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<tr>
<td>BMU</td>
<td>Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (Germany)</td>
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<tr>
<td>CANARI</td>
<td>Caribbean Natural Resources Institute</td>
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<td>CARICOM</td>
<td>Caribbean Community</td>
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<td>CBD</td>
<td>Convention on Biological Diversity</td>
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<td>CCA</td>
<td>Climate Change Adaptation</td>
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<td>EU</td>
<td>European Union</td>
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<td>GCCA</td>
<td>Global Climate Change Alliance</td>
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<td>GEF</td>
<td>Global Environment Facility</td>
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<td>ICCAS</td>
<td>Integrated Climate Change Adaptation Strategies project</td>
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<tr>
<td>IKI</td>
<td>International Climate Initiative</td>
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<tr>
<td>IPBES</td>
<td>Intergovernmental Platform on Biodiversity and Ecosystem Services</td>
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<td>NBSAP</td>
<td>National Biodiversity Strategy and Action Plan</td>
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<td>NEA</td>
<td>National Ecosystem Assessment of Grenada</td>
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<tr>
<td>NGO</td>
<td>Non-governmental organisation</td>
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<td>NR</td>
<td>National Report to the Convention on Biodiversity</td>
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<td>OECS</td>
<td>Organisation of Eastern Caribbean States</td>
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<tr>
<td>SLU</td>
<td>Sustainable Land Management</td>
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<td>UNDP</td>
<td>United Nations Development Programme</td>
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<tr>
<td>UNEP-WCMC</td>
<td>United Nations Environment Programme World Conservation Monitoring Centre</td>
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<td>UNFCCC</td>
<td>United Nations Framework Convention on Climate Change</td>
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EXECUTIVE SUMMARY

Known as the “Spice Isle”, Grenada’s very identity is connected to the biodiversity and ecosystem services provided by its diverse natural capital. The country’s rich and biodiverse ecosystems underpin critical economic sectors such as tourism, fisheries and agriculture. At the same time, however, its ecosystems and biodiversity face a number of pressures and drivers of change, that jeopardise the health of the country’s economy, environment and people.

The Grenada National Ecosystem Assessment (NEA) aims to form an essential knowledge base for the safeguarding of essential biodiversity and ecosystem services that underpin national well-being. This report outlines the critical scoping phase of the assessment, which in preparation for the compilation of the main report outlines the assessment’s scope, priorities, and proposed methodology for execution. This scoping phase was conducted using the steps outlined in the diagram below.

The methodology above yielded the following key policy questions which will guide the scope of the assessment:

- What are the status and trends of Grenada’s forest, coastal, marine, freshwater and agricultural ecosystems?
- How do forest, coastal, marine, freshwater and agricultural ecosystem services contribute to Grenada’s national economy and human well-being?
- What are the greatest threats to these ecosystems and how can policy mitigate against them? How will planned policies be impacted by changes in biodiversity and ecosystem service delivery?
- How do Grenada’s ecosystems contribute to climate resilience (food and water security, disaster resilience, climate change adaptation / mitigation)?
- What opportunities exist for enhancing national economy and well-being by conserving biodiversity?
• What is the value of genetic resources across the different ecosystem types, in particular the agricultural landscapes of Grenada?

These questions, and the subsequent NEA are designed to mainstream the consideration of biodiversity and ecosystem services into Grenadian decision-making. Policy questions are also designed to strengthen the science-policy interface for the Government of Grenada and for civil society and the private sector. Based on the aforementioned policy questions, the proposed outline for the Grenadian NEA is as follows:

• Chapter 1 - Setting the Scene: Why a National Ecosystem Assessment and how will it contribute to better decision-making?
• Chapter 2 - What are the status and trends of Grenada’s ecosystems (forest, coastal, marine, freshwater and agricultural) and how do they contribute to Grenada’s national economy and human well-being?
• Chapter 3 - What’s the value of Grenada’s key ecosystems and how can these values be considered in decision-making?
• Chapter 4 - How can biodiversity and ecosystem services be mainstreamed within key national and regional policies?
• Chapter 5 - What opportunities exist for enhancing national well-being by conserving biodiversity?
• Chapter 6 - Scenarios, recommendations and conclusions.

As an island state, Grenada faces numerous challenges related to its location in a hurricane belt, high vulnerability to climate change related impacts and its susceptibility to global economic shocks. While it is one of many small island developing states, it is the first one conducting a NEA. As such, this NEA will produce information and showcase methodologies that can be used in future NEAs across other island states and states with similar geographies and environmental and economic challenges. The assessment team and Government of Grenada hope to set a regional and global example of how to conduct NEAs within this context, through the mainstreaming of Grenada’s NEA learnings into governance, policy, decisions and way of life.
1 INTRODUCTION

With its rich and biodiverse ecosystems, the Caribbean is home to one of the world’s biodiversity hotspots. These ecosystems are important ecologically, economically and socially to Caribbean peoples and in many cases form a critical part of national and regional identity. Ranging from cloud forest on island ridgelines down to fringing barrier reefs, the islands have numerous ecosystem types and high levels of endemism.

This Caribbean scenario is true of Grenada, where the country’s biodiversity and ecosystems provide essential goods and services which enable and enhance the well-being of Grenada’s population. Unfortunately, these same ecosystems face a number of anthropogenic and environmental drivers of change that have led to their degradation, jeopardising key economic sectors and human well-being. These drivers of change include land-based sources of pollution, urbanisation, climate change and the impact of invasive species (Government of Grenada, 2000).

One of the main hurdles in protecting Grenadian and, by extension, Caribbean ecosystems is the lack of consideration of the value of ecosystems in decision-making and policy formulation. This is partly due to the absence of national assessments which showcase the importance of said ecosystems coupled with limited Caribbean expertise and skills to assess and advocate for ecosystems’ value to key decision-makers.

Nonetheless, Grenada is leading the way in addressing these challenges. The country has already conducted several protected area ecosystem valuation exercises and through this current initiative, the Environment Division of the Government of Grenada is partnering with the Caribbean Natural Resources Institute (CANARI) to execute the country-wide National Ecosystem Assessment (NEA) of Grenada.

