

United Nations Educational, Scientific and Cultural Organization

> REPORT ON THE WORK ACCOMPLISHED SINCE THE FIFTEENTH SESSION AND BUDGET IMPLEMENTATION (2019-2021)

> > Agenda item 3.2

**Cesar TORO** 

Sixteenth Session of the IOC (of UNESCO) Sub-Commission for the Caribbean and Adjacent Regions Virtual Meeting



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### **OCEAN ACIDIFICATION**

- IOC and its networks, including the Global Ocean Acidification Observing Network (GOA-ON), directly contribute to the achievement of SDG Target 14.3.
  GOA-ON counts more than 800 members from 101 countries.
- IOC also supports the GOA-ON Pier-to-Peer mentoring program which pairs mentors and mentees in the ocean acidification community through the Global Ocean Acidification Observing Network (GOA-ON). As of April 2021, scientists from 14 IOCARIBE MS participate in the GOA-ON mentoring programme as mentors (7 MS) and mentees (IIMS).







# **Challenge:**

- Lack of trained staff and lab capacity to carry out monitoring activities in ocean acidification.
- IOC has advanced in the production of well-crafted ocean acidification monitoring guidelines and standard operating procedures.







# **MARINE SPATIAL PANNING 1/2**

IOC-UNESCO and European Commission boost development of Marine Spatial Planning and Sustainable Blue Economy worldwide. The Joint Roadmap to accelerate Maritime/Marine Spatial Planning processes worldwide (MSProadmap), which has two main objectives at regional level:

- Strengthen institutional capacities in relation to Marine Spatial Planning (MSP) and the Sustainable Blue Economy;
- Strengthen institutional coordination for the adoption of a roadmap.







# MARINE SPATIAL PANNING 2/2

In the IOCARIBE Region and with the support of Sweden, as well as national and regional authorities and partners, a series of online and face-to-face events took place throughout the months of October and November 2020.

Objective: to build collective capacities to respond to emerging ocean issues, facilitate exchanges among public and private stakeholders, and formulate recommendations for the development of MSP and the Sustainable Blue Economy in each country/ region.

Two Regional Workshops and workshops in Costa Rica, El Salvador, Guatemala, Panama, Trinidad and Tobago







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# SARGASSUM AND OIL SPILLS MONITORING FOR THE CARIBBEAN AND ADJACENT REGIONS

IOCARIBE, GEO Blue Planet and other partners have been working to support the development monitoring capabilities for "other coastal hazards."

- In 2019 the Sargassum project was expanded to include the entire Tropical Atlantic
- New Partners AtlantOS, the Atlantic International Research (AIR) Centre and the Specially Protected Areas and Wildlife (SPAW) Sub-Programme of the United Nations Environment Programme (UNEP) Cartagena **Convention Secretariat, and IOCAFRICA**









# SARGASSUM AND OIL SPILLS MONITORING FOR THE CARIBBEAN AND ADJACENT REGIONS

IOCARIBE of IOC UNESCO, GEO Blue Planet, AtlantOS, and the Atlantic International Research (AIR) Center developed the Sargassum Information Hub to provide information about sargassum in the Tropical Atlantic, improve communication among stakeholders, and increase visibility of sargassum activities. The Sargassum Information Hub was launched on 31<sup>st</sup> July 2020







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# SARGASSUM AND OIL SPILLS MONITORING FOR THE CARIBBEAN AND ADJACENT REGIONS

- <u>Sargassum Webinar Series</u>
- NOAA Sargassum Data:

NOAA's CoastWatch program is working to transition Alternative Floating Algae Index (AFAI) fields currently generated by USF along with Maximum Chlorophyll Index (MCI) products in order to produce and distribute satellite-based Sargassum products on a regular basis. <u>NOAA</u>

- Experimental Inundation Reports:
- Best Practices



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A Regional Pilot Programme for Satellite Oil Spill monitoring for the wider Caribbean region is the first step for the development of a coordinated region-wide monitoring and forecasting system. The pilot started March 2021.

The plan is to 1) Train Regional Satellite Analysts who will be responsible for performing oil spill surveillance using freely available satellite data, as well as connect with regional users to disseminate products and receive feedback.

