IUCN CARIBBEAN
REGIONAL COMMITTEE REPORT

Actions & Achievements 2012-2016

BACKGROUND

Driven by the members, the *Caribbean Initiative* was adopted in response to a resolution passed in 2004 World Conservation Congress (Bangkok, Thailand) and went live after the 2008 World Conservation Congress, Barcelona, Spain and is embedded in the Costa Rica-based IUCN Regional Office for Mexico Central America and the Caribbean (ORMACC). The Initiative charts the goals and objectives for members in the insular Caribbean with the support and leadership of ORMACC. The achievements from 2009 to 2012 included: Building partnerships with key regional actors, strengthening the participation of Caribbean members in IUCN activities and building a technical role and a portfolio of projects for the Caribbean[1]. The **Caribbean Regional Committee** was formally established in 2010 on the basis of the statutes of the IUCN, and the 2013-2016 Work Plan was developed to reflect the IUCN Global Programme.

The Regional Committee plays a vital role in coordinating and collaborating with members of the IUCN in the insular Caribbean by keeping members updated and promoting the active participation and representation of IUCN Caribbean members in regional and global initiatives. The Regional Committee facilitates the engagement of all members in the participation in thematic priorities, such as Red List species, protected areas, watershed management, critical ecosystems & people's livelihoods and, ecosystem-based approaches to climate change adaptation and resilience -- as stated in the 2013-2016 Work Plan[2].

This report focuses on the achievements in the insular Caribbean in terms of the global goals of 1) Valuing and conserving nature, 2) Equitable benefit sharing -- local capacity building, and 3) Nature-based solutions -- mitigation and adaptation projects: Climate, Food and Economy.

The community of insular Caribbean members of the IUCN was well represented at the 2012 IUCN Congress in Jeju and at the 2014 World Parks Congress in Australia. Since 2012 the members in the region have significantly contributed to the IUCN One Programme Approach by providing scientific expertise and decision making data to support the evaluation of Red List species, developing management plans, lobbying for stringent biodiversity management policies and providing funding opportunities for grass-roots organisations to reduce the loss of biodiversity as well as identify nature-based solutions to counter the impacts of climate change.

IUCN members of the insular Caribbean are building and strengthening relationships using regional IUCN institutions such as ORMACC and projects such as BIOPAMA. New partnerships have been formed for sharing knowledge, resources and decision-making information. The active communication of achievements through emails and the IUCN Caribbean Regional Committee Facebook page (https://www.facebook.com/IUCNCaribbean/) has helped raise awareness of Caribbean initiatives, projects and funding opportunities available for members. The regional secretariat uses English and Spanish communications to overcome language

barriers and is effectively increasing engagement between and among members to help optimize resource use in the region.

The Caribbean Report provides a window on the activities of IUCN members in the Caribbean. These activities were largely performed independently of the IUCN. As such the report shows how the members are contributing to to delivering results of the IUCN Programme and carrying the message of the IUCN in the region.

VALUING AND CONSERVING NATURE

Defending the vast natural capital in the Caribbean is no easy feat given the economic, social, political and cultural differences. The insular Caribbean members of the IUCN have embraced these differences to find creative and innovative solutions to provide value for the protection and conservation of nature. Driving these conservation efforts is the setting of institutional objectives aligned to national, regional and global conservation goals. By engaging all stakeholders, from resource users to decision makers, Caribbean members reach out to ensure the protection of the natural capital of their countries. Four new RAMSAR sites have recently been designated in Curacao and one in the Dominican Republic (DR). This international recognition has spearheaded the development of management plans for these RAMSAR sites and in turn upgraded their ecosystem value. Additionally, two new SPAW sites were declared in DR: Jaragua National Park and Sierra de Bahoruco National Park.

The Caribbean is identified as one of the biodiversity hotspots of the world and has also been designated as one of the most vulnerable regions to species loss through deforestation, urban development, agriculture and climate change (Meyers, 2000)[7]. In order to halt the loss of biodiversity Caribbean members actively

Box 1: Reintroduced, the Puerto Rican crested toad: reaching maturity

In November 2014 the El Convento Natural protected area in Guayanilla, Puerto Rico, welcomed 8,012 new sapo concho (crested toad, *Peltophryne lemur*) tadpoles. This latest release increased the total number of tadpoles in the country's natural protected areas to over 42,000 since the reintroduction project began in 2012.

