Building a Future for Coral Reef Restoration and Monitoring in St. Kitts & Nevis

To evaluate and restore coral reefs in St. Kitts and Nevis, the IWEco.SKN project together with the Department of Marine Resources embarked on project activities related to coral reef monitoring and restoration including: (1) a survey of selected coral reef using a drop down camera technique, (2) establishment of a coral nursery, (3) capacity building in coral reef monitoring and restoration and benthic analysis and (4) installation of the MoReef artificial reef modules at three locations in the Federation.

Photo 1

In June 2022, twelve MoReef artificial reef modules were installed at three locations in the Federation. The MoReef was designed by Dr. Alwin Hylkema and his team.
Hon. Minister Beckles-Robinson makes Opening Remarks

Planning and Development, Trinidad & Tobago, made Opening Remarks at the formal Opening Ceremony on 19th July, noting the successful implementation of Trinidad & Tobago’s National sub-Project by the executing agency, the Environmental Management Authority and many benefits to the country.

RPSC6 had begun on the preceding day, 18th July, with a well-organized and much appreciated field visit to the IWEco.Trinidad & Tobago pilot project sites (pgs. 2-3) that have been the focus of rehabilitation at the National Quarries Company Limited compound in Guaico, North East Trinidad. Participants were able to witness the encouraging progress and transformation of several areas of land which were targeted by a range of rehabilitation techniques. They also met representatives of the two NGOs – the Trust for Sustainable Livelihoods and IAMovement – and members of the Quarry Rehabilitation Champions, persons from nearby communities who have been trained in land restoration techniques.

Presentations made by most national sub-projects and regional executing partners showed significant progress during the past year.

Regional activities coordinated by IWEco’s Regional many executing partners and meant to help build capacity amongst the participating countries also gained momentum in the year since 2021. Significant progress was seen in: the strengthening of environmental monitoring through the provision of training and equipment acquisition for nominated laboratories; building consensus, political will and financial support for Integrated Water Resource Management at regional and national levels; enhancing sustainable livelihoods and socio-economic benefits for targeted communities; and advancing work towards the development of a Regional Environmental Monitoring Data Portal.

RPSC6 was particularly significant as the Project is about to enter its final year of execution. Participants recalled that at the previous RPSC meeting (which took place virtually in September 2021) the end date for all activities in the field was extended to 31 August 2023, with completion of all financial and administrative arrangements related to the project, including conduct of the Terminal Evaluation, is 31 December 2023. As such all Participating Countries and Partners were urged to accelerate execution of agreed project activities.

Site visit NQCL, 18th July 2022

RPSC6 reviewed and approved the 2022-2023 IWEco workplan and budget as presented by the IWEco Regional Project Coordinator, Jan Betlem, who retired at the end of July 2022.

Decisions and recommendations of RPSC 6 included:

- Implementation of the previously approved 3% charge to all projects with undisbursed funds from 1 September 2022 to support the Cartagena Convention Secretariat in continued hosting of the Regional IWEco Project and associated administrative and financial services
- Support for further development and implementation of the Regional Environmental Monitoring Data Portal (REMDAP) in collaboration with other regional efforts to improve environmental data and information management
- Following the training for regional environmental laboratories, the IWEco PCU and the Cartagena Convention Secretariat continue efforts to procure already determined equipment with support from the specialized consultant, preferably through involvement of an established regional institution with relevant experience and interest.
- Recommendations that the Cartagena Convention Secretariat and regional partners explore mechanisms for the formalization of the Regional Environmental Laboratory Network in order to optimize greater collaboration on environmental monitoring and assessment.

Jonathan Barcant of IAMovement (below in blue) introduced participants to work being done at the NQCL site (above)
IWEco. St. Vincent and the Grenadines:
“The Amazona Guildingii A Vincy Parrot”  
Video launched!

