Mid-Year Report

JANUARY – JULY 2022

"Impact Assessment of Climate Change on the Sandy Shorelines of the Caribbean: Alternatives for its Control and Resilience"

REPORT NO.9

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ACRONYMS

ACS	Association of Caribbean States
CITMA	Ministry of Science, Technology and Industry (Cuba)
CSC	Caribbean Sea Commission
DECS	Directorate for Disaster Risk Reduction, Environment and the Caribbean Sea
ICIMAR	Institute of Ocean Science (Cuba)
KOICA	Korean International Cooperation Agency
KIOST	Korean Institute of Ocean Science and Technology
NEPA	National Environment and Planning Agency (Jamaica)
OSG	Office of the Secretary General
UDC	Urban Development Corporation (Jamaica)

1. PROJECT OVERVIEW

1.1. Operations Overview

The Sandy Shorelines Project continues operating within the Directorate for Disaster Risk Reduction, Environment and the Caribbean Sea (DECS):

During the period covered by this report, January to July 2022, the ACS was able to agree to an extension of the Sandy Shorelines Project through to September 2023 through consultation with KOICA.

The lifting of travel restriction across our member states due to COVID-19 Virus, notably Trinidad & Tobago and Antigua & Barbuda resulted in the ACS working with the Ministry of Foreign Affairs of both member states along with the Cuban coastal experts of GAMMA SA to simultaneously execute Beach Executive Projects at Bonasse Bay Cedros, Trinidad & Tobago, and Runaway Bay, Antigua & Barbuda. With the milestone of the completion of the project in sight, the Sandy Shorelines team is energised and focussed to achieve the objectives of each of the six components of the project with active liaison with the Technical Coordinator Dr José Luis Juanes and the Focal Point of the Member States on a weekly basis. Director Ana Leticia Ramírez Cuevas will continue to update KOICA by sending incremental updates on the components at the project proceeds.

2. PERFORMANCE REVIEW

2.1. Activities Undertaken and Results Achieved

The Sandy Shorelines Project team was able to achieve the following during the period January to July, 2022.

- ✓ Update the Nominations to the Focal Point Network
- ✓ 7th Focal Point Meeting successfully hosted.

- ✓ Hosting of Formal Meeting with the Technical Coordinator in Port of Spain, Trinidad and schedule weekly liaison.
- ✓ Progress has been made on Coastal Equipment Procurement Exercise, with the drafting of the Custody Transfer Agreement.
- ✓ Completed Beach Rehabilitation Project in both Trinidad & Tobago and Antigua & Barbuda as well as hosting of Post Graduate Courses with the local experts in each country.
- ✓ Followed Up on Field work National Erosion Network within the Member States.
- ✓ Held Meetings with NEPA regarding capacity building exercises for the benefit of the wider focal points within the Sandy Shorelines Project.
- ✓ Successfully drafted, Terms of Reference for the Proposed Online Platform and verge of tendering this work item.

COMPONENT 1: Establishment of Focal Point Network and Needs Assessment

- ***ACTIVITY 1.1-Update the Focal Point Network***

The nominations to the focal point network were successfully updated -including the nomination of alternate focal points- except for Haiti and these representatives would be in place as the country liaisons up to the expected completion of the project in June, 2023, this will ensure continuity (see attached table). The confirmation was critical for the delivery of the coastal equipment and scheduled meetings on the Beach Monitoring Network. ACS recently set the up the 7th Focal Point Meeting which was held on July 7th, 2022.

Country	Technical Focal Point Designated	Position	Institution
Antigua & Barbuda	Mr. Mark Archibald	Senior Fisheries Officer within the Fisheries Division	Point Wharf Fisheries Complex
Antigua & Barbuda (alternate)	Mr. Hilroy Simon	Fisheries Officer within the Fisheries Division	Point Wharf Fisheries Complex
Costa Rica	Sra. Lilliana Piedra Castro	Natural Resources and Wildlife Laboratory Coordinator	National University of Costa Rica
Costa Rica (Alternate)	Sr. Mario Cerdas Gómez	Director of the Amistad Caribe Conservation Area	
Cuba	Dr. Roberto Rafael Núñez Moreira	Director	Instituto de Ciencias del Mar (ICIMAR) / Institute of Ocean Science (ICIMAR)
Dominican Republic	Bienvenido Santana	Technician, Department of Integrated Management of Coastal and Marine Ecosystems - Vice Ministry of Coastal and Marine Resources	Ministry of Environment and Natural Resources
Dominican Republic (alternate)	Patricia Ortiz	Analyst of the Directorate of Climate Change	
Guatemala	Edwin Roberto García Alay,	Director of National Coordination of MARN	Ministry of Environment and Natural Resources

