

ANTIGUA AND BARBUDA NBSAP REVIEW PROCESS MONOGRAPH
(2nd Draft)



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Submitted to IUCN

February 22, 2014

Photo courtesy of Ms. Ruleta Camacho

1. Introduction: Country Situation Analysis

a. Background

Physical Features

Antigua and Barbuda is an archipelagic state located in the Caribbean Sea approximately 250 miles southeast of Puerto Rico. It is the most central of the leeward island chain that starts with the Virgin Islands in the West and ends with Dominica in the South (Map1). There are several tiny uninhabited islands surrounding Antigua, Redonda (0.6 sq. miles or 1.6 sq. km) being the largest. The precise coordinates of Antigua is 17°10' latitude, 61°55' longitude, Barbuda is 28 miles north of Antigua at latitude 17°35' and longitude 61°48'. Antigua is roughly round and has an area of 108 sq. miles (280 sq. km) while Barbuda is 62 sq. miles (160 sq. km). Antigua and Barbuda has an estimated exclusive economic zone of 110,071 sq. km.

The islands of Antigua and Barbuda are emergent parts of a 3400 sq. km submarine platform. The depth of water between the two islands averages 27.33 m. The coastline of Antigua is indented with numerous islets, creeks, inlets, associated sand bars and wetlands. A large portion of the east, north and south coasts are protected by fringing reefs. The west coast is dominated by a sandy substrate interspersed with fringing reefs in relatively shallow waters.

Antigua's topography can be described as undulating. The highest point in Antigua is Mt Obama (1,319 ft. or 402 m) in the southwest where other relatively steep slopes are located. Slopes with gradients of 110 – 200 are common in this region but in localized areas in the south, slopes up to 300 exist. Antigua has three topographic zones. The first zone is the mountainous southwest volcanic region comprised of hard igneous rocks in the uplands and sedimentary material in associated valleys. The valley systems of this volcanic region consist of sandy loams or loams of near neutral pH which is conducive to tree growth. The second zone is the relatively flat Central Plains. This region is characterized by heavy clays that are not easily drained and near neutral pH, some calcareous clays are also found. In general, these soils are hard to work. The third zone can be described as the rolling limestone hills and valleys of the North and East. The limestone areas in the North have high clay content but possess good structure and have a high base structure and high base saturation, pH is 8.2. These soils are generally productive. However, the limestone areas in the east consist of complex alternate shallow and deep calcareous soils with a drier climate that restricts productivity.

Deeply indented bays and sandy beaches provide the setting for much of the island's important tourism industry also characterize the island. Equally, Barbuda's pink and beaches and coral reefs provide an aesthetic and environmental feature unique to the Eastern Caribbean.

Barbuda is relatively flat with the highest point rising to just under 125 ft. (40m) in the Highlands on the islands northeast coast. Barbuda, which is dominated by coralline limestone rocks, has a relatively uniform topography; sand dunes are present but the land is generally covered by

limestone and sand. Unlike Antigua, the coastline of Barbuda is less varied but has extensive reef systems especially off the east coast. On the western side of the island is the Codrington Lagoon that averages about one and a half miles in width and is separated from the sea by a narrow spit of sand. A variety of Mangroves and sand ridges border the Lagoon, making it an area of significant importance to the fisheries sector and wildlife of Barbuda.

In addition to the two main islands, the State of Antigua and Barbuda comprises a number of uninhabited small islands and cays, including the island of Redonda, which has previously been known for phosphate mining and export.

Government and Institutional Structure

Antigua and Barbuda is a constitutional monarchy with a British-style parliamentary system of government. An appointed Governor General, as the head of state, represents the reigning British monarch in Antigua. The government has three branches: legislative, executive, and judicial.

Over the years there have been a series of legislation aimed at environmental protection. However, these have been piecemeal and without outlined authority for responsible parties to ensure effective legislative and policy protection for environmental issues. All of these legislations formed parts of acts administered by separate government agencies such as the Development Control Authority, the Central Board of Health, the Antigua Public Utilities Authority as well as the National Solid Waste Management Authority. A list of these legislations is provided below in Annex 1. Based on this fragmentation, in 2005, the country began its quest to develop an overarching Environmental Management Bill for the protection of the environment. The latest draft of the bill is slated to go before the parliament in 2014.¹

b. Convention on Biological Diversity and National Biodiversity Strategy and Action Plan

Antigua and Barbuda, along with much of the international community, participated in the United Nations Earth Summit in 1992 in Rio de Janeiro, Brazil. One of the principal outcomes of this exercise was the signing on to the Convention on Biological Diversity (CDB), which it ratified a year later in April, 1993. The implementation of the convention was vested within the Environment Division (then Environment Unit), which became the convention's focal point.

The country's first NBSAP was produced in 2001 after extensive consultations with stakeholders and agencies. However it never received the approval of the Cabinet and was never fully implemented. Target 17 of the 20 Aichi Targets, adopted in Nagoya 2010, stipulated that

¹ Banhan, Melesha, 2014. Antigua and Barbuda National Biodiversity Strategy And Action Plan 2014 to 2020. Government of Antigua and Barbuda. Pg. 46

countries should have developed adopted and commenced implementation of revised NBSAPs by 2015; therefore the country began this process in 2012. The country chose to accomplish this by drawing from other ongoing processes such as the National Environment Management Strategy (NEMS). The development of this strategy included:

- Land Use Plans
- Outcomes of The Protected Areas Project
- Outcomes of the Sustainable Island Resource Management Mechanism (SIRMM) Project
- Outcomes of the UNCCD process
- Guidelines to include the CMS into the NBSAP
- Guidelines for Including Climate Change within the NBSAP²

Status of the NBSAP

Antigua and Barbuda's NBSAP is in its final stages of completion; it has gone through a series of stakeholder consultations and revisions and the final draft is now being edited. The process began in late 2012; approximately 11 years since the preparation of the country's last NBSAP.

At the national level, a number of assessments have been completed on critically important biodiversity issues. These assessments, in some cases, have resulted in policy level adjustments and a renewed commitment to the preservation of the country's biodiversity. A positive signal towards effective implementation of resulting plans. This national level commitment has sparked new interest in the biodiversity debate nationwide and has led to the engagement of a number of community groups and other stakeholders in the development of adequate solutions to the current biodiversity related problems including the issue of invasive species, climate change and the added challenges of being a small island developing state.

