

# GREEN REPORTER

## Blue-Green Recovery for the SDGs

*In this edition, SGP Barbados highlights the contribution of seven grantees to the Blue-Green Recovery for the SDGs.*

*Learn more about the projects from The Barbados Youth Action Programme, The Coral Reef Restoration Alliance, Caribbean Environmental Management Bureau, The Barbados Sea Turtle Project, Barbados Institute of Management and Productivity, Barbados Education and Research Programme and Empower Youth International.*





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### **National Coordinator - SGP Barbados**

Welcome to another edition of the SGP Green Reporter! The Sustainable Development Goals (SDGs) and progress towards their attainment provide a hope of a brighter future. Unfortunately, the COVID-19 pandemic has erased decades of development gains, brought into sharp focus the inequalities that presently exist across our world and impeded our progress towards the future we all want. Nevertheless, hope remains and the response efforts thus far at the global, country and community levels show a renewed commitment to the SDGs fueled by a Blue-Green Recovery.

In this edition of the SGP Green Reporter, we focus on the Blue-Green Recovery at the community level. We are pleased to highlight the contributions our civil society partners are making to the Blue-Green recovery as they remain resilient and chart a way forward in the face of the COVID-19 pandemic. When you read this edition, it will become clear that our civil society partners are making their contributions by creating jobs and opportunities for Ocean-Climate Action, facilitating investment in a Blue-Green Future at the community level, and ensuring that the recovery is equitable.

We know that you will find this edition informative and interesting, so please share it within your networks, inclusive of partners, colleagues, friends, and family. On behalf of the GEF SGP Barbados team, I take this opportunity to thank you for your continued support. Stay safe and join us in supporting our civil society partners who are contributing to the Blue-Green Recovery for the SDGs.

*David Bygnoe*





# CORALS IN LIVING COLOUR

## *The Coral Reef Restoration Alliance*

By Susan Mahon, President, The Coral Reef Restoration Alliance

The Coral Reef Restoration Alliance (CORALL) continued its steps towards restoration and conservation of coral reef ecosystems in Barbados during 2020 to present despite the challenges faced during the lockdown periods and other restrictions pertaining to the COVID-19 pandemic; the eruption of la Soufriere Volcano in St. Vincent in April; the freak thunderstorm of record intensity in June, and Tropical Storm Elsa that became a Hurricane as it passed near Barbados during July 2021.

Recently, CORALL's most striking accomplishments have included the establishment of a thriving Pilot Coral Nursery at Vauxhall on the west coast of Barbados; and the [Corals in Living Colour](#) documentary launched in celebration of UN World Environment Day and World Oceans Day on 5 & June 2021.

CORALL's Pilot Nursery at Vauxhall reef was established during the period of November to December 2020.

We undertook a field trip in November 2021 to scope for *\*fragments of opportunity* and identified areas on the Vauxhall reef where they might be found. All these fragments were staghorn corals (*Acropora cervicornis*). They were used to populate the trees in December 2020 under the watch of officers from the Coastal Zone Management Unit and Folkestone Marine Reserve of Barbados.

Fragments of opportunity were found lying on the substrate after having been presumed broken off from their parent colony by accidental or natural means. Each fragment included a 'dead piece' and there were sufficient fragments of opportunity to populate



CORALL's Pilot Nursery with 80 fragments, with some still left on the reef (see photo 1). The donor fragments of opportunity were clipped by pliers into short lengths underwater by CORALL's members, so that each fragment was about 3 inches in length, and then each fragment was suspended on the branch of a 'Tree' by a piece of nylon fishing line (see photo 2).

The growth of each coral fragment, from December 2020 to April 2021, was estimated by first measuring the length of each branch and adding the lengths together (in centimetres) to obtain an indication of total live tissue in December; by repeating this measuring process in April 2021; and then obtaining an estimate of "Total linear extension (TLE)" by subtracting the amount measured in December 2020 from the amount measured in April 2021.

All fragments showed an increase in TLE over the 4 months. The greatest increases in TLE were: 31.7cm on Tree #1; 60cm on Tree #2; and, 42.3cm on Tree #3.

These measurements pertaining to total linear extension (TLE), plus photographs, and records of the condition of each of the coral fragments suspended from the trees – demonstrate that all the corals grew and thrived.

Only one fragment was lost after the volcanic eruptions during April 2021. Subsequent, rapid visual inspections, and photographs taken by CORALL's snorkelers and free-divers during May and early July 2021, indicate that – although a few fragments (about ten) were lost as a result of Hurricane Elsa – the remaining fragments (about 70 fragments) are continuing to grow and thrive.