Country	Technical Focal Point Designated	Position	Institution
Haiti	Ninon Angrand	Director	National Office of Environmental Evaluations (BNEE)
Jamaica	Jodiel Ebanks	Policy & Environmental Research Specialist/Member of Management Board	National Environment & Planning Agency
	Anthony McKenzie	Director- Environmental Management and Conservation	National Environment & Planning Agency
Panama	Ligia Castro	National Director of Climate Change	Ministry of Environment of Panama
Panama (alternate)	Jose Julio Casas	National Director of Coasts and Seas	
Trinidad and Tobago	Dr Rahanna Juman	Director (Ag.)	Institute of Marine Affairs

Table 1: Updated Focal Point Representatives by Member States

ACTIVITY 1.3 – Focal Point Meeting

The Sandy Shorelines Project team successfully hosted the 7th Focal Point Meeting of the "Impact of Climate Change on the Sandy Shorelines of the Caribbean. Alternatives for its Control and Resilience" on July 7th, 2022. Key outcomes were as follows:

- ✓ Eight (8) Member States were in attendance. Haiti was absent.
- ✓ The Update on the Procurement Process was given. The Custody Transfer agreement was discussed with Member States which is essential for delivery of the equipment. Individual meetings will again be initiated to make the purchases by the end of August with Delivery by October.
- ✓ All Member States made a presentation on the status of the National Monitoring Network. Reports to be submitted by Focal Points.
- ✓ The Sandy Shorelines technical coordinator discussed the need to ramp up the Monitoring Network. Dr Juanes requested that National Reports need to be

submitted and will send out a schedule for Individual Meetings with Member States on the Beach Monitoring Network

- ✓ Mr Christopher Alexis, of the Institute of Marine Affairs under the Trinidad & Tobago Focal Point, made a presentation on the benefits and learnings from the execution of the Post Graduate Course and working with ACS consultant GAMMA during their Field work exercise at Bonasse Bay, Cedros, and Trinidad & Tobago.

Appendix I. Minutes of the 7TH Focal Point Meeting of the Sandy Shorelines Project held on 7th July,2022

- ***ACTIVITY 1.4 – Technical Advisory Group (TAG)***

The Project Manager held consultations with the Technical Coordinator for the project Dr Jose Luis Juanes and held formal meetings in May 2022 at ACS Head Office in Port of Spain. The project team have determined that a Technical Advisory Group (TAG) may be required for the component 5&6 namely the Beach Rehabilitation Manual and the Sandy Shorelines Conference in June 2023. The ACS will pursue

- ✓ The Regional Experts used previously (Dr. Constanza Ricaurte, Dr. Leo Brewster, Mr. Lester Toppin, Dr. Patricia Chardón, Mr. Ywenn de la Torre, Dr. Miguel Canals)
- ✓ University Lecturers/Experts across the Region

COMPONENT 2: Creating Institutional and Human Resources Capacities in Dealing with the Erosion Process and Climate Change

- ***ACTIVITY 2.1 – Conferences/Training***

Dr José Luis Juanes, Technical Coordinator of the Sandy Shorelines Project has submitted the Abstract "Erosion Process in the Caribbean Sandy Beaches" for participation at the International Conference on Coastal Engineering ICCE Conference 2022 to be held in Sdyney Austraila on 4th to 9th December, 2022. The ACS is awaiting acceptance of the abstract by the organizers to confirm formal participation by the Sandy Shorelines team,

and is currently liaising with KIOST regarding the attendance by Focal Points to the event.

Consultant GAMMA, S.A. in completing the Executive Projects in both Trinidad & Tobago and Antigua & Barbuda hosted training courses entitled "Post Graduate Course on Coastal Processes and Beach Methodologies for Beach Recovery". As part of Component 4: Beach Rehabilitation Projects and Monitoring Beach Erosion at the Bonasse Bay in Trinidad and Runaway Bay, Antigua & Barbuda which was held at the Institute of Marine Affairs, Auditorium Chaguaramas, Trinidad, from the 25th April, 2022 to 6th May, 2022 with 13 participants/experts from across Trinidad such as University of Trinidad & Tobago, Environmental Management Authority and the Institute of Marine Affairs among others and subsequently on May 11th, 2022 to May 17th, 2022 at Dunbar's Lab Complex, St John's Antigua & Barbuda with 9 participants from the Fisheries Division, Department of the Environment and Department of Metrological Services.

The course was delivered with in person lectures and a field trip designed for coastal engineers, geographers, marine biologists, and oceanographers related to the problem of coastal erosion, and in particular professionals who deal with the preparation of beach rehabilitation projects and the management of the coastal zone.