To develop the Plan a number of stakeholders were integrated into a process aimed at ensuring all that aspects of the government and non-government system were included. A number of consultative processes took place in an effort to ensure all facets of biodiversity conservation and management in the country were included in the process of re-developing the NBSAP for Antigua and Barbuda. This in its self is seen as a significant achievement when one considers that stakeholder participation in developing the 2001 NBSAP was not as extensive. In fact many positive changes have taken place since then; securing the inclusion of biodiversity on the agenda of some critical policy decision issues, for example.

² Environment Division, Ministry of agriculture, lands, Housing and the environment. National Biodiversity Strategy and Action Plan (NBSAP): Stocktaking Exercise pg. 44

2001 NBSAP

The process of developing the 2001 NBSAP was unprecedented as it represented one of the first times there was a concerted effort to raise awareness of biodiversity and its related issues on a national scale. The Plan was developed through a process of participation including individual consultations with experts and stakeholders, and national consultations. All relevant ministries, government departments and agencies at all levels, non-governmental organizations, business and industry, professional societies, educational institutions, advisory councils and interested individuals were invited to participate and to comment on the NBSAP drafts.

Particular care was taken to make sure there was representation by those who:

- Depended on the country's biodiversity for their livelihood - farmers, livestock owners, fisher-folk, charcoal burners, herbalists, crafts persons, tour operators;
- Were involved in converting land from its natural state - developers, real estate agents, surveyors and
- Decisions and plans would greatly influence land use and habitat conservation or degradation.

However, in spite of these broad-based consultations the 2001 NBSAP failed to achieve Cabinet approval. In retrospect the process served more of a public awareness/education role and gave varied groupings among the society a platform to bring their long-standing issues regarding how natural resources were being managed to the fore. Before this time there was very little attempt to get the public's views on policy issues the Government was developing. In fact the Government owned and operated the media. There were not enough independent voices among the population to bring an objective view to the policies of the Government. Additionally, not enough consideration was given to the political viability of the targets being set resulting in the NBSAP's failure to get through this critical stage. In fact previous national reports to the conventions examined what took place and provided the following explanations for the lack of Cabinet support:

- a. The political directorate feeling that the strategy it outlined had a heavy focus on the protection of biodiversity thus limiting the developmental options available to the country.
- b. Since much of the lands in proposed protected areas were privately owned. Landowners were uneasy since they wanted the right to develop their lands however they pleased. The NBSAP did not present a clear strategy to address these issues.
- c. Then there was the overall cost of implementation was also a cause for concern since the cost identified in the report would have resulted in a more than ten-fold increase in the budget allocation to various ministries.
- d. A clear misunderstanding of protected areas and the ways that they can be implemented further complicated these concerns. It was viewed that protected areas were a deterrent to foreign investments into the tourism sector particularly when constructing new hotel rooms and related infrastructure.
- e. During the period of time that the NBSAP was produced the decision making process for most developmental projects was extremely controversial and political. There was no EIA process required and development projects were normally met with resistance from community and environmental groups. Hence, there was reluctance by the political

directorate to add another layer of complexity to this already complex process.³

Although the consultation process was groundbreaking it did not go far enough to convince the public and the political directorate that proper management of biodiversity was an important part of economic development. It did however raise awareness and started a national debate, for the first time, on the role of Biodiversity in economic development of the country. Interviews conducted with Ministers as well as speeches (UN speeches, budget and others) made this clear. Although this realization came many years after the preparation of the NBSAP, that process was the first step of many towards the education of the public about the importance of the Biodiversity.

National Biodiversity Targets

The fifth ordinary meeting of the Conference of Parties to the CBD in 2000 adopted a strategic plan designed to reduce the rate of global biodiversity loss over the next ten years. Like most targets one important element of the work programme was to establish indicators to measure progress made towards achieving these targets. Antigua and Barbuda although supportive of the strategy, did not establish specific national targets with indicators until 2009. This extensive delay may or may not have been directly related to the failure of the 2001 NBSAP to get final Cabinet approval. Much needed baseline data was not collected until 2009 and since then there has been no comprehensive quantitative assessment of species or ecosystems status and impacts stemming from their use. Antigua and Barbuda like many of the OECS countries is without a university; a limitation affecting its capacity for quantitative research on biodiversity.

There is however, adequate and reliable qualitative information to make an assessment of the status and trend of Biodiversity since 2001. This was facilitated mainly through the GEF full size project *Demonstrating the Development and Implementation of a Sustainable Island Resource Management Mechanism in a Small Island Developing State (SIRMM)*. This project was executed by the Environment Division in 2008 with a US\$3 million grant from GEF and ran until the end of 2013. Its main aim was to “ensure the sustainability and maintenance of island ecosystem integrity, health, and function through integrated planning and management of the islands’ resources, thereby providing a basis for continued sustainable economic development.” It is largely seen as being instrumental in assisting the country with implementing a Sustainable Island Resource Management approach to stabilise and maintain ecosystem functions.

The project was managed through a Technical Advisory Committee (TAC) made up of public and non-government stakeholders and was supposed to have 4 main outcomes:

1. *Easy and reliable access to information for environmental management by all*

³ Dr. Gore Francis, Janil 2010. Fourth National Report To The Convention on Biological Diversity: Antigua and Barbuda. Government of Antigua and Barbuda. Pg. 39-41

stakeholders

2. *A sustainable island resource management plan developed and in place*
3. *Policy and institutional reforms provide for implementation of the SIRMM plan*
4. *Requirements for implementation of the SIRMM plan in place, as well as mechanism for capture of lessons and best practices*

This same TAC was used to develop the Revised NBSAP. More information is provided on this in the following sections.

c. Methodology

This Monograph was developed through interviewing staff of the Environment Division, the national CDB Focal Point and the agency, which coordinated the NBSAP Revision. Documents such as those below were compiled and reviewed:

- Antigua and Barbuda National Biodiversity Strategy And Action Plan 2014 to 2020 (3rd Draft)
- Draft Biodiversity Strategy and Action Plan for Antigua and Barbuda 2001
- National Reports To The Convention on Biological Diversity: Antigua and Barbuda
- National Biodiversity Strategy and Action Plan (NBSAP): Stocktaking Exercise
- NBSAP Project Work Plan (September 2012 to March 2013)
- Environment Division's Communication Strategy For Effective Environmental Management 2013 to 2018.

