actively working to raise awareness of the values of biodiversity, and to promote conservation and sustainable use. Awareness-raising activities have been designed to reach a variety of segments of society, including women, youth, and resource users such as fishers. There is a strong emphasis on raising awareness among young people, via schools outreach, career days, and summer camps, as well as via social media. Further details of measures taken in relation to this target are presented in the section on Implementation.

CEPA activities in St. Vincent and the Grenadines are increasing people's awareness of the unique and globally significant components of biodiversity present in the country — for example, important bird areas in the Grenadines and endemic species such as the Union Island Gecko — and of actions they can take to conserve and sustainably use these habitats, ecosystems, and species.

Objectives related to this target are included in the St. Vincent and the Grenadines' NESDP and NOP.

AICHI BIODIVERSITY TARGET 2: BIODIVERSITY VALUES INTEGRATED

By incorporating biodiversity considerations into national and sectoral development plans and strategies, St. Vincent and the Grenadines has placed objectives related to 90% of the ABTs into mainstream policy- and decision-making frameworks.

AICHI BIODIVERSITY TARGET 3: INCENTIVES REFORMED

St. Vincent and the Grenadines has not yet implemented measures that contribute to the global achievement of ABT 3.

Objectives and interventions related to this target are included in the NESDP and NOP.

AICHI BIODIVERSITY TARGET 4: SUSTAINABLE CONSUMPTION AND PRODUCTION

St. Vincent and the Grenadines has implemented policies and programmes to encourage consumption of local foods for food and nutrition security, and there has been a corresponding reduction in the importation of staple foods such as wheat, rice, and maize, and a reduction in rates of undernourishment. Shifting consumption patterns towards local foods encourage greater sustainability in the agriculture sector (by enhancing local markets for local produce) and contribute to sustainability of consumption by reducing total food miles and ecological footprint.

Objectives and interventions related to this target are included in the NESDP and the NOP.

AICHI BIODIVERSITY TARGET 5: HABITAT LOSS HALVED OR REDUCED

Legislative protection afforded to the central and highland forests of St. Vincent protects the habitats of globally significant populations of endemic species, including the St. Vincent Amazon, the Whistling Warbler, and the St. Vincent Blacksnake.

One of the major causes of forest loss in St. Vincent and the Grenadines has been the illegal cultivation of marijuana in the national forest reserve. The passage, in 2018, of legislation legalizing the cultivation of marijuana for medicinal and research purposes is anticipated to result in more environmentally responsible approaches to marijuana cultivation and a corresponding reduction in deforestation. Further information about this action is provided in case study 4.

Objectives and interventions related to this target are included in the NESDP.

AICHI BIODIVERSITY TARGET 6: SUSTAINABLE MANAGEMENT OF MARINE LIVING RESOURCES

Several measures have been taken to improve the sustainable management of living marine resources in St. Vincent and the Grenadines. These have included a ban on the taking of sea turtles, promotion of less destructive fishing practices, training for fishers, and the use of fish aggregating devices to reduce pressures on inshore/coastal fisheries. The formation of a National Fisherfolk Organization has been a significant step towards engaging fishers in fisheries governance, and experts from the Fisheries Division have indicated that they have observed an increased uptake amongst fishers of sustainable fishing practices. However there remains a lack of verifiable data to enable determination of whether the status of key fisheries has improved and whether current catch levels are sustainable.

New prohibitions on the hunting and taking of all species of sea turtles, including the previously heavily exploited green and hawksbill turtles, contributes to preventing the extinction and improving the conservation status of these globally vulnerable, threatened and critically endangered species.

Management actions related to the Caribbean Spiny Lobster fishery respond to regional and international concerns about the sustainability of this fishery and serve to implement the St. George's Declaration on Conservation, Management and Sustainable Use of the Caribbean Spiny Lobster (*Panurilus argus*), which was signed by member countries of the Caribbean Regional Fisheries Mechanism in 2015.

The Caribbean Queen Conch (*Strombus gigas)* is listed in Appendix II of CITES; trade must be controlled in order to avoid utilization incompatible with the survival of the species. Actions to assess and manage the Queen Conch fishery, and to protect the species and ecosystems through sound management while assuring sustainable socio-

economic benefits from the fishery, contribute to the achievement of the objectives of CITES.

Recent review of St. Vincent and the Grenadines' fisheries-related regulatory framework will serve as a basis to strengthen the country's capacity to discharge its duties, as a flag State, to take action to prevent, deter, and eliminate illegal, unreported, and unregulated fishing, in keeping with international law.

Objectives and interventions related to this target are included in the NESDP and NOP.

AICHI BIODIVERSITY TARGET 7: SUSTAINABLE AGRICULTURE, AQUACULTURE, AND FORESTRY

Measures taken to improve agricultural practices in St. Vincent and the Grenadines, as described in the section on Implementation, are designed to deliver benefits in terms of reducing pollution, reducing deforestation, controlling erosion, ameliorating impacts on ecosystems that provide essential services related to water, increasing efficiencies in resource use, increasing pollinator populations, enhancing sustainable land management and reducing land degradation, and enhancing climate resilience.

Objectives and interventions related to this target are included in the NESDP and NOP.

AICHI BIODIVERSITY TARGET 8: POLLUTION REDUCED

St. Vincent and the Grenadines has taken measures to reduce plastic pollution, which contribute to achievement of ABT 8, as well as to SDG 14 and implementation of the Commonwealth Blue Charter. Actions have also been taken to restrict importation and use of hazardous chemicals and polluting substances, such as pesticides containing glyphosate and detergents containing phosphates. A national project has been formulated to address and reduce land-based sources (e.g. agricultural runoff, sewage effluent) of pollution of the marine environment.

Objectives and interventions related to this target have been included in the NESDP and NOP.

AICHI BIODIVERSITY TARGET 9: INVASIVE ALIEN SPECIES PREVENTED AND CONTROLLED

St. Vincent and the Grenadines has not yet implemented measures that contribute substantially to the global achievement of ABT 9. However, St. Vincent and the Grenadines is participating in a recently launched regional project that is intended to reduce the incidence and impacts, including impacts on biodiversity, of IAS in the countries of the Eastern Caribbean. It is anticipated that this project will also have positive impacts on sustainability in the agriculture sector (by reducing pest outbreaks) and on the conservation of endemic species.

Objectives and interventions related to this target are included in the NOP.

AICHI BIODIVERSITY TARGET 10: PRESSURES ON VULNERABLE ECOSYSTEMS REDUCED

St. Vincent and the Grenadines has not yet implemented measures that contribute substantially to the global achievement of ABT 10.

Objectives and interventions related to this target are included in the NESDP and NOP.

AICHI BIODIVERSITY TARGET 11: PROTECTED AREAS INCREASED AND IMPROVED

St. Vincent and the Grenadines is a participating country in the Caribbean Challenge Initiative and is making concerted efforts to achieve the challenge goal of effectively conserving and managing 20% of more of its marine and coastal environment by 2020, a target which is more ambitious than the condition for MPA coverage in ABT 11.

Designation of the TCMP as a regionally recognized protected area under the SPAW Protocol contributes to the growth and strengthening of a Wider Caribbean regional system of protected areas that are ecological representative and include areas identified as being of particular interest for biodiversity and ecosystem services.

The TCMP Authority's participation in the GNMPA, and the facilitative support provided by Sustainable Grenadines to the Network, contribute to the connectivity and effective management of this important transboundary network of MPAs.

There are 16 internationally recognized KBAs in St. Vincent and the Grenadines, and 40% of the area of these KBAs is incorporated into the national protected areas system.

Objectives and interventions related to this target are included in the NESDP and NOP.

AICHI BIODIVERSITY TARGET 12: EXTINCTION PREVENTED

Species and habitat conservation in St. Vincent and the Grenadines contribute to the preventing the extinction of globally unique endemic species such as the St. Vincent Amazon and the Union Island Gecko. Protection of Important Bird Areas in the Grenadines helps to improve the conservation status of migratory seabirds.

Actions being taken to expand the country's protected areas network and improve management effectiveness also contribute to this target. For example, one of the proposed new protected areas is designed specifically to offer legal protection to the habitat of the endemic and critically endangered Union Island Gecko.

AICHI BIODIVERSITY TARGET 13: GENETIC DIVERSITY MAINTAINED

Institutions in St. Vincent and the Grenadines continue to maintain on-farm collections of local varieties of fruit and root/tuber crops. The establishment of protected areas under the Forest Conservation Act and the National Parks Act have also had indirect benefits for the protection and conservation of under-utilized wild species representing genetic resources for food and agriculture.

AICHI BIODIVERSITY TARGET 14: ECOSYSTEMS AND ESSENTIAL SERVICES SAFEGUARDED

St. Vincent and the Grenadines is acting to protect and effectively manage ecosystems that provide essential services related to water, in keeping with ABT 14. These actions

are complementary to/synergistic with actions taken in respect of ABTs 5, 7, 11, and 15, and are further described in the section on Implementation.

Objectives and interventions related to this target are included in the NESDP and NOP.

AICHI BIODIVERSITY TARGET 15: ECOSYSTEMS RESTORED AND RESILIENCE ENHANCED

St. Vincent and the Grenadines has identified reforestation, afforestation, reduced deforestation, and reduced forest degradation as components of its national climate change and mitigation approach under the Paris Agreement. Associated actions therefore contribute towards both achievements of ABT 15 and implementation of the UNFCCC. Measures in relation to this target are described in the Implementation section.

Objectives and interventions related to this target have included in the NESDP and NOP.

AICHI BIODIVERSITY TARGET 16: NAGOYA PROTOCOL IN FORCE AND OPERATIONAL

St. Vincent and the Grenadines has not yet implemented measures that contribute substantially to the global achievement of ABT 16.

Objectives and interventions related to this target have been included in the NOP.

AICHI BIODIVERSITY TARGET 17: NBSAPS ADOPTED AS POLICY INSTRUMENT

St. Vincent and the Grenadines has prepared a revised NBSAP that incorporates the principles of the Strategic Plan for Biodiversity 2011-2020 and the associated ABTs. This NBSAP has been submitted to the CBD Secretariat. Official endorsement as a national policy document is pending.

Objectives and interventions relevant to this target are included in the NESDP.

AICHI BIODIVERSITY TARGET 18: TRADITIONAL KNOWLEDGE RESPECTED

Action is being taken to document the local and indigenous biodiversity knowledge and traditions of St. Vincent and the Grenadines, and to involve local communities in biodiversity management and decision-making, particularly in the fisheries sector.

Objectives and interventions related to this target are included in the NESDP and NOP.

AICHI BIODIVERSITY TARGET 19: KNOWLEDGE IMPROVED, SHARED AND APPLIED

St. Vincent and the Grenadines has not yet implemented measures that contribute substantially to the global achievement of ABT 19.

Objectives and interventions related to this target are included in the NESDP and NOP.

AICHI BIODIVERSITY TARGET 20: FINANCIAL RESOURCES FROM ALL SOURCES INCREASED

New mechanisms have been set up in St. Vincent and the Grenadines in order to increase financing for biodiversity, in keeping with ABT 20. Biodiversity stakeholders in state and non-state sectors have also made concerted efforts to improve resource mobilization, and the private sector is also provided increased financial support for biodiversity-related initiatives. St. Vincent and the Grenadines is a participating country in the Caribbean Biodiversity Fund, and has committed to the Fund's goal of providing "a sustainable flow of resources to support activities that contribute substantially to the conservation, protection and maintenance of biodiversity in the Caribbean".

RELATIONSHIPS BETWEEN NATIONAL BIODIVERSITY ACTION AND THE SUSTAINABLE DEVELOPMENT GOALS

CEPA activities targeted at youth and students support the achievement of SDG 4 on education and lifelong learning, and specifically achievement of target 4.7. Awareness-raising activities by government agencies and civil society also contribute to SDG 12, target 12.8.