The objectives of the course were as follows:

1. Discuss concepts and methodological criteria that contribute to the better identification of the causes of erosion on beaches
2. Evaluate legal and engineering alternatives for the best confrontation with the erosion process on the beaches

With specific objectives of:

1. Define the concept of coastal zone and identify and characterize the coastal processes that condition its development.
2. To evaluate the methodological importance of the analysis of the sedimentary balance of the coastal system, in the investigation of the processes of erosion of

beaches.

3. Evaluate the scope of morphological and sedimentological indicators for the determination of net coastal drift and direct and indirect methods for estimating coastal transport.
4. Analyze the concept of beach as a morphodynamic element of coastal systems and identify the natural and anthropic causes of the erosion process.
5. Evaluate the scope of legal and engineering measures for the control of erosion processes
6. Analyze the process of decision, design, execution, and evaluation of an Artificial Beach Feeding project

Appendix II. Course Outline "Post Graduate Course on Coastal Processes and Beach Methodologies for Beach Recovery".

Participants	Organization
Ms Nadia Gour	Environmental Management Authority
Mr Steve Lalbeharry	Environmental Management Authority
Ms Hanaa Bhagratty	Environmental Management Authority
Mr Arnott Jones	Environmental Management Authority
Mr Howard Robins	The Tobago House of Assembly
Mr Richard Hinds	The Tobago House of Assembly
Mr Miquel Garcia	University of Trinidad and Tobago
Ms Sharelle Jackson	The University of the West Indies
Ms Shani Brathwaite	The University of the West Indies
Ms Cydni-J DeFrence	Ministry of Works and Transport

Participants	Organization
Ms Shandell Thomas	Institute of Marine
Mr Christopher Alexis	Institute of Marine
Mr Aaron S. Mohammed	Institute of Marine

Table 2: List of Trinidad Attendees to Post Graduate Course

Participants	Organization
Ms. Jerrelle Aaron	Fisheries Division
Mr. Randolph Christmas	Fisheries Division
Ms. Eden Bird	Dept. Analytical Services
Mr. Ayokunie Ogunbiyi	Dept. Analytical Services
Mr. Machaella Hamblin	Dept. Analytical Services
Mr. Tajh Seaman	Ministry of Lands & Urban Development
Mr. Rawle Punter	Ministry of Lands & Urban Development
Mr Hilroy Simon	Fisheries Division
Mr Mark Archibald	Fisheries Division

Table 3: List of Antigua & Barbuda Attendees to the Post Graduate Course

Appendix III. Template of certificate of the Post Graduate Course

COMPONENT 3: Establishment of Regional Erosion Monitoring Network

The Establishment of the Regional Monitoring Network is divided into two (2) activities: procurement and regional monitoring network.

- ***ACTIVITY 3.1: Procurement of Equipment***

The ACS is actively engaged in closing out the procurement component of the project with the provision of modern laboratory and field equipment to complement and strengthen the equipment resource of the member states' institution for the purpose of collecting data in the coastal zone to map coastal processes and land degradation due to climate change.

Following our recently held Focal Point Meeting we expect the delivery of the equipment by October, 2022 with the signing of the Custody Transfer agreement.

Methodology for ACS Purchases (Large Equipment)

- ✓ The equipment needed and its detailed specifications of the equipment was recommended by its independent Technical Advisory Group (TAG)
- ✓ The 229 items were arranged into groups and identified suppliers that can provide multiple products
- ✓ The Project Manager having identified the prospective suppliers of Large Equipment, made contact and submitted its detailed product specifications for the company to submit its product that meets its specification
- ✓ The company was also requested to indicate its ability to ship its product /equipment to the identified member states, its training, warranties and cost.
- ✓ Once the company meets ACS requirements, a formal request will be sent, having already know that this company will be able to close the deal.

Methodology for In Country Purchases (Small Equipment)

The Focal Point countries will identify the smaller equipment that can be purchased within their territory and will provide a purchase order for ACS's verification and approval .The ACS will use the project budget to make the purchases.

Work Completed for this Period

PHASE	ACTIVITY	DETAILS	STATUS	CONSTRAINTS
1	Needs Assessment	All Equipment has been identified and Sourced according to the Specifications outlined by the TAG	Completed	None
2	Sourcing Strategy	Distributors of the Specified Equipment has been Identified	Completed	None
3	Negotiation	Quotations have been received and Assessed	Completed for Large Purchases - Drones, - Laboratory Equipment - Total Stations & Surveying Equipment	Maintaining Up to date pricing due to variable Shipping Costs
4	Member Liaison	Consultation with Member States with Specifics for Delivery & Custody Transfer	Information for 5 of 9 Countries Received Draft Custody Transfer Agreement Completed	Ongoing consultations and sign off necessary
5	ACS Contract Department	Payments Made Directly or based on Quotations from	Outstanding	None ,However All Sign off must be in place