#### *Fragments of opportunity*

The process begins with collecting corals that have been knocked off of their parent colony and ended up buried in the sand or in other environments where they would inevitably die.

## [Watch Corals in Living Colour](#)



Photo 1: A Fragment of Opportunity. Photo: Zoe Lisk



Photo 2: CORALL free divers and snorkellers above a coral 'tree' located in the Pilot Coral Nursery. Photo: Miriam Alvarado



Photo 3: Coral fragment suspended from the tree structure in December 2020 (top left); a fragment during a maintenance dive in March 2021 (top right); a tree during a maintenance dive in May 2021 (bottom left); and a tree during a reconnaissance snorkel in July 2021 (bottom right).



# BitEgreen Barbados Project

DREAM WORK | TEAM WORK | MAKE IT WORK  
FUTURE WORK

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By Simera Crawford  
Executive Founder, Caribbean Environmental Management Bureau

*“A very ambitious undertaking!”* is a statement repeated by ICT professionals to describe the BitEgreen Project. It is aimed at enhancing the overall operational efficiency of businesses, and integrating environmental preservation (especially through waste management) and other sustainable livelihood actions into mainstream society via everyday activities, aided through the use of technology.

## Dream Work

To address environmental problems through focusing on problem solving and developing solutions, you must have a true desire and sense of responsibility to help alleviate these social problems. Team members dedicated to this aspect always go above and beyond to see the solution through in their various capacities. Next, you must identify a mentor or team player to assist in designing a business approach utilizing creative practices. Selwyn Cambridge of TEN Habitat competently fulfils this role.

## Team work, make it work

Additionally, you must possess a deep appreciation, knowledge and understanding of natural resource and environmental management. Our approach on this project was not one of a “Jack of all trades, but rather specializations within areas. Therefore, nowhere in the BitEgreen system (i.e. the practical design), would you find one action leading to or causing another environmental problem. This is achieved through a deep knowledge of natural resource and environmental management and capacity for creativity and problem solving.

Kadeem Wharton, an exceptional team player, is focused on the user interface (UI) designs (i.e. our visual and physical product design) and other visual tasks which is his specialization. An independent review noted that it appears as if the project was flipped, since UI designs are not done first, but our approach is beneficial to the project. The entrepreneurial process to facilitate initial buy-in where we created a visual example of our product extremely well. These product representations will reduce possible fallouts in costs arising from learning through a finished product. It allows for issues to be addressed, and for users to be associated with the technology before the actual launch.

The independent review by Dr. Seon A. Levius (ICT professional) indicated that tremendous work was done by our team to realise what we have achieved today, and the only document required before the technology can be physically built by any developer, is our official technical requirements (translation) document.

## Future Work

Our project is appreciative of all persons and organizations that form part of our team both locally in Barbados and internationally. Recently, Microsoft selected and agreed to partner with our project via GEF SGP UNDP to provide free technical support and training!

Connect with CEMBIORG





# The Barbados Sea Turtle Project

By Professor Julia Horrocks and Carla Daniel  
The Barbados Sea Turtle Project, University of the West Indies' Cave Hill Campus

The Barbados Sea Turtle Project (BSTP), based at the University of the West Indies' Cave Hill Campus, is the home of the regional Marine Turtle Tagging Centre (MTTC) of the Wider Caribbean Sea Turtle Conservation Network.

This centre was established in 2000 with a grant from the Global Environment Facility (GEF) Small Grants Programme (SGP) implemented by UNDP. For over 20 years, the MTTC has provided turtle flipper tags and applicators, and archived tag fate data, for over 30 sea turtle projects in the region. Many of these projects also include a non-consumptive sea turtle ecotourism elements based on best practices, which has provided a source of income for local communities. We have been fortunate to obtain a second grant from GEF SGP UNDP to purchase additional tags and tag applicators - replacing depleted stock- and to expand our national and regional training efforts.

This year, thanks to this grant, we have been able to offer persons from sea turtle projects in the region the opportunity to be trained alongside BSTP volunteers in a South to South Exchange. Barbados is well known for the success of its sea turtle conservation activities. The degree to which the hawksbill population has recovered thus far allows trainees to work with large numbers of turtles and experience the challenges posed by extensive coastal development. Trainees are introduced to the theory of sea turtle conservation through hybrid sessions and then practical field sessions. Following this they have the opportunity to hone these skills in the field, cementing their knowledge with practice. This also exposes them to situations that they may otherwise only rarely encounter in their own countries. They work on the beach all night between 8pm and 4am or through the day from 8am to 4pm, on alternating periods of night and day shifts.