The main challenge to completing the study was the limited documentation available on the methodology used to develop both the 2001 and 2013 NBSAPs. However through the interviews the Researcher was able to at a pretty good picture of what the process looked like through asking the following questions:

- How different actors in the revision process were identified.
- Why some were chosen to participate over others
- Expectations about how public engagement will lead to reduction in biodiversity loss
- Had to rationalise standard communications and engagement practices with what actually happened on the ground
- Working with the Focal Point to develop case studies

2. NBSAP Coordination and Institutional Structure

The NBSAP revision process was lead and implemented by the Environment Division, the national CBD Focal Point. In late 2012 the Environment Division undertook a NBSAP Stocktaking Exercise. It reviewed the draft 2001 plan and gave an assessment of the activities completed thus far. It noted that the risks to biodiversity had not changed much since 2001. However, this does not mean that work had not been done in the past 11 to 12 years. To the contrary a considerable amount of work has been completed and many of the identified activities have been undertaken. They achieved varying degrees of success, which were obtained mainly through integrating biodiversity conservation policies and measures into the operational programmes of key institutions and agencies within the country. Successes were also achieved through the efforts of regional and international agencies promoting the critical importance of biodiversity.

Additionally, the stock taking exercise compiled a list of all the biodiversity assessment reports completed for the country in the last 12 years. These were mainly done on particular species or in specific areas, as they were outputs from previous projects. A comprehensive ecological assessment of the biodiversity of Antigua and Barbuda is yet to be completed and many gaps remain as a result. There is need for a complete assessment of each Aichi goal and its individual targets to determine whether or not they have been achieved using established indicators.

The Stocktaking Exercise report outlined the status of planned activities within the 2001 NBSAP including analysis of the issues affecting their completion and offered possible mechanisms to allow them to move forward. At the time of preparing that report planning for the new NBSAP was on going as well. By this time the SIRMM TAC was fully functional and had incorporated many more stakeholders into its membership as it became apparent their inputs were needed. There was a realisation by those on the Committee that developing the NBSAP should be done through the integration of a number of stakeholders in the process to ensure all aspects of the government and non-government system were included. There was optimism that a more positive outcome would be achieved the second time around as more and more inclusion of biodiversity management were seen on the agendas of some critical policy decisions over the past 12 years. At the same time it was recognized that more work was still needed to solidify political approval of the second NBSAP.

a. Coordination

The Environment Division as the national focal point for the CBD led the process for revising the NBSAP. A grant from the GEF allowed them to commence project activities. Its implementation was vested in the senior technical officer within the Division with support from other senior members of staff. The process consisted of developing an internal work plan with various officers of the Division who were given responsibility for different aspects of the process.

The next step was to conduct a literature review of all biodiversity reports produced by previous projects, from the SIRMM project, Protected Areas Project and the National Environment Management Strategy for example. This was then used to develop the Stocktaking Exercise

Report (mentioned above), which was presented to stakeholders at a series of national consultations for comments. There were six consultations in total between April 2013 and January 2014 with participants from agencies such as the Agriculture Extension Division, Lands Division, National Office of Disaster Services and the Environment Awareness Group (see Annex 2 for full participants list and meeting dates).

There was a process whereby comments could be submitted to the Environment Division via email and if feasible these were taken on board. The second draft was then prepared and submitted to the stakeholders (via email once more) for another round of comments before the final document was produced.

At this point a Technical Advisory Committee (TAC) was used to do the work of revising the NBSAP. Instead of forming a new body the TAC of the SIRMM was used for developing the NBSAP.⁴ It consisted of government stakeholders and the NGOs actively working on environmental issues such as of the EAG, Gilberts Agricultural and Rural Development Center (GARDC) and the GEF SGP coordinator who represented many of the smaller CBOs. It is important to note the distinction between roles of the Environment Division, which primarily facilitated the NBSAP revision process, and that of the TAC, which developed the biodiversity targets set out in the Revised NBSAP.

The SIRMM project closed in 2013 and the TAC was subsequently disbanded. However, an application to the Permanent Secretary has been made to convene a general biodiversity and environmental Project Coordination Committee (PCC). This permanent body, to be convened in the near future, will oversee the implementation of the NBSAP along with all other environment related projects in the country. Terms of references have been drafted and an invitation sent to the Permanent Secretaries of the relevant ministries identifying preferred officers to sit on the committee. While the Permanent Secretaries have full discretion over whom to appoint to the PCC it was considered prudent to suggest the particular officer they believed would contribute most to the process and in some cases multiple officers were represented on the Committee.

Individual roles on the PCC are decided upon according to how the representatives' agencies are involved in environmental management and expected to participate in implementing parts of the NBSAP. Permanent Secretaries of the agencies would choose their representatives based on ability and how relevant their job description was to the areas of the NBSAP the agency is expected to implement.

The PCC is open to non-governmental stakeholders. The larger and more active NGOs that were invited to participate in both the SIRMM TAC and the PCC, which should be convened in the near future, have been invited to participate. However it was made clear that the intention was not to create a consultative stakeholder committee but to create a body that did the actual work of putting together the revised NBSAP. Therefore, agency representatives were asked to

⁴ Due to the small size of the population more often than not the same individuals are tapped to participate on multiple committees, which leads to fatigue and burnout.

conduct internal reviews and report to the TAC on what past, present and future activities/plans they had undertaken. It was found that in most cases their activities were consistent with the Aichi targets. In instances where activities were either inconsistent or nonexistent explanations were provided about difficulties meeting the targets and suggestions were made on either the assistance available or how the targets could be modified to better reflect national circumstances. The view was that this would be the most expedient method to achieve agreement among all agencies with an interest in either conserving or exploiting the country's biodiversity resources. It would facilitate decision making about what their respective roles in fulfilling this task should be as it provided a forum whereby:

- All stakeholders were able to voice their concerns and off their perspective on solutions;
- The ability to share ideas about the benefits of conservation;
- Take decisions through consensus quickly and in a transparent manner thus ensuring support publicly for final outcomes.

This arrangement would allow agencies the ability to carefully consider their internal capabilities so as to not overcommit themselves. However, during the time of the SIRMM TAC there was less than optimal attendance to meetings and it became apparent that the information was not being shared and decisions made at the TAC meetings were not being communicated within the representatives' agencies. This resulted in poor implementation and time wasted because of having to revisit prior decisions.