1.1 PROJECT BACKGROUND

As part of the global initiative, “Supporting decision-making and building capacity to support the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) through National Ecosystem Assessments”, Grenada was selected as one of the participating countries. Other project countries include Azerbaijan, Bosnia and Herzegovina, Cambodia, Cameroon, Colombia, Ethiopia and Vietnam. The project began in 2019 and is scheduled to conclude in 2023. Funding is provided by the Government of Germany, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU), International Climate Initiative (IKI) with global project oversight by the United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC).

The Grenada NEA provides information on the country’s biodiversity and ecosystems which can then be used for national reporting on regional and international biodiversity-related frameworks. Over the duration of the project, the NEA will produce the following key reports and documents:

- Technical scoping report (this document)
- Summary for policy makers
- NEA technical report
- A plan for dissemination and use of assessment findings

The project will also create various supporting information products, including but not limited to, briefs and videos aimed at advancing the integration of biodiversity and ecosystem values into
national decision-making. The assessment will also utilise and promote relevant policy tools and methodologies to inform and assist decision-making.

The initiative will build capacity at different levels to mainstream ecosystem services into government decision-making. This includes building capacity on ecosystem valuation within the project’s Technical Secretariat, National Steering Committee, relevant government personnel and assessment authors. Capacity building for civil society stakeholders on ecosystem valuation will also be emphasised. In addition, the project will focus on building civil society’s capacity on environmental advocacy, in particular to advocate for the consideration of the assessment findings in national decision-making processes.

Overall, it is envisioned that this project will contribute information towards to the achievement of the goals of Grenada’s National Biodiversity Strategy and Action Plan (NBSAP) which aims to achieve balanced national sustainable growth and development through proper ecosystem functioning for the benefit of the present and future generations.

1.2 SCOPING REPORT OBJECTIVES

This scoping report is the first milestone of the NEA. It aims to:

- determine the need and utility of a national ecosystem assessment;
- establish key policy questions that are relevant to guide the assessment;
- determine the scope and priorities for the national ecosystem assessment; and
- compile and synthesise key biodiversity information and data sources that will be used in the NEA.

1.3 METHODOLOGY

This scoping report was developed using information gathered through stakeholders’ consultations with governmental and non-governmental stakeholders combined with desk research using academic literature, grey literature, project reports and national plans and policies. A key aspect of the methodology used in the scoping exercise was a strong participatory approach. Participatory approaches facilitate dialogue among all actors; mobilise and validate popular knowledge and skills; encourage communities and their institutions to manage and control resources; seek to achieve sustainability, economic equity and social justice; and maintain cultural integrity (Krishnarayan et al, 2002). As such, great attention was paid to the design of the scoping exercise as explained below to incorporate as broad a range of stakeholder perspectives as possible and include local knowledge. The overall process for the scoping exercise is summarised in Figure 1 below and explained in detail in subsequent sections.
1.3.1 NATIONAL ASSESSMENT LAUNCH AND INITIAL STAKEHOLDER CONSULTATION TO PLAN SCOPING EXERCISE

On June 7, 2019 the NEA was launched at a monthly meeting of Grenada’s National Sustainable Development Council. This national body has been in existence since 1996 with a mission of serving as a platform for discussion on matters related to the environment and sustainable development. This body will also serve as the National Platform for the Grenada NEA.

Following the launch event, the project team held meetings with the Environment Division of the Ministry of Climate Resilience, the Environment, Forestry, Fisheries, and Disaster Management which is the national focal point for the NEA. A workshop with key members of civil society and other stakeholders was also held to discuss the project objectives, stakeholders needs and suitable methods of engaging Grenadian stakeholders. These detailed discussions clarified appropriate methods of mobilisation, facilitation and specific geographic areas of interest to include in scoping exercise consultations later that year. These ‘scoping planning meetings’ led to the following observations and recommendations:

- A series of community consultations and consultations with specific target audiences would be more effective than having a single national consultation. It would also provide a more accurate picture of how Grenadians benefit from and interact with biodiversity.
- Grenadian stakeholders are suffering from “consultation fatigue” thus methods of engagement had to be innovative and interesting.
- Late night and evening consultations would maximise impact as many environmental resource users such as farmers and fishers have limited availability to attend long daytime workshops.
- Weekend consultations would be more effective for youth stakeholders, many of whom attend classes during the week.
• Capacity building for civil society was strongly expressed as a need and incentive for stakeholder engagement.
• While not directly relevant to the scoping exercise methodology, stakeholders emphasised that the outputs of the assessment should include products suitable for a wide range of stakeholders. In particular, a “Citizen’s Guide to the National Ecosystem Assessment” was recommended.

1.3.2 TARGETED COMMUNITY AND NATIONAL STAKEHOLDER CONSULTATIONS

Following the planning workshop in June 2019, five community consultations and a youth national consultation were held across Grenada, Carriacou and Petite Martinique in November 2019. These meetings, facilitated by the assessment team from CANARI, were aimed at identifying priority ecosystems and services and associated information needs for the broadest possible range of stakeholders. Many of these stakeholders interact with and depend on ecosystems and ecosystem services on a day-to-day basis (see Appendix 1 for a list of stakeholders consulted in November 2019).

Consultations were held across Grenada’s varied geography to ensure the scoping exercise was representative of resource users and one youth-focused consultation was held to generate perspectives from future resource users. Consultations were organised with the help of “local mobilisers”. These are community persons or members of non-governmental organisations (NGOs) with close ties to the target groups. Local mobilisers managed logistics and followed up directly with invitees to encourage participation.

This approach was critical to ensuring stakeholder participation given the high level of stakeholder fatigue in Grenada.

Consultations were also used to gather information on the status and trends in ecosystem service delivery observed by the population.

Consultations followed the same general format. Participants were first introduced to key concepts on ecosystem services (definition, categories, valuation and use in decision-making). They were then divided into groups based on the major ecosystems or services applicable to their region and asked to work collectively on the following questions:

• How do you rely on ecosystems and their services?
• How have these changed in the last 10 years?
• How do you believe they will change in the future?

Group responses were presented in plenary for validation, inclusive of further discussion on key areas of ecosystem service production and key concerns about future change. In this regard, consultations acted as a rapid participatory scenario development exercise. They also provided an indication of priority ecosystems and services to include in the assessment based on the ecosystems selected by the participants for discussion during group exercises.