Mainstreaming biodiversity in the NESDP supports SDGs 1 (targets 1.4), 2 (target 2.4), 8 (target 8.4), 12 (target 12.2), 14 (targets 14.4 and 14.7), 15 (target 15.9), and 17 (target 17.14).

Improving the sustainable use of living marine resources contributes to achievement of SDGs 2 (targets 2.1, 2.3, and 2.4), 8 (targets 8.2 and 8.4), 12 (target 12.2), 13, (target 13.2), and 14 (targets 14.2, 14.4 and 14.7).

Promoting sustainable agriculture contributes to achievement of SDGs 1 (targets 1.4 and 1.5), 2 (targets 2.1, 2.3, 2.4, 2.5), 3 (target 3.9), 6 (targets 6.3, 6.4, 6.6) 8 (target 8.4), 12 (target 12.2) and 15 (targets 15.2 and15.3). The emphases on climate resilience and soil conservation in the agriculture sector support implementation of the UNFCCC and the United Nations Convention on Combatting Desertification.

St. Vincent and the Grenadines' ban on the importation, manufacture, sale and use of expanded polystyrene products contributes not only to achievement of ABT 8, but also to the objectives of the *Our Ocean, Our Future: Call for Action* and the Commonwealth Blue Charter. It represents fulfilment of commitments made at the 2017 Ocean Conference and contributes to achievement of SDG 14 (target 14.1) and SDG 6 (target 6.3).

Strengthening the national protected areas system supports SDGs 11 (target 11.4), 14 (target 14.2), and 15 (target 15.4).

Action to improve the conservation status of endangered, endemic, and migratory species supports SDGs 11 (target 11.4), 12 (target 12.2), 14 (target 14.4), and 15 (targets 15.5, 15.7, and 15.C).

Measures to safeguard and sustainably manage ecosystems and essential services related to the supply of water contribute to SDGs 6 (targets 6.4, 6.5, 6.6), 7 (target 7.1), (12 (target 12.2), 13 (target 13.1), and 15 (targets 15.1, 15.2, and 15.4).

Restoration of coastal ecosystems support SDGs 8 (target 8.9), 13 (target 13.1), 14 (targets 14.2 and 14.7), and 15 (target 15.5).

Action to mobilize additional financial resources for biodiversity conservation and management support SDG 15 (targets 15.A and 15.B) and 17 (target 17.3)

1: End poverty in all its forms everywhere
2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture
3: Ensure healthy lives and promote well-being for all at all ages
4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
5: Achieve gender equality and empower all women and girls
6: Ensure availability and sustainable management of water and sanitation for all
7: Ensure access to affordable, reliable, sustainable and modern energy for all
8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
10: Reduce inequality within and among countries
11: Make cities and human settlements inclusive, safe, resilient and sustainable
12: Ensure sustainable consumption and production patterns
13: Take urgent action to combat climate change and its impacts
14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development
15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
17: Strengthen the means of implementation and revitalize the global partnership for sustainable development

The Sustainable Development Goals

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ANNEX I: CORRESPONDENCE BETWEEN THE ABTS AND THE NESDP AND NOP

Aichi Biodiversity Target	NESDP Strategic Interventions	NESDP Strategic/Sectoral Objectives
1: Awareness increased	Sensitize the youth to environmental problems and the concept of sustainable development	To foster among young people ideals of social harmony, mutual respect, cultural heritage, national values and international cooperation
2: Biodiversity values integrated	Enforce land-use zoning legislation to protect the critical ecological balance and biodiversity Develop a comprehensive system for the sustainable management of land resources Develop national land-use policies and land-use zoning plans Develop and employ methodologies for the economic assessment and accounting of natural resources Enhance the capacity at the Ministry responsible for the environment as well as strengthen its ability to collaborate with other agencies	To manage and guide the growth and development of the state in a sustainable manner To optimize the use of limited land space To conserve the natural resources of the country through effective utilization and management To ensure a clean, safe, and healthy environment
3: Incentives reformed	Establish incentive regimes to encourage compliance with land use policy Provide incentives for the protection and restoration of natural resources Develop fiscal and other policy incentives to encourage environmentally sustainable imports and the use of local products with degradable content	To promote the sustainable use of land, forestry and marine resources To ensure a clean, safe, and healthy environment

4: Sustainable consumption and production	Manage terrestrial, marine and atmospheric resources, organisms and ecosystems in a sustainable manner Develop fiscal and other policy incentives to encourage environmentally sustainable imports and the use of local products with degradable content Develop a more authentic tourism product that protects the environment and utilizes as far as possible local inputs Promote the sustainable use of land, forestry, and marine resources Encourage “green growth”	To ensure a clean, safe and healthy environment To stimulate growth in the tourism sector To revitalize the agriculture and fisheries sector To create jobs and reduce the level of unemployment
5: Habitat loss halved or reduced	Preserve critical forest areas Develop appropriate measures to restore and protect the natural resources of the country Strengthen the existing legal and institutional frameworks to encourage integrated approaches to marine management and to reduce environmental degradation Manage and restore biological diversity where possible Minimize damage to beach and shoreline integrity and marine ecosystems	To optimize the use of limited land space To conserve the natural resources of the country through effective utilization and management To optimize the economic contribution made by ocean resources To effectively manage biological resources To reduce the adverse impact of climate change
6: Sustainable management of marine living resources	Manage terrestrial, marine and atmospheric resources, organisms and ecosystems in a sustainable manner Establish and implement a comprehensive integrated ocean governance policy Promote the sustainable use of land, forestry and marine resources Develop and employ methodologies for the economic assessment an accounting of marine resources	To ensure a clean, safe, and health environment To revitalise the agriculture and fisheries sector To optimize the economic contribution made by ocean resources

7: Sustainable agriculture, aquaculture and forestry	Minimize the negative impact of climate change on agriculture and human health Promote the sustainable use of land, forestry and marine resources Deepen linkages between agriculture and other sectors, particularly tourism, manufacturing and the environment Implement soil conservation measures in agriculture districts Enact and enforce appropriate legislation for agro-ecological zoning Develop and enforce regulations/ practices prohibiting agriculture activities and systems of production that are environmentally degrading	To revitalize the agriculture and fisheries sector To reduce the adverse impact of climate change To promote the sustainable use of land, forestry and marine resources To improve the legislative and institutional framework of the agricultural sector To manage and guide the growth and development of the state in a sustainable manner
8: Pollution reduced	Minimise, where possible, the discharge of pollutants in soils, water, air and the natural environment Adopt and implement appropriate measures to adequately manage solid and liquid waste including hazardous waste and atmospheric pollutants Develop a sustainable waste management system Strengthen the nationwide waste management system	To ensure a clean, safe, and healthy environment
9: Invasive alien species prevented and controlled	—	—

10: Pressures on vulnerable ecosystems reduced	Develop and implement a Coastal Area Management Plan Strengthen coastal zone management system Minimize damage to beach and shoreline integrity and marine ecosystems Develop appropriate legislative and regulatory framework, for proper environmental management and institutional systems for responding and mitigating effects of climate change Manage terrestrial, marine and atmospheric resources, organisms and ecosystems in a sustainable manner	To conserve the natural resources of the country through effective utilization and management To promote the sustainable use of land, forestry and marine resources To reduce the adverse impacts of climate change
11: Protected areas increased and improved	Develop alternative and sustainable livelihood programmes for local communities in protected areas	To conserve the natural resources of the country through effective utilization and management
12: Extinction prevented	—	—
13: Genetic diversity maintained	—	—
14: Ecosystems and essential services safeguarded	Improve the protection and management of water resources Develop measures to promote sustainability of the water supply Develop and implement an Integrated Watershed Management Plan Strengthen the existing Integrated Watershed Management Plan Discontinue squatting, farming, and other human activities around major water catchments Implement appropriate water management practices including reforestation, soil conservation, and river bank stabilization Institute measures to conserve biodiversity and protection of the watershed	To ensure an adequate, safe, reliable, and sustainable supply of water To promote the sustainable use of land, forestry and marine resources

15: Ecosystems restored and resilience enhanced	Develop appropriate measures to restore and protect the natural resources of the country Manage and restore biological diversity where possible Adopt measures to restore environmental degraded areas Provide incentives for the protection and restoration of natural resources	To conserve the natural resources of the country through effective utilization and management To effectively manage biological resources
16: Nagoya Protocol in force and operational	—	—
17: NBSAPs adopted as a policy instrument	Encourage the adherence to St. Vincent and the Grenadines' commitments under multilateral environmental agreements	To ensure a clean, safe, and healthy environment
18: Traditional knowledge respected	Develop an operational participatory mechanism to facilitate effective involvement of the farming community in policy formulation Adopt a participatory approach to problem analysis [in the agriculture and fisheries sector] through community consultations Promote greater awareness of Vincentian heritage, including its pre-Columbian past, and use of authentic indigenous cultural items and services Encourage the documentation and preservation of Vincentian culture	To strengthen policy formulation and framework for agricultural development To preserve, maintain and promote the cultural heritage of St. Vincent and the Grenadines
19: Knowledge improved, shared and applied	Advance research on biological resources Upgrade the system for the collection, monitoring and management of hydrological and other data/information on water resources	To conserve the natural resources of the country through effective utilization and management To ensure an adequate, safe, reliable and sustainable supply of water at affordable prices
20:	—	—

Table: Correspondence between Aichi Biodiversity Targets and St. Vincent and the Grenadines' National Economic and Social Development Plan 2013 - 2025

NOP Strategic Objective	Relevant Strategic Actions	Related Aichi Biodiversity Targets
2: To sensitize the public on opportunities for livelihoods and investment available in the blue economy and the need for sustainable management of coastal and marine resources	Develop and implement a targeted public awareness and education strategy on the importance of the sea, its resources and protection of the marine environment	Target 1: Awareness increased
3: To foster shared responsibility among all stakeholder groups in the effective management and use of the marine resources	Identify the key stakeholders within local communities and industries, and develop a strategy for engagement in the planning, management and monitoring of ocean resources	Target 18: Traditional knowledge respected
4: To increase resilience and reduce the adverse impacts of environmental change in coastal areas	Develop and maintain coastal and marine systematic observation, research and information management systems to enable effective planning and monitoring Develop marine zoning and a multiuse spatial plan for improving management of the marine space to achieve economic development and environmental objectives Establish a system of effectively and equitably managed, ecologically representative and well-connected protected areas Implement measures to prevent the introduction and manage the adverse environmental impacts of alien invasive species, including, as appropriate, those adopted in the framework of the International Maritime Organization	Target 2: Biodiversity values integrated Target 9: Invasive alien species prevented and controlled Target 11: Protected areas increased and improved Target 19: Knowledge, improved, shared, and applied

5: Develop and increase the potential of marine resources to meet human nutritional needs and other developmental goals, while maintaining and restoring populations of marine species	Improve food security by increasing the availability of marine living resources as human food by reducing wastage, post-harvest losses and discards Assess the potential of marine living resources, including underutilized or unutilized stocks and species, by developing inventories, where necessary, for their conservation and sustainable use Develop and implement evidence-based management plans which may include reducing or suspending fishing catch in particular locations commensurate with the status of the stock Reduce the adverse ecosystem impacts from fisheries by eliminating destructive fishing practices Limit the introduction of new subsidies that contribute to overcapacity and overfishing, and or from extending or enhancing existing ones Explore the scope for expanding recreational and tourist activities based on marine living resources, including those for providing alternative sources of income	Target 3: Incentives reformed Target 4: Sustainable consumption and production Target 6: Sustainable management of marine living resources Target 19: Knowledge improved, shared, and applied
6: To promote the adoption of appropriate adaptation and resilience strategies to minimize the effects of climate change in coastal areas	Conduct coastal vulnerability assessments as part of integrated coastal zone management planning processes Protect and restore natural coastal features such as coral reefs, mangroves and beaches to act as natural buffers to storm surges and to reduce wave-damage from storms	Target 2: Biodiversity values integrated Target 10: Pressures on vulnerable ecosystems reduced Target 14: Ecosystems and essential services safeguarded Target 15: Ecosystems restored and resilience enhanced