Vital work conducted between January and March, 2015 by 112 volunteers, who dedicated 437 hours to monitoring predators and competitors of the sapo concho and enhancing their habitat through reforestation, has allowed the species to successfully survive at Para la Naturaleza's reintroduction sites. A case in point: in February some of the toads previously released at Hacienda La Esperanza came back to the liberation ponds to find mates.
http://www.paralanaturaleza.org/?s=sapo+concho

contribute to species status assessments. Also, guided by the Red List of Threatened Species, members are working to protect and reintroduce vulnerable and threatened species, inter alia, *Acropora palmate, Montastraea annularis, Montastraea faveolata, Dendrogyra cylindrus, Chelonia mydas, Caretta, Sorocea spruce, Vitex compressa, Maytenus tetragona, Mytenus versluysii, Guapira fragrans, Krugiodendron ferreum* and *Sabal causiarum, Solenodon paradoxus, Plagiodoontia aedium, Amazona ventralis, Cyclura ricordii, Ceratophrys cornuta, Pterodroma hasitata, Catharus bicknelli, Peltophryne lemur and Eretmochelys imbricate.* Members have also reintroduced native and endemic species in reforestation projects throughout the Caribbean.

Furthermore, members have been monitoring the invasive species that negatively impact endemic and native species (Box 1). Several monitoring projects involved not only researchers but also local communities through citizen science initiatives. Members are actively involved in providing grass roots environmental education and training to raise awareness of the value of biodiversity and ecosystem services provided by natural resources. The monitoring projects not only focus on endangered and invasive species but also on habitat quality and threats, such as water quality and incidence of fire.

Members of the insular Caribbean have been leaders and contributors to national policies, laws and regulations on conservation, adaptation to and mitigation of the impacts of climate change as well as driving forward the establishment of new protected areas.

For instance, in Curacao CARMABI headed efforts to designate five no-catch zones (150 m from shoreline) that encompass about 30% of the island's coastline. CARMABI is also participating in the development of new reef monitoring protocols for the Caribbean region under the Global Coral Reef Monitoring Network (GCRMN) framework and developing a proposal to designate part of the Oostpunt area as a national park (Parke Nashonal Oostpunt).

In Puerto Rico Para la Naturaleza (PLN) has created a strategic conservation model to identify critical ecosystems involving expert groups from all social and economic sectors to address the threats of urban development and unsustainable agricultural practices. Using the model, PLN lobbied and supported the development and adoption of the national land-use plan to ensure that 33% of the territory is zoned appropriately to protect the biodiversity and ecosystem services.

Over the past couple of years, the Fondation pour la Protection de la Biodiversite Marine (FoProBiM) assisted the government of Haiti in the creation of its first two marine protected areas covering over 120 square kilometres. FoProBiM has continued environmental management and rehabilitation actions targeting mangroves, coral reefs, sea grass beds, and fisheries and has actively engaged over 45 community groups with environmental education, capacity building, and resource use conflict resolution activities. Furthermore, this member has continued to generate scientific data for the creation of additional marine protected areas and is expanding its coral gardens and mangrove nurseries initiatives. Jean Weiner, founder of FoProBiM, was awarded the Goldman Environmental Prize in recognition of his outstanding work[1].

In Jamaica, The National Environment and Planning Agency (NEPA) has been active, for instance, in 2016 NEPA, as part of its annual release programme reintroduced 37 headstarted JamaIcan iguanas (Cyclura collie), once believed to be extinct due to predation by the invasive small Asian mongoose and still critically endangered. NEPA monitors a number of endangered species, including two endemic parrots (Amazona sp.), the American crocodile (Crocodylus acutus); the West Indian Whistling duck (Dendrocygna arborea), the Jamaican iguana, as well as orchid species and sea turtles.

On another front NEPA played a key role in the participatory process of drafting and the final cabinet approval in 2016 of the Protected Areas System Master Plan. Moreover, NEPA expects to see completion of the Overarching Protected Areas Legislation and a new Protected Areas Policy at the end of 2016. NEPA also developed management plans for 6 protected areas (Pas).

In Cuba, the Fundación Antonio Núñez Jiménez de la Naturaleza y el Hombre (FANJ) succeeded in:

- The first inclusion of an endemic Cuban land mollusc genus in CITES Appendix I at CITES CoP
- Presenting proposals for inclusion in the IUCN Red List of the most threatened groups on the Cuban Red List of Invertebrates, especially the proposed CITES genus.
- Organising two multi-institutional expeditions in the Toa River Basin and a third one was prepared to evaluate the biodiversity, propose new PAs and work with local communities in conservation and sustainable use of biodiversity. This area, which

[1] http://www.goldmanprize.org/recipient/jean-wiener

includes the Alejandro de Humboldt National Park, is the main pole of Cuban biodiversity.

- As part of the CCamBio Project, 6 expeditions (field trips) to the best-preserved marine-coastal sectors, coordinating with multiple national actors and monitoring the ecosystems and flagship species.
- Two publications, one on the *Polimita* genus and another on Cuban rainforests, have been finally printed and published. These books are based on the results of a project implemented with the Dutch IUCN National Committee.
- Also fresh off the printing presses is a book on fishing communities on Cuba's northern coast. This book presents the results of a project implemented by FANJ with funds of the Local Initiatives Fund of the Canadian Embassy in Cuba.