PHASE	ACTIVITY	DETAILS	STATUS	CONSTRAINTS
		Member States		
6	Delivery		Outstanding	N/A
7	Close Out Report		Pending	N/A

Table 4: shows tabular overview of the status of the Procurement Process

- ✓ The Sandy Shorelines team continues to liaise with the Focal Point members who has yet to submit their details of the Authority/Institution that the equipment will be sent to and the Location for Delivery.
- ✓ A deadline date for final submission will be set, if no date is forth coming the ACS will focus on the submissions received.
- ✓ The ACS has completed the Custody Transfer Agreement and is in consultation with each Member State for sign off.
- ✓ The ACS is in receipt of the updated quotations for large items and will move ahead with member states who are fully compliant. Fully compliant member states are as follows: Trinidad & Tobago, Jamaica, Dominican Republic, Panama, Costa Rica, Antigua & Barbuda

The equipment was expected to be delivered by May 2022 as per the project Work Plan 2022 to 2023. However, the Sandy Shorelines team has taken a decision to finalize all arrangement regarding sign off the custody transfer agreements with each Focal Point which is critical and mandatory before equipment handover. *ACTIVITY 3.2 Establishment of National Erosion Monitoring Networks*

The ACS requested that at the 7th FP Meeting of the Sandy Shorelines Project held on the 7th July, 2022, all participating countries make presentations on the status of the Monitoring Network. The guidelines set out by the Sandy Shorelines Technical Coordinator submitted a document entitled "ESTABLISHMENT OF THE REGIONAL MONITORING NETWORK OF EROSION ON BEACHES on November 2020 was given as a template for all

member states to commence selection be beaches as well as collection of data as part of the process.

The presentations made by the member states were well received which varied from multimedia power point presentations to verbal updates. The ACS requested subsequent to the meeting, that each focal point submit a report on the presentation for our records.

The Sandy Shorelines Technical Coordinator has submitted a template for each Member State to commence compiling their National Monitoring Network reports and will send out

Appendix IV. National Beach Monitoring Network template.

Member State	No. Beaches Monitored	Update Received	Report Submitted
Antigua Barbuda	6	Yes	Pending
Costa Rica	4	Yes	Pending
Cuba	35	Yes	Pending
Dominican Republic	4	Yes	Yes
Guatemala	Pending	No	Pending
Haiti	1	No	Pending
Jamaica	7	Yes	Pending
Panama	3	No	Pending
Trinidad & Tobago	54	Yes	Pending

Table 5: shows Overview of Beaches Monitored as part of the Sandy Shorelines Project.

COMPONENT 4: Preparing Beach Rehabilitation Projects and Monitoring Beach Erosion Process

- ***ACTIVITY 4.1 - Beach Rehabilitation Projects in Panama, Antigua Barbuda and Trinidad & Tobago***

During this period the ACS consultant CITMA/GAMMA (a Cuban company responsible for the conducting the extensive coastal studies/work in the region) has successfully completed the Beach Rehabilitation Projects at Runaway Beach, St John's Antigua &

Barbuda, and Bonasse Beach, Cedros Trinidad & Tobago. This completes all fieldwork exercises and Post Graduate Courses in all three sites for the Executive Beach Projects with the previous completed project at Viento Frio Beach in Panama in October, 2021.

The lifting of travel restriction across our member states due to the COVID-19 Pandemic, and notably Trinidad & Tobago and Antigua & Barbuda resulted in the ACS working with the Ministry of Foreign Affairs of both member states along with the Cuban coastal experts of GAMMA SA to simultaneously execute Beach Executive Projects at Bonasse Bay Cedros Trinidad and Runaway Bay Antigua & Barbuda.

The Government of Trinidad & Tobago GORTT required that Consultant GAMMA S.A undertake a 7 day quarantine period on entry to the country prior to undertaking the project activities site at Bonasse Bay, Trinidad. Since the GORTT did not recognize the Cuban vaccines – Abdala and Soberana 02 and as such a period of quarantine was required. The Government of Antigua & Barbuda, eventually gave an exemption for entry, so a quarantine period was not necessary.

Appendix V. Beach Rehabilitation Project-Travel Restrictions and Evaluation of Alternative Sites (Quarantine Report).

Although the Sandy Shorelines project Budget did not cater for quarantine cost, the ACS was able to share the cost for the consultant quarantine stay among GAMMA SA, IMA (Trinidad Focal Point) and ourselves.

The Focal Points of both Antigua & Barbuda and Trinidad & Tobago namely Mr Mark Archibald of the Fisheries Division Antigua & Barbuda and Dr Rahanna Juman Director of the Institute of Marine Affairs, Trinidad played a key role in the successful completion of the Beach Rehabilitation Project.