7: To improve the health and vitality of coastal ecosystems by mitigating anthropogenic threats	Adopt measures to protect vulnerable coastal and marine ecosystems from adverse impacts of development activities, including the use of environmental impact assessments Adopt and enforce measures to control and prevent coastal erosion and siltation due to anthropogenic factors related to, *inter alia*, land-use and construction techniques and practices Establish and improve regulatory and monitoring programmes to control effluent discharge, using minimum sewage effluent guidelines and water quality criteria Incorporate internationally accepted standards for sewage disposal when formulating or reviewing coastal development plans, including human settlement plans Reduce solid waste pollution of the marine environment by promoting recycling, waste audits and minimization initiatives Reduce point sources of pollution from industry by encouraging cleaner production techniques and appropriate treatment of industrial effluents Identify and institute appropriate mechanisms for controlling non-point sources pollutants emanating from inappropriate sewage and waste management, agricultural practices, construction and transportation, *inter alia* Cooperate with relevant regional and international bodies to monitor marine pollution from ships, especially from illegal discharges and enforce MARPOL discharge provisions more rigorously Establish port reception facilities for the collection of oily and chemical residues and garbage	Target 2: Biodiversity values integrated Target 7: Sustainable agriculture, aquaculture, and forestry Target 8: Pollution reduced Target 10: Reduce pressure on vulnerable ecosystems

8: To promote a shift from the traditional sector-specific methods to whole-of - government and whole-of-society approaches to the development and management of marine resources	Modernize environmental regulations to deter over-exploitation of the marine resources Adopt and enforce relevant legislation, regulations and standards to reduce marine pollution from all sources	Target 6: Sustainable management of marine living resources Target 8: Pollution reduced
9: To create a robust blue economy	Promote entrepreneurship and innovation in the fisheries, aquaculture and tourism sectors Ratify the Nagoya Protocol on Access and Benefits Sharing and establish the necessary legal and institutional provisions	Target 7: Sustainable agriculture, aquaculture and forestry Target 16: Nagoya Protocol in force and operational
10: To develop the capacity for marine scientific research and more effective management	Improve data collection and information management capacity and carry out systematic monitoring of the state of the marine environment Strengthen research facilities for systematic observation of marine pollution, environmental impact assessment and development of control mechanisms Undertake marine scientific research and cooperate with relevant national, regional and international bodies to develop associated technological capacity Strengthen the capacity and authority of national planning and coordinating bodies to review all land-based activities and sources of pollution for their impacts on the marine environment and to propose appropriate control measures	Target 8: Pollution reduced Target 18: Knowledge improved, shared, and applied

Table: Correspondence between Aichi Biodiversity Targets and St. Vincent and the Grenadines' National Ocean Policy and Strategic Plan

ANNEX II: UPDATED BIODIVERSITY PROFILE FOR ST. VINCENT AND THE GRENADINES

BIODIVERSITY FACTS: STATUS AND TRENDS OF BIODIVERSITY

St. Vincent and the Grenadines is an archipelagic nation in the Eastern Caribbean, made up of the main island St Vincent 390 sq.km. and thirty-two islands, islets and cays comprising the Grenadines, covering some 44 sq.km. within a 36,062 sq.km. maritime area. St. Vincent and the Grenadines is part of the Caribbean Islands Biodiversity Hotspot.

St. Vincent has a rugged central north to south mountain spine, made up of a very complex terrain of peaks, ridges, ravines, gorges, and valleys. There is active volcano, La Soufriére (elevation 1234 m), at the northern end of the island. The Grenadines are characterized by low, dry hills. Extensive coral reefs and sea grass beds surround the islands of the archipelago.

Flora and Fauna

St. Vincent and the Grenadines has rich biodiversity with multiple endemics.

Forests and terrestrial flora

On mainland St. Vincent, the central hills and mountains, except the upper slopes of Soufriere, support a luxuriant growth of forest including rain forest, palm brake, and elfin woodland. Secondary humid forest, including scrub, is found at low elevations in the central chain in response to human disturbance and in rain forest and palm brake zones on steep slopes and ridges where storm damage has occurred, or loose unstable subsoil exists. Secondary forest has also colonized Soufriere up to about 600 m, where it changes to very low forest and then to shrubs, ferns, grasses, and herbaceous plants up to the summit. Outside the central hills and mountains, St. Vincent is extensively cultivated, and only small sections of drier, mostly secondary forest exist. The vegetation in the Grenadines is primarily deciduous forest, mostly transforming into leafless forests during the dry season.

Four species of mangrove have been identified in St. Vincent and the Grenadines: Black mangrove (*Avicennia germinans*), White (*Laguncularia racemosa*), Button (*Cococarpus erecta*) and Red (*Rhizophora mangle*). Approximately just over 42 hectares of mangrove forest remain along coastal areas, mainly on Union and Mustique Islands and in a small area on St. Vincent's south coast.

Records for St. Vincent and the Grenadines report 1150 species of flowering plants (including an estimated 27 endemics) and 163 species of ferns (including four endemics).

St. Vincent and the Grenadines has no official national forest policy or forest management plans. There are three forest reserves, but these reserves have not been legally gazetted as Protected Areas. Over 90% of forest land is state-owned, including all lands above the 305m contour. In the 2015 FAO Forest Resources Assessment, forest coverage was estimated at 27,000 ha (68% of total land area). Of the total forested area, approx. 70% is natural forest, 25% planted forest and 5% agroforestry.

Terrestrial fauna

Of the 190 bird species recorded, there are two endemic species, namely *Amazona guildingii* (the national bird of St. Vincent and the Grenadines) and *Catharopeza bishopi* and two endemic sub-species, the St. Vincent House Wren (*Trologlodytes aedon*) and the Rufous-throated solitaire (*Myadestes genibarbis*). There are over a dozen regionally endemic species of bird. Seabirds recorded in St. Vincent and the Grenadines include the Red-footed Booby, Brown Booby, Brown Noddy, Bridled Tern, Audubon's Shearwater, Laughing Gull, Royal Tern, Sandwich Tern, Roseate Tern, Sooty Tern, Masked Booby, Magnificent Frigatebird, White-tailed Tropicbird, Red-billed Tropicbird and Brown Pelican.

There are four recorded amphibians including one endemic (*Pristimantis shrevei*) and one invasive. Of the 21 reptiles recorded there are six endemics, including four lizards (*Anolis griseus*, *Anolis trinitatus*, *Sphaerodactylus kirbyi* (endemic to Bequia and Mustique), and *Gonatodes daudini* (endemic to Union Island)) and two snakes (*Chironius vincenti* and *Corallus cookii*). Two species of invasive reptiles have been recorded.

Invertebrate assessments are varied. Main taxa include twenty species of diplopods (centipedes and millipedes), two hundred and twenty species of arachnids, not including microscopic mites, two thousand species of insects, thirty-five terrestrial crustaceans, and seventy-five species of terrestrial/freshwater molluscs. For Union Island alone, 16 species of nematodes have been recorded.

Fourteen species of bats have been recorded in St. Vincent and the Grenadines, including the recently (2010) described St. Vincent Big-eared Bat (*Micronycteris buriri*).

Coastal and marine flora and fauna

There are over 1200 marine species including 450 species of finfish, 12 species of whales and dolphins, nine species of gastropods, 11 species of seaweed, 30 species of corals

recorded, and 800 species of marine molluscs. There are four species of turtles: Hawksbill (*Eretmochelys imbricata*), Green (*Chelonia mydas*), Loggerhead (*Caretta caretta*) and Leatherback (*Dermochelys coraica*).

Three quarters of the Grenada Bank is less than 50 m deep and supports the most extensive coral reefs (estimated at 85 sq.km.) and related habitats in the south-eastern Caribbean. In the Grenadine Islands all reef-related habitats are represented: seagrass and lagoon, areas of mangrove, and a variety of patch, fringing and bank barrier reefs.

Endangered species

There are1,523 species listed on the IUCN Red List for St. Vincent and the Grenadines. Of this number, 1,347 species are classified as of Least Concern. There are 78 species for which data is deficient. The remaining 97 are distributed as follows

- Extinct: 1
- Critically Endangered: 7
- Endangered:14
- Vulnerable: 43
- Near Threatened: 33

Of the 21 critically endangered and endangered species, five are endemic to St. Vincent and the Grenadines; *Chironius vincenti*, *Gonatodes daudini*, *Pristimantis shrevei*, *Catharopeza bishopi* and *Amerotyphlops tasymicris*. Both *Pristimantis shrevei* and *Catharopeza bishopi* are recorded as having declining populations.

Protected Areas

According to the World Database on Protected Areas, St. Vincent and the Grenadines' terrestrial protected area amounts to 92 sq.km. (22% coverage) and marine protected area amounts to 80 sq.km. (<1%) coverage.

There are 18 wildlife reserves listed in the Wildlife Protection Act and 3 forest reserves listed in the Forest Resource Conservation Act. The Fisheries Conservation Act has designated ten (10) conservation areas within the country's EEZ. The Tobago Cays have multiple layers of protection as they are protected under the Forest Resource Conservation Act, Wildlife Protection Act and Fisheries Conservation Act as a Forest Reserve, Wildlife Reserve and Marine Conservation Area. In addition, the Tobago Cays are recognised as both a National Park and a Marine Park. The Tobago Cays Marine Park has also been designated as a protected area of regional importance, under the Protocol Concerning Specially Protected Areas and Wildlife to the Convention for

the Protection and Development of the Marine Environment in the Wider Caribbean Region.

The multiplicity of types of designations (natural landmarks, wildlife reserve, marine reserve, forest reserve, marine park, national park, marine conservation area, recreational landscapes, protected landscapes, protected seascapes) under national law and policy, along with the number of applicable pieces of legislation, the differing degrees of protection afforded under the various legislation, and other overlaps and inconsistencies in the regulatory framework make it difficult to determine the precise number, extent, and management categories of protected areas in St. Vincent and the Grenadines.

MAIN PRESSURES ON AND DRIVERS OF CHANGE TO BIODIVERSITY

The country's biodiversity is threatened by various factors, including limited and ineffective land use planning, deforestation and other forms of habitat loss and fragmentation, excessive use of agro-chemicals, forest fires, sand mining, destructive harvesting practices and unsustainable use of resources.

Natural threats to the forest ecosystems include volcanic eruptions, tropical cyclones, extended drought and landslides. Habitat loss and fragmentation due to squatting for housing and development are now also major factors threatening forest biodiversity in the country. Invasive alien species are on the rise, presenting significant challenges to forest and marine biodiversity. The illegal pet trade is emerging as a threat to endemic wildlife, particularly reptiles.

Threats to agricultural ecosystems and biodiversity include export markets, natural disasters, genetic erosion, invasive alien species and introduced pathogens. Unplanned development and the unregulated use of the coastal and marine resources of the Grenadines have already led to significant degradation in many areas.

Overfishing, coastal habitat destruction, sedimentation, solid waste and sewage disposal from land-based and boat sources, as well as the recreational abuse of coral reefs, have been cited as causative factors for this deterioration. Coral bleaching, as a result of global climate change, is also considered one of the greatest threats to coral reefs. The fragmentation of habitats and degradation of coastal ecosystems is making the country increasingly vulnerable to the impacts of natural disasters, such as hurricanes, tropical

storms, storm surges and heavy rains, the effects of which are expected to worsen under climate change.

Invasive Alien Species

Thirty-five introduced/invasive have been verified as being present in St. Vincent and the Grenadines, ten from the plant kingdom and 25 from the animal kingdom. Additionally, 124 IASs have been recorded as present in St. Vincent and the Grenadines, but these observations are unverified.