In a major cross-regional programme to conserve biodiversity-rich habitats initiated by the Critical Ecosystem Partnership Fund (CEPF), partnerships were developed between global organizations and civil society organizations (CSOs) -- including insular Caribbean IUCN members. The Caribbean Natural Resources Institute (CANARI) assumed the important role as Regional Implementation Team (RIT) to provide strategic leadership for the USD $6.9 million investment in the insular Caribbean. Financial support went to 68 local, national and international CSOs that worked on 77 biodiversity conservation projects across eight islands: Antigua and Barbuda, the Dominican Republic, Grenada, Haiti, Jamaica, Saint Lucia, St. Vincent and the Grenadines, and The Bahamas. On the basis of the CEPF Ecosystem Profile for the Caribbean Islands Biodiversity Hotspot[3] key conservation results and outcomes include:

- Improved management of 25 key biodiversity areas (KBAs) covering 593,967 hectares throughout the region through the development, approval and implementation of participatory protected area management plans that engaged local communities and resource users.
- Creation of seven new PAs covering 98,496 hectares in The Bahamas, Dominican Republic and Haiti, including the declaration of the Dominican Republic's first private PA and the establishment of the legal framework for additional private reserves in the country. CEPF grantees and partners worked to strengthen the organizational and technical conservation capacities of community groups and park rangers. Several stakeholder committees were also established to ensure the active and effective participation of resource users and communities in decision-making and supporting the monitoring of sites in collaboration with local protected area management teams.
- Development of innovative financing mechanisms to support biodiversity conservation, including the sale of the Caribbean's first forest carbon offset scheme in a payment system for ecosystem services (PES).
- Integration of climate change adaptation and resilience into protected area management plans and implementation actions.

- Development of socio-economic benefits to local communities living in and around protected areas in Antigua and Barbuda, Dominican Republic, Grenada, Haiti, Jamaica and St. Vincent and the Grenadines through developing and promoting crop diversity, fruit and vegetable processing, ecotourism and beekeeping.
- Strengthening the capacity of 54 local and regional CSOs, including the development of new strategic and fundraising plans, accounting and financial manuals and systems, upgraded web and social media sites, improved expertise in project design, proposal development, monitoring, evaluation and reporting.
- Alliances and multi-sector partnerships throughout the hotspot, in particular in the Dominican Republic, which now serves as a model for how civil society can foster strategic alliances with the private sector and government.

CANARI contributed to the successful delivery of results by:

- Supporting the development of a strategic portfolio of grants: CANARI established a Regional Advisory Committee for CEPF (RACC), comprising 17 experts to provide an independent, technical review of proposals to increase transparency and accountability in the review process. The volunteer RACC members also helped CANARI ensure effective coordination of CEPF's investment with other regional biodiversity conservation initiatives.
- Facilitating access across the Caribbean: CANARI issued seven calls for proposals and received a total of 241 applications. The programme provided 77 grants implemented in eight islands. A total of 68 local, national CSOs, regional and international NGOs, community groups, and universities including several IUCN members (e.g. CAD and Grupo Jaragua in DR) directly benefited from grant support. This entailed CANARI working across different institutional, political and cultural contexts and in four languages (English, French, Haitian Creole and Spanish).
- Building civil society capacity to support results: The Regional Implementation Team (RIT) provided support in the areas of project design, proposal development, monitoring and evaluation, reporting, communication and networking to all grantees.
- Managing the small grants mechanism: CANARI managed and administered the CEPF small grants mechanism; including establishing and adapting small grant operational policies and procedures. CANARI also carried out on-going monitoring of all 77 grants in the portfolio.
- Facilitating knowledge exchange: Through the quarterly CEPF Caribbean e-newsletter, Capacité[4], CANARI's Facebook page and website (www.canari.org) and direct email and conservation list serves, CANARI promoted the CEPF as a funding mechanism and documented and disseminated the approaches and results of CEPF's Caribbean projects. CANARI also facilitated national and regional peer exchanges for grantees and their government and donor partners.

- Measuring effectiveness and analysing lessons: The RIT supported the CEPF Secretariat to ensure that a cohesive portfolio of strategic grants was developed and implemented. CANARI facilitated a participatory mid-term evaluation of the CEPF Caribbean Islands programme in 2013 and supported the final evaluation in 2015.
- Long-term strategic impact: CANARI will build on the foundation established by the CEPF's investment by continuing to support civil society in the Caribbean to work on biodiversity conservation, sustainable livelihoods, climate change, policy advocacy and public awareness. CANARI is committed to facilitating continued knowledge sharing, networking and capacity building among Caribbean CSOs and their key partners.