We are able to offer regional trainees accommodation as well as a stipend to cover their food. The accommodation “base” provides a central area for storing equipment and incubating nests, and allows persons to be trained in techniques like nest relocation, and ex situ egg incubation and care of premature hatchlings.

There are a number of growing challenges for sea turtle conservation in the Caribbean and this has resulted in the need to develop new mitigation strategies. One of these challenges is beach erosion due to more extreme weather events and high seas, as well as increasing impacts of coastal development. It is critical that sea turtle conservation projects in the region are ready to respond to these new challenges.

**Connect with The Barbados Sea Turtle Project**  
**Sea Turtle 24 Hour Hotline: 230-0142**





# Greening BIMAP

By Chevron Nesfield, Quality Assurance and Research Assistant, BIMAP

*In 2015, the United Nations committed to 17 life changing goals. These Global Goals, also known as the Sustainable Development Goals (SDGs), include ending extreme poverty, and providing clean water and clean energy. The government of Barbados launched its own initiatives as outlined in the Barbados National Energy Policy (BNEP 2019-2030) designed to achieve 100% renewable energy and carbon neutral island- state transformational goals by 2030.*

*Barbados possesses many of the inherent economic, social and environmental vulnerabilities associated with Small Island Developing States (SIDS). These include our susceptibility to natural disasters and extreme events, a small population, limited land and natural resources and a small open economy. These are exacerbated by the impacts of climate change and, if left unchecked, will undermine the sustainable development and economic gains that have been achieved over the course of the country's history.*



**Left to Right:** LED lights in the corridors and classrooms; Water efficient taps in restrooms; Water tanks for storage and harvesting; and available roof space for installation of a photovoltaic system. *Photos: Barbados Institute of Management and Productivity*

In recent years, The Barbados Institute of Management and Productivity (BIMAP) has implemented several climate change initiatives such as, the outfitting of LED light fixtures throughout the compound, installation of water tanks and rain harvesting systems in an effort to assist the country with its fight against climate change.

At the beginning of the year 2020 to formalize our efforts and to further enhance our contribution it was decided to have a Greening BIMAP project. This project seeks to build on the initiatives already established and to add components to further assist the country with its goals. As part of the project we sought to explore the possibilities of a PV system to reduce our dependence on fossil fuels and undertake water conservation initiatives that will assist in the country's ability to respond to the prevailing drought conditions. Some of the activities planned include planting of fruit trees around the compound, changing remaining plumbing and electrical fittings to energy saving alternatives as well as to reducing the printing and use of paper until we are eventually a Paperless campus.

As an institute, we are more conscious of the environment and the effect our actions have on it. As a result many of the initiatives implemented have been transferred into our personal lives and our homes.





## SGP NSC touring community projects

By Karen Harper, SGP Programme Assistant

The SGP Barbados Team, National Steering Committee and the local media toured two project sites, to **Biocultural Education and Research Programme (BERP)** located at Neil's Plantation, St Michael and **Barbados Youth Action Programme (BYAP)**, Ashford, St John. The aim of the site visits was to give the NSC members and some of the media the opportunity to see and experience the SGP projects being implemented within communities across Barbados and to provide an additional conduit for the dissemination of work our grantee partners are doing in partnership with SGP.

The first stop to BERP showcased the research being facilitated with under utilized local medicinal plants in Barbados and the growth parameters of phytonutrient rich under utilized plant species such as Purslane (*Portulaca oleracea*) and other plants that could be used for colds and the flu, with the future objective of nutraceutical development.

During the 90 minute visit the team got a briefing on the work being undertaken by BERP as well as a display of value added products produced from some of the underutilized plants being researched. The team also enjoyed samples of purslane soup, breadfruit bread and local juices.

Moving on, the group travelled to Barbados Youth Action Programme (BYAP), Ashford, St John where thirty Barbadian youth from various communities are learning innovative methods in sustainable agriculture. Young people are being trained in agri-preneurship and climate smart organic approaches to agriculture. They are growing crops and also learning new technologies available in agriculture. These advances in agriculture have encouraged many of them to pursue employment opportunities in this sector.

The BYAP participants also displayed the value added products created from the crops grown including cassava flour, tamarind sauce, carrot juices and jams. Part of the programme includes learning about business, sales, and marketing.