The PCC terms of reference provides the agencies with clearer guidelines on the skills and expertise it required, the level of work it expected from their representatives and most importantly it made clear that decisions on the biodiversity management targets the Committee sets will be binding on the country and consequently their respective government departments. It is hoped that this awareness of the goal and procedures of the PCC motivates the agencies to give more serious consideration to who they nominate to represent them on the Committee and to also actively monitor the actions of the PCC to ensure that they are confident they can achieve the final targets.

The terms of reference outline the duties and responsibilities of members of the PCC as being the following:

- To assist with recruitment of consultants
- Participate in developing terms of references
- Provide analysis of technical proposals
- Provide technical guidance to consultants and the technical says assigned to projects
- Review technical documents and reports
- Provide information and advice based on the work programmes of the representative agencies
- Participate in monitoring and evaluation of projects and activities
- Assist with project coordination including reviewing of project reports, organising training and workshop activities
- Participate in training, workshop consultations and public awareness

3. Communication, Public Awareness and Participation

As it was understood that effective participation by members of the TAC and the PCC required communicating clearly what was expected of them it was also understood that the same was needed when raising awareness on the NBSAP. To achieve this two distinctive strategies were used for communication and public awareness. For stakeholders who had particular interests in or responsibilities for biodiversity management on the island there were TAC meetings and wider stakeholder consultations. The Third Draft of the NBSAP, completed in 2014, makes the point that the document was developed in an entirely participatory fashion. It explains, "The course of completing the NBSAP began with consultations on the existing 2001 Draft NBSAP, a stocktaking exercise evaluating the current issues relating to biodiversity in country and those identified between 2001 and 2012 as well as a review of the 20 Aichi Targets and their relevance to Antigua and Barbuda. Three consultations were held for the latter and a final targets and indicators document was deliberated and agreed. Consultations were also held on the revised NBSAP both on an individual basis with experts and stakeholders as well as through a total of six other national consultations. All relevant ministries, governmental departments and agencies, non-governmental organizations, business and industry, professional societies, educational institutions, advisory councils and interested individuals were invited to participate in these consultations and to comment on the draft documents presented at each stage of the NBSAP development process. This final NBSAP was also circulated for consultation with inputs solicited from those who depend on the country's biodiversity for their livelihood e.g. farmers, livestock owners, fisher-folk, charcoal burners, herbalists, craft persons, tour operators, and others who are involved in the conversion of land from its natural state, like developers, real estate agents, surveyors and any other whose decisions and plans will greatly influence how land is used and habitats are preserved or degraded/destroyed. It is believed that this will ensure the participator process continues through the implementation stages of the NBSAP."⁵

The Environment Division's staff also facilitated training workshops to ensure proper dissemination of information to stakeholders on the importance of the CBD, NBSAP and the 5th National Report to the CBD. Participants for both the consultations and the training were recruited via invitation letters. The NBSAP Revision project was announced through written invitation letters to the Permanent Secretaries of the identified ministries. Invitations stipulated the agency's officers whom the Environment Division wished to sit on the PCC; citing the officer's current position, technical background and the work plan as reasons. However, the final say on who the representative would be would rest with the permanent secretary. Post meeting and consultation reports were circulated via email in an effort to get feedback and comments before decisions were finalized. Based on these comments the final biodiversity targets were set.

A very different methodology was employed for raising awareness amongst the public. In the

⁵ Environment Division, Ministry of agriculture, lands, Housing and the environment. National Biodiversity Strategy and Action Plan (NBSAP): Stocktaking Exercise pg. 18

opinion of the Division, years of public relations efforts in the form of media interviews, newspaper articles, websites and public consultations had not yielded enough public enthusiasm for the sustainable management of the country's biodiversity resources. This is attributed to one or two factors- the issues being discussed are presented very technically and therefore fail to capture and hold the public's attention and due to increased urbanisation there has been a growing detachment from issues relating to biodiversity management.

In 2013 the staff of the Environment Division prepared a more broad-based "Communication Strategy for Effective Environmental Management." The plan focused on promoting the importance of biodiversity, climate change and sustainable land management amongst the general population of Antigua and Barbuda from 2013-2018.

The Plan was designed to facilitate the flow of information to specific target audiences in a sustained way by providing the foundation for an ongoing educational program to be delivered via the Victoria Park Botanical Gardens based on targeted audiences. Educating all members of the public is critical when gathering support for implementing activities towards environmental conservation and sustainable development. To this end, the Environment Division has targeted the following groups:

- *Students of all ages* - the Division has engaged the participation of both primary and high school students through its Environmental Cadet Program in a wide range of environmental activities and will continue to do so.
- *Teachers & Educators* – Through the Cadet Program, teachers are guided to important principles of proper environmental management.
- *Persons with limited mobility*– The Plan highlights the enhancement of the Gardens to accommodate their entry and participation in observing environmental management issues
- *Professional adults*- the City of St. John's, which houses a large portion of the financial industry and business entities, is a large target audience. The goal is to bring awareness of best practices, new technologies to these professionals and provide information on the Conventions for good decision-making and strategic policy guidance; the Gardens will be available for workshops and meetings for a fee.
- *Visiting Tourists* – Antigua and Barbuda prides itself as a tourist destination and the Communication Plan endeavours to complement and enhance the national tourism product and highlights the value of our biodiversity and ecosystems to this market.
- *Other members of the public* – through the use of various mediums the three principles of environmental management will be disseminated.

The main strategy for the plan is to inform, sensitize and build support for the SIRMM outputs

that address the conservation of national biodiversity, climate change adaptation and mitigation and sustainable land management through the use of a coordinated set of communication initiatives. Pivotal to this strategy is the nurturing of a long-term relationship with key audiences in order to develop trust and gain credibility for environmental management leading to behavioural change among users and support for developments at the Botanical Gardens.

The national GEF projects and enabling activities has focused on, particularly through its demonstration projects, the need for developing and enhancing sustainable livelihoods. The Environment Division intends to publicize and host classes to demonstrate ways that individuals can provide for themselves and their families. The presentation of information during classes will be most conducive to encourage the participation of both parents and children. To assist with this endeavour, the Division intends to partner with faith based/ community based organizations to design and implement such activities for community residents.

Activities of the Communication Plan will concentrate on wide dissemination of information through a combination of media based communication channels, notably utilizing the following:

Educational Program: The Communication Plan will seek to increase awareness of all school children on the principles of environmental management. The Environment Division aims to capture at least 50% of all school children.