This endemic and vulnerable species, so precious to the people of St. Vincent & the Grenadines, has significantly increased in numbers in recent years despite hurricanes, volcanic eruptions and the negative effects of increasing human activities in its habitat. This is due to the passing of the 1987 Wildlife Protection Act, establishment of a 10,000 acre sanctuary in the centre of St. Vincent and the efforts of the Forestry Department in concert with a number of other local and international actors.

Find out more about it!
Check the project’s video gallery:  
https://www.iweco.org/resources/video-gallery

1, 2, 3: Three separate sites of intervention within the NQCL compound were visited to see progress with restoration.

4 and 5: Local community participants in the project displayed products created from vetiver and described the impacts of IWEco on their lives.

They benefited from training in land rehabilitation and for strengthening of livelihood opportunities.
team at the University of Applied Science Van Hall Larenstein based in Saba, Netherlands Antilles (www.moreef.com). At each location, three modules were placed as the base and one module stacked on top (Photo 1, pg. 1).

Photo 2
In June 2022, an NGO based in Nevis named C.A.R.E. SKN (Coral Assistance, Restoration and Education St. Kitts and Nevis) was engaged by IWEco SKN to build and establish the first ever coral nursery in the Federation (www.facebook.com/caresaintkittsNevis/).

(Continued from page 1)

Photo 3
Three “coral trees” were installed at Tamarind Cove, Nevis on July 15, 2022.

Photos 4 and 5
After coral fragments are collected, Ms. Valérie Grégoire and Ruddell Williams of C.A.R.E SKN added coral fragments to the coral tree on July 28, 2022.

Photos 6 and 7
Two workshops on coral reef survey techniques (i.e. benthic identification) were held on both islands on July 20 (Nevis) and July 27 (St. Kitts) with over 20 participants.

Photo 8
More training in the form of PADI Open Water Scuba Diving for three women of the Department of Marine Resources and SKN Reef Guardians given by trainer and C.A.R.E SKN co-founders marine biologist Ms. Valérie Grégoire.

Article courtesy Dr. Halla Sahely, IWEco.SKN Project Coordinator
Negril Farmers Trained in Sustainable Farming practices

IWEco.Jamaica, under its Component 4, with the support of UNDP GEF Small Grants Programme and the Negril Area Environmental Protection Trust (NEPT), is addressing unsustainable land use within wetland ecosystems by training farmers in sustainable farming practices and alternative livelihood programmes.

NEPA, the national executing agency, in its most recent project updates, noted that under this initiative:

- Workdays are held every Wednesday and Thursday.
- Cilantro and revelation sweet peppers harvested from the greenhouse, and mixed lettuce and basil harvested from the hydroponics unit, have been sold to local exporters and/or local buyers.
- A Climate Smart Agriculture Handbook has been produced and a total of 146 copies distributed to farmers in the period 30 May to 30 June.
- In May 2022 training sessions on pest and disease management of dasheen, banana, plantain and tomato were conducted with 71 farmers from Logwood, March Town and Cauldwell by H&L Agro and NEPT.
- On 16th June, H&L Agro conducted a herbicide efficacy demonstration plot at the Climate Smart Agriculture Site. Farmers were taught proper herbicide handling and introduced to the broad spectrum herbicide, Pilastar. Representatives from the Rural Agriculture Development Authority (RADA) and Jamaica Agricultural Society (JAS) were present.
- The final project report was submitted to the GEF-Small Grants Programme and letter of project completion received by NEPT in July 2022.
- In August, the greenhouse and hydroponics unit were sanitized in preparation for new crops (sweet pepper and lettuce).
- Technical support is currently being provided to the Fish River Farmers Group to register with the Department of Cooperative and Friendly Societies (DCFS) to build their capacity to source funding on their own.

In addition to providing local farmers with an income, employment of these best environmental practices is expected to result in improved water quality, reduced brush fires and improved peat reserves.