Figure 2: Consulting Grenadian stakeholders on the benefits provided by key ecosystems. In this image, stakeholders are describing the benefits of one of the largest reefs around the island of Carriacou.
A national cell phone video competition was used to supplement consultations, providing an additional vehicle for stakeholders to input data and showcase their views, indigenous knowledge and perspectives on Grenada’s ecosystems. The national video competition titled, “Ecosystems of Grenada – past, present and future”, was held between December 10, 2019 and January 10, 2020. This competition invited the public to submit videos explaining how one ecosystem has changed over the last 10 years, how they believe it will change over the next 10 years, and how these changes have affected or will affect communities and businesses.

To support this video competition, during three of the community consultations, participants were given a crash course in using cell phone videos for data collection and advocacy. Additional cell phone filming guidelines were provided on the video competition webpage1.

Perspectives presented in the competition videos were assessed and used to supplement information gathered through community consultation group exercises. The video competition and associated training were also the start of the environmental advocacy capacity building to be executed under the Grenada NEA. This training will build the capacity of civil society and other stakeholders to advocate for the use of the assessment’s findings within national decision-making processes.

1.3.3 DESK RESEARCH

Information from key national reports was collated and summarised within the scoping report, in particular, from Grenada’s NBSAP and Fifth National Report to the Convention on Biodiversity (NR). These documents provided background and context highlighting the country’s main ecosystem types. They also provided preliminary information on the status and trends of the Grenadian ecosystems inclusive of drivers of change. This information coupled with stakeholder views provided the rationale for the proposed NEA key policy questions and overall scope.

1.3.4 GOVERNMENT CONSULTATION

The final scoping exercise consultation was held in February 2020. The target audience for this meeting was government officials (See Appendix 1). Participants were introduced to key concepts on ecosystem services, and how these services can be included in national decision-making with a focus on economic trade-offs. Following these introductions, participants were asked to outline and discuss policies, programmes and projects (existing, planned, in draft or implemented) which could impact on or be impacted by the country’s biodiversity and ecosystems. After these policies were identified they were asked what biodiversity and/or ecosystem data and information could support the effective implementation of these policies.

Figure 3: Stakeholder from Petite Martinique filming a video describing causes and impacts of coastal erosion. Training on filming cell phone videos for data collection was provided as part of capacity building activities during the stakeholder consultations.

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1 See https://canari.org/grenada-ecosystem-assessment-cell-phone-video-competition
During this meeting, the assessment team also showcased the priorities (key areas of ecosystem service production and key concerns about future change) identified by stakeholders (civil society, youth and local communities) from the previous consultations held in 2019. These priorities were discussed in detail within the context of national government policy needs and development priorities. During the final session of the government consultation, priority themes, ecosystems and information needs from all governmental and non-governmental consultations were combined and utilised in a voting exercise to establish the final priority ecosystem types, data needs and questions of interest for the Grenada NEA. This sequence of consultations and methodology allowed the government personnel involved in policy-making to respond to and incorporate the needs expressed by a broad range of stakeholders into the final NEA design.

1.3.5 DRAFTING THE SCOPING REPORT

The information gleaned from the methodology above was incorporated into the findings of the scoping report. Section 2 of this report introduces Grenada’s general geographic characteristics and major ecosystem types. Section 3 provides a brief overview of the ecosystem services and drivers of change of these ecosystems as derived from the literature and showcased during stakeholder consultations. Section 4 synthesises information from Section 3 to provide the rationale for the scope of the NEA. The NEA scope, including geographic boundaries and key policy questions, is then presented in Section 5 with the utility of the assessment, assumptions and requisite data sets highlighted in subsequent report segments (Sections 6-8). The report ends with an overview of the NEA operational framework including project roles and responsibilities, work schedule, project communication and engagement strategy and proposed capacity building activities (Sections 9-12).

The methodology and findings of the scoping report are also showcased in an accompanying participatory video produced by the assessment team2. This video utilises cell phone footage taken during consultations combined with excerpts of footage from the video competition. The video will serve as an additional information resource as well as an engagement tool to showcase the intent and scope of the NEA to policy makers and other stakeholders.

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2 Video hyperlink to be inserted
2 GRENADA: AN OVERVIEW

2.1 GEOGRAPHY

The tri-island state of Grenada is the most southerly nation of the Windward Islands on the eastern edge of the Caribbean Sea. It is comprised of the main island of Grenada, the smaller, Southern Grenadine islands of Carriacou and Petite Martinique, and around 600 mostly uninhabited islets (World Atlas, 2017). The islands are located between 11°59' and 12°20' North latitude and 61°36' - 61°48' West longitude (Government of Grenada, 2000).

The largest island of Grenada has an area of 312 km². The island is generally mountainous at the centre and ringed by reefs. Mount St. Catherine is the highest point of all the islands situated on mainland Grenada and standing at 840m above sea level.

Carriacou is situated 24 km to the northeast of mainland Grenada and has an area of 34 km². Carriacou, known as the “Land of Reefs”, has its highest point of the island, High North Peak, standing at 291 m above sea level. The smallest inhabited island of Grenada, Petite Martinique, has an area of 2.3 km² and is situated northeast of Carriacou (Government of Grenada, 2000). Petite Martinique is conically shaped, with the highest peak, Piton, being 233 m above sea level. The rocky, high energy, eastern coast of Petite Martinique is completely uninhabited, with most residents occupying the western side (Government of Grenada, 2013).

Grenada has a tropical climate, with an average annual temperature ranging from 24 degrees to 30 degrees Celsius, and a small diurnal range modulated by its island nature and trade winds. There are two seasons, a dry and wet, with the dry season generally between January and May and wet season between June to December. Approximately 77% of the annual rainfall occurs in the rainy season, up to 4000 mm annually. The coastal areas of Grenada, particularly the densely populated southern coastline, experience a lower annual average rainfall of 1125 mm (Government of Grenada, 2000). Grenadian soil types are largely clay loams, with smaller proportions of sandy loams.
The country’s population is estimated at 113,094 (2020 est.) (United States Central Intelligence Agency World Factbook, 2020). The country’s economy is largely based on the services sector, in particular tourism. Grenada’s main agricultural products include bananas, cocoa, nutmeg and mace. The island’s agricultural emphasis on nutmeg and mace has resulted in Grenada being known as the “Spice Isle” (United States Central Intelligence Agency World Factbook, 2020).

2.2 COASTAL AND MARINE ECOSYSTEMS

Grenada’s coastal and marine environment is dominated by three typical ecosystems: coral reefs, mangrove swamps and seagrass beds. These ecosystems are crucial to local fisheries, providing shelter, nurseries, spawning grounds and transitional shelter for a wide variety of marine life.