In a very recent development, following a review by Global Island Partnership (GLISPA) of the worldwide CEPF programme and the highly successful outcome of the CEPF Caribbean initiative implemented by CANARI, the CEPF has announced a second CEPF Caribbean initiative, this time involving Cuba, which will again open opportunities to IUCN members in the Caribbean.

A group of mentors from across the Caribbean gather for a photograph during a break between training sessions at their workshop in St. Vincent and the Grenadines, October 2011. (Photo credit: CANARI)

EFFECTIVE AND EQUITABLE GOVERNANCE OF NATURE'S USE:

Equitable benefit sharing & local capacity building

Capacity building for Caribbean members was identified as a priority in the 2009 Caribbean Initiative. Recognizing that many of the Caribbean members are not-for-profit organizations, training workshops were developed to provide support on how to effectively manage natural protected areas and classify according to IUCN categories. The training and capacity building activities in the region not only provided technical support to natural protected area managers but also engaged CSOs and community members.

Civil society training and capacity building workshops hosted by Caribbean members include:

1) CANARI hosted a Mentor Orientation Workshop conducted over five days in October 2011 in St. Vincent and the Grenadines for civil society.
2) Members of staff from the Environmental Foundation of Jamaica (EFJ) hosted an Institutional Self-Assessment (ISA) Train-the-Trainer workshop in 2014, which provided training to five members of staff and representatives from 13 grant beneficiary organisations and partners.

3) The Fundacion Sur Futuro (FSF) held certified environmental education workshops -- developed with several governmental institutions -- targeted at educators and community leaders in environmental sustainability and climate change to be replicated in classrooms. More than 900 educators and 450 community leaders participated in the climate mitigation and adaptation workshop. As part of the UN CC-Learn project 500 teachers participated in Climate Change courses developed with UNITAR.

4) During the period 2013 to 2016 CERMES facilitated a number of SocMon training workshops, provided technical guidance and developed the capacity of fisheries divisions, marine protected area (MPA) authorities, government agencies, community-based and non-governmental organisations and a wide range of stakeholders in socio-economic monitoring. Overall, 58 people were trained in local and regional SocMon training workshops across 11 island territories within the Wider Caribbean from 2013 through to April 2016: Turks and Caicos Islands, British Virgin Islands, Dominica, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Barbados, Cuba, Jamaica, Dutch Antilles and French Antilles (Box 2).

5) Using the Toolkit for Ecosystem Service Site-Based Assessment (TESSA), Grupo Jaragua involved experts and community members to contribute to the study of ecosystem services in Sierra de Bahoruco National Park.

6) As members of the Caribbean Landscape Conservation Cooperative's (CLCC) Protected Area Conservation Action Team (PACAT), Para la Naturaleza (PLN) has been building the

capacity of stakeholders in IUCN Natural Protected Area (NPA) categories. In Puerto Rico PLN led the development of a shared definition of NPA for Puerto Rico and signed an agreement among NPA state and federal agencies, as well as private managers to maintain a shared database of the NPA network and continue collaborating towards improved management.

7) CARMABI started a reef education programme reaching 15,000 schoolchildren annually and helped produce various films on Caribbean reef ecology/conservation for use by teachers. Also CARMABI produced a manual for Caribbean reef managers (Towards Reef Resilience and Sustainable Livelihoods: a handbook for Caribbean reef managers) and organized workshops on rearing coral larvae for resource managers and academics.

8) FANJ can look back on success in:
   - Administrating two protected areas: Bellamar Caves and Santa Catalina Caves. The latter is in the final process of approval by Parliament. FANJ is the only NGO in Cuba that administers PAs
   - Proposing four new PAs, in three of which FANJ is co-administrator. In one FANJ cooperates with a community group, a first in Cuba.
   - Contributing to the formation of an environmental culture on a sustainable basis, integrating state institutions, communities and scientists. The involvement of local communities in sensitive ecosystems and PAs is a priority.
   - Contributing to the Cuban academic sector through studies on the history of livestock in the country and its environmental impact. Likewise, following the legacy of founding president Dr Antonio Núñez Jiménez, studies on the geo-transformation of nature in Cuba and its conservation have continued. Moreover FANJ organised courses and coordinated internships for foreign university students on the environmental history of Cuba.
   - Contributing to the CEC and placing three new Cuban members.