Awareness Raising: Improve and increase awareness on the key objectives and national outcomes as it relates to the Conventions of Biodiversity and Climate Change and Desertification.

Behaviour Change: Launch a massive public education campaign aimed at increasing the number of visitors to the Gardens and raise awareness to the Afterschool program.

Corporate Imaging: The Environment Division will be merged with the Forestry Unit and persons within the general public will be able to acknowledge the logo that identifies this new unit within the Botanical Gardens at all times and what it represents.

Networking and Promotions: Sensitize all relevant stakeholders about the project, and the preferred messages and formats for promoting the Gardens; Develop strategic relationships with organizations and individuals, who can support communication and exhibits.

Key Messages: Develop and deliver key messages to target audiences using the most cost-effective vehicles, paying close attention to the scheduling, placement and settings of messages.

Consistent Messaging: Ensure consistent communications, paying close attention to scripts written for dissemination and/or broadcast, incorporating key messages to targeted audiences to provide them with timely news and information about ongoing environmental projects.

Enhancement Of Project Visibility: Promote Enabling activities across Antigua and Barbuda by

heavily marketing the success of the Gardens and the availability of viewing new exhibits.

Strategic Positioning: Build strategic relationships with the top-level management at various ministries for effective advocacy through constant collaborations on environmental issues and activities requiring multisectoral management and monitor.

Media Outreach/Advocacy: Develop a sustained relationship with the media in Antigua and Barbuda, particularly the government information machinery of the GIS and ABS who are known to have a high interest in material for local programmes. These media operatives, along with other private media entities, will help maximize opportunities to reach the widest possible audience. Concurrently, the Division would be sure to provide opportunities for public participation and feedback.

School's Outreach: Currently, the Environment Division runs an Environmental Cadet Programme, which exists in twenty-six primary and secondary schools. It is an extra-curricular program that also encourages children to engage in activities that have a positive impact on the environment. This program will be greatly augmented by the launching of the Environment Division's After School Programme. The After School Programme will help to reinforce many of the issues previously learnt in the Environmental Cadet Programme. Further, it will give other students who have no such programme in their schools an opportunity to become environmentally aware and active.

The Environment Division will specially organise activities for teachers and students in order to attract interest in and garner support for the Gardens, and increase the number of visitors seeing exhibits.

Production And Distribution: Utilization of the Antigua and Barbuda Biodiversity Clearing House Mechanism to disseminate information.⁶

The use of the Victoria Park Botanical Gardens as an inspirational place of learning and recreation is central to this Pan. The six-acre botanical gardens was established in the 1800's on the outskirts of St. John's City. Its management plan explains that the intention is for it to become the communications hub of the Environment Division – “a new space on the outskirts of St. John's that is aesthetically pleasing and also a source of environmental education. Through its elaborate design, the Gardens will readily demonstrate the use of a variety of technologies for renewable energy and efficient lighting of the grounds as well as the offices. The thematic outlays of the Gardens will educate its visitors on not only the local biodiversity found within this country but also on the environmental projects implemented by the Environment Division. The Gardens will also be used to host afterschool programs and activities focus on the environment's conservation and development of artistic skills and creativity.”⁷

⁶ Hill, Arica, et al. Environment Division's Communication Strategy For Effective Environmental Management 2013 to 2018.

⁷ Environment Division, 2013. Victoria Park Botanical Gardens Management Plan 2013 to 2018

Although the strategy of engagement may have merit it is not clear how the decision to use this as the main vehicle to achieve public support and participation was made. That is, was there an assumption that the public will be receptive to this concept or was there an investigation into understanding where biodiversity management places on the list of the public's priorities and how they want to be engaged on this subject. During personal communications with the Environment Division staff it was revealed that public sentiment that the Division is anti-tourism development still exists; not because the Ministry of Tourism is not engaged in the process but as a result of weak but critical government institutions like the Development Control Authority, which has the mandate to administer the Physical Planning Act 2003. This Act has clear guidelines not only on the development approval process but also gives it the responsibility of preparing a development plan for the country. However, it neither had the funding nor expertise to carry out this essential function. Although the SIRMM project was able to facilitate the development of a National Land Use Zoning Plan it needs to be translated into local area plans and just as was done for the environmental impact assessment process the public needs to be educated about the law and the role each agency needs to play in sustainably managing the country's natural resources.

a. Stakeholder Identification

TAC/PCC

As mentioned before stakeholders identified during the SIRMM project were also very relevant to the NBSAP Revision process. Therefore the Environment Division decided to incorporate the activities of this project into the work programme of the SIRMM's TAC. There are a large number of institutions involved in environmental management including government ministries, statutory bodies, NGO's and community based organisations (CBOs). At the government level the control and development of land and the management of coastal resources is divided among a number of different agencies; not all of whom were identified as critical to the SIRMM process from the beginning. In fact the final membership of the TAC came out of a very organic process.

As SIRMM activities progressed during the five years of implementation the TAC became a place to discuss any environmental issue being experienced by the agency representatives who had no other platform to obtain widespread /national attention. In fact this began to account for approximately half of the work of the TAC. This was highlighted strongly during in the project's midterm evaluation and prompted the Environment Division, as the chair of the Committee, to open up the membership to a broader base of stakeholders. An example of this arose in the Body Ponds Watershed Demonstration Project - a subcomponent of the SIRMM with its own committee. The Antigua Public Utilities Authority⁸ was a member of the subcommittee but it was

⁸ The APUA manages the country's water resources including the dams and reservoirs in the Body Ponds Watershed.

soon realised that they were integral to other activities managed by the larger committee and were subsequently invited to join.

The key institutions, which formed the SIRMM's TAC and their involvement and responsibilities with respect to island resource management, are described below:

Ministry of Agriculture Lands, Marine Resources & Agro Industries -This Ministry has the broadest and oldest involvement with land and marine based natural resources. It is staffed with well-qualified professionals, but often lacks the support staff, basic equipment and supplies to do an effective job, and suffers also from weak legislation. The Fisheries and Forestry Division are the two principal government agencies charged with gathering most of the primary data on the biological resources of Antigua and Barbuda.

The Environment Division – This was initially set up within the Ministry of Tourism and Environment and was mandated to (i) identify and coordinate the implementation of national commitments to Multilateral Environmental Agreements, (ii) develop and implement a national environmental awareness program, (iii) establish projects related to the rehabilitation and protection of the environment, coordinate the development of environmental legislation; and (iv) coordinate the process of conducting EIAs for development projects. The Division was subsequently moved to the Ministry of Agriculture and recently (June 2014) was reassigned to the Ministry of Health.