The island state has 12.5 km² of coral cover which supports 317 reef fish species. There are currently 23 IUCN Red Listed reef associated fish species, and 11 Red Listed coral species of which Staghorn and Elkhorn are listed as critically endangered. The presence of the invasive Lionfish (*Pterois volitans*) has resulted in a significant decrease of reef fish populations (Government of Grenada, 2014).

There is an estimated 284 ha of mangrove in Grenada, 172 of which is found on mainland Grenada and 112 around the shores of Carriacou (Government of Grenada, 2014). The primary species are white mangrove (*Laguncularia racemosa*), black mangrove (*Avicennia germinans*), red mangrove (*Rhizophora mangle*) and buttonwood (*Conocarpus erectus*) (Government of Grenada, 2000). The mangrove ecosystems in Grenada hold significant value, not just to the island itself, but regionally, as they represent the largest mangrove area in the Windward Islands.

The main species of seagrass found around the islands are paddle grass, halophila sea grass, cover grass, shoal grass, manatee grass (*Syringodium filiforme*) and turtle grass (*Thalassia testudinum*). These seagrass beds cover approximately 1,800 ha (Government of Grenada, 2014). Like coral and mangrove habitats, seagrass bed communities are also declining (Government of Grenada, 2014).

2.3 TERRESTRIAL ECOSYSTEMS

Grenada (mainland) has diverse forest ecosystems, including the follow forest types (Helmer *et al*, 2008):

- Deciduous, Evergreen Coastal and Mixed Forest or Shrubland, with or without Succulents
- Semi-Deciduous Forest
- Seasonal Evergreen and Evergreen Forest
- Sierra Palm, Transitional and Tall Cloud Forest
- Elfin and Sierra Palm Cloud Forest
- Mangrove (Forested Wetland)

Primary forested areas include Levera, Morne Delcie, Mt. St. Catherine, Grand Etang, Mt. Hope and Annandale. In Carriacou, the main forested area is in the High North Forest Reserve (Government of Grenada, 2014). Petite Martinique has primarily dry forest, cactus scrub and littoral woodland (Government of Grenada, 2000). Grenada has 450 species of flowering plants and 85 different types of trees. There are four endemic plant species.

Grenada’s terrestrial animal biodiversity includes eight species of lizard, five species of snake, and four amphibian species, two of which are endemic. There are 150 species of birds (of which 18 are threatened or endangered) and there are 22 species of terrestrial mammals. Monkeys (*Cercopithecus mona denti*), the manicou (*Didelphis marsupialis insularis*), the armadillo (*Dasypus novemcinctus*).
hoplites), the ramier pigeon (Columbia squamosa) and iguana (Iguana iguana) are the main terrestrial species hunted across the islands.

2.4 FRESHWATER ECOSYSTEMS

There are 71 watersheds in Grenada according to the National Report for Integrating Management of Watersheds and Coastal Areas (Department of Economic Affairs, 2001). The upper reaches of a number of these watersheds are protected as forested crown lands and forest reserves. There are also two protected watershed areas in Carriacou, namely High North (A) and Forest Reserve. Freshwater ecosystems include surface water streams, small springs, three volcanic crater lakes (Lake Antoine, Grand Etang Lake and Levera Lake) and a man-made lake (Palmiste Lake).

3 ECOSYSTEM SERVICES AND DRIVERS OF CHANGE

The information presented in the sub-sections below summarises stakeholder inputs from the various consultations on the ecosystem services that they depend on and what they identify as drivers of change / threats to these ecosystems and services. The sub-sections also draw on information documented within the country’s NBSAP and NR.

3.1 MARINE AND COASTAL ECOSYSTEMS: SERVICES AND DRIVERS OF CHANGE

Grenada’s coral reefs, mangrove swamps and seagrass beds provide spawning, hiding, recruitment and foraging habitats for assemblages of reef species, migrant pelagic and vagrant species.
Stakeholders from Carriacou emphasised the role of coral reefs in protecting their fishing boats and coastal infrastructure from sea surges. Similarly, they noted the use of channels within mangrove swamps as safe harbour during hurricanes. The importance of all these ecosystem types for livelihoods, (for example, tourism and fisheries), recreation and cultural significance was highlighted at all consultations.

However, stakeholders noted that these ecosystems are under significant pressure and in particular that commercial fisheries species are overexploited. Coastal ecosystems are heavily impacted by tourism and associated activities, for example, marina construction leading to significant habitat destruction. Beach sand mining and pollution through dumping of solid and liquid wastes are other threats to the coastal and marine ecosystems. The impact of lionfish (*Pterois volitans*) as the main invasive alien species affecting Grenada’s marine and coastal ecosystems was noted. The lionfish was first sighted in Grenada waters in October 2011. The species is especially threatening because of its high fecundity, its short life cycle, its apparent isolation from known predators and its wide diet-breathth.

Grenada’s mangrove swamps are generally considered to be in decline due to a combination of sediment mining, climate change related impacts and coastal development. Sea level rise and coastal erosion encourage the inward migration of mangrove habitats; however, coastal development and steep topography inland hinder this inland migration and so mangroves are sandwiched by pressures from both directions.

### 3.2 Terrestrial Ecosystems: Services and Drivers of Change

The role of forest ecosystems in underpinning the services of water supply, climate regulation and provider of timber and non-timber forest products was noted in consultations and in the literature. However, terrestrial ecosystems face several pressures and drivers of change that have resulted in declining health and extent of this ecosystem type. Overgrazing by small livestock, mainly sheep and goats, was identified as a major driver of change within forest ecosystems, particularly on the islands of Carriacou and Petite Martinique. The clearing of land for agriculture, housing and tourism development is another significant threat. Timber harvesting for boat building and construction was also a cause of deforestation on the islands of Carriacou and Petite Martinique. Poor coordination amongst government ministries and low levels of enforcement of existing policies to manage land use (and lack of implementation of the forest policy in draft) enables and exacerbates the conversion of forested land to other uses.
3.3 FRESHWATER ECOSYSTEMS: SERVICES AND DRIVERS OF CHANGE

Grenada’s riverine and lake ecosystems are important in terms of water supply, eco-tourism and recreation. However, forest clearcutting, heavy pesticide and fertilizer use, and soil erosion negatively impact on freshwater quality and quantity available for human consumption. These activities also compromise riverine and lacustrine (lake) habitats, negatively impacting aquatic flora and fauna. Other drivers of change within freshwater ecosystems include encroachment on riparian (riverbank) habitats, illegal river damming and the introduction of the invasive fish, tilapia. Solid waste disposal in rivers is another concern. These drivers have resulted in reduction in water supply, degraded habitats and decline in populations of endemic species.