The Fourth and Fifth National Reports of St. Vincent and the Grenadines to the CBD note that invasive species are increasing in species and number, presenting a major challenge to native biodiversity. For example, the introduced armadillo (*Dasypus novemcinctus*) causes considerable damage to forest ecosystems; its digging undermines large trees causing them to topple and reducing habitats for tree nesting species. It also accelerates erosion, increases siltation in the watershed, and affects ecosystem services related to the supply of water for potable and industrial use.

Alien species also have adverse effects on native and endemic biodiversity through predation and displacement. The roosting habits of the Cattle Egret (*Bubulcus ibis*) have been linked to loss of mangroves at the Brighton beach area. It appears that toxins caused by build-up of faecal deposits have polluted wetland soil, destroying plant roots. The National Report of Saint Vincent and the Grenadines to the Third International Conference on Small Island Developing States notes that the impact of IAS on agriculture is very high and increasing; for forest and costal forest/mangroves it is high with increasing impact; while for marine, coastal, coral reefs and inland waters it is moderate impact but increasing.

The main socio-economic impacts of IAS are associated with the introduction of agricultural pests, such as the Asian citrus psyllid, which is responsible for the spread of citrus greening disease; the red palm mite, which affects coconut trees; and the microbes that cause the Moko and Black Sigatoka diseases in bananas. The spread of invasive agricultural pests has affected SVG's export trade in bananas, plantain, mangoes, and other fruit and vegetables. There has been considerable expenditure in recent years to control the spread of IAS that affect the agriculture sector, and in particular the cultivation of bananas.

The marine IAS of principal concern is of the IndoPacific Lionfish (*Pterois volitans*), which continues to threaten fish biodiversity and the sustainability of fisheries across the Caribbean. However, reports from fisheries stakeholders in St. Vincent and the

Grenadines suggest that the impacts of the lionfish on fisheries and associated livelihoods have not been as severe as those observed elsewhere in the Caribbean. Other marine invasives are the *Halophila stipulacea* seagrass and the *Ophiothela mirabilis* brittle star, but the impact of the spread of these species is yet to be adequately assessed.

SVG does not have national legislation, policy, or action plans that specifically address the prevention, prioritization, management, and control/eradication of IAS and IAS pathways.

Habitat Conversion

One of the main threats to upland forest on the island of St. Vincent is illegal clearing of forests for cultivation of marijuana. Marijuana cultivation has become a livelihood option (one which was, until recently, illegal) for a significant number of the country's unemployed and underemployed workforce. The crops are typically grown on high elevations, particularly on the fertile but very unstable slopes of the Soufriere volcano. The clearing of land to supporting this shifting agriculture has led to a significant level of deforestation, loss of biodiversity, degradation of critical habitats. Habitat destruction and fragmentation is a key driver of land degradation in St. Vincent. Deforestation due to illegal marijuana cultivation affects critical watersheds and essential ecosystem services related to the provision of water, by increasing erosion and, consequently, siltation in watercourses. This compromises the quantity and quality of water collected from the island watersheds and affects both the supply of potable water and the generation of hydropower.

Continued habitat loss, fragmentation and degradation has made the country increasingly vulnerable to the impacts of natural disasters, including landslides, soil erosion and poor drainage. Forest clearing and fragmentation for housing and agriculture have exacerbated the severity of flooding in lower slopes and coastal areas, with devastating impacts resulting from intense rainfall events in 2010 and 2013.

Residential and tourism development along the coasts of St. Vincent are resulting in a loss of coastal forests and are affecting ecosystem connectivity and increasing fragmentation. In the Grenadines, tourism development has already caused the loss and degradation of natural habitats and ecosystems. Proposed tourism development could affect the habit of rare endemic species such as the Union Island Gecko.

Coastal development has been rated as the marine threat to coral reefs in St. Vincent and the Grenadines, followed by marine-based pollution and sedimentation. Sewage,

agrochemical pollution, and sedimentation from coastal development have had an adverse effect on reef health. Destruction of coastal and marine habitats stemming from upslope agriculture and development, unplanned coastal development, deforestation (including the cutting of mangroves) and sand or stone mining have resulted in widespread erosion and sedimentation. Resultantly, they have increased the vulnerability of coastal communities to the effects of climate change and related natural hazards such as hurricanes, tropical storms, storm surges and flooding.

A 2004 analysis found all the reefs within the waters of St. Vincent and the Grenadines to be threatened by human activities. Coastal development was rated as threatening almost two-thirds, while marine-based pollution and sedimentation were estimated as threatening 30 and 15 percent of the reefs, respectively. The degradation of many shallow reefs around. Grenada and the Grenadines was believed to result from sewage, agrochemical pollution, and sedimentation from coastal development

One of the strategic goals of the National Economic and Social Development Plan 2013 - 2025 is the enactment of a national physical development plan, which will serve to curb uncontrolled development that leads to environmental degradation, as well as to enhance protection of environmentally sensitive areas.

Impacts of Climate Change and Variability

As a small island developing state, St Vincent and the Grenadines is among the world's most at-risk countries to climate change. The effects of global climate variability and change are being experienced in with the increasing frequency of extreme weather events. Drought in 2009 affected the agricultural sector and exacerbated land degradation and loss of forest cover due to fires. Fires continue to be a major threat. The high intensity of rainfall during the frequent hydrometeorological contributes to increased erosion and landslides.

Current climate change predictions for the Caribbean suggest a general drying trend with less frequent but more intense rainfall events, predicted temperature increases and sea-level rise, many islands are projected to undergo substantial coastal squeeze in the next century. Anthropogenic influences, such as infrastructure or inappropriate agricultural practices on steep slopes, or degradation of coral reefs and mangroves, have compromised the resilience of these ecosystems, furthering impacts of extreme weather events. Coastal zones and the more densely populated human settlements are increasingly vulnerable to storm surges and erosion, exacerbated by anthropogenic impacts (densely populated settlements, coastal development, increased sedimentation due to upper watershed degradation, waste disposal). Saint Vincent and

the Grenadines lies within the Atlantic hurricane belt and is at risk annually during June to November. Hurricane Tomas (2010) damaged 30% of the estimated 13,000 hectares of natural forest in St. Vincent and the Grenadines, as well the agricultural industry (particularly bananas), with estimated damages to the agricultural sector at EC$69.64 million, of which the forestry subsector accounted for 43.6%. The 2013 Low Level Trough system producing 273mm rain over 3 hours destroyed or damaged 20% of the nation's forests, with an approximate EC$32 million cost to the agricultural sector, of which 74% was to the forestry subsector and 7% to "other crops. The overall cost to the island was US$108.4 million (15% of GDP). Storms very often damage forest canopies and architecture. This kind of damage can take multiple years very extended periods to return to normalcy. Severe weather events exacerbate an existing vulnerable situation due to unsustainable agriculture practices and habitat fragmentation/loss on the island's steep watershed slopes. The effects of increased storm frequency and severity combined with prolonged dry periods (particularly detrimental to the Grenadines), fire and soil erosion, has compromised the forests ability to maintain and re-generate forest cover. Forest damage and landslides from these events have impacted forest structure, micro-climate, floral and faunal species composition, rare species populations, and natural hydrological processes at an increasing number of sites. A period of drought in 2009 negatively affected the agricultural sector and fuelled further land degradation and loss of critical coverage in the forest sector due to increased incidence of fire. Impacts of prolonged drought in the Grenadines results in further deterioration and loss of soils and exacerbates the impacts of uncontrolled grazing (due to scarcity of fodder) on Union Island. Successful drought resistant and non-palatable vegetation are outcompeting and changing natural forests.

Forest clearing and fragmentation (for housing and agriculture) contributed to severe flooding in lower slopes and coastal areas along the west coast (2010 Hurricane Thomas), including Buccament Watershed. The coastal areas of numerous watersheds around St. Vincent have experienced destruction of coastal and marine habitats due to upslope agriculture, development, unplanned coastal development, deforestation (including the cutting of mangroves) and sand or stone mining. These activities have resulted in widespread erosion and sedimentation and increased the vulnerability of coastal communities to the effects of climate change and related natural hazards such as hurricanes, tropical storms, storm surges and flooding. Impermeable infrastructure in the Kingstown Watershed has contributed to significant flooding and damage to this coastal city.

Outside of these extreme weather events other more subtle effects of climate variability and change such as reduced moisture due to periods of drought can alter forest type

distribution along altitudinal gradients or even cause forest type shifts from moist to dry forest. At a more local and micro scale reduced moisture can stress epiphytes to even the point of death. Death of epiphytes destroys the habitat of small species such as birds, insects, reptiles and amphibians.

Sea level rise may impact freshwater supplies as subsurface water is used in the Grenadines and there are unconfirmed reports of salt water intrusion in these islands. In the coastal environment sea level rise will potentially alter mangrove distribution causing shifts in location from coast to inland or shifts in species distribution among Red, Black and White Mangroves. Drought or low rainfall conditions also can affect mangroves as they require large amounts of fresh water to reach full growth potential.

The marine ecosystem and species will be affected by sea surface temperature changes, carbon dioxide enrichment, ocean acidification and salinity as well as extreme weather events. These factors individually and in combination can alter migration patterns of migratory species such as whales and turtles and stress corals causing them to expel symbiotic zooxanthellae leading to bleaching events. Coral bleaching is considered one of the greatest threats to coral reefs. Further impacts on marine species include nesting beach damage due to storm events or skewed sex ratios in developing eggs as a result of higher sea temperatures. Sea level rise will increase the depth of the water column above seagrasses thus impacting light attenuation and ultimately productivity.

IMPLEMENTATION OF THE NBSAP

St. Vincent and the Grenadines revised and updated its National Biodiversity Strategy and Action Plan in 2015, to guide national implementation of the Strategic Plan for Biodiversity 2011 - 2020. The draft revised NBSAP, which included five national targets, has not yet been officially approved by the Cabinet of Ministers as a national policy instrument. Nonetheless, biodiversity measures have been taken that are in alignment with the draft revised NBSAP and the Strategic Plan for Biodiversity 2011 – 2020. These include actions towards the achievement of Aichi Biodiversity Targets 1, 2, 6, 7, 8, 11, 12, 14, 15, 18, 19, and 20.

Overall actions taken to contribute to the implementation of the Strategic Plan for Biodiversity 2011-2020

Actions taken to contribute to the implementation of the Strategic Plan for Biodiversity 2011—2020 include, but are not limited to:

- Communications, education and public awareness activities targeted at a variety of stakeholders and interest groups, with a strong focus on youth outreach
- Integration of biodiversity values and concerns into national development strategies and sectoral planning
- Efforts to reduce pressures on heavily used fisheries and to improve the sustainable and participatory management of living marine resources
- Encouraging agricultural diversification and the practice of low input, climate resilient agriculture
- Prohibiting the importation, trade, and use of polluting substances
- Enhancing the management of protected areas, including through transboundary networks and cooperation
- Increased protected for endangered sea turtles and cetaceans
- Restoration of degraded coastal ecosystems in the Grenadines
- Documentation, with the consent and participation of local communities, of traditional knowledge, practices, and innovations associated with biodiversity and its use
- Mobilization of additional financial resources for biodiversity, including from new and innovative sources.

Support mechanisms for national implementation of the Strategic Plan for Biodiversity 2011 – 2020

There are a variety of items of legislation that are of relevance to environmental issues and the conservation and sustainable use of biodiversity, but the development of the overall legislative regime has been somewhat piecemeal, resulting in areas of overlap and duplication, as well as gaps in coverage.

The integration of biodiversity-related goals and objectives, aligned with 13 of the Aichi Biodiversity Targets, into the National Economic and Social Development Plan 2013—2025 helps to mainstream biodiversity, giving it greater visibility and strengthening the basis for biodiversity action. However, this has not yet been supported by the official enactment of polices, including sectoral policies, with appropriate legal and institutional frameworks and action plans, to guide the sustainable management and use of natural resources, ecosystems and habitats.