Box 2: **Socio-economic Monitoring for Coastal Management** (SocMon) is a global initiative of the IUCN World Commission on Protected Areas (WCPA-Marine), Global Coral Reef Monitoring Network (GCRMN) and the National Oceanic and Atmospheric Administration (NOAA). The initiative is being implemented at the global and regional levels with the goal of establishing socio-economic coastal and marine monitoring programmes globally at the site level. CERMES is the regional SocMon node for the English-speaking Caribbean. Local training workshops resulted in the initiation of (1) first ever SocMon site assessments and collection of baseline socio-economic data to guide future development and management of national marine parks (Turks and Caicos Islands); (2) one repeat assessment at a SocMon study area comprising three fishing villages (Dominica) to determine trends in fisheries-related socio-conditions; and (3) the introduction of relevant stakeholders to the methodology for subsequent implementation at a marine managed area (Barbados) to inform management planning. In regional training sessions (2015 and 2016), SocMon and biophysical monitoring methods have been integrated for the first time for comprehensive coral reef monitoring. CERMES partnered with The Nature Conservancy's Eastern Caribbean Marine Managed Areas Network (ECMMAN) project and the GCRMN-Caribbean to build capacity and provide technical support for comprehensive reef monitoring. Data comparability and improved and strategic reporting are primary objectives. SocMon site assessments will be implemented at ECMMAN and GCRMN-Caribbean sites later in 2016 and throughout 2017.

DEPLOYING NATURE-BASED SOLUTIONS TO GLOBAL CHALLENGES

Climate, Food and Economy: Acting Local to Impact Global

As a biodiversity hotspot threatened by the economic needs of insular populations that rely on natural resources for their livelihoods, finding nature-based solutions for the mitigation and adaptation to the impacts of climate change is crucial in the Caribbean. Members have been involved in the development and implementation of nature-based solutions to ensure food reliability and improved local economies.

At a regional level CANARI set in motion the analysis of the economic realities of the Caribbean and provided alternative economic green pathways to ensure sustainability into the future[6]. Furthermore, CANARI took the lead to empower local communities to participate, develop and implement nature-based solutions to mitigate the impacts of climate change, especially in fisher folk communities.

With respect to terrestrial ecosystems Caribbean members are using reforestation, agroforestry, renewable energy and micro-enterprise approaches to prepare communities to mitigate the impacts of climate change. Finding alternatives for livelihoods not based on the

consumption of natural products is always a challenge, yet Caribbean members have developed projects to provide communities with such alternatives. In Jamaica, for example, through the Smithfield Survivor's Club - Smithfield Reforestation Community Awareness and Livelihood Project EFJ launched a project in which 5.25 hectares of land were planted with 5,797 fruit tree and lumber species saplings. The community has access to an apiary of 21 hives to train community members in beekeeping and honey processing. Over 60 persons have been trained and the apiary has seen production levels of 13 gallons of honey at one reaping. The Dolphin Head Local Forest Management Committee -- Dolphin Head Reforestation, Agro-forestry and Livelihood Development Project funded by EFJ also has components that address alternative livelihoods for the buffer zone communities of the Dolphin Head Mountains. An apiary of 40 hives was established and community members are being trained in beekeeping and honey processing. As a result of the training five new beekeeping enterprises were created.

EFJ also funded two projects concerned with mangrove restoration. The University of the West Indies (UWI) Port Royal Marine Laboratory implemented a two-phase project entitled "Critical Coastal Forest Restoration". The first phase, which commenced in 2011 and ended in 2014, was geared towards collecting physical and chemical, hydrology and vegetation data. Twelve sites that were in need of mangrove restoration were examined and five selected for restoration in the second phase. Phase one also saw the improvement of the nursery at Port Royal Marine Lab to hold an additional 2000 seedlings and the retrofitting of Discovery Bay Marine Lab for a nursery with capacity for 3000 seedlings is in preparation. Phase two, which is geared towards replanting degraded mangrove forests, started in 2015 and is now on-going.

In the Dominican Republic (DR) Caribbean member Grupo Jaragua (GJ) supported similar agroforestry projects, in which community based groups use the Jaragua Agroforestry System, featuring tree nurseries and organic honey production. To reduce deforestation GJ trained and funded community members to establish micro-enterprise nurseries. The plants, native trees adapted to dry climates, are used to restore mining areas. Since many members of the community rely on forest products for energy and cooking materials, GJ promoted the use of solar cookers in the areas surrounding the Jaragua and Sierra de Bahoruco national parks.

Caribbean member Consorcio Ambiental Dominicano (CAD), in collaboration with the Dominican Ministry for Environment and Natural Resources (MIMARENA) and with funding from CEPF, successfully steered a pioneering project with manifold aims:

- protect the habitat of Bicknell's thrush (*Catharus bicknelli*), a small bird listed on the IUCN Red List as Vulnerable,
- create an ecological corridor between two established PAs with the usual positive knock-on effects for both,
- combat climate change through carbon capture.