High level of water abstraction from lakes for consumption is a significant driver of change. Runoff with high nutrient loads due to erosion and fertilizer use is another. Encroachment of vegetation enabled by low water levels has accelerated the decline of some lake ecosystems.

4 RATIONALE

The Government consultation, other stakeholder consultations and the video competition highlighted the following common priority ecosystems for inclusion within the NEA:

- Coastal and marine ecosystems
  - Mangrove swamps
  - Seagrass beds
  - Coral Reefs

- Forest ecosystems
  - All types with a focus on dry forests and elfin woodland

- Freshwater Ecosystems
  - Rivers
  - Lakes
  - Riparian zones

Among these ecosystem types, coastal and marine ecosystems emerged as the highest priority for consideration within the NEA as evidenced by the voting exercise during the Government consultation and the number of groups that focused on these systems during the other stakeholder consultations.

The consultation with government representatives additionally identified agricultural ecosystems as a focal area for the NEA. Governmental officials also requested a focus on the value of genetic resources across all
ecosystem types, but with an emphasis on agricultural ecosystems. A NEA focus on agricultural ecosystems is well justified given that Grenada is known as the “Spice Isle”, famous for its agricultural products, which are also a significant contributor to its economy. Agricultural output is in turn underpinned by the water supply and essential pollination services supported by adjacent forested areas.

Water security, climate resilience and disaster resilience were crosscutting themes highlighted across all consultations. As such, the assessment will reflect the fact that Grenada is a small island developing state in a hurricane zone, and that the majority of Grenada’s infrastructure, for example, ports, roads, hotels and other resorts, is located on the coast and threatened by climate change induced sea level rise and coastal erosion. The assessment will focus on mangroves and coral reefs given their critical role in protecting these assets, yet it will describe how they are also under pressure from climate change. The assessment will demonstrate that sectors such as tourism, agriculture and fisheries are all major contributors to Grenada’s economy and major employers of its people and that these sectors are underpinned by healthy and well-functioning ecosystems.

Overall, the NEA will focus on the aforementioned ecosystem types, and the variety of environmental and anthropogenic drivers of change that impact them. The NEA policy questions will also incorporate the cross-cutting themes highlighted above.

5 SCOPe OF ASSESSMENT

The Grenada NEA aims to assess the status and trends of Grenada’s ecosystems and identify the drivers and responses to these trends. This assessment will answer several related questions on the interactions between Grenadians and their ecosystems, based on the priorities identified throughout the scoping process highlighted in the rationale section above. These policy questions are:

- What are the status and trends of Grenada’s forest, coastal, marine, freshwater and agricultural ecosystems?
- How do forest, coastal, marine, freshwater and agricultural ecosystem services contribute to Grenada’s national economy and human well-being?
- What are the greatest threats to these ecosystems and how can policy mitigate against them? How will planned policies be impacted by changes in biodiversity and ecosystem service delivery?
- How do Grenada’s ecosystems contribute to climate resilience (food and water security, disaster resilience, climate change adaptation / mitigation)?
- What opportunities exist for enhancing the nation’s economy and well-being by conserving biodiversity?
- What is the value of the genetic resources across the different ecosystem types, in particular, the agricultural landscapes of Grenada?

These questions and the subsequent NEA are designed to mainstream the consideration of biodiversity and ecosystem services into Grenadian decision-making focusing on the key issues highlighted above. Policy questions are also designed to strengthen the science policy interface for the government of the Grenada as well as civil society and the private sector.

Grenada’s relatively small size affords the assessment the opportunity of assessing general ecosystem status, trends and contributions to well-being and climate resilience at the national scale. Therefore, for the purpose of this assessment, the geographic scope will include the land, inland waters and ocean of the three inhabited islands of Grenada (Grenada, Carriacou and Petite Martinique). It should be noted, however, that while the geographic area of the assessment is
national, certain policy questions and topics may be covered at the sub-national scale as detailed case studies. These case studies will be used to fill data and information gaps on ecosystem goods and services and provide detailed information on ecosystem service value for future trade-off decisions.

It is anticipated that the assessment will use 2020 -2035 as the time frame for scenarios and back casting activities. This temporal scale was selected to align with the Grenada National Sustainable Development Plan, to maximise the mainstreaming of the NEAs results with high level policymakers’ goals. Scenarios developed for NEA will articulate clearly how biodiversity and ecosystem services contribute to the achievement of this Plan.

6 UTILITY

This assessment will provide essential information to national decision-makers, policy makers and their supporting staff as they develop and implement policies and initiatives for the achievement of Grenada’s National Sustainable Development Plan 2020-2035. By articulating the benefits of ecosystems and their services in economic terms and the close linkages to national well-being, the report will enable the mainstreaming of ecosystem goods and services values into government processes and thinking. In this regard, the assessment will articulate how biodiversity and ecosystem services contribute to non-environmental Goals #1 (Society) and #2 (Economy) of the country’s Sustainable Development Plan (Figure 12).
Grenadian decision-makers need credible, authoritative and up-to-date information on biodiversity and ecosystem services that assess the complex interlinkages between humans and nature. More specifically, several plans, policies and regional / global environmental agreements need detailed and comprehensive supporting data to enable more effective enactment, application, enforcement, monitoring and reporting. Key policies and plans that require targeted information to support decision-making include:

- Protected Area Systems Plan
- Dry Season / Drought Management Plan (2019)
- Disaster Resilience Plan
- Water Policy (Draft)
- Land Policy (Draft)
- National Forest Policy and Strategy (Draft)
- National Environmental Policy and Strategy (2005)
- National Climate Change Policy (2017)
- Integrated Coastal Management Policy (Draft)

Furthermore, this report will support implementation of and reporting on regional and global multilateral environmental agreements and strategies such as:

- Convention on Biological Diversity (CBD)
- Ramsar Convention on Wetlands of International Importance
- United Nations Framework Convention on Climate Change (UNFCCC)
- The draft Caribbean Community (CARICOM) Biodiversity Strategy (2019-2030)
- The draft OECS Biodiversity and Ecosystems Framework (in development)
- Sustainable Development Goals

7 ASSUMPTIONS

The assessment will be built on available scientific data sets, including remote sensing data where available. There will also be a strong emphasis on local and indigenous knowledge. The NEA will draw on the frameworks and guidelines provided by the IPBES regional, global and thematic assessments and information provided by supporting institutions such as the WCMC. Where significant data gaps exist, it is assumed that the expert and author groups will have the capacity to provide expert opinion to overcome these gaps.