The Climate Smart Agriculture Handbook

The handbook is an output of a project entitled “Conserving the Natural Resources through Innovative Agricultural Techniques in the Negril Environmental Protection Area”. This has been implemented by the Negril Area Environmental Protection Trust with funding support from the Global Environment Facility Small Grants Programme which is supporting community projects under IWEco. It is a resource for farmers, to enable them to learn and apply sustainable land management practices as well as other environmental conservation strategies. This will help them to adapt to climate change impacts as well as reduce the negative impacts resulting from their farming activities on the environment.

Download the Handbook at: https://tinyurl.com/udnjfc7c
Governance of Natural Resources through Community Participation
- IWEco.Dominican Republic makes advances

One of the main objectives of IWEco. Dominican Republic is the conservation and sustainable use of biodiversity through the strengthening of national capacities for the integrated management of the Higüamo river basin, supported by adequate public policies, institutional and legislative reforms, as well as the application of efficient and effective management measures. To address this, IWEco.Dominican Republic has been working over the past year to identify and mobilize stakeholders of the watershed, to strengthen their organizational capacities and to support the process of forming the Council of Basins as a space for governance of the ecosystem resources of the Higüamo River.

In total, more than 200 people in 10 communities representing the 8 micro-watersheds that integrate the Higüamo river basin and its estuarine zone, have participated in the different awareness and education meetings about Resolution 022/2020 of the Ministry of the Environment. The Ministry approves the creation of a micro-watershed committee, a sub-watershed authority and a watershed council in the Dominican Republic to, through provision of a space for participation and agreement between the organized actors involved in the basin, guarantee the sustainable use of the ecosystem services provided by watersheds for various socio-economic and environmental activities, with water resources as the central axis.

This governance structure is a mechanism for the local social and environmental organizations to assume the planning, monitoring and control of the ecosystem resources of their territory and act in coordination with public institutions to guarantee compliance with environmental legislation.

This Basin Council is meant to support the implementation of an Integrated Management Plan for the watershed, which is being built based on the Participatory Environmental Diagnosis of the Higüamo river basin and the coastal zone. The Environmental Diagnosis was generated through community meetings involving the local authorities, community leaders, agricultural producers, women’s associations, students, and the community in general, as well as the private sector. Its purpose was to understand the environmental problems from the perspective of the users of the watershed, combined with the biophysical and scientific information on the state of conservation of the ecosystems in the watershed generated by the Ministry of the Environment, and thus build participatory solutions with the stakeholders for the reduction of pollution, environmental restoration, and sustainable production.

As a result of community mobilization and participation, the Playa el Faro committee in the municipality of San Pedro de Macorís was reactivated. This is made up of civil society as well as the authorities responsible for the management of the public beach and will form part of the Higüamo river sub-watershed authority.

With the support of IWEco, the Ministry of the Environment and Natural Resources will swear-in nine basin committees, which will integrate the Higüamo River Basin Council: eight (8) basin committees, one (1) beach committee and three (3) sub-basin Authorities (Casui, Magua, Higuamo).

The strengthening of policies and legal and institutional frameworks and the development of local capacities for the sustainable management of land, the integrated management of water resources and the management of ecosystem services, taking into account climate change, is essential to conserve, protect and guarantee the conservation and sustainable use of the water, land and biodiversity resources of the Higüamo river watershed and its estuarine zone. This is necessary to ensure the economic development of the region, for the benefit of current and future generations, and protect and rehabilitate ecosystems affected by anthropogenic activities and the effects of global warming.

**Importance of social mobilization in the governance of natural resources**

- Recognizes the environmental richness and potential of its territories
- Identifies the environmental problems and how they affect the generation of the local economy
- Proposes solutions from the point of view of the community, its capacities and roles.
- Articulates civil society with public institutions for the management of natural resources.
Upgrade of Water Quality Monitoring Protocols in St. Kitts and Nevis

The overall goal of the IWEco St. Kitts and Nevis National sub-Project is to reduce and reverse land degradation using the IWEco approach. The project has facilitated nature-based solutions within the College Street Ghaut watershed (St. Kitts), and key quarry sites and nearby wetlands and coral reefs (Nevis).