**Top:** The National Coordinator, Dr Bynoe (centre) and Marcia Marville, former head of the agriculture department at The Barbados Community College (right) explaining the benefits of Purslane to the media.

**Middle:** A sample of the value added products produced by Biocultural Education and Research Programme.

**Bottom:** BYAP participants placing the lid on the solar flat drier which contained grated cassava.

Photos: Karen Harper





## Barbadian youth actioning a value improvement project

By Glendene Greaves

Young people need employment opportunities and programmes in their communities to provide meaningful rehabilitation of deviant behavior and reduce crime. The COVID-19 pandemic and the ongoing issues with food security in Barbados have increased the need for youth to be engaged and taught new skills in agriculture where they can impact their households and communities in a positive way.

The Barbados Youth Action Programme (BYAP) has risen to the occasion by creating a project primarily focused on the youth adding value to agricultural produce by harnessing the power of solar energy. This project was birthed in March 2021, with funding support from the Global Environment Facility (GEF) Small Grants Programme implemented by UNDP and the British High Commission. The project response to date has been phenomenal! Young men and women excitedly embraced and soaked up the many skills taught in Communication, Team Building, Goal Setting, Composting, Mulching, Water Harvesting, Solar Drying, Food Processing and Food Safety.

The joy and wide smiles on the faces of these 35 participants signaled their enthusiasm as they participated in theory and also in the practical components of the project. Together they built a composter, a flat plate solar dryer for the purpose of making cassava, sweet potato and other flours, along with a chamber dryer for the drying of garden herbs such as parsley, thyme and basil.

The project will see the empowerment of these young people, the enhancement of their livelihoods and their communities. As they plunged into the construction of these units, the team building and communication skills they attained were evident in the free hand painting of the composter.







Garden beds of organic thyme at the BYAP project site  
Photo: Karen Harper

The project has also seen the creation of a business name which will be registered and brand names for the value-added products, which will hit Barbadian shelves later this year. Excitement has also been seen while learning the practicalities of farming techniques and preparing the farm beds for planting.



**Painting the Composter**

**Left:** Jonathan Antrobus, Shemar Mayers, Andrina Welch, Tutor George Gill, Keriah Scantlebury and Tameka Chance.



**Construction of the Chamber Dryer**

**Left:** Nia Bellamy, Akeil Goodridge, Kevin Samuel, Tutor Adhim Hunte, Stevon Sertima, Shemar Mayers, Antoine Johnson.

Photos: Barbados Youth Action Programme

They have taken the initiative as a team to plant some short crops where their varying strengths and weaknesses were identified. We saw strengths in marketing, administration, processing, crop production and sales. So far, it's been very encouraging to management and parents alike to see the changes amongst the team. We look forward to the next phase where the value added organic products created will be marketed and sold nationally.



**Top:** Akeil Goodridge with a bottle of BYAP branded Tamarind Sauce.



**Bottom Left & Right :** Cassava flour packages and tamarind sauce on display.

Photos: Karen Harper



# Collaborating Across the Caribbean in the Battle Against Climate Change



Members of BERP, WIRRED and CTPP Barbados celebrating Caribbean Tree Planting Week July 8th, 2021. Appreciation extended to Elize Rostant, Program Manager WIRRED and Britney Grimes, Youth Ambassador CTPP.

By Dr Sonia Peter, Executive Director, Biocultural Education and Research Programme

During the week of July 5th – 11th a unified undertaking occurred across the Caribbean for the inaugural Caribbean Tree Planting Week with the purpose of ‘Protecting Biodiversity and Cultural Heritage in the Caribbean’. This effort emerged out of an initiative championed by the Caribbean Philanthropic Alliance (CPA) via their Caribbean Tree Planting Project (CTPP). The Biocultural Education and Research Programme (BERP) joined with CTPP Barbados and the Walkers Initiative for Regenerative Research Education and Design (WIRRED) to plant coconut trees at the important restoration ecology project in the parish of St. Andrew, Barbados.

The CPA and the CTPP set a tree planting target of one million trees to be achieved through a collaborative effort spanning 2020 to 2021. The success of this collaborative effort was seen in the recent count of trees planted, as of June 30th, that numbered 1,517,463. Through the CTPP Barbados, and the leadership of Barney Gibbs, Chairman of the Future Centre Trust, Barbados made the contribution of over 9,000 trees planted either in ground or in nurseries ready for transfer.

