

Climate-Resilient Eastern Caribbean Marine Managed Areas Network (ECMMAN) Project

Project Accomplishments 2013-2017

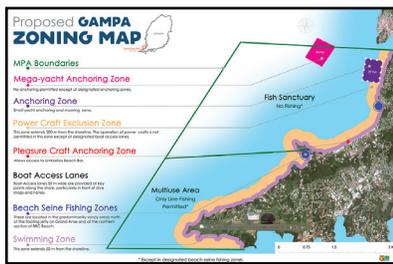
The Climate-Resilient Eastern Caribbean Marine Managed Areas Network (ECMMAN) project laid a foundation that will continue to improve the way Eastern Caribbean countries manage the marine and coastal resources that define their islands and sustain their economies. ECMMAN provided communities and government agencies in St. Kitts and Nevis, Antigua and Barbuda, Dominica, Saint Lucia, St. Vincent and the Grenadines, and Grenada with the funding, training and tools necessary to create a more sustainable future for these vital resources and the people who rely on them.

GOAL To establish a regional network of marine management areas (MMAs) that more than doubles the area of effectively managed MMAs and provides for improved livelihood opportunities.

Strengthened and Declared New Marine Managed Areas (MMAs)

MMAs Added to the Eastern Caribbean Network

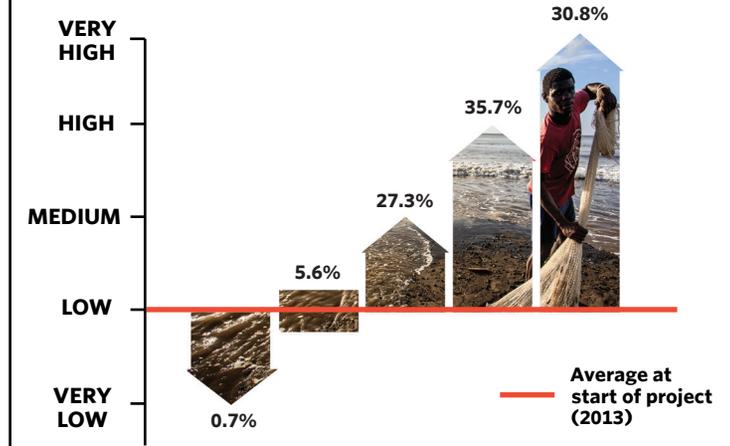
Two MMAs were established and the foundation was laid for the completion of a marine spatial plan. These achievements expand the total coverage of effectively conserved coastal and near-shore marine environment (up to the 20m depth contour) to: St. Kitts and Nevis (51%); Antigua and Barbuda (8.85%); Dominica (1.93%); Saint Lucia (6.43%); St. Vincent and the Grenadines (4.10%); and Grenada (1.01%).



Grand Anse Marine Protected Area (Grenada, 2017)

- Grenada's largest MPA (~1,965 ha (19.7 km²))
- Situated along most developed and highest density transportation and tourism area
- 6 management zones (mega-yacht anchoring, anchoring, power craft exclusion, pleasure craft anchoring, traditional beach seine fishing, and swimming)

Support for MMAs among Coastal Communities at close of project (2017)



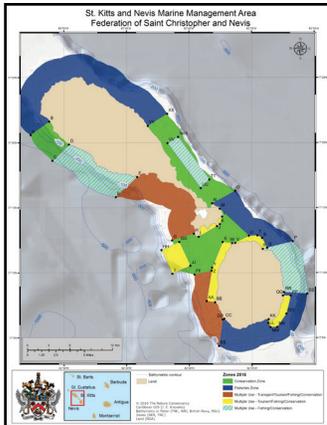
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Strengthened and Declared New Marine Managed Areas (MMAs)



St. Kitts & Nevis Marine Management Area (2016)