In order to ensure the sustainability of such solutions, complementary project activities related to strengthening legal instruments, environmental monitoring protocols and management plans were also initiated. One such activity was the upgrade of water quality monitoring protocols in St. Kitts and Nevis.

The consultancy, conducted by Ambient Environmental Consulting Inc., included field and laboratory assessments conducted in August and September 2021 on both islands, as well as face-to-face or virtual interviews and exchanges by members of the consulting team with key stakeholders from the relevant government departments (Environmental Health, Bureau of Standards, Environment and Water), and resulted in two outputs:

- A document detailing a comprehensive assessment of water quality (potable, recreational and wastewater) monitoring practices (sampling and analysis protocols, identification of sampling points with maps and GPS coordinates, equipment, human resources, data storage and analysis and overall enabling environment), gaps and recommendations for improved monitoring practices inclusive of human and physical assets for both St. Kitts and Nevis.

- An upgraded manual of best practices and protocols for water quality (potable, recreational and wastewater) monitoring for both islands and recommendations for training needs of laboratory personnel. This also reviewed the recommendations for the purchase of equipment as outlined in the report “Regional Laboratory Assessment” commissioned by the regional IWEco project in 2020.

The manual also documents the Standard Operating Procedures that are recommended for water quality monitoring in St. Kitts and in Nevis. These are divided into four parts:

⇒ Manual 1: Standard operating procedures for collecting and analyzing samples of drinking water and source waters for critical water quality parameters.

⇒ Manual 2: Standard operating procedures for collecting and analyzing recreational waters for intestinal Enterococci.

⇒ Manual 3: Standard operating procedures for collecting and analyzing samples of treated municipal wastewater.

⇒ Manual 4: Standard operating procedures for collecting and analyzing samples of drinking water after disinfection for total and residual chlorine.

A presentation of the upgraded manual of best practices and protocols was delivered to relevant government stakeholders on 26 January 2022 in Nevis and 28 January 2022 in St. Kitts. Meaningful engagement of stakeholders during this process has resulted in two reports which form a solid foundation upon which the Federation of St. Kitts and Nevis can continue to improve its water quality monitoring now and into the future.

Both documents are available on the IWEco website:

Best Practices for Water Quality Monitoring

Water Quality Monitoring Practices Assessment Report
https://www.iweco.org/sites/default/files/2022-07/IWEco_C1_SKN_Water_Quality_Monitoring_Assessment_Report_FINAL.pdf

- by Halla Sahely, IWEco.SKN National Coordinator

IWEco.SKN shows the way...

... Training Youth in Water Quality Monitoring

Flashback: In October 2021, the project conducted theory and field monitoring training for members of the SKN chapter of the Caribbean Youth Environment Network (CYEN) using kits for citizen scientists!
Congratulations to the Cartagena Convention’s new Coordinator!

“Ensuring that the projects and activities we implement are resulting in direct socio-economic benefits for the region and at a local community level. This requires us to take a more integrated and participatory approach both in the design and delivery of our Work Plan and Budget. We need to find the balance between on-the-ground local interventions that benefit livelihoods, support national policy and decision-making while also working towards wider transformational changes at a regional level through harmonized approaches and regional transboundary cooperation.”

We look forward to his continued support and guidance!

Stay safe everyone!
For up-to-date info on COVID-19: https://www.who.int/emergencies/diseases/novel-coronavirus-2019

IWEco thanks its partners, both regional and national, for their contributions to this issue and for their continuing support.

For more information contact:
Project Coordination Unit
GEF IWEco Project
United Nations Environment Programme
14-20 Port Royal Street
Kingston, Jamaica
Phone: 1(876)-922-9267/9; Ext. 6225
Email: donna.spencer@un.org

www.iweco.org

The IWEco Project is a five-year multi-focal area regional project funded by the Global Environment Facility (GEF). UN Environment is the lead Implementing agency and it is hosted by the Cartagena Convention Secretariat.

#CaringForOurFuture