State and non-state agencies have successfully intensified efforts to identify and access new potential sources of funding. Additionally, new funding mechanisms such as the St. Vincent and the Grenadines Preservation Fund and the St. Vincent and the Grenadines

National Conservation Fund have and will provide additional funding for biodiversity action. This progress notwithstanding, shortage of financial resources remains one of the key challenges for biodiversity actors, both in government and civil society, in St. Vincent and the Grenadines.

Mechanisms for monitoring and reviewing implementation

No mechanisms for monitoring implementation of the Strategic Plan for Biodiversity have been established in St. Vincent and the Grenadines, nor is there a national environmental data collection, monitoring, and reporting system that could inform assessment of progress towards the Aichi Biodiversity Targets. As biodiversity-related goals have been incorporated in the NESDP, the monitoring, evaluation, and reporting procedures under that Plan could provide a basis for determining effectiveness of actions and progress towards national and international biodiversity targets.

ANNEX III: STAKEHOLDER ENGAGEMENT FOR 6NR PREPARATION

PREPARATION OF ST. VINCENT AND THE GRENADINES' SIXTH NATIONAL REPORT TO THE CONVENTION ON BIOLOGICAL DIVERSITY: STAKEHOLDER ENGAGEMENT

The process of stakeholder engagement for the preparation of St. Vincent and the Grenadines Sixth National Report (6NR) to the Convention on Biological Diversity (CBD) has involved the following elements:

- Steering Committee meeting/familiarization session
- Stakeholder questionnaires
- Stakeholder interviews
- Focus groups
- Development of a communication strategy
- National 6NR validation workshop

Steering Committee Meeting

The stakeholder engagement process began with a Steering Committee meeting held on September 13, 2018.

The objectives of this meeting were to introduce, review and agree on plans for 6NR preparation, to obtain stakeholder buy-in to the 6NR process and commitment to active participation, and to begin to identify additional biodiversity stakeholders.

Membership on the Steering Committee was by invitation from the Sustainable Development Unit of the Ministry of Finance, Economic Planning, Sustainable Development and Information Technology, which is the focal point agency for the CBD in St. Vincent and the Grenadines. Representation was drawn from both government agencies and civil society.

Participating organizations were the:

- Sustainable Development Unit
- Ministry of Agriculture, Forestry, Fisheries, Rural Transformation, Industry and Labour
- National Parks, Rivers, and Beaches Authority
- Physical Planning Unit
- Forestry Department

- Fisheries Division
- St. Vincent and the Grenadines National Trust.

Ten people (six women, four men) attended the Steering Committee Meeting.

Stakeholder Questionnaires

At the Steering Committee Meeting, participants recommended several governmental, non-governmental and private sector stakeholders for participation in the 6NR process. On the basis of these recommendations, biodiversity questionnaires were e-mailed to the following organizations:

- Agriculture Department, Ministry of Agriculture, Rural Transformation, Forestry and Fisheries
- Economic Planning Department, Ministry of Finance, Economic Planning, Sustainable Development and Information Technology
- Finance Department, Ministry of Finance, Economic Planning, Sustainable Development and Information Technology
- Fisheries Division, Ministry of Agriculture, Forestry, Fisheries, Rural Transformation, Industry and Labour
- Forestry Department, Ministry of Agriculture, Forestry, Fisheries, Rural Transformation, Industry and Labour
- Physical Planning Unit, Ministry of Housing, Informal Human Settlements, Lands, Surveys and Physical Planning
- Sustainable Development Unit (officer with responsibility for climate change), Ministry of Finance, Economic Planning, Sustainable Development and Information Technology
- Central Water and Sewerage Authority
- National Parks, Rivers, and Beaches Authority
- St. Vincent and the Grenadines Tourism Authority
- St. Vincent and the Grenadines National Conservation Trust Fund
- St. Vincent and the Grenadines Preservation Fund
- Caribbean Youth Environment Network (St. Vincent and the Grenadines Chapter)
- Northern Grenadines Community Development Inc.
- Rise Up Bequia
- Science Initiative for Environmental Conservation and Education (SCIENCE)

- St. Vincent and the Grenadines National Trust
- Sustainable Grenadines
- Union Island Environmental Attackers
- Barrouallie Tourism and Heritage Organization
- Buccament Development Organization
- Cumberland Valley Eco-Tourism Organization
- Layou Tourism and Heritage Association
- North Leeward Tourism Association
- Owia Salt Pond Management Committee
- Northern Grenadines Community Development Inc.

The list above includes government ministries and departments, quasi-governmental organizations, non-governmental organizations, and community-based organizations, several of which focus on community-based eco-tourism management.

Information and input were also invited from the following regional and inter-governmental organizations:

- Caribbean Biodiversity Fund
- Caribbean Natural Resources Institute
- Caribbean Regional Fisheries Mechanism
- Commission of the Organization of Eastern Caribbean States (OECS Commission)
- IUCN/Biodiversity and Protected Areas Management Programme (BIOPAMA)

The level of response to the e-mailed questionnaires was very poor, indicating that this is not an effective means of stakeholder engagement in St. Vincent and the Grenadines.

Stakeholder Interviews

Following the stakeholder questionnaires, information-gathering interviews were held with representatives of the following organizations.

- Central Water and Sewerage Authority
- Caribbean Youth Environment Network
- Economic Planning Department
- Finance Department
- Fisheries Department

- Forestry Department
- Inter-American Institute for Cooperation on Agriculture (IICA)
- Ministry of Tourism, Sports and Culture
- National Parks, Rivers and Beaches Authority
- OECS Commission
- SCIENCE
- South Grenadines Development Foundation
- Sustainable Development Unit
- Sustainable Grenadines
- St. Vincent and the Grenadines National Conservation Fund
- St. Vincent and the Grenadines Tourism Authority
- Tobago Cays Marine Park Authority
- UNDP GEF Small Grants Programme

The majority of the interviews were held in person; a few were carried out via telephone/ Skype. In total 24 people were interviewed, 12 men and 12 women.

Focus Groups

After the interviews were completed, a first draft of the 6NR was prepared and circulated to the national Steering Committee, and with other national stakeholders, based on recommendations from the Steering Committee and referrals from other stakeholders. These stakeholders were all invited to participate in a series of biodiversity focus groups, based on five themes:

1. Agriculture
2. Living Marine Resources
3. Protected Areas and Ecotourism
4. Stewardship and Sustainability
5. Natural Resource Management and Ecosystem Services

The principle objectives of the focus groups was to obtain stakeholder perspectives on the effectiveness of the biodiversity measures that have been taken, and on the degrees of progress being made towards the biodiversity targets. The focus groups were also an opportunity to get feedback on the overall contents of the draft national report and , to supplement and correct the information contained in the draft.

Of the 46 organizations were invited to the focus groups, 29 organizations sent representatives:

Agriculture

- IICA
- National Botanical Gardens
- Small Ruminant Society
- St. Vincent and the Grenadines Beekeepers' Association
- Windward Islands Farmers Association
- Women in Agriculture

(6 participants; 4 women, 2 men)

Living Marine Resources

- Caribbean Regional Fisheries Mechanism
- Fisheries Division

(3 participants; 1 woman, 2 men)

Protected Areas and Ecotourism

- Mustique Island Company
- National Focal Point for the World Heritage Convention
- National Parks, Rivers, and Beaches Authority
- Owia Heritage Organization
- St. Vincent and the Grenadines Tourism Authority
- Tobago Cays Marine Park Authority

(6 participants; 3 women, 3 men)

Stewardship and Sustainability

- Ministry of Finance, Economic Planning, Sustainable Development, and Information Technology
- Richmond Vale Academy
- SCIENCE
- St. Vincent and the Grenadines National Conservation Fund
- Union Island Museum and Ecological Society
- UNDP GEF Small Grants Programme

(6 participants; 4 women, 2 men)

Natural Resources Management and Ecosystem Services

- Central Water and Sewerage Authority
- Forestry Department
- Ministry of Agriculture, Forestry, Fisheries, Rural Transformation, Industry and Labour
- Economic Planning Department
- Physical Planning Unit
- Sustainable Development Unit
- Sustainable Grenadines
- Union Island Environmental Attackers
- Union Island Revenue Office

(13 participants; 8 women, 5 men)

National 6NR Validation Workshop

On April 16, 2019, a multi-sectoral national workshop was held to review and validate the draft 6NR and the accompanying communications strategy. Approximately 60 organizations were invited to participate in the workshop, including all organizations that had contributed to and participated in the report preparation process. Prior to the workshop, the draft 6NR was circulated via e-mail to all invitees. Written comments were received from some stakeholders and were incorporated into the draft report. Feedback was sent to stakeholders about how their comments had been included in the revised draft.

At the validation workshop the content of the 6NR was presented to participants in a tabular form, and workshop participants were invited to present their comments on the report, target by target. Stakeholders were able to validate the report's description of measures that had been taken, and to point out areas where corrections or additions should be made, with a focus was on discussing the challenges and needs in respect of improving progress towards the targets. Following the workshop, stakeholders were given an additional two weeks to submit additional information and feedback on the 6NR via e-mail.

The validation workshop was attended by 28 participants (16 women, 12 men) from the following 21 organizations:

- Caribbean Regional Fisheries Mechanism
- Caribbean Youth Environment Network
- Central Water and Sewerage Authority
- Eastern Caribbean Trading, Agriculture and Development Organization
- Fisheries Division
- Forestry Department
- GEF Small Grants Programme
- Goodwill Fishermen's Cooperative
- Ministry of Agriculture, Forestry, Fisheries, Rural Transformation, Industry and Labour
- Ministry of Finance, Economic Planning, Sustainable Development, and Information Technology
- Ministry of Tourism, Sport, and Culture
- Mustique Company Ltd.
- National Botanical Gardens
- National Parks, Rivers, and Beaches Authority
- Richmond Vale Academy
- St. Vincent and the Grenadines Conservation Fund
- Sustainable Development Unit
- Sustainable Grenadines Inc.
- Tobago Cays Marine Park Authority
- Union Island Environmental Attackers
- Windward Islands Farmers' Association

Feedback and input from stakeholders at this workshop was collated and incorporated into the final 6NR.

Communications Strategy

A communications strategy has been drafted to accompany the final 6NR. The overall objectives of the communications and public awareness strategy are:

- To inform stakeholders (national, regional, and international) and the local population about St. Vincent and the Grenadines' implementation of the CBD and the Strategic Plan for Biodiversity, including progress towards the Aichi Biodiversity Targets;

- To highlight success stories and good practices as described in the 6NR;
- To mobilize national, regional and international stakeholder support for, and involvement in continued action to achieve the Aichi Biodiversity Targets; and
- To inform stakeholders and the public in St. Vincent and the Grenadines about the 6NR preparation process.

As part of the process of drafting the Communications Strategy, interviews were held with several media agencies, including the national Agency for Public Information and private radio and television companies. The draft and final communications strategy were circulated to stakeholders for feedback and comment, as well as being presented at the national 6NR workshop for validation and prioritization

Summary

There are 38 entities which have provided input to the 6NR reporting process in St. Vincent and the Grenadines. These include:

- 10 government ministries/departments/divisions (26%)
- 4 quasi-governmental organizations (11%)
- 17 non-governmental and community-based organizations (44%)
- 6 regional organizations, including regional non-governmental organizations (16%)
- 1 private sector organization (3%)

A total of 54 individuals in St. Vincent and the Grenadines have been directly engaged in the 6NR reporting process. This total comprises 31 women (57%) and 23 men (43%).