- Country's first MMA
- 2-mile radius around the twin island
- Includes 51% of the nation's nearshore and coastal areas
- 5 management zones (Conservation; Fisheries, Multiple use: transport/tourism/fishing/conservation; Multiple use: tourism/fishing/conservation; and Multiple use - fishing/conservation)



St. Vincent and the Grenadines

- Laid the foundation for the completion of a marine spatial plan (MSP) for St. Vincent and the Grenadines
- The MSP encompasses the entire Exclusive Economic Zone (EEZ) of mainland St. Vincent
- Builds upon MSP work done previously in the Grenadines

MMAs Strengthened

In collaboration with the Regional Activity Centre for Specially Protected Areas and Wildlife (SPAW-RAC), acting through the Caribbean Marine Protected Area Managers (CaMPAM) Network, small grants and technical expertise was provided to local partners (collaborations of governmental and non-governmental organizations) in targeted MMAs in the 6 countries. These initiatives allowed MMA stakeholders to become more knowledgeable, confident and better equipped to deal with the responsibilities and challenges of managing their coastal areas. Activities achieved through the grant funding significantly increased their ability to:

- **Assess the condition of natural resources**
- **Assess the socio-economic status of persons who depend on marine resources**
- **Implement activities to protect critical ecosystems**
- **Improve the livelihoods of coastal communities**
- **Expand outreach and create awareness of the importance of MMAs, and marine and coastal resource management**
- **Implement strategies to reduce conflict between resource users**
- **Train MMA stakeholders**
- **Advance national and regional conservation commitments**



TCMP Ranger. ©Lucienne Cross/TNC

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ACTIVITIES TO STRENGTHEN MMAS

ST. KITTS - NEVIS St. Kitts and Nevis Marine Management Area (SKNMMMA)

- Hired MMA staff
- Installed navigational buoys
- Implemented awareness activities targeting students
- Improved waste disposal
- Developed fishing priority area management plan
- Improved compliance with rules for marine areas
- Provided safety equipment for fishers
- Provided equipment to increase compliance
- Supported training for MMA staff and stakeholders, including MMA training of trainers
- Constructed climate-smart fisher village in Nevis

ANTIGUA- BARBUDA North East Marine Management Area (NEMMA)

- Improved stakeholder management capacity
- Constructed and established management office
- Installed and maintained navigational buoys
- Trained staff in data collection via drones
- Trained MMA staff and stakeholders, including MMA training of trainers
- Hosted mangrove monitoring and assessment training workshop and collected baseline data
- Produced NEMMA short documentary
- Reviewed and updated NEMMA educational resources
- Completed floating classroom with over 350 students

DOMINICA Cabrits National Park - Marine Section

- Established management organization operational documents
- Constructed management office and provided office equipment
- Provided safety equipment
- Hired MMA staff
- Purchased MMA patrol boat
- Provided biodegradable fish traps
- Taught net mending according to conservation standards
- Produced TV/radio programs
- Installed Fish Aggregating Devices (FADs) to reduce inshore fishing pressure
- Installed cruise and dive moorings
- Completed slipway for fishers to haul up boats
- Created awareness billboards
- Supported training for MMA staff and stakeholders, including MMA training of trainers
- Supported dive master training

SAINT LUCIA Point Sables Environmental Protection Area (PSEPA)

- Hired MMA staff
- Hosted training in enforcement for park rangers
- Developed and implemented a biophysical monitoring plan, including assessments and mapping of priority resources
- Developed sustainable financing plan and implemented 1 sustainable financing option
- Completed public awareness activities, purchased and distributed PSEPA branded items
- Completed beach clean-ups
- Provided conservation booklets for children
- Provided GPS equipment and training in turtle monitoring
- Provided mentorship in ecotourism marketing and created online marketing tools
- Designed and installed interpretation signs
- Trained MMA staff and stakeholders, including MMA training of trainers
- Completed restoration activities in Mankote mangroves including data collection activities, stocking of nursery with 4,000 plants, and planting into die-off area