In the process, CAD and partnering CSOs: created the first private PA (Reserva Privada el Zorzal) in the DR; performed a carbon inventory and quantification; and developed a comprehensive habitat-monitoring protocol, a zoning plan, land-use plan and management

plan for the private reserve. Additionally, they produced a legal framework adopted by MIMARENA as the basis for establishing more private PAs in the country. Last but not least, CAD set up and implemented a sustainable financing model that ensures the long-term financial security of the reserve and at the same time incentivises landowners to group parcels of land to establish private reserves in other areas of the country. The financing model centres on paying landowners from a rotating fund to plant a mix of native tree species and commercial cocoa and macadamia trees to capture carbon and generate revenues. In this model, based on the *Plan Vivo* carbon offset scheme, the rotating fund is financed by selling the Caribbean's first forest carbon offset credits to premium chocolate companies in North America. It is estimated that the project will exceed US$750,000 in the sale of forest carbon credits over a 30-year period. This model is likely to be replicated at the national level. (http://annualreport.cepf.net/feature6.html)

Since its inception CAD has played an important role in the DR as a venue for bringing environmental CSOs, including member of the Caribbean IUCN, around the same table as the state agency MIMARENA for benefit of the environment, biodiversity, protected areas and civil society. In another pioneering project CAD partnered with INTEC and local conservation CSOs to establish the feasibility of a payment system for environmental services as an additional funding mechanism for the Reserva Privada el Zorzal and neighbouring PAs and as a model for the country's PAs. To present the funding mechanisms to other conservation CSOs CAD organised a successful symposium at 8th Biodiversity Congress of the Caribbean in Santo Domingo in 2015.

Also in the Dominican Republic, FSF supports local communities in Ecomicro, a micro finance state-of-the-art project for climate change adaptation. The main purpose is to develop green finance products so that micro, small, and medium enterprises and low-income households can access clean energy and increase their energy efficiency. Another project by FSF that focuses on clean energy solutions is "Facilidad Sur Solar", funded by the European Union. This project motivates energy efficiency and renewable energy solutions and targets more than 20,000 lower income people. Through this project they:

- Installed 574 solar power systems that provide energy for refrigerators and freezers in households and schools.
- Installed solar water purifiers for areas with problems of water quality and access. FSF encourages communities to participate in the process of building and assembling the water purifiers.
- Led the clean stove initiative to improve the quality of life and health of more than 1,000 women in marginalized rural areas in the south.

In addition, FSF also promoted the use of clean hydroelectric energy by installing three hydropower plants at El Rocodo, Lima Ingenitos and El Montazo; all of them are in very remote and low-income areas, where they supply 206 families with electricity.

Another Dominican member of the IUCN, the Centro para la Conservación y Ecodesarrollo de la Bahía de Samaná y su Entorno (CEBSE), has been active since its inception in driving the

sustainable management of the local whale watching economy in the Bay of Samaná. Thanks to CEBSE's pioneering work, the Bay of Samaná and two other key reproductive areas of the humpback whale (Megaptera novaeangliae) now form the largest dedicated marine mammal sanctuary in the northern hemisphere. CEBSE remains strongly engaged with local youth; training them inter alia in data collecting, whale biology, and the importance of a healthy environment. Many of these youngsters are now ambassadors for the environment. They spread the word by speaking on local radio and some are studying and even working for CEBSE as technical staff in mangrove restoration and coral reef conservation projects run by CEBSE in cooperation with TNC.

A case in point is an ongoing mangrove restoration project, which is highly participatory, involving local fisher communities. Successes include a mangrove nursery and reforestation of a unique mangrove system at Los Corozos. This CEBSE run project has a triple objective: climate change resilience and mitigation, sustainable livelihoods and use of natural resources, holistic habitat conservation through a reef to ridge conservation approach. In this light, CEBSE is also working with local communities, CSOs and MIMARENA in an on-going project to make management more effective in a marine area near Los Haitises National Park -- improving land-use and enhancing habitat and biodiversity conservation from the tips of the mogotes (low karst mountains) to the roots of the mangroves, which form the largest intact mangrove system in the DR. Another ongoing project, in collaboration with government agencies and fisher cooperatives, targets the creation of no-take zones in the Bay of Samaná and coral restoration on the Atlantic coast.

In the Bahamas, the Bahamas National Trust (BNT), in cooperation with Island Conservation and with funding from CEPF, built support for protection of Booby Cay, home to the IUCN Red listed critically endangered Bartsch's iguana (*Cyclura carinata bartschi*). They succeeded in getting the Bahamian government to designate Booby Cay as a national park, a critical first step in protecting the Bartsch's iguana from habitat loss. In this context BNT is driving forward invasive species management planning for the park to eradicate rats, one of the biggest threats locally to endemic and native fauna.