ANNEX IV: 6NR COMMUNICATIONS STRATEGY

Communications Strategy

St. Vincent and the Grenadines Sixth National Report to the Convention on Biodiversity

Prepared by: Dianne N Squires
Date: March 14, 2019

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Introduction

St. Vincent and the Grenadines (SVG) became a party to the UN Convention on Biodiversity (CBD) in 1992 and is completing its sixth national report (6NR) for submission to the CBD secretariat this year. This report will detail the measures that have been taken in SVG towards achieving the Aichi Biodiversity targets under the Global Strategic Plan for Biodiversity 2011-2020. It will also outline the challenges encountered in meeting targets and identify the actions necessary to move closer to those targets. The 6NR is the last report to be submitted before the expiration of the Global Strategic Plan in 2020 and therefore the last opportunity to help set the stage for a new global plan.

The Technical Consultant to the UNDP with responsibility for preparing the 6NR has noted that despite the good progress that St. Vincent and the Grenadines has made towards the achievement of the CBD's Aichi Biodiversity Targets (the global targets) many of the key stakeholders were unaware/have low awareness of the CBD, the targets and were also therefore not aware of their positive contributions to the achievement of those targets.

Problem statement

There is low overall national awareness of SVG's implementation of the UN CBD and the Aichi Biodiversity targets, even among stakeholders making positive impacts towards the progress in achieving these targets.

Low awareness may:

- *Result in limited/fragmented measures to "mainstream biodiversity"*
- *Lessen the direct measures that stakeholders put in place towards achievement of the targets (including application for funding in specific areas), retarding the rate of progress towards achieving them*
- *Lessen the opportunities for celebrating global achievements made in biodiversity conservation and management by St.Vincent and the Grenadines on the individual stakeholder level and the national level*
- *Diminish the probability of SVG also achieving its national biodiversity targets which will in turn have a negative effect on achievement of National Social and Economic Development goals and targets aimed at improving the quality of life for all Vincentians.*

The St. Vincent and the Grenadines revised National Biodiversity Strategy and Action Plan recommends that one area of improvement needed for mainstreaming biodiversity is "Development and execution of a harmonised biodiversity education and awareness strategy"[2017 p.19]. One mechanism to achieve this is through simultaneous awareness of the CBD, the Aichi targets and St. Vincent and the Grenadines' role in their achievement towards national and global environmental sustainability.

Communications goal

Use the 6NR as a platform for developing an integrated biodiversity communications and public awareness programme that establishes ***a spirit of national pride and ownership*** *in St. Vincent and the Grenadines' rich biodiversity.*

Objectives

The general objectives of the communications and public awareness strategy are categorised below according to the desired outcomes and intended reach.

Objective	Communication category	Reach
To inform stakeholders (national, regional, and international) and the general public about St. Vincent and the Grenadines' implementation of the CBD and the Strategic Plan for Biodiversity, and about St. Vincent and the Grenadines' progress towards the Aichi Biodiversity Targets;	Awareness - tell	St. Vincent and the Grenadines, OECs and CARICOM states, UN CBD
To highlight success stories and good practices as described in the 6NR;	Awareness - Tell (celebrate)	St. Vincent and the Grenadines, OECs and CARICOM states, UN CBD
To mobilize national, regional and international stakeholder support for and involvement in continued action to achieve the Aichi Biodiversity Targets; and	Action - change	St. Vincent and the Grenadines, OECs and CARICOM states, UN CBD, international donor/funding organisations
To inform stakeholders and the public in St. Vincent and the Grenadines about the 6NR preparation process.	Awareness - tell	St. Vincent and the Grenadines
To influence behaviour change congruent with biodiversity conservation and management in the selected target audiences	Action - change	St. Vincent and the Grenadines

Situation

The draft sixth national report (6NR) states

> *"There have been many initiatives aimed at educating and raising awareness about the values of St. Vincent and the Grenadines' biodiversity …These initiatives reach hundreds of people annually. Although there has not been a systematic assessment of the reach and effectiveness of these awareness-raising measures, there was general consensus amongst stakeholders consulted during the preparation of the 6NR that the level of awareness about biodiversity has increased in the past decade, particularly among youth. However, most of those consulted indicated that awareness-raising has not resulted in a significant commensurate shift towards more biodiversity friendly behaviour."[p.5]*

The above provides useful guidance for this strategy:

1. Evaluation of the success of communications efforts are built into the strategy
2. A programmatic approach is taken, into which a campaign period is built, allowing over time the opportunity to monitor various stakeholders
3. The 6NR provides a central platform to anchor the entire programme for a harmonized line of action
4. Behaviour change is a key area to monitor

Stakeholder review

Biodiversity conservation and sustainability is actively pursued and or supported by several stakeholders in public, private and NGO sectors in St. Vincent and the Grenadines.

Primary stakeholders have a direct impact on the policies, funding and implementation activities required in progress towards Aichi Biodiversity targets and are therefore also the key stakeholders for the 6NR process and completion. These are listed below.

- **The Ministry of Finance** through its Sustainable Development department has responsibility for national and international biodiversity targets under the Convention on Biodiversity (CBD) and the National targets through the National Biodiversity Strategic Action Plan (NBSAP). Within the Ministry there is an officer assigned to all aspects of the CBD.

- **The Ministry of Agriculture** has responsibility for the Division of fisheries, forestry and rural transformation and therefore has direct impact through policy making and interactions with farmers, fishers and other folk whose livelihoods involve and impact on SVG biodiversity.

- **The Ministry of Tourism** through its related statutory entity, National, Parks, Rivers and Beaches Authority has responsibility for defining and overseeing protected area systems marine and terrestrial alike.

- The St. Vincent and the Grenadines **6NR Steering Committee** has responsibility for prioritising the activities relating to the preparation of the sixth national report to the CBD The full complement of the committee comprises:
    - Janeel Miller-Findlay, Director, Environmental Management, Economic Planning and Sustainable Development Division
    - Jennifer Cruickshank-Howard, Chief Fisheries Officer
    - Andrew Lockhart, Superintendent, Marine and Terrestrial Parks, National Parks, Rivers, and Beaches Authority
    - Andrew Wilson, Director, National Parks, Rivers and Beaches Authority
    - FitzGerald Providence, Director of Forestry
    - Tyrone Ballah, Town Planner, Physical Planning Unit
    - LaVerne Phillips, St. Vincent and the Grenadines National Trust
- **The UNDP** has provided funding for the preparation of the St. Vincent and the Grenadines 6NR.
- **The CBD Secretariat** will be the ultimate recipient of the report and all reports from the various parties to the convention, prior to the expiry of the Global Strategic Plan in 2020.

Secondary stakeholders are indirectly impacted by, or impact the targets set by SVG under the CBD Strategic Plan 2011-2020. Even if they have low awareness of the CBD and SVG's' role in this international convention, their awareness in high regarding individual issues relating to biodiversity sustainability and conservation.

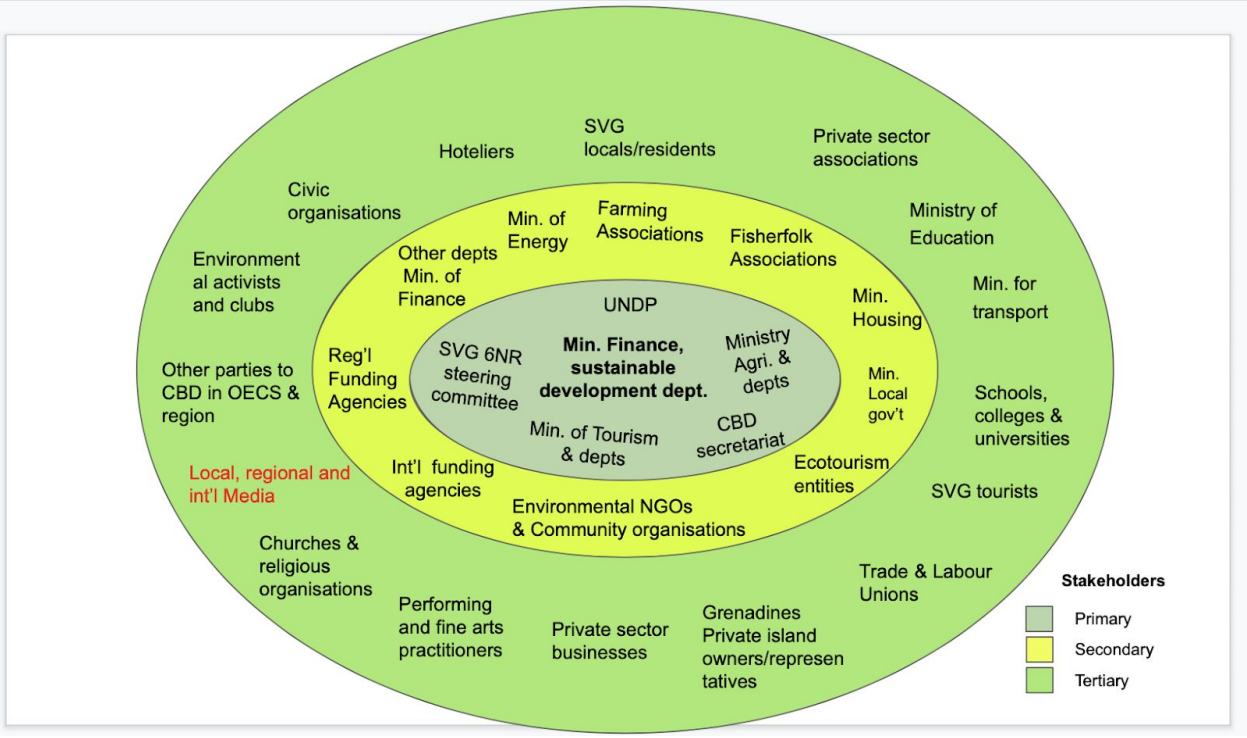
Tertiary stakeholders have little impact in shaping the 6NR process and have low awareness of it, but are individual players helping the country meet its national and international biodiversity related targets. They include the various segments of civil society (the public) and the media.

Stakeholder vs. Audience

Because biodiversity is everywhere and all humans directly affect and are a part of it, all stakeholders will be considered as active participants to the communications process rather than passive observants. The use of the term audiences in this strategy document refers mainly to tertiary stakeholders.

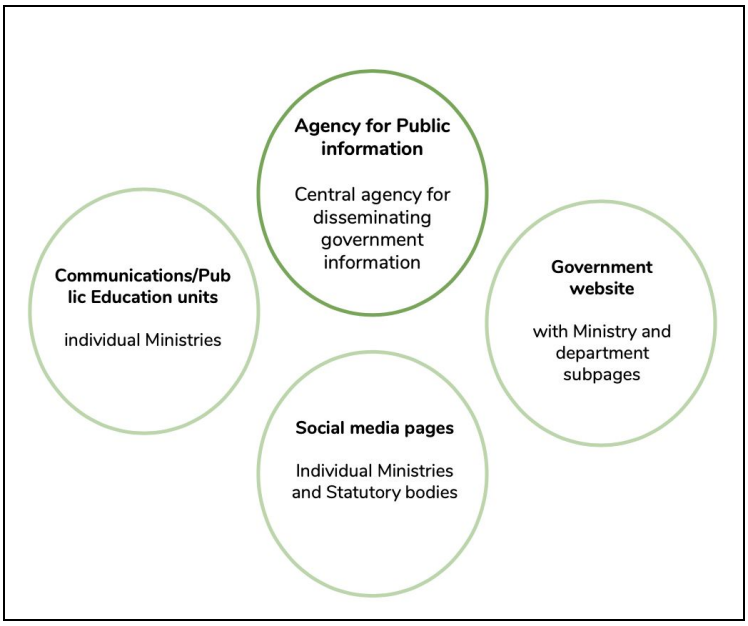
Page 8 shows a stakeholder map with the secondary and tertiary stakeholders also included.

Stakeholder map



Communication channel review

Government channels for external communications



Public education/communications Units

There is an existing ecosystem of communications units within the government of SVG that can be more intentionally used to convey messages about biodiversity actions, challenges, stories and needs externally. Stakeholder ministries and statutory bodies have Public Education or Communications Units and are supported by the Agency for Public Information (API), which has responsibility for producing and or disseminating government content to the public.