ST VINCENT-GRENADINES Tobago Cays Marine Park

- Provided office equipment
- Hired MMA staff
- Purchased water quality equipment and supplies
- Completed water quality monitoring training and assessments
- Conducted bio-physical assessments
- Completed monitoring activities of priority TCMP resources, including queen conch and turtles
- Designed and installed waste disposal units and signage
- Installed composting toilet system
- Trained MMA staff and stakeholders, including MMA training of trainers
- Developed strategic compliance, surveillance, training and enforcement plan for SCMCA and TCMP, including training of rangers in enforcement strategies
- Supported emergency response training for TCMP rangers
- Supported scuba diving training for TCMP rangers
- Purchased patrol boat for SCMPMA
- Supported annual meetings of Grenadines Network of MPAs
- Supported designation of TCMP as a SPAW Protocol Site

GRENADA Moliniere-Beausjour, Woburn Clarks Court Bay and Grand Anse MPAs

- Hired MMA staff
- Expanded reef guardian program and educational summer camps
- Expanded junior rangers program (24 students)
- Developed MPA website and media campaign, including procurement of promotional materials
- Purchased enforcement materials, equipment and ranger uniforms
- Hosted awareness and outreach activities in communities and schools adjacent to MMAs, including lion fish eradication campaign
- Trained MMA staff and stakeholders, including MMA training of trainers, data collection, enforcement and safety at sea procedures
- Purchased equipment to complete monitoring and culling of lionfish
- Purchased patrol boat for GAMPA
- Outfitted existing MPA boat with equipment necessary to conduct night patrols
- Installed and maintained berthing station for MPA boats
- Designed and installed educational signs

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Built Strong Constituencies for Sustainable Livelihoods and Ocean Use

Sustainable Livelihood Businesses Launched

19 successful project proposals were developed and implemented with a total of 23 beneficiaries, while another 2 other applicants received assistance in capacity building to assist them with project development.

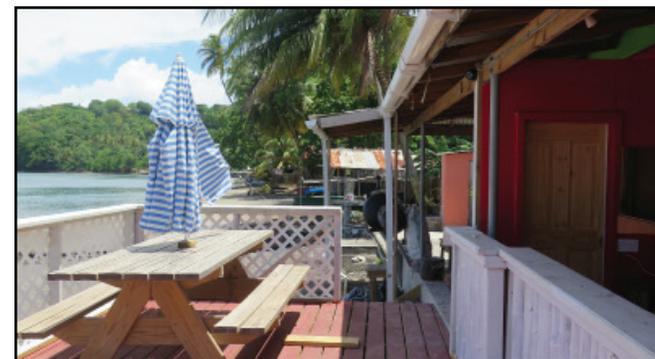
Innovative entrepreneurs received seed funding and mentorship from the Organisation of Eastern Caribbean States (OECS) Commission in order to start or improve small, sustainable businesses associated with the sustainable utilization of marine and coastal resources. These projects created jobs and demonstrate that MMAs can be both ecologically and economically profitable for coastal and fishing communities.



Princess Margaret School chicken business in Antigua. © Lucienne Cross/TNC



A sustainable mangrove charcoal business is part of EcoSouth Tours in Saint Lucia. © Tim Calver



Toucarie Beachfront Development Committee expanded their beach restaurant under the project ©Lucienne Cross/TNC

SUSTAINABLE LIVELIHOOD PROJECTS

ST. KITTS AND NEVIS

Enhance the Livelihood of Fishers & Dive Operators, & Creation of New Livelihood by Installation and Maintenance of Dive Moorings in The Narrows (Scuba Safaris Ltd.)