The expert and author groups for the assessment will follow provided guidelines and collectively, represent a balance of inputs from the natural, social and economic sciences. Expert and author groups across chapters and thematic groups will interact and coordinate on their activities, enabling conceptual and methodological coherence across the assessment. Expert and author groups will work closely with the project team to ensure that local and indigenous knowledge are incorporated into the assessment in a participatory manner, particularly to support data gaps in ecosystem trends.

8 DATASETS

8.1 KEY DATA SOURCES

The assessment will be built on available data taken from both peer-reviewed and grey literature. An initial review of the literature indicates that government data and grey literature will play an important role in the assessment due to limited availability of up-to-date peer-reviewed literature covering environmental and biodiversity related topics in Grenada. The following are the key data sources that will be drawn on for the project:

Government datasets: State agencies and government ministries hold a valuable repository of data. The Ministry of Agriculture and Lands, as well as the Ministry of Finance, Planning, Economic Development & Physical Development, will be approached for relevant land use maps and agricultural data. For data on aquatic ecosystems, the National Water and Sewerage Authority will be a primary data source. Environmental impact assessment studies submitted to the government will also be considered as a data source.

National reporting to international agreements: Data from the country’s national reports to agreements such as the CBD, UNFCCC and the Ramsar Convention on Wetlands of International Importance will be used in the assessment.
**Project data:** Data generated by national and regional projects, post-hurricane assessments and historical accounts will also act as an important data source. Examples of projects which can supply information for the assessment include:

- **Implementing a “Ridge to Reef” Approach to Protecting Biodiversity and Ecosystem functions within and around Protected Areas in Grenada** - Global Environment Facility (GEF) / United Nations Development Programme (UNDP) funded project with a focus on enhancing biodiversity, sustaining ecosystems and regenerating the landscape of Grenada.
- “Integrated Climate Change Adaptation Strategies (ICCAS)” project - funded by the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) within the scope of IKI.
- “Organisation of Eastern Caribbean States (OECS) Global Climate Change Alliance (GCCA) Project on Climate Change Adaptation (CCA) and Sustainable Land Management (SLM) in the Eastern Caribbean” – funded by the European Union (EU).

**Regional data sets and policies:** Due to the existence of strong regional political coordination mechanisms in the OECS and CARICOM, regional policies and datasets will also be drawn on for the assessment. Online data sources such as the Caribbean Protected Areas Gateway will also be utilised.

**Indigenous knowledge:** Scientific data and information will be consistently supplemented by indigenous knowledge in a structured way. The NEA scoping exercise has already benefited from community stakeholder consultations and a cell phone video competition to gather indigenous knowledge. Other mechanisms for community engagement like BioBlitz’s will be explored for the actual assessment.

8.2 ADDITIONAL DATA

In order to complete the assessment and maximise the report’s use by policy makers, the report will seek additional data on the areas of focus listed below. Where data is not available, expert opinion, rapid assessments and remote sensing options will be considered.

**Economic value of ecosystem services.** Beyond provisioning services such as agriculture, fisheries and some cultural services such as tourism, there is limited data and information on the economic value of ecosystem services in Grenada. Further, non-use values and value of utilised genetic resources are largely non-existent yet an area of high interest based on consultations. Value transfer methodologies will be considered to fill these gaps. In addition, experts with socio-economic backgrounds will be part of the author teams for each chapter.

**Temporal frequency.** Many data sets are ‘one and done’ and if updated, often employ new methods or strategies, making the establishment of strong trend observation a challenge. Analysis of available remote sensing data will be explored to mitigate against this challenge.

**Detailed downscaled climate change projections.** Climate change is a major driver of change in Grenada and so detailed data on the potential physical impacts of climate change are essential to inform scenario building and back casting exercises.
The NEA will be broken down into the following six chapters:

Chapter 1. Setting the scene: Why a National Ecosystem Assessment and how will it contribute to better decision-making? This chapter will outline key concepts and frameworks necessary for connecting biodiversity and ecosystem services to the social and economic well-being of Grenada. This chapter will articulate the challenge of making decisions while trying to balance social, economic and environmental needs, and the importance of tools such as the NEA in supporting decision-making. This chapter will also provide an overview of the overall assessment, articulating the utility of each of the chapters to potential users.

Chapter 2. What are the status and trends of Grenada’s ecosystems (forest, coastal, marine, freshwater and agricultural) and how do they contribute to Grenada’s national economy and human well-being? This chapter will assess the status, extent and health of forest, freshwater, agricultural, coastal and marine ecosystems across Grenada, Carriacou and Petite Martinique. This chapter will include an analysis of how these ecosystems contribute to national economic and social well-being. This chapter will also articulate the major threats / pressures on Grenada’s biodiversity and how these can affect national well-being inclusive of social, cultural and economic dimensions.

Chapter 3. What’s the value of Grenada’s key ecosystems and how can these values be considered in decision-making? Across Grenada, key ecosystems will be identified based on stakeholder priority and potential for contribution to national well-being. An economic valuation of the contribution of these ecosystems will be conducted to establish values that can be used in future trade-off decisions. Opportunities for payments for ecosystem services schemes and natural capital accounting will also be identified (and expanded upon in Chapter 5).

Chapter 4. How can biodiversity and ecosystem services be mainstreamed within key national and regional policies? This chapter will assess how biodiversity can contribute to the achievement of Grenada’s National Sustainable Development Plan 2020-2035 which is the central framework for national decision and policy making. This chapter will also highlight how biodiversity and ecosystem services can be mainstreamed into key government policies and plans highlighted in Section 6 of this report. If possible, this chapter will conduct an exploratory “back casting” of how biodiversity will contribute to the achievement of the Sustainable Development Goals and the National Sustainable Development Plan 2020-2035.