2) Set up A GIS-based oil spill information webpage that will host information about the location of platforms, ports, past oil spills, potential current spills and other information as requested by end users.

<u>Area for the Pilot</u>: The regional pilot programme is focusing on smaller areas. Trinidad and Tobago has been selected given its abundance of oil facilities and monitoring needs.

<u>**Partners:**</u> IOCARIBE, NESDIS-NOAA's National Environmental Satellite Data and Information Service, GEO Blue Planet Initiative, RAC-REMPEITC Caribe of UNEP/ CAR-CU. :<u>**Partners in Trinidad & Tobago:**</u> IMA-Institute of Marine Affairs, Ministry of Energy.

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### INITIATIVES TO IMPROVE MEMBER STATES HURRICANE OBSERVING FORECASTING CAPACITY

**IOCARIBE GOOS** establishment of a pilot project on Improvement of Hurricane Observing Forecasting Capacity

#### **Objective:**

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Build supporting physical and social infrastructure and conduct a long-term, critical-region sampling program using Autonomous Ocean Gliders, High Frequency Radars (HFRs), and other existing and developing technologies to provide real-time information resulting in hurricane forecast improvement.

**Partners:** National Ocean-Met Services, Universities and Research Institutions, WMO Rutgers University, US Virgin Islands University, Texas A&M

**UN Initiative for IOCARIBE** <u>"Transformative Ocean Observing</u> for Hurricane Forecasting, Readiness, and Response in the Caribbean Tropical Storm Corridor"





UN DECADE OF OCEAN SCIENCE FOR SUSTAINABLE DEVELOPMENT 2021-2030 WESTERN TROPICAL ATLANTIC REGIONAL (WTA) WORKSHOP 27-28 April 2020.

Regional Consultation to facilitate the dialogue and the discussion for experts and stakeholders to define the Western Tropical Atlantic Region (WAT) Scientific Priorities and how they will be reflected in the Global Process of the UN Decade.

IOCARIBE- Structural Mechanism to manage the complexity in the region; overall responsibility for planning and coordination of the UN Decade of Ocean Science for Sustainable Development (2021-2030) and to catalyse actions, projects and programmes in the Western Tropical Atlantic region.









•Establishment of a Regional Planning Group and Working Groups by Societal **Outcomes and Capacity Development July 2020 to advance and coordinate strategic** partnerships and actions for the WTA Region.

#### Virtual UN Decade Series

•Co-designing the Ocean Science we need for the Western Tropical Atlantic Webinar 4 November 2020

•Co-designing the Ocean Science we need for the Eastern Tropical Pacific Webinar 28 **January 2021** 





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### IOCARIBE AND IHO MESO-AMERICAN AND CARIBBEAN SEA HYDROGRAPHIC COMMISSION – MACHC PARTNERSHIP

IOCARIBE & MACHC Seabed 2030 Strategy – **IOCARIBE and IHO Meso-American and** Caribbean Sea Hydrographic Commission – **MACHC Member States developed a strategy** (December 2020, January 2021) to complete baseline seabed map of the MACHC/ IOCARIBE Region by 2030 that informs the sustainable, multi-purpose use of this region of the Ocean, as a contribution to the Nippon Foundation **GEBCO Seabed 2030 Project and the UN** Decade.

MACHC-IOCARIBE Seabed 2030 Strategy 2021-2030







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## **IOC OCEAN INFO HUB** LAC OCEAN INFO HUB



**IOCARIBE & The Ocean InfoHub (OIH) Project aims to improve access to global** oceans information, data and knowledge products for management and sustainable development. The OIH will link and anchor a network of regional and thematic nodes that will improve online access to, and synthesis of existing global, regional and national data, information and knowledge resources, including existing clearinghouse mechanisms.

**IOCARIBE** is developing jointly with MS national Agencies and Institutions, the LAC Regional Node for the IOC Ocean Information Hub (LAC OceanInfo Hub) with the technical support of IODE

### Financial Support: Government of Flanders, Kingdom of Belgium



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### IOCARIBE & THE CLME+ TRAINING AND CAPACITY DEVELOPMENT PORTAL

IOCARIBE & The CLME+ Training and Capacity Development (TCD) Portal aim is to bridge the information gap between "those (marine practitioners) in search of training opportunities" and "those providing training and capacity building initiatives."