- Trained and certified 4 fishers to install and maintain dive moorings as an alternative job
- Installed moorings at 6 dive sites, with an aim to reduce sea floor damage by removing the need to anchor dive boats

Enhancing the Enterprise Capacity of the Nevis Fishers Associations to Contribute to Sustainable Fisheries in the Narrows (Nevis Fishermen's Marketing & Supply Cooperative)

- Required certification training in sustainable fishing practices and the new fisheries regulations in order to access fish pot wire at a reduced cost

Lionfish as a Commercially Viable Fishing Alternative to Traditional Fish Species within the Narrows Marine Area (Dameon A. Jacobs)

- Purchased boat and equipment to launch micro-business that harvests lion fish and supplies the Department of Marine Resources with lionfish biological data

ANTIGUA AND BARBUDA

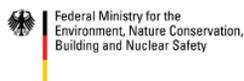
Climate Smart Sustainable Livelihoods Generation within the North-East Marine Managed Area (NEMMA) (Aquaculture, Aquaponics, Agroecology Society of Antigua and Barbuda and the Princess Margaret School)

- Educated groups about sustainable composting and sustainable agriculture
- Constructed chicken processing facility and increased meat and egg production at student training facility

Establishment of a Peace Park in Freetown (Freetown Community Group)

- Developed Peace Park hub to increase community- and culture-based tourism

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SUSTAINABLE LIVELIHOOD PROJECTS (Continued)

DOMINICA

Enhancing Business Capacity of St. John's Fisherfolk Co-operative (SJFC) through Establishment & Operation of Tackle Shop & Improving fuel pump facility (SJFC)

- Outfitted a tackle shop and fuel pump area to service fishers

Establishment of Outboard Marine Engine Repair Centre (Centre Where Adolescent Learn to Love and Serve (CALLS))

- Constructed boat engine repair center, which provides skills-based jobs for youth and supports fishers who previously traveled many miles for engine repairs

Portsmouth Association of Yacht Services (PAYS) Enhancement Project (PAYS)

- Purchased outboard motor and safety equipment to improve services to an increasing number of visiting yachts
- Installed dive and cruise mooring buoys to reduce anchor damage to the sea floor

Upgrade and Expansion of Toucarie Beachfront Development Committee Operations (Toucarie Beachfront Development Committee)

- Improved restaurant building and increased days of operation
- Supported local fishers to supply the restaurant with higher quality seafood

Tantan Village Development Corporation (TVDC) Water Sports Services (TVCD)

- Received equipment to restore livelihood activities after the passage of Hurricane Maria in September 2017

SAINT LUCIA

Improving the Capacity of Eco-South Tours to Promote and Support the Expansion of Community-Based Eco-Tourism in the Point Sables Environmental Protection Area (PSEPA) (EcoSouth Tours)

- Managed tours (bicycling, horseback riding, turtle watching and Kayaking) in the Mankote Mangrove (collaborative effort between five community groups)
- Provided services to improve the quality of the catch of fishers in Savannes Bay

ST VINCENT- GRENADINES

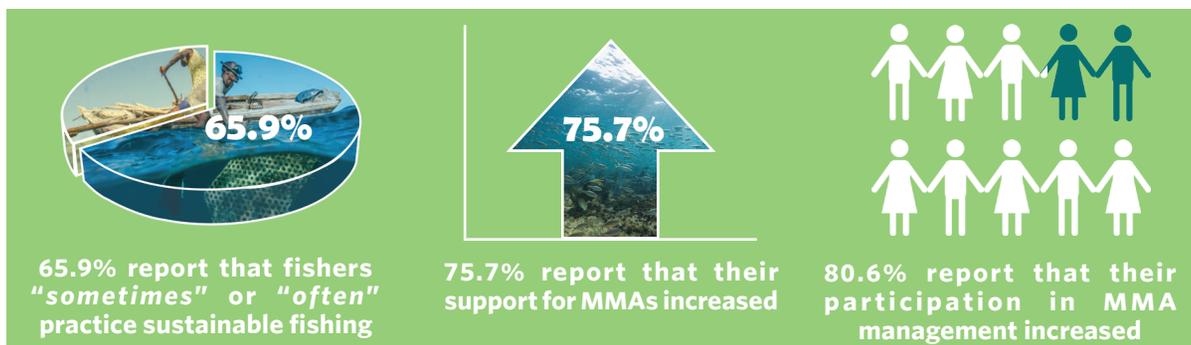
Developing the Capacity of National Fisherfolk Co-Operative Limited to Promote Sustainable Fisheries, Improving the Capacities of Fisherfolks and Reducing the Numbers of an Invasive Species in St Vincent and the Grenadines (Serenity Dive, Dive St. Vincent, the Calliaqua Fishers Cooperative, National Fisherfolk Organisation)