The Fisheries Division - has responsibility for developing the fisheries sub-sector, monitoring fish stocks and marine resources, as well as a regulatory role in policing fishing practices. The Division is given powers under the Marine Areas Act (1972) to restrict fishing in certain areas and to preserve habitats, flora and fauna, natural beauty or shipwrecks in marine areas. These powers however, have not been exercised to any large extent due to inadequate resources. The Fisheries Division has been involved in a number of activities to address issues related to land degradation including:

- Monitoring and inventory of all mangrove forests to ensure continued growth and health;
- Efforts to declare areas as mangrove reserves;
- Monitoring of beach changes
- Working with the DCA on EIA's for coastal area development.

The overall long-term work program that will tackle issues related to land degradation aims to:

- Protect and manage mangrove forests on Antigua and Barbuda;
- Raise awareness of beach erosion.

The Forestry Division has responsibility for managing the country's forest and woodland areas and for reforestation. The Division has been restricted by the lack of adequate legislation to support its activities and is seriously under staffed and under budgeted. The primary instrument for management of the upper watersheds is the Forestry Ordinance (cap 99 1941), which provides for the establishment of forest reserves, the granting of permits for harvesting forest resources, and clearing. Apart from the prohibition of forest clearing on steep slopes, the

regulations of the Forest Law are almost completely ignored and exploitation for fuel, wood and charcoal on both government and private lands is virtually uncontrolled. However, the Forestry Division does not have the manpower to enforce these ordinances, even assuming that there was a supportive policy. In recent years, the Division has taken on activities more related to biodiversity conservation and to eco-tourism development, reflecting a more environmentally conscious thrust from the newly trained staff.

Ministry of Tourism and Civil Aviation - This Ministry has responsibility for Meteorology, V.C. Bird International Airport, Civil Aviation, St. John's Development Corporation, Tourism Corporation, Deep Bay Development, Beach Protection, Vendors, National Parks Authority, Antigua & Barbuda Hospitality, Training Institute, Heritage Sites, and Botanical Gardens.

The Environmental Awareness Group (EAG) – This NGO has consistently raised issues of sustainable natural resource management and has become involved in efforts to improve community management of coastal natural resources, providing training to stakeholders in practices that conserve reefs, off-shore island ecosystems and mangrove wetlands. EAG has also been active in improving education of teachers and students with respect to environmental matters including coastal issues.

The Gilbert Agricultural and Rural Development Centre (GARDC) - This NGO has conducted courses in agriculture and rural crafts that emphasize the need for sustainable practices and effects of polluting chemicals. GARDC has provided training in agro-forestry practices to farmers and agricultural extension officers (on the use of trees in livestock systems, hillside crop farming, and fire prone areas, using multipurpose trees for live fencing, fire/windbreaks and fodder production). GARDC established a number of farm projects that were more environmentally friendly (i.e. composting, use of green manure crops, cover crops, mulching, bio-pesticides, alley cropping). GARDC worked collaboratively with the Environment Division in a national tree-planting project and with the Forestry Unit in a watershed protection project, to establish buffer strips around a major water reservoir (Potworks Dam).⁹

b. Public Awareness and Stakeholder Mapping

In addition to identifying Government and NGO stakeholders it is was important to engage members of the communities in the NBSAP review process as well. To identify influential groups and individuals the Environment Division implemented a stakeholder mapping analysis exercise. Using their knowledge and experience they started by developing a list of individuals from various communities around Antigua and Barbuda. The next step was to undergo a baseline data collection process, which identified a few additional persons but more importantly sought to identify the stages of involvement the communities were at – very involved in community resources management activities to only receiving information about the government's plans and

⁹ Government of Antigua and Barbuda and United Nations Development Program. Demonstrating the Development and Implementation of a Sustainable Island Resource Management Mechanism In a Small Island Developing State. PIMS 1899 Atlas Project ID: 00053747. Pg. 22

programmes. Targeted outreach activities were developed and implemented accordingly but the Division soon realised they actually had been operating in this fashion all along but without formally documenting the process. In reality no new modality had been introduced. Unfortunately there is not enough staff or resources to enable them to spend the amount of time needed inside individual communities building relationships one individual at a time but this is the method found to yield the most results.

c. Stakeholder Engagement

After identifying the relevant stakeholders the Environment Division employed many avenues to involve them in decision-making. However these stakeholders for the most part fell into the two broad categories discussed throughout this monograph. It is important to note that in Antigua & Barbuda only government agencies have the legal authority to manage the country's biodiversity therefore, implementing the national targets relied heavily upon government activities. The only exception to this situation is the EAG's Offshore Island Conservation Programme¹⁰. Hence, communities were mostly relied on for identifying issues on the ground.

The government agencies expected to carry out biodiversity management activities were represented through their memberships on the TAC, which had a series of technical meetings held on a monthly basis with follow-up emails to finalise discussions and decisions. The quantity of participation of the stakeholders on the TAC was discussed earlier but it is important to note here that there were also internal issues within these agencies, which contributed to their less than ideal participation. For instance, the Central Board of Health, a government agency, could not physically attend meetings but found a way to participate via email submissions; GARDC did not have a member of staff available to attend meetings or contribute to the project. The EAG, due to its structure, mostly depends upon volunteers and in this case could not find an individual with the level of interest needed for the organisation's effective participation.

In the case of communities public engagement largely took place within the context of the SIRMM Demonstration projects. The Body Ponds Watershed (BPW)¹¹ Demonstration Project was one where consultations took place in the surrounding communities of Swetes, Buckleys

¹⁰ The EAG's Offshore Islands Conservation Programme works to conserve indigenous and globally significant populations of flora and fauna of the offshore islands of Antigua and Barbuda and to promote the sustainable use of resources found there. These islands encompassing over 30 square miles of coastal and marine resources that provide a refuge for rare and globally important wildlife and habitats.