Their included and was not limited to the following:

- ✓ Assist with existing information, for the characterization of the coastal areas where the beaches to be recovered are located.

- ✓ Assist with the coordination for the entry of GAMMA specialists and teams to each country, as well as ensure the logistics required to carry out the work.
- ✓ Assist in appointment of local representatives who are linked to the realization of the work throughout the process, to guarantee the logistical part and immediately resolve any need that arises

Appendix VI. Presentation by Mr Christopher Alexis of the IMA

Appendix VII. Brief Report by Mr Mark Archibald Fisheries Division, Antigua.

PHOTOS FROM ANTIGUA AND TRINIDAD COURSE &FIELD WORK

Photo 1& 2 shows the commencement of the Post Graduate Course at IMA Auditorium, Chaguaramas Trinidad by consultant CITMA/GAMMA SA as part of the Beach Rehabilitation Projects at Trinidad & Tobago. Photo1 shows ACS Project Manager, Mr. Colin Jack with the GAMMA Professors (from left to right), Ms Loudres Rodriguez, Ms Martha Rivero and Dr Joes Luis Juanes. Photo2 shows Dr Jose Luis Juanes, introducing the course.

Photo 3 & 4 shows consultant CITMA/GAMMA SA Field Team engaged in recording data onshore at Bonasse Bay as part of the e Beach Rehabilitation Project at Trinidad & Tobago.

Photo 5 to 7shows consultant CITMA/GAMMA SA Field Team engaged in recording data offshore at Bonasse Bay as part of the Beach Rehabilitation Project at Trinidad & Tobago.

REPORTING

The ACS ensured that the during the progress of the works that the GAMMA SA Project Managers of both Beach Rehabilitation Sites Mr Miguel Izquerido (Trinidad) and Mr Pavel Diaz (Antigua) , submitted Weekly and Bi weekly Progress Reports to track the progress of the works.

Appendix VIII. GAMMA SA Weekly Progress Reports for Fieldwork Exercises at Bonasse Bay, Trinidad and Runaway Bay, Antigua

The major deliverable of the Executive Beach Project is the submission of a feasibility report that addresses the following:

- ✓ Establish a geodesic baseline, with x, y, z points in the local coordinate system, for topographic, hydrographic, geophysical surveys and future monitoring of the geomorphological and sedimentological indicators of these beaches.
- ✓ Perform topographic cross sections for the morphological characterization of the beach, as well as the position of the coastline.
- ✓ Perform bathymetric survey for the characterization of the morphology of the seabed, in support of mathematical simulations.
- ✓ Characterize the sediments that make up these beaches and the rivers.
- ✓ Simulate the hydrodynamic processes in the coastal front of interest with the use of mathematical models of wave propagation, generation of coastal currents, sediment transport and post-storm evolution of the beach profile.
- ✓ Establish the scheme of the operation of the coastal system by identifying the causes of the erosion process.
- ✓ Locate and evaluate possible sources of sand loan for the execution of the rehabilitation works of these beaches.

- ✓ Propose that the projects be submitted to the Environmental Impact Study, in accordance with the country's environmental legislation. The actions proposed in the projects will be done under environmental considerations, which will facilitate the preparation of environmental impact studies.
- ✓ Identify engineering alternatives for erosion control and coastal protection.
- ✓ Establish the technical and design parameters of the proposed solutions.

Site/Country Report	Start of Field Work	Completion of Field Work	Preliminary Report	Submitted	Final Report	Submitted
Viento Frio Beach Colon/Panama	August 6th, 2021	11th October,2021	1st July,2022	YES	31st July,2022	Pending
Bonasse Beach Cedros /Trinidad & Tobago	29th March,2022	15th June,2022	1st July,2022	YES	31st July , 2022	Pending
Runaway Beach St John's /Antigua Barbuda	25th April, 2022	16th June,2022	1st July,2022	YES	31stJuly, 2022	Pending

Table 6: shows the Schedule Dates for completion of the Beach Rehabilitation Reports by GAMMA SA

Appendix IX. GAMMA SA Preliminary Beach Rehabilitation Report for Bonasse Bay Trinidad and Runaway Bay Antigua & Barbuda

Photo 8 & 9 shows consultant CITMA/GAMMA SA Field Trip with the Antigua & Barbuda team as part of the Beach Rehabilitation Project at Antigua & Barbuda. Photo 8, shows Mr. Mark Archibald, the Antigua & Barbuda Focal Point Representative