- Helped with lionfish eradication efforts in the SCMCA through harvesting and creation of a secure market for the processed fish

GRENADA

Alternative Livelihood Micro-Enterprise Development for Displaced fishers within the Molinere Beausejour Marine Protected Area (MBMPA) (Grenada Fund for Conservation, Sea Tonic Water Taxi services, K&J Snorkel Tours)

- Provided boats, insurance, equipment and training to two microbusinesses that provide displaced fishers with a new livelihood within a no-catch MMA. Their businesses capitalize on their proximity to the world-renowned underwater sculpture park.



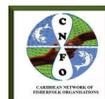
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Built Strong Constituencies for Sustainable Livelihoods and Ocean Use

Fisherfolk Leaders Connected and Trained to Develop a More Sustainable Industry

By strengthening the administrative capacity of the Caribbean Network of Fisherfolk Organisations (CNFO), the ECMMAN project helped build a regional network of fisherfolk leaders and organizations. With improved communication between regional fishers and access to intensive mentorship and training, Caribbean fisherfolk are redefining their industry as both sustainable and business-savvy.



Training

Hosted 11 capacity building workshops for fishermen, which resulted in 146 fishers trained from organizations on all six islands.

Workshop Topics

- MMA Co-management
- Local Laws & Regulations
- Small-Scale Fisheries Guidelines
- Disaster Preparedness
- Fishing Gear & Bycatch Reduction
- Small Business Management
- Project Management
- Record Keeping
- Grant Proposal Writing
- Report Writing
- Marketing
- Leadership
- Conflict Resolution
- E-communications 101
- Public relations
- Public Speaking Fundamentals
- ICT in Fisheries



Communication

The CNFO improved communication channels, including developing a quarterly newsletter and creating online support groups for guidance, mentoring, and even hurricane relief.



Fishers hold a meeting on the beach in St. Vincent and the Grenadines. © Lucienne Cross/TNC

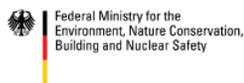


Knowledge-Sharing

Fisher Exchange trips brought fishers from the ECMMAN countries to visit successful MMAs and learn firsthand about the opportunities and challenges that fishers experience within these sites. The fishers returned to their countries inspired to encourage their peers to organize and advocate for improved local MMAs.

- **St. Vincent and the Grenadines Exchange (2015)**
 - Tobago Cays Marine Park
 - 18 participants
- **Belize Exchange (2016)**
 - Hol Chan Marine Reserve, Port Honduras Marine Reserve, Bacalar Chico National Park and Marine Reserve, Caye Caulker
 - 13 participants

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Built Strong Constituencies for Sustainable Livelihoods and Ocean Use

Building a Regional Movement for Marine Conservation

The ECMMAN project launched “This is Who We Are,” a regional awareness campaign competition. Seed funding, communications training and friendly rivalry fueled multi-sector campaign teams on each island to produce excellent awareness activities that reached thousands of people. At the end of the competition, following an award ceremony to recognize achievements and share lessons learned, the six islands joined together to continue the campaign as a united brand. “This is Who We Are” represents the interconnectedness between Caribbean cultures, economies and the health of marine resources.