In Jamaica NEPA was one of the implementing agencies in the EU/UNEP Climate Change Adaptation and Disaster Risk Reduction project, focusing on mangrove rehabilitation; installation of wave attenuation devices; seagrass replanting and artificial reef installation. To date all pilot projects are being monitored. Also sustainable livelihood grants given to a number of communities for projects such as for alternative crops. Additionally, NEPA participated in the Adaptation Fund Project – Enhancing the Resilience of the Agriculture Sector and Coastal Areas to Protect Livelihoods and Improve Food Security. The activities implemented by the Agency included the training of local communities and entities in Disaster Risk Reduction (DRR) and Natural Resources Management and the development of adaptation plans for the most vulnerable areas along the Negril coastline.

CANARI continued its work to explore and promote a 'green economy' approach which recognises that economic development should also be environmentally sustainable and ensure

more equitable distribution of benefits. CANARI established the Caribbean Green Economy Action Learning Group as a diverse group of champions from across sectors and countries in the region. They developed a programme of work on green economy, with priority areas identified for research, knowledge sharing and advocacy to change policy and practice. As part of implementation of this programme of work, CANARI provided technical assistance to the Caribbean Development Bank to conduct a study on how renewable energy can be a pathway to a green economy in the Caribbean. Specific recommendations were made for strengthening policies and institutions. CANARI also started work to explore how micro, small, and medium enterprises (MSMEs) could provide economic, social and environmental benefits and promote a green economy transformation in the Caribbean. CANARI is working particularly to support rural community micro-entrepreneurs operating businesses based on the sustainable use of natural resources. (see http://www.canari.org/programmes/issue-programmes/green-economy.php)

FANJ has been promoting permaculture as an approach to solving environmental problems, for instance, by organising the National Encounter of Young People in Permaculture, National Encounter of Masculinities, Encounter of the National Group of FANJ Facilitators, Forum Exchange of Sustainable Agriculture in Cuba as well as courses on Approach to Permaculture in Havana and Camagüey. The book "Permaculture, Family and Sustainability" and the manual "Field Agenda and Permaculture" were published. The Impact Study of Permaculture was carried out in the province of Havana. Other important achievements include:

- Over the last two years, as the main Cuban partner in the CCamBio Project, FANJ, with funding from the European Commission and WWF Holland, implemented projects in biodiversity, communities and climate change in the two main national marine parks (MPs) of Cuba: Ciénaga de Zapata and Jardines de la Reina.
- Installing two buoy probes to collect real-time information on water conditions at the Zapata and Jardines de la Reina MPs, the first of their kind in Cuba -- see Facebook CCambio.
- As part of the environmental education work of the CCambio Project organising six education and exchange workshops in the communities of Playa Larga and Jucaro with a focus on adaptation to climate change and protection of biodiversity in coastal areas and their communities close to those MPs.
- Participation in COP21 of the Convention against Climate Change, in the CoP and with a stand and presentations about our work on climate change and biodiversity.

.

Additional Information of Regional Activities

Caribbean Members have represented the region in a number of international conservation congresses and symposiums.

6th World Parks Congress (WPC), Australia (2014) – Against the theme of *People, Parks and Planet*, Caribbean members communicated a message that highlighted the role of individuals who dedicate their lives towards the protection of nature and the idea that there should be no separation between land and people. Among 5,000 participants representing 168 countries the Caribbean was well represented at the 2014 WPC. The event provided an opportunity for the Caribbean Regional Committee to reconnect, exchange ideas and promote a unified message from the Caribbean. The group agreed that:

1. There was a need to develop a realistic and strategic Caribbean Agenda for Protected Areas to guide coordination of resources and prioritization of issues in the light of shared natural resources, similar developmental challenges, overlapping jurisdictions and limited resources.

2. New initiatives for or related to Caribbean protected areas should coordinate with existing regional or national networks of protected area organizations & institutions.
3. A common, coordinated approach to design, implementation and assessment of capacity building initiatives for protected areas in the Caribbean is desired to ensure that local, national and regional needs are adequately addressed.

Caribbean Regional Committee at WPC - Mesoamerica Regional Forum, Panamá 2015

The Regional Forum in Panama allowed the Caribbean Regional Committee to exchange knowledge, coordinate efforts and collaboratively review IUCN achievements and challenges over the past year. Prior to the Forum, the Committee nominated and reviewed two candidates for the post of North American Regional Councillor for the insular Caribbean. The Committee voted for and presented their chosen candidate during the Regional Forum. The Committee also dedicated time to strategically plan for the 2016 World Congress in Hawaii. Several members participated in the BIOPAMA forum, which allowed data providers and users opportunities to discuss challenges they face in their countries. IUCN members were directly involved with BIOPAMA in providing information for the *Caribbean Protected Areas Gateway*, a regional information system. The BIOPAMA web portal has the potential to be an important decision-making resource, especially for funding agencies investing in the Caribbean, by providing information on landscape threats and vulnerabilities of species, habitat and ecosystems as well as livelihoods and decision-making systems for PA governance. The Caribbean Gateway is hosted by the Centre for Resource Management and Environmental Studies (CERMES), which is a member of the IUCN, on behalf of the University of the West Indies.