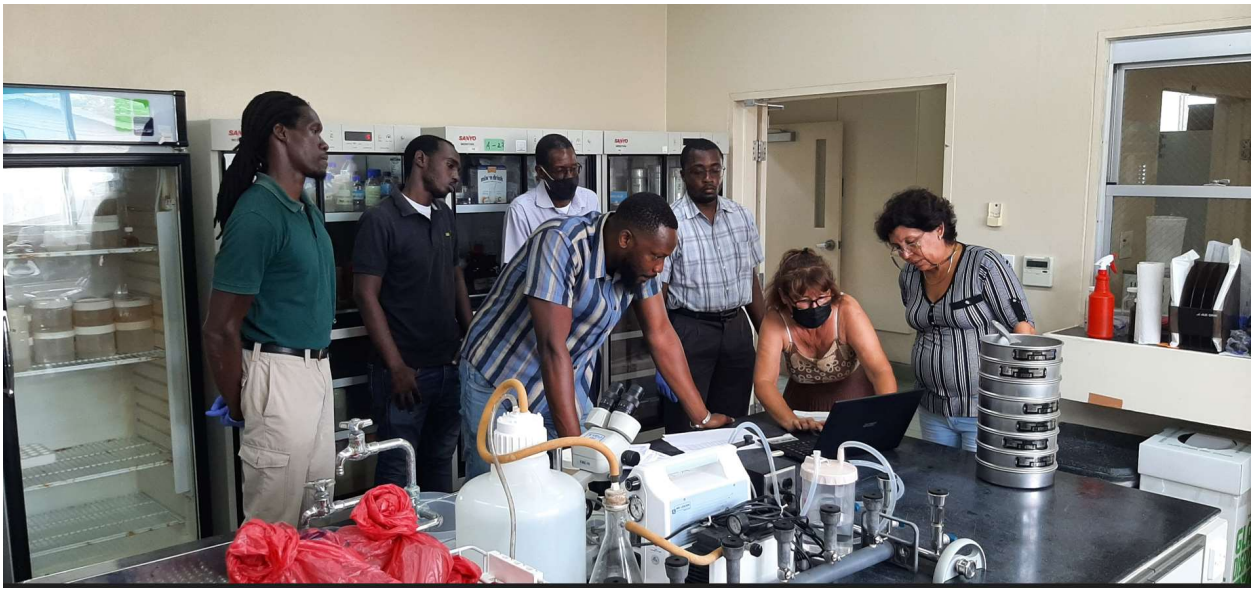

Photo 10 &11 shows consultant CITMA/GAMMA SA Professors Ms Loudres Rodriguez and Ms Martha Rivero, lecturing on Sedimentology as part of the Post Graduate Course for the Beach Rehabilitation Project at Antigua & Barbuda

- ***ACTIVITY 4.2 - Video Monitoring Tower Jamaica***

  (This component is managed by the KIOST and the NEPA)

The ACS is in consultation with NEPA Jamaica, to host capacity building exercises as part of their Beach Monitoring Tower Project at Hellshire Beach Jamaica.

Representatives from the Korean Institute of Ocean Science & Technology (KIOST) arrived in Jamaica on the 11th of July, 2022 to commission and train nominated representatives of NEPA in using the Video Monitoring System (VMS) of the Tower.

A six month testing period of the equipment is expected to the end of the year after which the Sandy Shorelines teams will be expose to the use of Video Monitoring Systems to monitor and assess coastal processes on our beaches and its benefits.

COMPONENT 5: Writing a Beach Rehabilitation Manual with Scientific and Engineering Criteria that respond to the special features of the Caribbean Coastal Regions

- ***ACTIVITY 5.1 – Beach Rehabilitation Manual***

The compiling of the Beach Rehabilitation Manual forms part of the consultations held between the Project Manager and the Technical Coordinator for the project Dr Jose Luis Juanes during formal meetings in May 2022 at ACS Head Office in Port of Spain.

The Beach Rehabilitation Manual is seen by Dr Juanes as a Caribbean best practise manual that addresses the unique characteristics in relation to coastal processes, movement of sediments and management of the hazards and risks associated with Caribbean Beaches to rival the US Army Corps Shoreline Protection Manual.

The results of the Beach Rehabilitation Projects in Panama, Antigua & Barbuda and Trinidad & Tobago gives the region an opportunity to show the site specific variations in established formulae with the extensive data collected from the sites ,which will then

allow for mathematical models to be devised and the development unique strategies for the rehabilitation of its beaches.

The Manual is seen as a scientific document, whose contents will be derived from the objectives of the Sandy Shorelines Project

The ACS has set a deadline of September,2022 to Technical Experts to compile the Manual are required to be identified by September,2022.