The campaign teams produced regionally-acclaimed campaign songs and music videos, including St. Vincent and the Grenadine’s popular video, which won an international Indiefest Award. The project also received media attention, including [press releases](#) and a spread in Liat Airline’s [in-flight magazine](#).

Sample Campaign Activities

- [Music Videos](#)
- School Visits
- [Murals](#)
- [Beach Clean Ups](#)
- Community Meetings
- Movie Nights
- Lionfish Tasting
- Art and Photo Competition
- [Beauty Contests](#)
- [Shout Out Videos](#)
- Exhibitions
- [Dancing Presentations](#)
- Family Fun Day
- Comic Strips
- [Animated PSAs](#)
- Radio talk shows
- Awareness Quiz Challenges
- Garbage Bin Painting



Improved Tools that Help Natural Resource Managers Make Smarter Decisions



Training

- 13 MMA managers participated in a Training of Trainers for MPA Management course to strengthen their abilities in biophysical monitoring, recreational activities, tourism, sustainable livelihoods, revenue collection, enforcement, raising awareness, daily operations
- 35 people trained in The Global Socioeconomic Monitoring Initiative for Coastal Management (SocMon)
- 33 people trained in Atlantic and Gulf Rapid Reef Assessment (AGRRA)
- 1 AGRRA and 1 SocMon monitoring team established in each country. Teams will continue the surveys after ECMMAN is completed.
- 60 persons were trained in the ECMMAN countries on the use of the CaribNode. Survey results showed that 90% of the persons trained have been using it in some capacity and report that it meets their needs for data and information.



Data

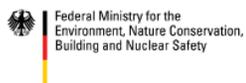
- Drones were used to map the aerial extent of 8 priority mangrove areas in Saint Lucia
- Drop cameras & satellite imagery were used to map the sea floor (benthic) habitats up to the 30-meter depth contour throughout all 6 countries.
 - Over [1,400 videos](#) now available to data and resource managers to better understand their marine ecosystems
- Completion of nearshore and coastal habitat maps up to the 30m depth contour, which highlight 7 habitat classes



Tools

- [Caribnode.org](#) - collects and combines marine and nearshore ecosystem data and produces interactive maps. This transforms the availability of data for managers with limited funding to collect data.
- Six first-of-its-kind [Coral Reef Report Cards](#) that assess the health of coral reef, mangrove and seagrass ecosystems at a national and localized level. They provide decision makers with key indicators to guide policy and management decisions and include recommendations on priority areas for monitoring
 - A [video](#) was produced to guide people through the Report Cards

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Established Sustainable Strategies for Lasting Project Impact

Sustainable finance systems have been established to ensure that islands can continue to fund ongoing conservation efforts long after the close of the ECMMAN project

- ECMMAN supported the establishment of National Conservation Trust Funds in Antigua and Barbuda, St. Kitts and Nevis, St. Vincent and the Grenadines, Saint Lucia and Grenada. The Trust Funds will develop local revenue streams as well as access regional endowment funds and funnel money to local organizations through small grants.
- US \$42 million is now available in the [Caribbean Biodiversity Fund](#), which is an endowment fund that matches locally raised conservation funding, effectively doubling the available resources.
- Potential Debt for Nature Swaps in Saint Lucia and Grenada have the possibility of generating more than US\$500,000 annually for conservation actions.



Fishing village of Gouyave, Grenada. © Marjo Aho

In collaboration with an extensive network of partners, the ECMMAN project significantly changed the ability of small islands in the Eastern Caribbean to manage their marine and coastal resources more responsibly. The network built a foundation for a sustainable future through new economic opportunities, more informed resource use, and extensive public awareness activities. Throughout the region, the project increased overall support for the designation of MMAs as a promising way to preserve natural beauty, create jobs, and bring communities together toward a common goal of sustainable development in harmony with conservation.

For more information

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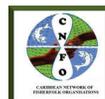
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