¹¹ The Body Ponds Watershed is the largest on Antigua. The area suffers from the indiscriminate burning of invasive Lemon grass (*Cymbopogon citratus*) a practice which leaves vast areas of land exposed and susceptible to soil erosion. Added to this fact that the soil has been made almost impermeable and the constant burning has created an environment favorable for the grass but detrimental to forest tree species. This along with the many other unsustainable land practices within the area (uncontrolled grazing, illegal logging, use of agro-chemicals etc.) has left an ever-increasing ecological footprint.

and Bendals. At these consultations individuals who could be used as point persons for liaising with the wider community would be identified. Additionally field workers who were at the demonstration site from day today would interact with community members who would visit the site to see what they were doing and give their feedback. Farmers and livestock owners also became active in the project to the point where one farmer volunteered his time and expertise to the design of dams in the area being rehabilitated by the Environment Division and APUA. There was also a lot of interest from persons outside of the target communities as the BPW was seen as a national asset. Influential persons such as the Governor General and officers within the Tourism Department would offer their assistance.

These and other examples demonstrate that the public has become more aware of the value of the country's natural resources and hence more involved in making sure that sustainable management practices are implemented. For example, in response to a proposed hotel development on Barbuda that could potentially threaten the integrity of the Codrington Lagoon National Park¹² and the close by Frigate Bird Sanctuary public pressure ensured that an environmental impact assessment was carried out on the proposed site; an unheard of scenario ten years ago.

4. Integration of Societal Actors Inputs and Mainstreaming

a. Management of societal actors' input

As shown earlier the SIRMM TAC (and the to be convened PCC) worked on the basis of meetings and consultations to garner stakeholder inputs into the revised NBSAP. It also had some difficulties with obtaining meaningful inputs from its members. This did become an issue that needed a solution because of the importance of setting achievable targets, not just from a political standpoint but from a resource and technical point of view as well. The effectiveness of the NBSAP depended upon it being integrated into the relevant agencies' work plans. Hence, they needed to be open, transparent and communicative within the TAC and their respective Ministries. This was not always the easiest to achieve resulting in time lags and uncertainty as to the legitimacy of the decisions that were taken. As a solution to this issue a procedural policy was instituted whereby decisions were taken on a "lack of objection basis". This meant that no response was treated as consent and placed the responsibility on the committee member for ensuring that issues with decisions were timely raised. Most often this was done through several rounds of emails before all members approved the final decision.

At TAC meetings representatives would review each target and indicator and provide feedback along the lines of:

- "Our agency's programme is contributing to this target through these set of activities"; or

¹² The Codrington Lagoon National Park (CLNP) was established in March 2005 and in June 2006 it was added to the List of Wetlands of International Importance under the Ramsar Convention.

- "We cannot meet this target because of these specified reasons".¹³

This exercise assisted with helping the Environment Division map its biodiversity activities and get a better picture of the status of biodiversity management in the country and what progress had been made. Where in the past they might have reported no progress in an area they could now draw from the work of other agencies. EAG's OICP project is one such example as it allowed the government the opportunity to record its Floating Classroom¹⁴ activities as meeting the target of raising public awareness.

There were also instances when the responsible agency was unable to meet the stated Aichi target. An example of this was when the Extension Division, within the Ministry of Agriculture, wanted to construct better access roads for farmers so they could use improved technology to plough their farms. This would have contributed towards meeting the target of better agricultural practices however the Extension Division could not raise the funds required to conduct these repairs. This demonstrates how vulnerable agencies are to factors outside their control. As a response to this at the beginning of meetings agencies would be cautioned that when they present ideas or suggestions they should identify the corresponding work programme it fits into at the same time. In reality no new work programmes could be introduced because of the lack of financing; in fact they were experiencing cuts due to budget constraints. This acted as an impediment to new proposals or ideas because of the knowledge that corresponding monies had to be sourced, which was not an easy task. This strategy is in direct contrast to how the 2001 NBSAP was developed as many of those targets were developed at that time were without identified resources. This revision took a very practical approach - unless there was a work programme or agency mandated to address the target it was not included or it was amended to suit the agency's capacity.

In order to fill this funding deficiency the Environment Division a funding mechanism called the SIRF (Sustainable Island Resource Fund). It will be established as a self-sustaining non-profit entity that once enacted (through the Environment Management Bill by December 2014) will earn revenue and attract funding to care for the protected areas and reduce fossil fuel consumption in Antigua and Barbuda. The SIRF will be established to own assets from which it will generate an income. In the first instance these assets will be wind turbines, solar panels, sewage treatment systems and a system to recycle waste oil. The services of sewage treatment, electricity and water generation will be purchased by APUA, or directly by specifically targeted consumers. The "profits" generated will be used for environmental management in general within which the

¹³ Personal communication with Environment Division staff.

¹⁴ The Floating Classroom programme is an educational component to the EAG's Offshore Island Conservation Project. It takes students and teachers on boat tours through critical mangrove and coral reef habitats within the North East Marine Management Area.

NBSAP will be included.

The path for the public to have their say in the biodiversity targets was not as straight forward but in general comments, suggestions, requests, et cetera were noted at national public consultations. The public¹⁵ was also informed that they could continue to make submissions via email after the meetings if they were not satisfied that all of their issues were addressed or they were not able to attend. The TAC would then consider these submissions but found that more often than not the suggestions were not implementable because of limited resources and the government's complex institutional structure.

b. Mainstreaming

The integration of the NBSAP targets into departmental work programmes was integral to mainstreaming biodiversity management policies. A different approach from the 2001 process was taken. Stakeholders were asked for information of the activities there were presently implementing. It was found that many of their activities were in accordance with the Aichi targets. Therefore, in this aspect they were confident that targets would be met. However, there is uncertainty as to the sustainability of these activities as they are most often funded by projects that have definitive timeframes. Once the project concluded there would be no more funding to continue. Hence, biodiversity resource management still has not made it onto the list of policy priorities in order to ensure assess to recurrent expenditure within the national budget. This signifies that more needs to be done to engage policy makers. It is hoped that with increased public education and support they will assist with bringing pressure to bear upon the policy makers but the actual steps needed to achieve this are not apparent.

An example of how the NBSAP review process tried to align itself with other sectorial policy processes can be taken from the new issue of Access and Benefit Sharing (ABS). This is a recent indicator where there is no responsible agency. However, there are agencies with experience in various aspects of ABS; with researchers entering the country to take samples for example. The Environment Division sought assistance from the Plant Protection Unit who already had a semi system in place. They tried to adapt this system to meet the ABS requirement. An agreement between the two agencies was sent to the Attorney General's (AG) office for approval. However, the AG was not aware that such an agreement was needed and there was some confusion as whether or not the Environment Division had the authority to give permission to researchers for collecting samples. They had to demonstrate that the country was signatory to international agreements which required them to follow stipulated guidelines.