Agency for Public information (API)

Each of the individual communications units perform some dissemination and production tasks without the assistance of the API, but overall the latter is there to serve their needs. API has the capacity to shoot, edit and produce high quality video content, produce radio-ready content and content for print. It also prepares government news releases. API content is aired three (3) times per week on SVGTV and starting April 2019, there will be an API radio show. The entity also disseminates content via its Youtube channel, which to date has over 1000 subscribers and its Facebook page with over 6500 followers.

Social media

The Divisions of Forestry and Fisheries as well as National Parks, Rivers and Beaches Authority, the St. Vincent Botanical Gardens, Ministry of Tourism, Ministry of Agriculture and Ministry of Health, all maintain social media pages (mainly Facebook). National Parks also maintains a Twitter page and the Division of Fisheries has opened an Instagram account.

While these stakeholders are posting with reasonable frequency to their social media pages, with the exception of National Parks, their audiences do not exceed 1000 followers. Increasing engaged followers for these pages will be important to growing the awareness for biodiversity and biodiversity-related public

awareness and education. Social media advertising budgets should be introduced to facilitate sponsored posts, including valuable video content, facebook lives, competitions, polls and trivia.

Government domain and website

The government of St. Vincent and the Grenadines www.gov.vc website gives access to information on all Ministries and departments in government as well as links to websites of statutory bodies.

Government channels for internal communication

Government email addresses and telephone lines are the usual means of communication between government departments. Whatsapp is however a powerful means of communicating informally within and outside of government. Select government officers may also be assigned cell phones and cell phone service packages in order to conduct government business.

Private sector communication channels

There is one main television station, SVG TV and two cable channels, IKTV and VC3.

While there are no available Knowledge, Attitudes and Practices (KAP) studies for biodiversity in St. Vincent, a 2017 KAP on climate change, found that over 70 per cent of respondents believed television was the best way for their community to access information on climate change. Of the respondents, 88% had access to television. Radio was a distant second most popular way to access information (14.7%). [Japan-Caribbean Climate Change Partnership and UNDP, p. 34]. Access to the internet was reported at 63.5% of respondents[p.35].

Television appears to be a wise first choice for public awareness. It is however unclear from the survey whether local channels were the source of information for the respondents. Wide access to internet and low cost makes digital media attractive channels.

Several radio stations ranging from popular music formats to talk shows exist, with Hot 97.3FM recently being voted to have the most popular morning show and radio personality.

Stakeholder Engagement

Primary and secondary stakeholders require special attention to fuel momentum and creative solutions for actions required for progress towards biodiversity targets. Opportunities for sharing and collaboration among them is essential and must be planned.

Between ministries

Several ministries are integral to the the 6NR process and to the ongoing work to manage and sustain SVG's biodiversity. While many are actively pursuing Aichi targets or other targets related to other national strategies and international conventions, there is greater opportunity for a true integrated approach to biodiversity ***within*** government.

Target stakeholders: Government Ministries and Statutory bodies

Objectives:

1. *To ensure that biodiversity conservation and management becomes an agent for progress across several government sectors with the ultimate focus on overall sustainable development.*
2. *To first mainstream biodiversity in national conversation* ***within*** *government and then externally to civil society and the business community.*
3. *To continue to build capacity for progress towards the Aichi and further biodiversity targets on the expiry of the Global Strategic Plan on Biodiversity.*
4. *Give increased attention to enforcing existing policies and gaining approval for draft policies.*

Key message: Sound biodiversity practices can help us all in our various ministries and departments to achieve our mandates towards sustainable development for SVG

Stakeholder engagement tool: Inter-Ministerial Action Committee for Sustainable Development

1. On completion of the 6NR it is recommended that the 6NR steering committee be formalised and expanded as a inter-ministerial action Committee for national transformation through sound, sustainable biodiversity practices in all areas of governance.
2. In addition to the Ministries of Agriculture and Tourism, Division of Fisheries, Division of Forestry, National Parks and National Trust representation now present on the steering committee, the expansion of this group should include representatives from:

    - Ministry of Health, Wellness and the Environment
    - Ministry of Education
    - Ministry of Housing
    - Energy Unit

- Ministry of Transport, Works, urban development and local Government (Grenadines representatives)
- Regional Integration and Diaspora Unit

3. Kick off meeting for this Committee should include sharing highlights of:
    a. The CBD and relating its goals to those of UN Sustainable Development Goals;
    b. The 6NR including any case studies which carefully incorporate areas relevant to each sector represented on the unit.

Evaluation: Simple poll of representatives' level of awareness of the CBD, 6NR and intersection of biodiversity and sustainable development on joining the unit versus awareness after the initial meeting of the group. This may be repeated every quarter.

Between sectors

During focus group sessions convened for the 6NR process, it was apparent that players from within government along with NGOs and civil society leaders such as those in community organisations, should come together to share accomplishments and express needs in a more organised setting.

Target Stakeholders: Government, NGOs, IGOs and civil society organisations (mainland and Grenadines)

Objectives:

1. *To update players across all sectors on the progress made by individual organisations,*
2. *To determine useful collaborations among players*
3. *To assess further progress made towards CBD Aichi targets and National Biodiversity targets.*

Key message: We are partners in biodiversity management and sustainable development. Working together we can achieve our goals for a better St. Vincent and the Grenadines.

Communications tool: Annual Multi-sectoral symposium on World Biodiversity Day

a. Presentations and papers from representatives of government, NGOs and community organisations -relate initiatives to the CBD Aichi targets and further to relevant sustainable development goals
b. Representatives from regional and international organisations should be invited to participate - UNDP, IICA, UNEP, CARDI, FAO
c. Online publication of the compiled papers and presentations of the symposium housed on a subpage of the Sustainable development Unit on the government of St. Vincent website

Evaluation: post-symposium poll of whether organisations/individuals feel more engaged in an integrated national direction for biodiversity.

Summary Action Plan: Stakeholder Engagement

Stakeholder	Objective	Action	When	Who is responsible?
Ministry of Finance, Economic Planning, Sustainable Development and Information Technology	Mainstreaming biodiversity into wider sustainable development issues across Ministries	Gain the Minister's blessing for inter-Ministerial and inter-sectoral collaboration. Reference the 6NR process which demonstrated the value collaborations could bring towards meeting not only biodiversity targets but sustainable development targets overall.	February and March 2019 on the lead up to and submission of the 6NR to the CBD	Director of Economic Planning and Sustainable Development; Sustainable Development team
Government Ministries	Mainstreaming biodiversity	Recommendation to the Minister to transform 6NR biodiversity steering committee into an inter-ministerial action Committee for sustainable development	March 2019 - after submission of 6NR report	Director of Economic Planning and Sustainable Development and Sustainable Development team
Government of SVG through Ministry of Finance, Economic Planning, Sustainable Development and Information Technology	Create an opportunity for intense national awareness on biodiversity and related environmental issues	Designate June Environment month (World Environment Day, World Oceans Day, World Day to Combat Desertification and drought all occur in June)	March 2019	Ministry of Sustainable Development
Sustainable Development, Agriculture, Tourism, Energy Ministries; NGOs; Community organisations	Maintain an overall understanding of SVG's efforts in biodiversity conservation and management	Multi-sectoral annual symposium	June 2019	Ministries of Sustainable Development & Environment

Public Awareness & Action

The 6NR to the CBD highlights several case studies demonstrating that St. Vincent and the Grenadines is making sound strides in its attention to biodiversity even if the Aichi targets have not been met. While there is a long way to go, there is every reason to encourage purposeful and positive continued action by all individuals and to throw support behind those already leading the charge. Continued behaviour change and sustained action will be fuelled by a public awareness campaign.

Public awareness campaign
This will be designed to revolve around the success stories of individuals and organisations who have been setting the example to conserve and manage biodiversity, whether directly or indirectly, and it will be a patriotic call for others to do the same.

Targeted activities for key audiences listed below will complement the general awareness effort.

- Farmers - encourage good work mentioned in 6NR
- Fisherfolk - encourage compliance commended in 6NR
- Youth - highest awareness is seen in this group according to 6NR; encourage action
- Vincy Mas bandleaders - encourage biodiversity themes in one of the largest national events of the year
- Business community - help leaders to understand biodiversity issues and how they can benefit from actions in/support for conservation and management

Objective: Evoke in the people of St. Vincent and the Grenadines a sense of pride, honour, ownership and responsibility for preserving and/or restoring the biodiversity of their lands.

Key message: Our island's rich biodiversity, the variety of animal and plant life and their habitats, makes it one of the most special places on earth and we will do everything possible to keep it that way.

Communications activity: Public Awareness Campaign

Possible campaign slogan: "To protect and defend this, my land"

Campaign communications products & activities

Communications Products/Activities	**Description**	**Dissemination**
The biodiversity protection oath	A simple oath to be included in all communications materials and incorporated in all public awareness and stakeholder engagement activities. ***"I commit to protect and defend this my land, its natural life and all its waters for my own good and the survival of those who come after. SVG forever"***	- Digital biodiversity education kit digital (printed on request) - End tag on "Stories in biodiversity" videos - Used as end tag for short radio ads. Sample script "If cut down a tree, I'll plant a tree. I commit to protect and serve…" - Campaign launch event - Whatsapp groups - Downloadable from API site, www.gov.vc site
Vincy Mas bandleaders biodiversity tour	Day long tour of specified sites for Vincy Mas (carnival) bandleaders along with media - e.g. farmlands, Ashton Lagoon, deforested area. VIncy Mas leaders with inspiration for design ideas for Vincy Mas 2019/2020 and media coverage of the event	Media coverage (local and regional)
Vincy Mas incentive prize	Cash prize for best representation of biodiversity-related theme by a band	Media coverage of presentation of cash prize to winning Bandleader; API news release of winner announcement
Biodiversity education kit	Digital kit comprising: ● PowerPoint or Prezi presentation on definition of biodiversity, key areas of interest for SVG, key actions individuals, businesses and government can take to be biodiversity-friendly and list of NGOs and government departments already involved. ● Biodiversity and me modular booklet with sections on actions children and young people, adults, businesses and communities can take to become/remain biodiversity friendly	● Home page and SDU page on www.gov.vc website ● Biodiversity workshop for business leaders - link to download (wi fi to be available at venue); printed copies by order only ● Careers in Biodiversity fair - link to download after opening presentation (wi fi to be available at venue); can be shared via whatsapp to students who give their whatsapp number; 2 printed copies of the booklet per school for their libraries ● Youth competition - link to download (wi fi to be available at all opening workshop sessions); printed copies on request ● TV, radio ads, segments and PSAs include mention of link to download ● Social media of relevant ministries and agencies include link to download ● Memos to private sector organisations, churches, community organisations with link to download to be shared with members ● Whatsapp broadcast of link to

		download to current partner agencies, community and civic organisations on SDU database ● API email established for members of public to message in order to receive electronic copies of the booklet and a link to the full kit
Campaign launch event - media launch of "Stories in biodiversity" video/audio series and publication	Brief presentation of excerpts from the 15 minute video features of biodiversity success stories to media audience and briefing on the campaign elements and activities to be rolled out. **Success stories to include:** ● "Hardcore" - The SVG women behind farming with a conscience ● "Defenders" The SVG NGOs driving biodiversity conservation triumphs ● "A Lagoon in Bloom"- revitalisation of the Ashton Lagoon ● "An industry evolved"- How SVG's fishing industry is maturing with positive effects on biodiversity (includes new strides by National Fisherfolk Organisation) ● "Bush Medicine and Botanical Gardens" -Documenting the medicinal value of plant life at National Botanical Gardens	Media houses; Agency for Public Information press release, Youtube video of event and recorded excerpts of the media launch on API's SVGTV programme; social media pages of stakeholder government Ministries to carry announcement of launch
Library collection	Dedicated library collection for SVG biodiversity-related publications and recordings	Media coverage; Public Library
Radio segments	Segments sponsored by Sustainable Development Unit and partners where necessary. Highlight upcoming activities or events relating to the programme and speak on specific biodiversity issues	Radio - NBC, Boom, Magic, Hot 97 etc.
Public Service Announcements	Short testimonials by individuals working in some way towards biodiversity conservation in SVG ending with the campaign slogan	Television, radio
Interviews	Focused on the CBD and Aichi targets and St. Vincent's implementation, progress and success stories, participants in youth competition	SVGTV News, NBC radio, Boom FM OMG morning radio show, other morning radio shows
'Biodiversity-friendly farming Practices' video and audio series and publication	Video documentary on SVG traditional sustainable farming practices	SVGTV, API Youtube channel, Community open air viewings; social media pages of stakeholder government agencies
Careers in biodiversity fair	Targeting youth 15-19 years	Invitation letters to schools, colleges, community groups; API TV and radio segments
Youth competition	Targeting children/youth 8 - 24 years	Invitation letters to schools, colleges, community groups; API TV and radio segments

Special target segments

Farmers

Objectives:

1. *Evoke a sense of pride in the farming community because biodiversity-friendly farming practices have been recognised in the 6NR, a global report.*
2. *Encourage increased attention to biodiversity-friendly farming techniques and agricultural diversification especially among new farmers.*

Key message: You have a lot to teach St. Vincent and the Grenadines and the world about biodiversity-friendly farming. St. Vincent and the world need to hear how your parents and grandparents taught you to do things.