Chapter 5. What opportunities for enhancing national well-being by conserving biodiversity exist? Incorporating science into policy requires the identification of not only negatives but also opportunities for positive change. This chapter will focus on major opportunities for enhancing biodiversity while preserving national well-being. Rehabilitation projects, initiatives and policies with potential for high environmental and social returns will be highlighted. Government stakeholders have expressed interest in blue and green bonds to support biodiversity preservation which will be incorporated as appropriate into the chapter.

Chapter 6. Scenarios, recommendations and conclusions. Building on previous sections, this chapter will articulate scenarios of the future based on different levels of biodiversity mainstreaming into decision-making. These scenarios will be directly followed by recommendations and conclusions on

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3 This proposed chapter structure does not prohibit breaking chapters down into sections to facilitate the writing of the report.
how best to mitigate the negative impacts presented in the scenarios and maximise the possibility of sustainable futures. The report will conclude with an articulation of the next steps to activate its recommendations\(^4\) based on consultation with all stakeholders.

### 10 OPERATIONAL FRAMEWORK AND KEY RESPONSIBILITIES

The assessment is operationalised by co-chairs, the Grenadian government focal agency (Environment Division) and Technical Secretariat (CANARI). The chairpersonship of the assessment is shared among a government decision-maker from the Environment Division, a technical expert from the University of the West Indies and a civil society representative from a local NGO. This is to ensure that the report is responsive to policy maker needs, technically robust and reflective of broader stakeholder perspectives. The assessment team and the co-chairs take guidance from the National Management Committee which in addition to the co-chairs, CANARI and the government focal point includes representatives from the Forestry and Fisheries Divisions of the Ministry of Climate Resilience, the Environment, Forestry, Fisheries and Disaster Management. The National Management Committee reports to the Grenadian National Sustainable Development Council which serves as the National Science Policy Platform for the NEA.

### 11 ASSESSMENT WORK SCHEDULE AND PROCESS

The proposed workplan for the assessment is shown in the Gantt chart below.

\(^4\) This articulation of next steps could come in the form of an assessment declaration, communication product or separate chapter depending on stakeholder interest.
<table>
<thead>
<tr>
<th>Output/Activity</th>
<th>Tasks</th>
<th>Deliverable/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inception</td>
<td>Prepare workplan and budget</td>
<td></td>
</tr>
<tr>
<td>Inception</td>
<td>Establish assessment parameters and project synergies through virtual/In person meetings with Grenada</td>
<td></td>
</tr>
<tr>
<td>Inception</td>
<td>Launch Ecosystem Assessment</td>
<td>June 19th 2019</td>
</tr>
<tr>
<td>Inception</td>
<td>Produce monthly/quarterly reports and send fund requests</td>
<td></td>
</tr>
<tr>
<td>Inception</td>
<td>Establish National Management Committee</td>
<td></td>
</tr>
<tr>
<td>Inception</td>
<td>Execute National Management Committee Meetings</td>
<td></td>
</tr>
<tr>
<td>Inception</td>
<td>Recruit Assessment Chairs</td>
<td></td>
</tr>
<tr>
<td>Communication/Engagement</td>
<td>Develop Communications Strategy</td>
<td>Communications Strategy</td>
</tr>
<tr>
<td>Communication/Engagement</td>
<td>Implement Communication Strategy</td>
<td></td>
</tr>
<tr>
<td>Communication/Engagement</td>
<td>Develop and disseminate social media posts, press releases and other information</td>
<td></td>
</tr>
</tbody>
</table>
### Grenada National Ecosystem Assessment Workplan

<table>
<thead>
<tr>
<th>Output/Activity</th>
<th>Tasks</th>
<th>Deliverable/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Out1 Act 1: Scoping</strong></td>
<td>Execute stakeholder identification workshop and design participatory Scoping Exercise</td>
<td>June 19th 2019</td>
</tr>
<tr>
<td><strong>Out1 Act 1: Scoping</strong></td>
<td>Execute stakeholder workshops to define scope of assessment including key policy questions</td>
<td>7 Community and National workshops Nov 2019- Feb 2020</td>
</tr>
<tr>
<td><strong>Out1 Act 1: Scoping</strong></td>
<td>Develop and implement participatory processes for broad stakeholder engagement and input of local knowledge into Scoping Exercise</td>
<td>Video Competition held Dec 2019-Jan 2020</td>
</tr>
<tr>
<td><strong>Out1 Act 1: Scoping</strong></td>
<td>Prepare Scoping Report</td>
<td>Draft Scoping Report to be completed March 30th 2020</td>
</tr>
<tr>
<td><strong>Out1 Act 1: Scoping</strong></td>
<td>Prepare participatory video on Scoping Exercise</td>
<td>Video to be completed March 30th 2020</td>
</tr>
<tr>
<td><strong>Out1 Act 1: Scoping</strong></td>
<td>Submit Scoping Report to IPBES Plenary</td>
<td>Apr-20</td>
</tr>
<tr>
<td><strong>Out1 Act 1: Scoping</strong></td>
<td>Finalise Scoping Report</td>
<td>May-20</td>
</tr>
<tr>
<td><strong>Out1 Act 1: Scoping</strong></td>
<td>Publish Scoping Report</td>
<td>Final Scoping Report</td>
</tr>
</tbody>
</table>

Output 1. Technical scoping and carrying out an assessment, including delivery of summaries for policymakers for all relevant sectors; technical reports to increase access to the evidence base, and communication materials and processes for helping to promote and facilitate uptake of the assessment findings by policy makers. Completed national ecosystem assessments within each project country.
<table>
<thead>
<tr>
<th>Output/Activity</th>
<th>Tasks</th>
<th>Deliverable/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Out 1 Act 2 Assessment</td>
<td>Design Assessment</td>
<td></td>
</tr>
<tr>
<td>Out 1 Act 2 Assessment</td>
<td>Select experts/authors</td>
<td></td>
</tr>
<tr>
<td>Out 1 Act 2 Assessment</td>
<td>Execute author meetings</td>
<td></td>
</tr>
<tr>
<td>Out 1 Act 2 Assessment</td>
<td>Execute stakeholder workshops, training and engagement activities</td>
<td></td>
</tr>
<tr>
<td>Out 1 Act 2 Assessment</td>
<td>Prepare zero order draft of assessment</td>
<td>Zero order draft</td>
</tr>
<tr>
<td>Out 1 Act 2 Assessment</td>
<td>Collect and update data for Assessment</td>
<td></td>
</tr>
<tr>
<td>Out 1 Act 2 Assessment</td>
<td>Conduct peer review/stakeholder engagement on zero order draft</td>
<td></td>
</tr>
<tr>
<td>Out 1 Act 2 Assessment</td>
<td>Prepare 1st order draft of assessment</td>
<td>First order draft</td>
</tr>
<tr>
<td>Out 1 Act 2 Assessment</td>
<td>Conduct peer review/stakeholder engagement on final draft</td>
<td></td>
</tr>
<tr>
<td>Out 1 Act 2 Assessment</td>
<td>Prepare final draft</td>
<td>Final draft</td>
</tr>
<tr>
<td>Out 1 Act 2 Assessment</td>
<td>Conduct peer review/stakeholder engagement on final draft</td>
<td></td>
</tr>
<tr>
<td>Out 1 Act 2 Assessment</td>
<td>Produce final assessment</td>
<td>Final assessment</td>
</tr>
</tbody>
</table>