Dr Juanes suggested the following preliminary persons

- The 3 Project Managers for the three Beach Rehabilitation Projects, to present the findings of the Executive Projects.
- Dr Jose Luis Juanes Marti, as Technical Coordinator of the Sandy Shorelines Project
- Dr Ywen De La Torre from the Caribe Coast Group (2 persons)
- An Expert in Coastal Zone Management (Legal Issues on Tourism & Land Use in the Coastal Zone)
- Involvement of KIOST
- Involvement of NEPA (Beach Monitoring Tower)

- ***ACTIVITY 5.4 – Online Platform***

With the issues of connectivity presented by the COVID-19 Pandemic and the need to disseminate information on the work and results of the project, the Sandy Shorelines Project team has drafted a Terms of Reference Document and has begun consultation with IT companies for the development of the platform

a) The Online Knowledge Transfer Platform will be a key deliverable of the Sandy Shorelines project, consisting of a website used display the results of each project component, as well as a repository for project documentation and as a knowledge transfer hub for the project. The project team envisage this platform to be a tool

for integration of the project and will be promoted with the project participants and member states since all project information will be disseminated through the platform. The platform will be introduced in a phased manner

PHASE	COMPONENT	DATE
I	Initial Interface, Preliminary Project Content, Online Meetings (members can log in ,register and participate)	October , 2022
II	Final Interface, Full Project Content , Major Project results displayed: Executive Projects ,Initial Monitoring Network content	December, 2022
III	Final Interface, Full Project Content , Updated Project results displayed: Executive Projects, Final Monitoring Network content	March,2023
IV	Launch of Platform to the public	June ,2023

Table 7: Proposed Phased Launch of the Online Platform

b) It is expected that the Focal Point countries will continue to upload data sets collected from the National Monitoring Network established as part of the Sandy Shorelines Project on a Bi Annual or Annual basis to the Online Knowledge Transfer Platform post the completion of the project in September 2023 for the use by the region.

During this period, the Sandy Shorelines Team has completed the Terms of Reference for the establishment of the platform in the coming weeks will seek tenders to select the website company to build the platform.

COMPONENT 6: Hosting of the 1st Conference on the Preservation of Beaches in the Caribbean Region.

- ***ACTIVITY 6.1 – Regional Conference on Beach Preservation***

The culmination of the Sandy Shorelines project is expected in June 2023 with the hosting of a conference which not only highlights the work of the project but provides a platform

for other experts /scientists currently engaged in similar research /projects on the effect of climate change and land degradation across the beaches and coastlines of the Caribbean and Latin America to present their work and enable discussions on the subject matter, best practices and areas where further research may be needed . This conference is part of Component 6 of the project, entitled the Conference of the Preservation of Beaches in the Greater Caribbean Region 2023.

The ACS has chosen the following countries as possible locations for the hosting of the conference

No	Country	Criteria
1	Antigua & Barbuda	Location of Executive Beach Rehabilitation Project under Component No.4 of the project
2	Cuba	ICIMAR work on the preservation of Varadero Beach , shows the result of best practices in the Preservation of Beaches/coastlines
3	Panama	Location of Executive Beach Rehabilitation Project under Component No.4 of the project
4	Trinidad & Tobago	Location of Executive Beach Rehabilitation Project under Component No.4 of the project

Table 7: Proposed Locations for the Beach Preservation Conference

The criteria in choosing the location for the hosting of the conference must also entail ,the cost benefit analyses of the member states' conference /auditorium spaces and availability , accessibility and logistics within the country.

Activity 6.1:

- Organizing, promotion and sending invitations for the event.
  - Estimated costs include: Renting of a conference room for 3 days, translation in the 3 different official languages of the ACS, pay hotel, tickets and food for 2 experts per country (maximum of 20 persons), coffee breaks (2 per day), lunches, for 3 days.
- Hosting the event
  - Participants: Members of the technical group, Government officials, Development banks, International organizations, Donor agencies etc.

The ACS are currently liaising with the Focal Points with the chosen member states and will make a final determination by September, 2022.

The Project Manager and Technical Coordinator of the Sandy Shorelines Project are compiling a Draft Concept Note for the Beach Preservation Conference , which will develop from the theme, the agenda, experts, presenters and all aspects of the conference.

FINANCIAL MATTERS

For the period January 2022 to July 31st, 2022, the ACS has used US$ 113,473.77 from the Sandy Shorelines Budget. The majority of which consist of payments to GAMMA SA, associated with Component 4. See Budget Summary Sheet below:

Appendix X. Sandy Shorelines Budget Summary January 2022 to July 2022

Individual Components as per Budget	Revised Budget as per 2022 Amendment		Costs incurred in 2017		Costs incurred in 2018		Costs incurred in 2019		Costs incurred in 2020		Costs incurred in 2021	Costs incurred in 2022	Total Costs to date		Balance available at 19th July 2022	
	US$	US$	US$	US$	US$	US$	US$	US$	US$	US$	US$		US$	US$	US$	US$
COMPONENT 1 : Focal Point Coordination and Needs Assessment																
Activity 1.1 - Establishment of Focal Point Network																
Activity 1.2 - Focal Point and Country Needs Assessment																
Activity 1.3 - Focal Point Meeting	86,000.00		-14,919.78		-7,337.51		-23,371.76		-6,783.32		-1,394.00		-53,806.37		32,193.63	
Activity 1.4 - Technical Advisory Group (TAG)	102,262.50						-79,353.16		-22,303.49				-102,262.65		-0.15	
		188,262.50		**-14,919.78**		**-7,337.51**		**#######**		**-29,086.81**	**-1,394.00**			**-156,069.02**		**32,193.48**
COMPONENT 2 : Building Institutional and Human Resource Capacities																
Activity 2.1 - Participation to ICS 2018 (+ ICCE 2018)	97,000.00				-37,372.66				-12,665.34				-50,038.62		46,961.38	
Activity 2.2 - Cuban Laboratory Techniques Training	110,000.00				-99,045.33		-134.33		-17,877.33				-117,057.05		-7,057.05	
		207,000.00		**0.00**		**-136,418.07**		**-134.33**		**-30,543.27**				**-167,095.67**		**39,904.33**
COMPONENT 3 : Executing Field Work to Monitor the Erosion Process																
Activity 3.1 - Procurement of Equipment	450,000.00														450,000.00	
Activity 3.2 - Establishment of Monitoring Network	141,900.00						-18,690.00		-8,010.00				-26,700.00		115,200.00	
Activity 3.3 - Supervisory Visits	70,000.00														70,000.00	
Activity 3.4 - National Assessment Report and Regional Report	8,000.00														8,000.00	
		669,900.00		**0.00**		**0.00**		**-18,690.00**		**-8,010.00**				**-26,700.00**		**643,200.00**
COMPONENT 4 : Preparing Beach Rehabilitation Manual																
Activity 4.1 - Field work & Executive Projects	800,000.00										-401,880.52	-84,482.92	-486,363.44		313,636.56	
Activity 4.2 - Installation of Video Monitoring Systems	-													-486,363.44	0.00	
		800,000.00		**0.00**		**0.00**		**0.00**		**0.00**				**0.00**		**313,636.56**
COMPONENT 5 : Writing a Beach Rehabilitation Manual with Scientific and Engineering Criteria																
Activity 5.1 - Beach Rehabilitation Manual	210,000.00														210,000.00	
Manual	50,000.00														50,000.00	
Activity 5.3 - Training/Lectures to University Students	40,000.00														40,000.00	
Activity 5.4 - Online Monitoring Platform	70,000.00														70,000.00	
		370,000.00		**0.00**		**0.00**		**0.00**		**0.00**				**0.00**		**370,000.00**
COMPONENT 6 : Hosting the 1st Conference on the Preservation of Beaches in the Caribbean Region																
Activity 6.1 - Regional Conference on Beach Preservation	170,000.00														170,000.00	
Activity 6.2 - Communication	-														-	
		170,000.00		**0.00**		**0.00**		**0.00**		**0.00**				**0.00**		**170,000.00**
Contingency Cost & Communication Strategy		**244,689.83**		**0.00**		**-4,520.80**		**-19,810.68**		**-9,672.27**	**-34.10**	**-4,930.85**		**-39,028.70**		**205,661.13**
Overhead Cost (10%)		**350,147.67**		**0.00**		**#######**		**-93,475.97**		**11,575.90**	**-36,800.00**	**-24,000.00**		**-245,237.67**		**104,910.00**
Balance as per Approved ACS Project Costs		**3,000,000.00**		**-14,919.78**		**-250,813.98**		**-235,441.90**		**-65,736.45**	**-440,108.62**	**-113,473.77**		**-1,120,494.50**		**1,879,505.50**

3. APPENDICIES

Appendix I. Minutes of the 7TH Focal Point Meeting of the Sandy Shorelines Project held on 7th July,2022

Appendix II. Course Outline "Post Graduate Course on Coastal Processes and Beach Methodologies for Beach Recovery".

Appendix III. Template of certificate of the Post Graduate Course

Appendix IV. National Beach Monitoring Network template.

Appendix V. Beach Rehabilitation Project-Travel Restrictions and Evaluation of Alternative Sites (Quarantine Report).

Appendix VI. Presentation by Mr Christopher Alexis of the IMA

Appendix VII. Brief Report by Mr Mark Archibald Fisheries Division, Antigua.

Appendix VIII. GAMMA SA Weekly Progress Reports for Fieldwork Exercises at Bonasse Bay, Trinidad and Runaway Bay, Antigua

Appendix IX. GAMMA SA Preliminary Beach Rehabilitation Report for Bonasse Bay Trinidad and Runaway Bay Antigua & Barbuda

Appendix X. Sandy Shorelines Budget Summary January 2022 to July 2022