Communications activity: Presentations to individual farmers' associations

- Key highlights of the CBD and the farming community's contributions to progress towards the Aichi targets.
- Announcement of biodiversity-friendly farming best practice documentation exercise as a result of discussions during the 6NR process and as recognition of farmers' contributions.

Communications activity: Documenting Good Agricultural Practices of St. Vincent & the Grenadines farmers

Partners: The Sustainable Development Unit, Ministry of Finance; Ministry of Agriculture; Agency for Public information.

A series of interviews with and demonstrations by livestock and crop farmers who practice or have practiced traditional biodiversity-friendly farming techniques will be done. Three products will emerge from this:

- **A publication** of best practice in sustainable farming
- **A video series** capturing the practices and interviews
- **An audio recording** compilation of all the interviews

Dissemination:

- *Screenings in the community and or at farmers' associations meetings.*
- *Interviewees and all farmers' associations receive hard copies of the publication for posterity.*
- *API television segments and Youtube channel, Ministry of Agriculture's television and radio segments.*

Evaluation: simple survey to gather farmers' awareness of CBD and Aichi targets post-presentations and again post-screening of video.

Fisher Folk

Objective:

1. *Evoke a sense of pride in the fishing community because sustainable fishing practices and the work of the National Fisherfolk Organisation (NFO) have been recognised in the 6NR, a global report.*
2. *Reward fisherfolk who are outstanding in their efforts to comply with closed seasons, size limits and other sustainable fishing practices.*

Key message: The work of the NFO and the increasing collaboration and compliance seen within your industry is encouraging and an example for the region. This will reflect in the 6NR to the UN CBD, a report on how SVG is doing locally to tackle issues of biodiversity. You should be proud.

Communications activity: Breakfast meeting for fisherfolk and NFO

Hosts and partners: Ministry of Fisheries in partnership with the Sustainable Development Unit of the Ministry of Finance, Economic Planning, Sustainable Development and Information Technology.

- A short presentation on what the CBD is and SVG's implementation of it and how fisheries factors into both the convention and the 6NR.
- Awards for outstanding attention to sustainable fishing practices
- All fisher folk in attendance get a "partner in biodiversity" t-shirt

Youth

Objectives:

1. *Present an opportunity for youth to develop specific products, programmes or courses of action that either: raise awareness of the need for biodiversity, or create actions to conserve or manage a specific area of biodiversity. Each entry must be designed to make positive change in the selected area.*
2. *Make youth aware of the available and likely future vocational and professional pursuits in biodiversity.*

Key message: Your present and your future are affected by the state of biodiversity. Take ownership of how your world changes.

Communications activity: "To protect and defend this my land" competition

Partners: Sustainable Development Unit, Ministry of Finance, Ministry of Education, Caribbean Youth Environment Network (CYEN) St. Vincent Chapter

Target audiences: youth ages 8- 12, 13-17 & 18-24 from mainland and Grenadines

1. Competition entries may take any form the participants choose: songs, dances, poetry, video, apps, inventions, designs, artwork, skits or plays etc.
2. Registration should take place in up to 10 communities across the ***mainland and Grenadines islands*** where participants must first attend a workshop that highlights what biodiversity and the CBD are and St. Vincent and the Grenadines' role in the CBD. Excerpts from the biodiversity success stories video series will be shown and entrants given a biodiversity education kit.
3. Divided into three (3) age categories to cover primary, secondary school age youth and young adults. Youth in the age categories can participate whether or not they are active students.
4. Participants will be given 8 weeks to develop their entry.
5. Prizes will be awarded in each age category for 1st, 2nd and 3rd places in each community
6. Ist place winners in each community will be entered to win a grand overall prize with their entries judged by a panel from the Sustainable Development Unit, CBD, Caribbean Youth Environment Network (CYEN), Ministry of Finance.

Communications Materials: Biodiversity education kit, success in biodiversity video excerpts, presentation on CBD and 6NR

Communications activity: "Careers in biodiversity" fair

Target audience: youth ages 15-19 from mainland and Grenadines islands

1. Opening remarks highlight SVG's implementation of CBD and notes the reporting process and the 6NR as final report prior to the close of the decade on biodiversity.
2. Booths manned by professionals/ practitioners in areas of biodiversity conservation and management, including NGOs and nonprofits.

Communications Materials: Biodiversity education kit, success in biodiversity video excerpts, presentation on CBD and 6NR

Evaluation: short questionnaire to determine whether students feel more informed about the CBD and SVG's implementation. Also to determine whether the career fair was useful and to what extent career choices seemed worthwhile to pursue.

Vincy Mas Bandleaders

Objectives:

1. *Bring biodiversity-related issues top-of-mind for Vincy Mas bandleaders*
2. *Provide Vincy Mas bandleaders with inspiration for 2020 designs*
3. *Provide incentive for featuring biodiversity-related themes and issues in 2020 Carnival celebrations.*

Key message: SVG's unique and rich biodiversity is ideal inspiration for innovative, colourful and award-winning costume design. Choose a biodiversity-related theme to present at Vincy Mas 2020 and you could win the cash prize for best portrayal.

Communications activity: Cash prize for bandleader with best portrayal of biodiversity-related theme in Vincy Mas presentation 2020

Evaluation: Note the number of bands who participate out of total bands entered, the types and range of biodiversity themes; see how themes chose relate to topics and areas presented on biodiversity tour.

Business Community

Objectives:

1. *Make business leaders aware of the CBD and SVG's implementation of it*
2. *Give business leaders a comprehensive view of how reduced biodiversity will affect their success*
3. *Gain commitments from corporate entities for sound biodiversity-related practices*
4. *Give NGOs and community groups an open forum to present their mandates and needs to corporate leaders*

Key message: There are issues related to biodiversity concerns that are and will continue to affect your businesses, your employees and your customers. Investing in sustainable operating practices within your businesses and exercising your corporate social responsibility in relevant ways will have a lasting positive impact.

Communications activity: Workshop entitled "The real issues in biodiversity: Guiding sustainable business practices and corporate social responsibility."

*Target audience: CEOs, CFOs, Marketing and Corporate Communications Managers. [***This is a suggestion of the level of executive that could be involved in the process, however their closest representatives may suffice and the appropriate representative may vary from organisation to organisation.]***

Agenda to include:

- Overview of the CBD and Aichi Biodiversity targets & SVG's implementation
- The cost to business of losing our biodiversity, the gains to preserving it
- Biodiversity considerations in business operations
- Spending your Corporate Social Responsibility dollars in biodiversity
- Introduction to NGOs and community organisations with biodiversity-related mandates
- The Biodiversity Oath
- Business and NGO leaders meet-and-greet

Communications materials: SVG biodiversity education and awareness kit; stories in biodiversity video excerpts; presentation

Evaluation: Short questionnaire to determine whether participants feel more knowledgeable about the global and local context for biodiversity, the CBD and Aichi targets. Also to determine whether or not they are more amenable to providing financial, operational and other support to ongoing efforts.

Summary Communications Schedule

Activity	Type	Target	Start	End	Dissemination
Designation of Environment Month (June) & launch of biodiversity oath	Stakeholder engagement and public awareness	Government, NGOs, IGOs, Community organisations, business community, civil society	March 2019	March 2019	Press briefing at 6NR validation workshop and declaration in Parliament; government memos; API news release
Establish inter-Ministerial action Committee	Stakeholder engagement	Government ministries and statutory entities	March 2019	Ongoing	Internal government memos and emails
Complete outlines, shooting and editing for video series "Stories in Biodiversity"	Public awareness planning	General public	March 2019	May 2019	Internal via file sharing to Sustainable Development Unit and partners for approval
Finalise and test campaign slogan and materials	Public awareness planning	General public	April 2019	April 2019	Local focus group report to Sustainable Development Unit for review
Produce Biodiversity information kit (digital)	Public Awareness	General public & youth and business segments	March 2019	May 2019	www.gov.vc site, individual department pages API site and social media pages, social media pages of Min. of Agriculture, National Parks, Min. of Tourism
Launch 'Documenting biodiversity-friendly farming practices' project	Public awareness	Farming community, general public	April 22, 2019 (Earth day)	September 2019	Media release and photo of first interview in field
Environment Month	Stakeholder engagement and public awareness	Government, NGOs, IGOs, Community organisations, business community, civil society	June 1, 2019 (and annually) Environment month	June 30, 2019 (and annually)	Media briefing of events planned during and after June
Multi-sectoral symposium	Stakeholder engagement	Government, NGOs, IGOs, Community organisations	June 2019 Environment Month	Annual on World Day for Biological Diversity	Media coverage, Facebook live segment on National Parks page
Fisher folk breakfast meeting	Public awareness	Fisher Folk segment	June 8, 2019 (World Oceans day)	June 8, 2019 (World Oceans day)	Media coverage

			Environment month		
'Careers in Biodiversity' Fair	Public awareness campaign	Youth segment 13-17 & 18-24	June 2019 Environment month	June 2019	Media coverage, API TV and radio shows
Launch Public Awareness campaign with "Stories in biodiversity" video/audio series and publication	Media engagement, Public awareness campaign	Media, General Public	September 2019	November 2019	Media conference, API TV show and youtube channel
Air television and radio interviews with individuals referenced in the videos and with policy makers	Public awareness campaign	General Public	September 2019	December 2019	TV news, radio PSAs
Air radio and television Public Service Announcements (PSAs) including the Biodiversity Oath	Public awareness campaign	General Public	September 2019	December 2019	Radio, TV, Youtube
Launch "To protect and defend my land" youth competition	Public awareness campaign	Youth segment 13-17 & 18-24	September 2019	December 2019	Media coverage, schools, PTAs, Community groups, churches
Present copies of publication on biodiversity-friendly farming to interviewee farmers, the National Farming Organisation and National Library	Public awareness campaign	Farming community and general public	September 2019	September 2019	Media coverage
Workshop - "The Real Issues in Biodiversity: Guiding Sustainable Business practices and Corporate Social Responsibility."	Public Awareness campaign	Business community segment	September 2019	September 2019	Media coverage, API TV show
Media & Vincy Mas bandleaders biodiversity tour	Media engagement, public awareness	Local, regional media; Vincy mas bandleaders (cultural leader segment)	January 2020	January 2020	Media coverage
Evaluate programme and campaign efforts	Campaign evaluation	All stakeholders and public	January 2020	February 2020	Final report to key stakeholders