Output 1. Technical scoping and carrying out an assessment, including delivery of summaries for policymakers for all relevant sectors; technical reports to increase access to the evidence base, and communication materials and processes for helping to promote and facilitate uptake of the assessment findings by policy makers. Completed national ecosystem assessments within each project country.
### Grenada National Ecosystem Assessment Workplan

<table>
<thead>
<tr>
<th>Output/Activity</th>
<th>Tasks</th>
<th>Deliverable/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Out 1 Act 3</td>
<td>Disseminate final assessment</td>
<td></td>
</tr>
<tr>
<td>Disseminate</td>
<td>Prepare draft summary for policy makers</td>
<td></td>
</tr>
<tr>
<td>Disseminate</td>
<td>Finalise summary for policy makers</td>
<td></td>
</tr>
<tr>
<td>Disseminate</td>
<td>Execute National Management Committee meetings/consultations with policy makers</td>
<td></td>
</tr>
<tr>
<td>Disseminate</td>
<td>Execute stakeholder advocacy activities to promote incorporation of assessment findings into policy</td>
<td></td>
</tr>
<tr>
<td>Disseminate</td>
<td>Disseminate summary for policy makers</td>
<td>Summary for Policy Makers</td>
</tr>
</tbody>
</table>

Output 1: Technical scoping and carrying out an assessment, including delivery of summaries for policymakers for all relevant sectors; technical reports to increase access to the evidence base, and communication materials and processes for helping to promote and facilitate uptake of the assessment findings by policy makers. Completed national ecosystem assessments within each project country.
<table>
<thead>
<tr>
<th>Output/Activity</th>
<th>Tasks</th>
<th>Deliverable/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Out2 Act1 Identify</td>
<td>Identify policy support tools</td>
<td></td>
</tr>
<tr>
<td>Out2 Act2 Develop</td>
<td>Develop policy support tools</td>
<td></td>
</tr>
<tr>
<td>Out2 Act3 Implement</td>
<td>Implement policy support tools</td>
<td></td>
</tr>
</tbody>
</table>

**Output II: Policy support tools and methodologies available to those involved in developing policy and making decisions in each project country**

[Calendar with dates marked]

**Output III: National platforms to support the assessment process, and to provide ongoing communities of practice facilitating a science-policy interface**

| Out3 Act1 Review | Discuss examine available platforms with Gov of Grenada and CSOs | |
| Out3 Act2 Establish | Establish/utilise existing platform to facilitate stakeholder discussions and engagement | |
| Out3 Act3 Sustainability | Investigate and document mechanisms for sustainability of national platform | Report on establishment/sustainability of national platform |

**Output IV: Support and guidance provided to national project implementation teams (Led by WCMC-activities TBD)**

**Output V: A series of case studies and lessons learned made available through relevant communities of practice such as the SGA Network, and support offered to other countries based on this experience so as to extend the impact of the project**

| Out5Act2: Case Studies | Produce case studies | Case studies |
12 PROJECT COMMUNICATION, STAKEHOLDER ENGAGEMENT AND CAPACITY BUILDING

Project outreach and training have already begun through the seven stakeholder workshops held across Grenada, Carriacou and Petite Martinique. These workshops hosted a cross-section of stakeholders who were apprised of the project, introduced to key ecosystem services and valuation concepts and given the space to share stories of their work and / or interactions with ecosystems. A short video was produced by CANARI as a communication product on the importance of the project itself, targeted at key stakeholders such as government ministries and decision-makers. The video also complements capacity building activities for both the government and general stakeholders on communicating ecosystem service values which was explicitly requested during consultations. A full communication and engagement strategy will be developed in 2020, inclusive of a detailed stakeholder analysis.

Stakeholder training on the creation of cell phone videos was also conducted during the scoping exercise workshops. A subsequent video competition was launched for all nationals of Grenada to share their stories on ecosystem importance and ecosystem change over the years. The cell phone video training was the first step in the environmental advocacy capacity building thrust which will continue until the completion of the NEA. It is envisioned that by building the advocacy skills of civil society organisations, youth and private sector, that these stakeholder groups will advocate for the consideration of the assessment’s findings in national decision-making processes. This approach will amplify any lobbying executed by the assessment team and National Management Committee towards this same goal.

In terms of assessment specific skills, it is intended that a key activity in the early stages of the project will be to train and build local capacity in spatial analysis and economic valuation for the assessment team, authors and other interested stakeholders. Other capacity building efforts will be identified as the project progresses.

13 CONCLUSION

The Grenada National Ecosystem Assessment represents an important step in enhancing the management of the country’s biodiversity and ecosystem services. With clearer information linking the national economy and human well-being to biodiversity, the government and various national decision-makers will be better prepared to make decisions that increase overall national well-being, not only in the short term, but looking into the future.

As an island state, Grenada faces numerous challenges related to its location in a hurricane belt, high vulnerability to climate change related impacts and susceptibility to global economic shocks. While it is one of many small island developing states, it is the first one conducting a national ecosystem assessment under the guidance of IPBES and UNEP-WCMC. This project and its NEA will produce information that can be used in future NEAs across other island states and states with similar geographies and environmental economic challenges. The assessment team and Government of Grenada hope to set a global example of how to conduct NEAs in this context through the mainstreaming of Grenada’s NEA learnings and biodiversity into governance, policy, decisions and way of life.
14 REFERENCES


APPENDIX 1: STAKEHOLDERS CONSULTED

To be added.
In partnership with: