

### In this issue:

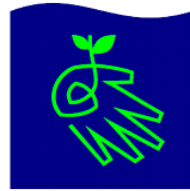
- Update from the RPCU ...pgs.1-2
- Sustainable Livelihoods and Land Rehabilitation in the Upper Soufriere Watershed, Saint Lucia ...pgs. 1-2
- Status of IWECO's National sub-Project Activities ...pg. 3
- Highlights: St. Kitts & Nevis and Trinidad & Tobago National sub-Projects ...pg. 4
- Highlights: The Dominican Republic and St. Vincent & the Grenadines National sub-Projects...pg. 5
- Regional Environmental Monitoring Data Portal (REMDAP) Update ...pg. 6
- Lessons Learnt and Best Practices in NbS in IWECO shared at CWWA 2023 ...pg 7
- Draft Action Framework for IWRM for the CARICOM Region presented at 19th HLF Water ...pg. 7
- Nature-based Solutions at work in Cuba ...pg. 8-9
- ICZM Methodological Framework for 4 IWECO countries ...pg. 9-10
- IMSAM - A Tool for Assessing Natural Resource Management Systems ...pg. 9
- IWECO TT published revised Quarry Rehabilitation plans ...pg. 10

Sustainable Development Goals being addressed



Volume 6 Issue 1

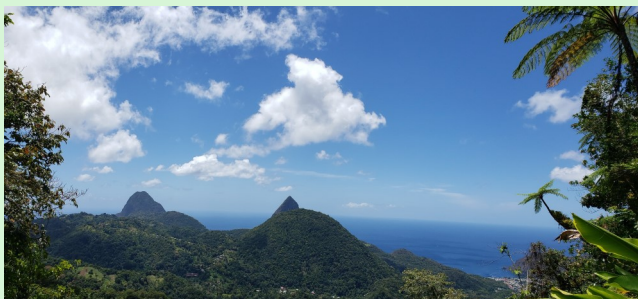
January — October 2023



# IWECO:link

Quarterly newsletter of the GEF-funded Integrating Water, Land and Ecosystems Management in Caribbean Small Island Developing States Project

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View of the Caribbean Sea from the Upper Soufriere Watershed.

## Sustainable Livelihoods and Land Rehabilitation in the Upper Soufriere Watershed, Saint Lucia

The IWECO Saint Lucia National sub-Project has sought to demonstrate sustainable approaches where restoration is merged with livelihood creation, and mindset and attitudinal changes are fostered through mutually beneficial management approaches.

Through the Ministry of Agriculture, Department of Forestry (DOF) and its partners, the Project sought to address the problems of land degradation and ecosystem degradation in the upper reaches of the Soufrière Watershed through rehabilitation of lands, provision of alternative sustainable livelihoods, capacity building and public awareness.

A diverse set of ownership and management arrangements exists in the upper Soufrière watershed where a monoculture of dasheen (a root crop) has been the main agricultural activity and poor land use practices persist. As such, the communities in the watershed are vulnerable to the destructive impacts of storms, such as Hurricane Thomas in 2010, which caused loss of property and life, landslides, erosion, scouring and destabilization of streambanks.

Through a variety of diagnostic assessments and direct engagement with farmers and landowners, a set of five demonstration plots and plant nursery sites were selected for



SLU National Project Coordinator (NPC), Karl Augustine, at the Community Nursery.

(Continued on page 2)

## Update from the RPCU

Dear IWECO Partners,

We are pleased to share the latest project newsletter...long in the making as the Regional Project Coordination Unit (RPCU) has continued working to support project partners in the final year of project implementation.

Progress in Component 1, with national sub-projects in a total of seven (7) countries has been significant so far in 2023. As we show on page 3, activities in three countries have been completed. Three (3) more countries are on track to finish by end of March 2024, and in the case of one, by the end of June 2024. A great deal of progress is being made on the ground in terms of nature-based solutions and we offer a glimpse of this in several articles in this issue.

The regional interventions under Component 3, which aim to strengthen the policy, legislative and institutional capacity for an integrated approach to water, land and ecosystems management, executed by CARPHA through the OECS Commission, have also made excellent progress. Stories on pages 6,7,9 and 10 describe the status of four important tools being supported by IWECO: the Regional Environmental Monitoring Data Portal (REMDAP), IWRM, ICZM and an Integrated Management System Assessment Model (IMSAM).

The significantly reduced RPCU has been ably supported by Dr. Halla Sahely, who has been Consultant Technical Specialist for IWECO since mid-April 2023. Those of you who have in any way participated in

(Continued on page 2)



Caribbean Public Health Agency

CARPHA

SGP The GEF Small Grants Programme

*(Continued from page 1)*

the case study missions which took place between October 2022 and April 2023 would have met Andrew Harnden, Case Study Consultant, who is helping us to record project experience and lessons learned. Farzana Yusuf-Leon, IWeco Technical Specialist at the OECS Commission and Shane Kirton, Programme Manager at CARPHA, have also diligently coordinated the numerous initiatives under Component 3.

Donna Henry-Hernandez has worked day, and often night, to provide support to partners, and, of course, we could not manage without the support of the staff of the Cartagena Convention Secretariat.

At the end-August 2023, I chose to revert to my substantive duties as Communication Specialist, given the need to document the work of the project at every level, including results and impact. The legacy of the GEF UNEP IWeco Project will be a complex one and it is important to understand it, if we are to learn and if the gains made are to be sustained and built upon.

I hope that you will find this issue both informative and enjoyable.

Warm regards.

*Donna Sue Spencer*  
IWeco Regional Project Coordination Unit (RPCU)

*(Continued from page 1)*

demonstrating an integrated management approach using a range of 'hands-on' rehabilitation and restoration activities to address land degradation with innovative and nature-based solutions. These sites included four private farm plots of 5 to 10 acres in size, one community agroforestry plot of about 1 acre, and a Department of Forestry operated agricultural plot at Dennery Range.

A variety of training sessions on sustainable land management emphasized planting techniques that substitute and replace short root crops with deep rooted varieties on steeper slopes. These included "below the canopy" crops such as vanilla using trellises, flowers such as orchids and ginger lilies and vines such as passion fruit on trees (Figure 1). Forestry Officers assisted in identifying tree crops which, in addition to being effective soil stabilizers, would sell for higher prices. These include soursop, sapodilla, grapefruit, sugar-apple, cashew, and sweet-sop. Native tree species which would support biodiversity were also included.



*Cyril Gaston, farmer, with one of his citrus trees*

Additionally, training focused on reducing erosion on slopes which had previously been cleared of vegetation through use of natural materials for installing check dams, reinforcing slopes, contouring, and composting for mixing into the soil. Finally, training on nursery operation including growing, pruning, and best species selection for different reforestation and restoration situations, completed knowledge transfer. These plots provide visiting farmers and community members with clear visual illustrations of sustainable land management and cropping techniques and how they can be replicated.

Over the lifetime of the project, over 12,000 tree species and 5,000 flowering plants were planted in the watershed over at least 25 hectares, although positive impacts from the IWeco nature-based interventions and demonstration plots are evidenced over a much wider area in the watershed. In fact, this work catalysed a new vision for this watershed which allowed for the development of an Agro-Tourism Park (ATP).



*Showing vanilla on trellis', Department of Forestry agricultural plot.*

### The Agro-Tourism Park

The ATP is a recreational trail network showcasing the entire landscape extending from the Fond St. Jacques (FSJ) community (from Torialle Bridge, Bois Den, Moca) northward along the Soufrière River to the top of the valley at the Edmund Forest Range, as shown in Figure 2. It provides recreational and eco-tourism opportunities with multiple conservation and economic benefits including small enterprise development and employment.



*Grand Eden Farms, Upper Soufriere*

A range of capacity building and hands-on training activities were actualized to help strengthen and broaden the base of knowledge and skills the community needs to successfully develop and manage the ATP. When complete, it will feature upgraded campsites, toilet facilities, common use and recreational areas, trails, and other eco-tourism activities such as farm-to-table experiences.

This activity is led by the Fond St. Jacques Development Committee (FSJDC) with support from the DOF through IWeco and UNDP GEF Small Grants Program. The ATP has also received the full endorsement of the Government of St. Lucia, through the formal signing of a Memorandum of Understanding with FSJDC in early 2023, which strengthened buy-in by all stakeholders and importantly, ensures long-term sustainability of IWeco interventions. Overall, the FSJDC has been able to leverage additional funds and support as the ATP continues to grow from strength to strength.

*Fond St Jacques Development Committee members with the NPC, March 2023*





## Status of IWeco's National sub-Project Activities

The GEF-funded UNEP Implemented IWeco Project has national sub-projects in seven (7) countries. To date, three (3) countries - Cuba, St. Kitts & Nevis and Trinidad & Tobago - have completed their interventions and are wrapping up reporting. Three countries - the Dominican Republic, Saint Lucia and St. Vincent & the Grenadines - are working to complete activities by end-March 2024. Jamaica is expected to finish activities by end-June 2024. Here is an overview of the status of activities:

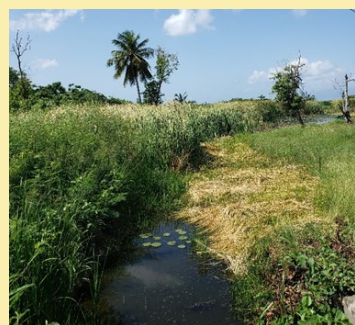
COUNTRY / NATIONAL SUB-PROJECT TITLE	STATUS OF ACTIVITIES	END-DATE
<b>Cuba</b> <b>Title:</b> Conservation and sustainability of biodiversity in Cuba through the integrated watershed and coastal area management approach.	Field activities completed. Wrapping up publication of final reports. Exchange and learning are well advanced. Acquisition of equipment for the CEAC Laboratories successfully completed by end-2022. A wide range of publications produced and the Center for Environmental Studies of Cienfuegos (CEAC) created a dedicated project website: <a href="http://iweco.ceac.cu/es/nosimportaelfuturo">http://iweco.ceac.cu/es/nosimportaelfuturo</a> to eventually house the main project reports. A closing workshop was held from 26 -28 September 2023. Officials, researchers, specialists and beneficiaries of the project in all four participating watersheds participated.	Activities - 31 March 2024.  Reporting - 30 June 2024.
<b>Dominican Republic</b> <b>Title:</b> Integrated Management of the Biodiversity, Freshwater and Land Resources of the Higuamo River Watershed and its Associated Coastal Zone, including Mitigating Climate Change Impacts.	Significant acceleration of activities in the upper, middle and lower parts of the Higuamo River watershed in 2023. Focus on supporting sustainable livelihoods at community level, notably amongst cocoa and honey producers in the middle watershed. Wide representation in the Lower Higuamo River Micro-watershed and Estuary Zone Committee, San Pedro de Macoris. The watershed-wide integrated approach to management is well illustrated by activities meant to inform, contribute to, and promote.	Activities - 31 March 2024.  Reporting - 30 June 2024.
<b>Jamaica</b> <b>Title:</b> Biodiversity Mainstreaming in Coastal Landscapes within the Negril Environmental Protection Area of Jamaica	A new PCA was signed on 27 April 2023 for a rescoped project focusing on: rewetting of a portion of the Negril Great Morass; development of plans for rebuilding of the Royal Palm Reserve Interpretative Centre; communication, and; activities supporting sustainability. Supported by the formation at national level of a Multi-Agency Oversight Committee in June 2023.	Activities - 30 June 2024.  Reporting - 30 September 2024.
<b>St. Kitts &amp; Nevis</b> <b>Title:</b> Addressing Impacts of Acute Land Degradation in the College Street Ghaut in St Kitts and Quarries and Sand Mining Hotspots on Nevis.	All activities completed. Terminal reports are being prepared.	Activities completed.  Reporting - 31 March 2024.
<b>Saint Lucia</b> <b>Title:</b> Addressing Problems of Land Degradation and Ecosystem Degradation in the Upper Reaches of the Soufriere Watershed in Saint Lucia.	Significant progress in late 2022 and 2023, particularly with agro-forestry and below forest canopy interventions. Fond St. Jacques Development Committee signed a MOU in April 2023 with GOSL formalizing their role as managers of the Agro-Tourism Park which is being developed for the area.	Activities - 31 March 2024.  Reporting - 30 June 2024.
<b>St. Vincent &amp; the Grenadines</b> <b>Title:</b> Addressing Land Degradation in the Georgetown Watershed, Saint Vincent.	Acceleration of activities since January 2023. Some shifting of planned interventions between two sites within the Georgetown Watershed, in particular between the Perseverance Forest and the Montreal Forest, as a result of work already being done under other projects since the interventions were originally designed. Initiatives supporting sustainable livelihoods by two communities have made good progress.	Activities - 31 March 2024.  Reporting - 30 June 2024.
<b>Trinidad &amp; Tobago</b> <b>Title:</b> Reduce and reverse land degradation at selected Quarry site(s) in the North East of Trinidad using an integrated water, land and ecosystems management approach.	All field activities completed. The "Guidebook for Quarry Rehabilitation Plans" published. The manual for training in land rehabilitation being finalized and a final documentary is being prepared.	Activities - 31 March 2024.  Reporting - 30 June 2024.

# Highlights: St. Kitts & Nevis and Trinidad & Tobago National sub-Projects, 2021-2023

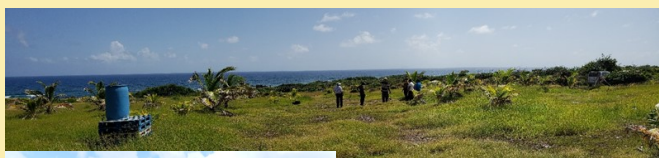


NbS implemented by communities featured prominently in SKN!

Quarry rehabilitation site, Hicks, Potworks Estate, Nevis, 2021-2022



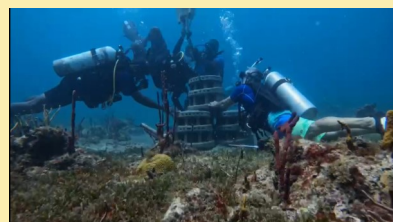
Nelson Spring Wetland, Nevis, 2021. Restored by the St. Thomas Residents Association and help from the Nevis Historical Conservation Society (NHCS).



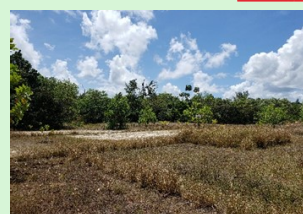
Coconut Walk, Nevis, revegetated by NHCS, despite being very exposed and arid.



Partnership with the St. Kitts chapter of the Caribbean Youth Environmental Network for water quality monitoring and beach cleanups.



Installation of MoReef artificial reef modules, July 2022, E. Coast, Nevis.



Three (3) former quarry sites at the National Quarries Company Ltd. Compound, Guaico, Trinidad were rehabilitated using NbS.



Forest canopy closure at one of the sites, despite the extremely dry season, March 2023.



Harvesting cassava from one of the taungya farming-sites, March 2023.



Community members trained as "Quarry Rehabilitation Champions" also learned skills such as weaving with vetiver grass and planting food crops in grow-boxes to earn additional income.





# Highlights: The Dominican Republic and St. Vincent & the Grenadines National sub-Projects, 2022—2023



Good agricultural practices (GAPs) have been implemented for conservation and restoration of the ecology of the Higuamo watershed. Members (about 95 in total) of the Association of Cocoa and Honey Producers in the middle watershed, explained that their honey production has improved in both quality and quantity as a result.



Composting is promoted and practiced.



Cocoa yields have improved due to the application of compost and other GAPs. Of 229 cocoa growers, 70 are women.



The vibrant Watershed Committee for the Lower Higuamo River and Estuary Zone meets regularly and has representatives from many sectors.



Members of the Association of Cocoa and Honey Producers of the middle Higuamo Watershed.



The Sandy Bay Heritage Development Organization in the Sandy Bay Community, north of Georgetown in the north-east of St. Vincent, has rehabilitated and further developed a trail used by the Garifuna people historically. IWEco partners, the UNDP GEF Small Grants Programme (SGP) and the Caribbean Natural Resources Institute (CANARI), through its regional sustainable livelihoods activity, both provided support.



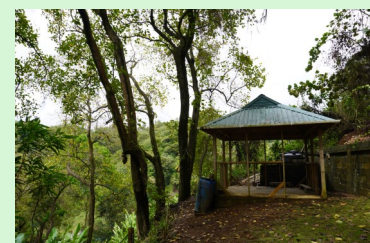
Counts of the St. Vincent Parrot (*Amazona guildingii*) conducted by the Department of Forestry (DOF), continued in July 2022 with support from the community.



Madeira Valley Heritage Park Inc., a community-based organization, led by Robert Fitzpatrick, has reforested an old banana estate near Biabou on St. Vincent's east coast. IWEco partners, the UNDP GEF Small Grants Programme and CANARI, through the sustainable livelihoods activity, provided support and mentoring.



The DOF continues to give support through the provision of technical advice as the park develops.





UPDATE:

## Regional Environmental Monitoring Data Portal (REMDAP)



*Participants attending the REMDAP training workshop in Saint Lucia, 21 - 22 August, 2023*

In 2020, the IWeco Project completed a scoping exercise that was the first step towards creation of a web-based Regional Environmental Monitoring Data Portal (REMDAP). The overall objective of the REMDAP is to contribute to the preservation of Caribbean ecosystems and natural resources through the improvement of data availability to inform monitoring and evaluation and the decision-making process, and through raising awareness of the importance and functioning of ecosystems and environmental systems. The REMDAP will serve as a clearing-house mechanism to strengthen the process of regional environmental monitoring and assessment.

The consultancy to develop and implement the REMDAP for Antigua & Barbuda, Barbados, Grenada, Jamaica, St. Kitts & Nevis, St. Lucia, St. Vincent & the Grenadines and Trinidad & Tobago began in December 2022. The consultant, WSP Environment and Infrastructure Solutions Inc. UK, sought to deliver results based on the following three (3) Components:

- **Component 1:** Establishing national consensus and support for the creation, implementation and hosting of the REMDAP.
- **Component 2:** Developing, testing and launching the REMDAP.
- **Component 3:** Providing training to key governmental bodies and third sector organisations responsible for environmental monitoring in the methodologies for data collection and preparation for inclusion in the Portal, and in the integration of said data and metrics in their tasks and workflows.

Key stakeholders in the eight (8) participating states were consulted towards establishing consensus and building support for the creation, implementation and hosting of the REMDAP. This involved first defining the vision, objectives and intended use of the portal. Some of the core features agreed to be beneficial for inclusion in the REMDAP based on these consultations were: new and improved web publishing capabilities; a secure platform for controlling access for differ-

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ent stakeholder groups; delivery of a secure and robust data repository; and provision of robust web mapping and dashboarding capabilities to support future Multilateral Environmental Agreements and indicator monitoring.

Practical sustainability being a major concern, the consultant recommended a logical system design which is technically feasible, user friendly and (as far as possible) addresses the full requirements of the stakeholders consulted. The preferred design option based on the analysis is based on an existing ArcGIS Online platform managed by the OECS Commission. Consideration was also given to the ease with which there can be integration of data from existing portals and projects, to reduce duplication of efforts and improve partner collaboration. These include linkages with the Caribbean Protected Areas Gateway (CPAG) GeoNode, and the Environment Statistics Self-Assessment Tool (ESSAT) developed by United Nations Statistics Division (UNSD), which was recently applied to five of the eight (8) participating states through support from the United Nations Economic Commission for Latin America and the Caribbean (ECLAC).

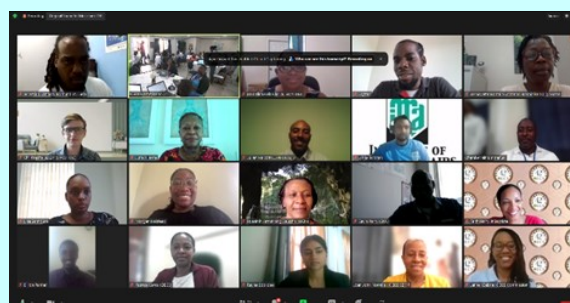
The REMDAP was built based on the ArcGIS online platform, and data received from the participating countries were analysed and uploaded to the platform.

A training workshop was successfully carried out in hybrid format from 21 - 22 August 2023 in Castries, St. Lucia. Stakeholders were trained in the use of technologies and techniques for natural resource monitoring, data preparation for inclusion in the Portal, the management of the Portal and the use of the Portal in environmental management decision-making. 71 stakeholders (30 in-person and 41 virtual) attended the training sessions.

Further refinement of the REMDAP is being carried out subsequent to the training and comments received from stakeholders. It is anticipated that the REMDAP will be officially launched in the coming months.



*Training assistance provided by WSP consultant, Shane Pinder, at the REMDAP Training Workshop*



*Snapshots of virtual participants in the REMDAP Training workshop*

## Lessons Learnt and Best Practices in NbS in IWEco shared at CWWA 2023



The Caribbean Water and Wastewater Association 32nd Annual Conference and Exhibition was hosted in Guyana from October 23-27, 2023. Over 350 delegates from the water, wastewater and solid waste sectors gathered to advocate for the use of innovation and technology in the management of our resources under the theme: “Accelerating Change in the Water, Wastewater and Solid Waste Sectors.”

This year’s theme focused on concrete actions that can be implemented now to accelerate the change that is required to ensure a climate-resilient future for our Caribbean region. Technical Specialist Halla Sahely attended the conference and presented a paper entitled “**Nature-based Solutions (NbS) in Action Across the Caribbean: Lessons Learnt and Best Practices from the GEF-IWEco Project**” featuring NbS in action across two of the participating countries, Cuba (see pg.7) and St. Lucia (see pg.1-2) and highlighting lessons learnt and good practices in relation to key features such as integrated approaches, stakeholder engagement, adaptive project

management and sustainability.

Over 25 delegates attended the session and a meaningful discussion ensued especially as it relates to NbS for use for wastewater treatment through constructed wetlands. Dr. Sahely was able to draw upon the experience of the IWEco national sub-project activities in St. Kitts and Nevis in designing a small, constructed wetland for the treatment of greywater from the College Street ghaut. She also had the opportunity to meet and share lessons learnt with partners from IWEco’s co-executing agency, CARPHA and the OECS Commission, through which it is coordinating component 3 activities.



*Above, Halla makes her presentation, and below, she connects with Farzana Yusuf-Leon, OECS, and Shane Kirton, CARPHA*



## Draft Action Framework for IWRM for the CARICOM Region presented at 19<sup>th</sup> High-Level Forum (HLF) on Water



*Participants in the 19th High Level Forum (HLF) of Caribbean Ministers with responsibility for Water, 24–25 October 2023, Georgetown Guyana.*

At the 19th High-Level Forum for Caribbean Ministers responsible for Water held in Georgetown, Guyana on 24 - 25 October 2023, information regarding the Vision, Mission and Strategic Goals associated with the Draft Action Framework for Integrated Water Resources Management (IWRM) for the CARICOM Region developed under the UNEP GEF IWEco project was presented by Dr. Paulette Bynoe, one of the key experts comprising the Global Water Partnership - Caribbean (GWP-C) team contracted to develop the Framework. Dr. Bynoe also outlined the proposed roadmap for implementation, and indicated that finalisation of the Framework is anticipated.

Convened during the CWWA’s 32nd Annual Conference and Exhibition, the HLF was attended by four Ministers with responsibility for water, one Permanent Secretary, water utility heads, regional and international donors and development partners.



## Nature-based Solutions at work in Cuba

The IWeco national sub-project, "Conservation and sustainability of biodiversity in Cuba through the integrated watershed and coastal area management approach" sought to strengthen national capacities for integrated management of watersheds to support biodiversity conservation and sustainable development.

Through the Centro de Estudios Ambientales de Cienfuegos (CEAC) and its many partners, IWeco.Cuba implemented a variety of nature-based solutions across four watersheds, the Guanabo, Arimao, Agabama and San Juan watersheds, covering a combined area equivalent to 2.7% of the land area of Cuba.

In terms of nature-based solutions (NbS), the project focused on integrated environmental management approaches including forest restoration and promotion of good agricultural practices for several farms located within these critical watersheds.

The main objectives were to increase overall forest cover to enhance watershed integrity and biodiversity with native species including fruit trees to create sustainable livelihoods.

Challenges included loss of forest cover, habitat fragmentation, presence of invasive species, soil erosion due to poor land use practices and overall poor management of natural resources.

The reforestation effort was supported by significant environmental monitoring activities including development of indicators to assess the sustainability of ecosystems goods and services and development of landscape maps, meaningful stakeholder engagement through workshops, training seminars and field visits, public education, and community outreach.

In the San Juan watershed, over 330 hectares were reforested with a focus on native species such as mahogany, cedar, carob, bijáguara, and others such as bamboo, widely used in protective strips along rivers and streams. IWeco.Cuba invested in the nursery at the "Hermanos Marañón" Forestry Community with a strong focus on native forest species and fruit trees including mango, soursop, tamarind and cashew as shown in Figure 1 below.

**Figure 1:**



Overall, for three of the four watersheds, the project supported the reforestation of over 840 hectares, the most of any of the participating countries in IWeco.



*Antolino Perez Rodriguez, Farmer, Arimao watershed with his plough.*

Hand in hand with reforestation efforts, the project focused efforts on the promotion of conservation agriculture at six farms in strategic locations within the Arimao, Agabama and San Juan watersheds. Extensive training with farmers at the intervention sites was facilitated demonstrating many facets of conservation agriculture including composting, green manure, contouring, intercropping, agroforestry, natural water retention together with support in terms of irrigation, solar pumping and small tillage equipment.



*Above & right, Enrique Padron's farm school, Arimao watershed.*



*(Continued on page 9)*



## ICZM Methodological Framework for 4 IWEco countries

Caribbean SIDs face over-exploitation of coastal resources, increasing sedimentation of coastal waters, coastal development, pollution, invasive alien species and climate related issues such as tropical storms, hurricanes and sea surges. Coastal zones, which have very limited area and limited resources face increasing pressure.

IWEco's Component 3 addresses the policy, legislation, institutions and capacity needs to enable Caribbean SIDS to develop and implement integrated natural resources management. Under this component and coordinated by the OECS through CARPHA, a consultancy titled "**Development and Implementation of a Methodological Framework for Integrated Coastal Zone Management - Grenada, Jamaica, Saint Lucia and Saint Vincent and the Grenadines**" was completed in September 2023 by NEMUS – Gestão e Requalificação Ambiental, Lda.

The overall objective of this work is to ensure that the principles and objectives of Integrated Coastal Zone Management (ICZM) are incorporated into decision-making for new developments. The consultancy included assessments of the governance structures in the four islands for decision-making on development initiatives and actions and recommendations for mainstreaming ICZM into decision-making for sustainable socio-economic development outcomes.

ICZM plans are not currently being implemented in any of these countries, although there is a framework for the development

*(Continued on page 10)*

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The organic Recreo 5 farm in La Coca Ecological Reserve, Havana del Este, for example, demonstrates the many benefits of conservation agriculture including increased agricultural productivity and income, improvement of soil productivity and soil water retention and reduction in soil erosion and pests, improvement in water quality, and enhanced biodiversity



The increase in biodiversity was well documented and published. This included a broad inventory of birds (both native and migratory), flora, vegetables, spices, fruit trees, orchids, and medicinal plants found in the Reserve. In fact, during project lifetime, 47 new species of fauna, that had not previously been



reported in the area were observed and documented.

The importance and benefits of this NbS cannot be overstated especially considering that the project was implemented largely during the COVID-19 pandemic and economic embargo in Cuba. The focus on supporting sustainable livelihoods was greatly valued by stakeholders at all levels and has seen a measurable increase in the number of farmers managing soils ecologically using the principles of conservation agriculture.

## IMSAM

### – A Tool for Assessing Natural Resource Management Systems



**IWEco, under Component 3**, coordinated by the OECS through CARPHA, developed a guide for review of policy, legislative and institutional capacity to support Sustainable Land Management (SLM) and water resources and ecosystems management in SIDS participating in the IWEco Project. It is called the **Integrated Management System Assessment Model (IMSAM)**.

IMSAM is a useful tool to assess natural resource management systems and can be used (expanded and refined as needed) more widely for the analysis of other SIDS. It can be used to determine gaps in policy, legislation and institutional arrangements which would inform priority interventions.

As a result, in consultation with the countries, the following activities were prioritized for completion during the project lifetime: development of a Methodological Framework for ICZM for Grenada, Jamaica, Saint Lucia and St. Vincent & the Grenadines; a National Water Information System for St. Kitts & Nevis; a National Research Strategy for the Collection of Environmental Data Necessary to Inform Environmental Management Decision-making in Antigua & Barbuda and Trinidad & Tobago; a Marine Pollution Management Strategy and National Action Plan for Barbados; update of the National Risk Management Plan for the Dominican Republic, and; development and implementation of a Regional Environmental Monitoring Data Portal (REMDAP).

All plans, frameworks, strategies, management and action plans were developed in consultation with national and regional stakeholders. The REMDAP (see page 6) was created and tested, and training was provided also with extensive consultation and in collaboration with existing platforms.

IMSAM can help Caribbean SIDS to address the common threat of pollution of the Caribbean Sea. It is meant to support implementation of the LBS Protocol and the GPA, SDGs 6,13, 14, 15.

The IMSAM was developed under the IWEco Project by Open Plan Consultants in the context of IWEco SIDS, during the early phases of the Project's Component 3.

Read more at:

[https://www.iweco.org/sites/default/files/2022-06/IWEco Project C3 Integrated Management System Assessment Model Final June2021.pdf](https://www.iweco.org/sites/default/files/2022-06/IWEco%20Project%20C3%20Integrated%20Management%20System%20Assessment%20Model%20Final%20June2021.pdf)



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and implementation of ICZM plans. The situational analysis found that there are methodologies and tools foreseen for ICZM plans in all countries, including the Coastal and Marine Spatial Plans developed by OECS for Grenada, Saint Lucia and Saint Vincent and the Grenadines, which encompass similar methodologies and tools. Grenada has an ICZM Act which addresses the preparation, development, and implementation of the Coastal Zone Management Plan, as well as the designation of Coastal Zone Management Areas. Jamaica has Coastal Management and Beach Restoration Guidelines and Saint Lucia has a Coastal Zone Management Strategy and Action Plan, dating back to 2008.

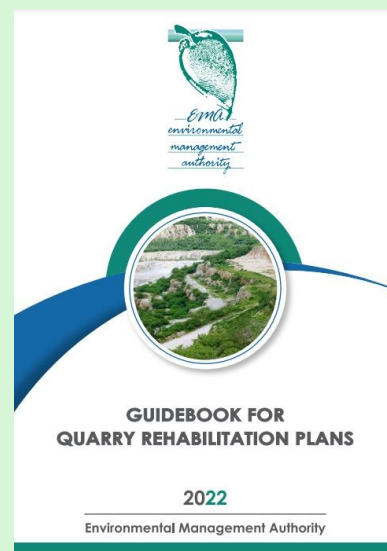
Through this activity, a package of support has been developed to assist the implementation of the methodology and pilot the use of the methodological ICZM framework in the participating states, guided by existing data availability.

The following key components addressed the general and specific objectives of the four participating countries:

- Development of a methodological framework to guide the preparation and implementation of ICZM Plans.
- Development of an action plan to support the implementation of the ICZM plan using the methodological framework adapted to the priorities, needs and resources of the states of Grenada, Jamaica and Saint Vincent and the Grenadines; and development of an action plan for evaluation of the implementation of the existing Draft ICZM Action Plan for Saint Lucia.
- Preparation of ICZM plans for pilot study shoreline areas, approximately 2km – 3km in length, in Grenada, Jamaica and Saint Vincent and the Grenadines, as examples of implementation of the methodological framework.
- Cost-benefit analyses and communication, and engagement strategies for Grenada, Jamaica and St. Vincent & the Grenadines.
- Review and finalisation of the Draft ICZM Action Plan for Saint Lucia and development of a stakeholder communication and engagement strategy.

The Final Report will be published to the IWEco Project website in coming months.

## IWEco Trinidad and Tobago publishes revised Quarry Rehabilitation plans




See:

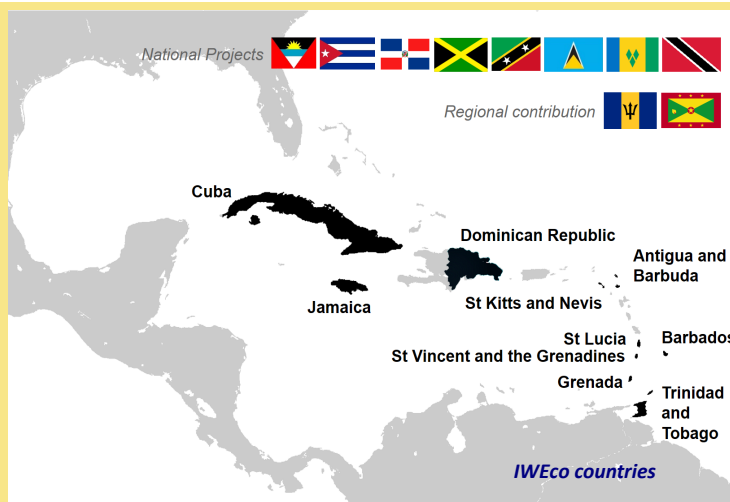
[https://www.iweco.org/sites/default/files/2023-05/IWEco\\_TT\\_Guidebook\\_for\\_Quarry\\_Rehabilitation\\_Plans\\_EMA\\_2022.pdf](https://www.iweco.org/sites/default/files/2023-05/IWEco_TT_Guidebook_for_Quarry_Rehabilitation_Plans_EMA_2022.pdf)

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