The Portal was launched on 15th December 2020, and it will be linked to IOC Ocean Info Hub.



### **IOC CARIBBEAN MARINE ATLAS**

#### **IOCARIBE & the CMA project ended in 2020.**

- The financial support provided by the Government of Flanders (Kingdom of Belgium) play an instrumental role in the development of the CMA.
- This support jointly with technical support of the CMA partner countries and their agencies and the technical support and coordination of INVEMAR (Colombia), and Partner MS Institutions is one of the best examples of cooperation for capacity development.
- The CMA project allowed increased training opportunities, sharing of knowledge, strengthening regional capacities that benefit IOCARIBE Countries and they ensured a sustainability beyond project phase.



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### OCEAN TEACHER GLOBAL ACADEMY AND COVID-19

April 2019 and April 2020 OTGA 6 courses (face to face) with 105 participants from 16 countries.

The OTGA-2

April 2020 and April 2021, a total of 6 courses were organized (online) involving 212 participants from 12 countries.

For year 2021 are planned 9 courses including Statistical Techniques, Marine GIS, OBIS, Data Science, ICZM-MSP, Ocean Acidification and MPA.



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|-----|----------------------------|------------|----|---------|------------|--------|-------------------------------|---------|
| #   | Programme / Activity       | TOTAL      | RP | EXB     | Unfunded   | Source |                               |         |
| - 1 | UN Decade                  | 50,000     |    |         | 50,000     |        |                               |         |
|     | Ocean Acidification        | 200,000    |    |         | 200,000    |        |                               |         |
| -   | IODE                       | 200,000    |    |         | 200,000    |        |                               |         |
|     | ODINCARSA                  | 60,000     |    |         | 60,000     |        |                               |         |
|     | CMA 2                      | 70,000     |    | 70,000  | 00,000     |        |                               |         |
|     | CMA 3                      | 800,000    |    | , 0,000 | 800,000    |        |                               |         |
|     | IBCCA                      | 60,000     |    |         | 60,000     |        |                               |         |
|     | IOCARIBE-GOOS              | 500,000    |    |         | 500,000    |        |                               |         |
|     | IOCARIBE-GOOS (Cuba & USA) |            |    |         | 0          |        |                               |         |
| 9   | IOCARIBE-GOOS (Cuba & USA) |            |    |         | 0          |        | REGULAR PROGRAMME 2020-2021   |         |
| 10  | Initiative                 |            |    |         | 0          |        |                               |         |
|     | SARGASSUM &OIL SPILLS      | 200,000    |    | 15,000  | 185,000    |        |                               | 10.000  |
|     | CIFDP-C (Add Country)      | 80,000     |    | 10,000  | 80,000     |        | Governance & Coordination     | 40,000  |
|     | HAB-ANCA                   | 45,000     |    |         | 45,000     |        | IOCARIBE Capacity Development | 75,000  |
|     | WORLD OCEAN ASSESSM        | 25,000     |    |         | 25,000     |        |                               |         |
|     | ICAM / MSP LA              | 10,000,000 |    |         | 10,000,000 |        | TOTAL                         | 115,000 |
|     | ICAM                       | 200,000    |    |         | 200,000    |        |                               |         |
|     | MSP                        | 150,000    |    |         | 150,000    |        |                               |         |
|     | CLME+                      | 130,000    |    | 130,000 | 0          |        |                               |         |
|     | OCEAN LITERACY             | 150,000    |    | -       | 150,000    |        |                               |         |
| 20  | IOCARIBE INT CONFERENCE    | 100,000    |    |         | 100,000    |        |                               |         |
| 21  | OTGA                       |            |    |         | 0          |        |                               |         |
| 22  | CHM / TMT                  | 120,000    |    |         | 120,000    |        |                               |         |
| 23  | OBIS                       | 40,000     |    |         | 40,000     |        |                               |         |
|     |                            |            |    |         |            |        |                               |         |
|     | TOTAL                      | 12,570,000 | 0  | 215,000 | 12,355,000 |        |                               |         |



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THANK YOU

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