Sustainable operationalization of an online digital “Caribbean Marine Atlas” technology platform as a support of Integrated Coastal Zone Management - ICZM (with special attention to: coastal hazards, climate change, biodiversity & habitats, fisheries, land based sources of pollution) and Ecosystem-based Management for CLME.
The CMA2 project builds upon the experience and lessons learnt in the CMA1 and SPINCAM initiative.
CMA2 PROJECT BUILDS UPON ...

A collaborative approach to strengthening capacities with existing national, regional and international marine data and information management programs, projects or strategies:

**Cooperation and Exchange Expertise**
South to South (CMA2 and ACMA African Coastal and Marine Atlas); as well as SPINCAM – Southeast Pacific data and Information Network in support to integrated Coastal Area Management

**Strategic synergies**

**Opportunities**
Advising from International coastal Atlas network - ICAN.
Training through regional training center at IODE Ocean Teacher Global Academy (OTGA).

**Tools**
OceanDocs, OceanExpert
CMA2 CURRENT PILOT COUNTRIES

13 countries: Barbados, Belize, Colombia, Costa Rica, Dominica, Guatemala, Jamaica, México, Panama, Dominican Republic, Turks & Caicos Isl., Trinidad & Tobago and Venezuela

And the users of the CLME+ Project (25 countries endorsed at Ministerial level)
## COORDINATION STRUCTURE

| Execution and financial support | • Flanders government  
• IOC/IODE |
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<tbody>
<tr>
<td>Regional coordination</td>
<td>• INVEMAR – (Colombia)</td>
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<tr>
<td>National coordination</td>
<td>• National Focal Point (NFP) / Countries</td>
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GENERAL PROCESS

2015-2016
• Search of country partners and formal linkage
• Requirements inventory
• Geospatial information inventory
• Website & tools geospatial information prototypes
• Selection of indicators and proposal of methodological sheet

2017
• Uploading information
• Indicators reporting
• Thematic maps generation
• CLME+ maps/reports generation (SAP and Ecosystems State Report)

2018+
• Maintenance in time of e-repository for Caribbean region
• Enforce dissemination strategy at national - regional levels
• Enforce synergies with others initiatives
ONLINE TECHNOLOGY PLATFORM (CMA INTERFACE)

PLATFORM STATUS - PRODUCTS

- On line 24/7
- Free access to data and information
- Multi topic information for ICZM and EbM
- Geoviewer for consultation of thematic layers and building/downloading maps
- Catalogue with documentation related to spatial information and links with external information sources (projects, countries, institutions)

http://www.caribbeanmarineatlas.net/
CMA2 PRODUCTS

**LAYERS**

825 thematic layers

- Opportunity to customize maps
- To consult and interact with sets of layers displayed
- To publish/download/interact online maps derived from projects, countries and institutions

**MAPS**

19 “interactive” maps
36 “static” maps

**CATALOGUE**

52 documents
93 information sources
Implementation process for publishing indicators derived from national data

- Coral Health
- Sea Level Rise
- Threatened Species
- Global Fish Capture Production
- Invasive Species
- Ecosystems representativeness
- Marine Protected Areas
- Coastal Economic Activities
- Coastal Population Change
- Extreme Events Effects
INFORMATION MANAGEMENT

- Compilation, use and share the most amount of national, regional and international marine data (different marine topics and scales)
- Metadata standards use
- Information policy (IODE information Policy [www.iode.org/policy](http://www.iode.org/policy))
- Protocol to upload products on CMA2 platform
- Quality control periodically
- *Training and enhance awareness: Geonode* technology allows the countries to manage their own contents, allowing self-government over information.

- Technical and scientific dissemination on events
- CMA2 complements and is completely synergistic with the actions and activities of other projects and initiatives linked to the implementation eg. CLME+ SAP.
COMMITMENTS FOR WORKING TOGETHER

- Work in two languages (English – Spanish)
- Institution leader by country as National Focal Point – NFP - (national coordinator)
- Implementation of information standards and protocols (metadata)
- Permanent communication
- Self management on national information to the Atlas by countries
- Publishing indicators for country pilots CMA2 and CLME+
Currently, CMA2 can receive new information from projects, its technical staff is working on developing a structure to host geospatial information from projects to enhance the spectrum of information sources for the Caribbean region.
GRACIAS - THANKS - DANKUWEL

http://www.caribbeanmarineatlas.net