As the Environment Division has no legal authority to compel another agency to execute its functions or mandate they must rely on individual agencies to set their targets and work programmes. The most the Division can do is say "here is the target and this is what we

¹⁵ Stakeholders representing government agencies, NGOs, CSOs, community groups, business community and individual citizens, attended public consultations.

recommend."¹⁶ Many of the targets were changed as a result of this approach. Table 1 below provides samples of the final national targets as compared to the Aichi targets to demonstrate this point.

Table 1. Antigua and Barbuda Strategic Goals and National Targets¹⁷

Strategic Goal	Aichi Targets	National Targets
A: Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society	Target 2: By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate and reporting systems.	Target 2: By 2020, biodiversity values have been integrated in national physical development plans and local area plans and the millennium development initiatives for Antigua and Barbuda
B: Reduce the direct pressures on Biodiversity and promote sustainable use	Target 5: By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced	Target 5: By 2020 we have implemented an effective monitoring protocol for habitats, including forests to assist in reducing degradation and fragmentation
	Target 7: By 2020 areas under agriculture, aquaculture and forestry are managed sustainably ensuring conservation of biodiversity	Target 7: By 2020 The capacity of governmental natural resources management institutions as well as non-governmental organizations, to support the objectives and

¹⁶ Personal communication with Environment Division staff.

¹⁷ Banhan, Melesha, 2014. Antigua and Barbuda National Biodiversity Strategy And Action Plan 2014 to 2020. Government of Antigua and Barbuda. Pgs. 51-53.

		achieve the overall aim of the NBSAP is strengthened
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5. Conclusion

This review revealed significant contrasts in the processes and procedures used to develop the 2013 NBSAP when compared to the 2001 version. Over the past 12 years inroads have been made into how both in the public sector and civil society view biodiversity and their attitudes towards its conservation and management. Over time there has been continuous changes and adjustments to the approaches used to engage stakeholders and better understand the circumstances that have shaped their individual viewpoints in order to develop a set of national biodiversity conservation targets.

In conclusion this review demonstrates the need for differential approaches depending on the desired outcomes. One such approach was directing engagement strategies at stakeholders actively involved in biodiversity conservation and management. These required approaches that you would encourage and allow active and meaningful participation in developing the national biodiversity targets. The foundation of this approach was practicality. The Environment Division made sure resources were identified for each target before it was finalised, for example. It also deliberately limited its involvement in the revision process to that of facilitator because it understood that it lacked the legal authority to implement most of the targets and more importantly it needs stakeholder buy-in to ensure that targets are actually achieved through ongoing activities across the government and private sector. Without widespread buy-in the Revised NBSAP will be little more than just another lifeless document.

Another approach the Environmental Division employed had to do with how it interacted with communities and the general public. It understood very early on that it needed innovative strategies to capture their imaginations; especially due to the fact that there are very few societal actors with legal authority to participate in biodiversity conservation and management in Antigua & Barbuda. One such strategy is their plan to renovate the Victoria Park Botanical Gardens, which will act as a tangible interface between the public and issues surrounding biodiversity. In doing this the Division is seeking to empower the community to advocate for better regulations and enforcement.

The review also showed the areas where more work is required. For this more resources are badly needed – financial, human and technical. This situation in some cases has led to the dilution of the Aichi targets and there is uncertainty as to whether or not they will ultimately achieve the goal of arresting biodiversity loss within the country. Limited resources also hinder the type of personal interactions between government agencies and communities needed to secure dedication to the cause. To this end the Environment Division is in the process of

establishing the Sustainable Island Resource Fund, a financing mechanism, which should produce use a steady stream of revenue to fund these and other much-needed natural resource management programmes.

It was clear that the Environment Division has a wealth of knowledge and experience in engaging its stakeholders and itself often engages in self-critique and evaluation. However, it would be considerably more valuable if they were to systematically track and record the successes and failures of their engagement activities over the next 6 years. The lessons learned could have great value for how other programmes are established, managed and more importantly could have great implications for future programmes.

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ANNEXES

Annex 1. Environmental Laws¹⁸

No.	Legislation	Year of Enactment	Issues addressed
1	Botanical Gardens Act	1900	Botanical Gardens
2	Dumping at Sea Act	1975	Marine Environment
3	Environmental Protection Levy Act	2002	Pollution
4	Fisheries Act	2006	Fisheries Management
5	Fisheries Regulations	2013	Fisheries Management
6	Forestry Act	1941	Forest Management
7	Fumigation of Plants Act	1905	Plant Importation Management/Invasive Species
8	Importation of Life Fish Act	1975	Fisheries Management/Invasive Species
9	Marine Areas (Enhancement and Preservation) Act	1972	Marine Environment
10	Maritime Areas Act	1982	Marine environment

¹⁸ Environment Division, Ministry of agriculture, lands, Housing and the Environment. National Biodiversity Strategy and Action Plan (NBSAP): Stocktaking Exercise. Pg. 49

No.	Legislation	Year of Enactment	Issues addressed
11	National Parks Act	1984	National Parks
12	National Parks Amendment Act	2004	National Parks
13	Oil Pollution of Marine Areas Act	1995	Marine Pollution
14	Turtle Act	1927	Species Protection
15	Wild Bird Protection Act	1913	Species Protection

Annex 2. Revised NBSAP Consultations

Date of Consultation	Participants
April 25 th 2013	Agriculture Extension Division (AED) Lands Division Environment Division (ED) National Office of Disaster Services (NODS) Environment Awareness Group (EAG) Fisheries Division Gilberts Agricultural and Rural Development Center (GARDC) Codrington Lagoon National Park (CLNP) Development & Control Authority (DCA) Department of Agriculture (DOA)
May 3 rd 2013	GEF Small Grants Programme (SGP) NODS ED Barbuda Council CLNP
June 20 th 2013	Fisheries Division ED CLNP GEF/SGP DCA Barbuda Council NODS EAG Ministry of Tourism

	DOA
September 26 th 2013	ED CLNP Barbuda Council GARDC EAG GEF/SGP
November 21 st 2013	Fisheries Division NODS Barbuda Council EAG DCA ED GEF SGP Development Planning Unit, Ministry of Finance
January 23 rd 2014	ED Statistics Division CLNP Barbuda Council Ministry of Tourism GARDC GEF/SGP DCA Plant Protection Unit National Parks Authority Fisheries Division