Caribbean members also participated in the Conservation Tool Knowledge Exchange sessions. For example, Para la Naturaleza (PLN) presented on the success of their citizen science efforts

as well as their strategic conservation planning initiative: *Mapa 33*. Based on the discussion among attendees, PLN learned that very few countries or NGOs use such conservation tools.

Main challenges looking forward

One of the main challenges facing the IUCN Caribbean Regional Committee is the process of integrating the English speaking island members with the Spanish speaking members so that they work more closely together to:

- Secure dedicated funding to support the functioning of the Regional Committee
- Enhance implementation of the IUCN Caribbean Programme in collaboration with the Secretariat and Commissions
- Transition the management of the IUCN Caribbean Initiative from ORMA to a regional office in the Caribbean with Caribbean personnel with experience and contacts in the Caribbean

In the light of two organisations leaving the IUCN Caribbean — one from Jamaica (Jamaica Environment Trust) and one from Trinidad and Tobago (The Trust for Sustainable Livelihoods) — it is important to:

- Initiate a discussion on the value added by being a member of the IUCN and on the net costs and benefits of membership in the IUCN
- Effectively collaborate with ORMA and other arms of the IUCN with interests in the Caribbean to promote regional projects and initiatives aligned with the IUCN programme that draw on the expertise of members and involve them in design, planning, implementation and execution with a view to improved networking, alliances and partnerships in the Caribbean as well as adding value to membership in IUCN

References

1) Caribbean Status Report 2012 https://cmsdata.iucn.org/downloads/appendix_3_status_report_implementation_caribbean_initiative.pdf
2) Caribbean Initiative Work Plan 2012 http://www.iucn.org/sites/dev/files/import/downloads/caribbean_initiative___work_plan_2013_2016_august_2012.pdf
3) http://www.canari.org/cepf-regional-implementation-team-in-the-caribbean-islands
4) http://www.canari.org/cepf-caribbean-e-newsletter-capacite
5) http://www.biopama.org/where_we_work/caribbean/
6) http://www.mrfcj.org/pdf/case-studies/2013-04-16-Caribbean.pdf
7) Meyers et al, 2000. Biodiversity hotspots for conservation priorities. Nature403, 853-858

Member organisation	Person(s) responsible
Grupo Jaragua (GJ)	Yvonne Arias Cornielle Sixto Inchaústegui
Caribbean Research and Management of Biodiversity (CARMABI)	Paul G.C. Stokkermans
Caribbean Natural Resources Institute (CANARI)	Nicole Leotaud
Centre for Resource Management and Environmental Studies (CERMES)	Patrick McConney Maria A. Peña Rey
Para La Naturaleza (PLN)	Soledad Gaztambide Arandes Neida Pumarejo Cintrón
Fundación Sur Futuro, Inc. (SUR FUTURO)	Eduardo Julia
Fondation pour la Protection de la Biodiversité Marine (FoProBiM)	Jean Wiener
Environmental Foundation of Jamaica (EFJ)	Allison Rangolan-McFarlane
Dutch Caribbean Nature Alliance (DCNA)	Kalli De Meyer
National Environment & Planning Agency (NEPA)	Peter Knight
Bahamas National Trust (BNT)	Eric Carey
Fundación Antonio Núñez Jiménez de la Naturaleza y el Hombre (FANJ)	Liliana Núñez Velis
Sociedad Cubana para la Protección de la Naturaleza (PRONATURALEZA)	Angel Valdéz
Fundación para el Mejoramiento Humano - PROGRESSIO	José Angeles
Consorcio Ambiental Dominicano (CAD)	Sésar Rodríguez Alvarez
Centro para la Conservación y Ecodesarrollo de la Bahía de Samaná y su Entorno (CEBSE)	Patricia Lamelas

Member organisation	Person(s) responsible
St Lucia National Trust (SLNT)	Bishnu Tulsie
National Parks Trust of the Virgin Islands	Linda Varlack
Fundación para el Mejoramiento Humano - PROGRESSIO	José Angeles
Ministerio de Medio Ambiente y Recursos Naturales de la República Dominicana	Patricia Abreu Fernández
Fundación Global Democracia y Desarrollo, Inc. (FUNGLODE)	Omar Ramírez Tejada