Professor Rosalea Hamilton, Chair of the CPA, has worked steadfastly to meet the objectives of the CTPP as they work within a global initiative to mitigate climate impacts by planting 950 million hectares of new forest to limit the increase in global average temperature to 1.5 degrees Celsius. The CTPP therefore committed to:

- plant at least 1 million trees and engage related climate action in at least 10 Caribbean countries (now numbering 22)
- promote climate change activism among Caribbean Youth and the Caribbean Diaspora
- continuously highlight that multi-stakeholder partnerships and collaborative actions are required to accelerate the achievement of SDGs, especially SDGs 13 (Climate Action) & 15 (Life on Land)

The importance of this activity was made evident in the recent events associated with the passage of hurricane ELSA across the Caribbean.



The unusual pattern being experienced, in changes in storm intensity, is likely an outfall of climate change exacerbated by the high levels of atmospheric carbon dioxide.

In recent years, rapid hurricane intensification has led to devastating impacts on the small island developing states of the Caribbean, with dislocation and major tree loss as outcomes. The Caribbean, though small, must play its part and enhance our tree cover to promote carbon sequestration. The activity spearheaded by the CTPP must be embraced and tree planting week made an annual event to heighten awareness and activism.

BERP, in partnership with CTPP Barbados, offers its full support for the initiative and the need for collaborative action across the Caribbean. Show your support by signing the letter, at the address following, to lobby for our governments to become engaged.



<https://cariphillalliance.org/letter-to-caribbean-heads-of-government/>

BARBADOS

9,050

# Trees Planted

55

# Youths Involved <35yrs

22

# Partners

WWW.CARIPHILALLIANCE.COM

CARIPHILALLIANCETREES@GMAIL.COM

CTPP Barbados target and Team Leader Barney Gibbs sharing the importance of tree planting with members of the Barbados Boy Scouts.

Photos: Biocultural Education and Research Programme





# Empower Youth International

## Grow-Smart Youth Farm

It has been our longstanding vision for the Grow-Smart Youth Farm to contribute to the blue economy by farming in a sustainable way using aquaponics. When people often think of farming, they usually have a picture in their mind of farmers tiling acres of land and really back-breaking intensive physical labour in the sun to produce crops. However, we wanted to transform this view of farming and create a farm that uses modern technology to produce chemical free crops with minimal intensive labour.

I first heard about aquaponics from a newspaper article that highlighted a female aquaponic farmer in Barbados who was using aquaponics to grow plants. I was fascinated by the use of technology in farming and my husband, Troy and I decided to visit her farm. The information she provided about this method of farming really allowed us to see how important aquaponics is to sustainable development. The whole aim of the Blue Growth Initiative is that it enables fisheries and aquaculture to contribute to the United Nation's Sustainable Development Goals (SDGs) particularly Goal 14, which relates to conservation and sustainable development of the oceans, seas and marine resources. One key priority is to support blue communities to maximize use of aquatic resources to provide food security and nutrition, while generating work and securing livelihoods.



**Top:** Troy Hamblin, EYI Director with the lettuce seedlings.  
**Middle:** Franz Harewood-Hamblin, EYI Director with the matured lettuce in the aquaponic system.  
**Bottom:** The koi fish in the aquaponic system.

Photos: Empower Youth International

These are some of the reasons why we made a decision to get into aquaponics as we wanted to also create employment for youth and ensure that we also focus our attention on assisting them in creating a sustainable livelihood. The use of aquaponics is an important and essential part of a future blue economy.

We sincerely thank the GEF Small Grants Programme for its contribution to our nation's progress towards the attainment of the SDs sustainable development goals by helping us implement this project. This is just the beginning of the great things to come from Grow Smart Youth Farm!

To learn more about this project, visit [www.empoweryouthint.org](http://www.empoweryouthint.org)







**All projects should fit within the following thematic areas:**

- Sustainable agriculture and fisheries, and food security
- Community-based conservation of threatened eco-systems and species
- Low carbon energy access with co-benefits
- Local to Global Coalitions for Chemicals and Waste Management
- CSO - Private Sector - Government Policy and Planning Dialogue Platform

Access the eligibility criteria and programme documents via <https://sgpbarbados.org/>.

Project proposals should address the priorities identified in the [Barbados Country Programme Strategy \(CPS\) \(2019-2023\)](#).

Project concepts are accepted at any time during our fiscal year, July to June but full project proposals should be submitted by **September 23, 2021**.

Email submissions to the National Coordinator, [david.bynoe@undp.org](mailto:david.bynoe@undp.org) and copied to [karen.harper@undp.org](mailto:karen.harper@undp.org).



# Meet the National Steering Committee

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