18th SESSION IOCARIBE

unesco
Intergovernmental Oceanographic Commission

Sub-Commission for the Caribbean and Adjacent Regions

Subcomisión para el Caribe y Regiones Adyacentes

6.3.5 Deep Sea and Areas Beyond National Jurisdiction (ABNJ)

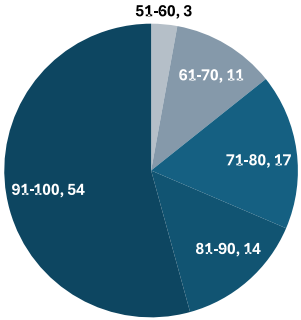
Elva Escobar Briones ICML UNAM Mexico

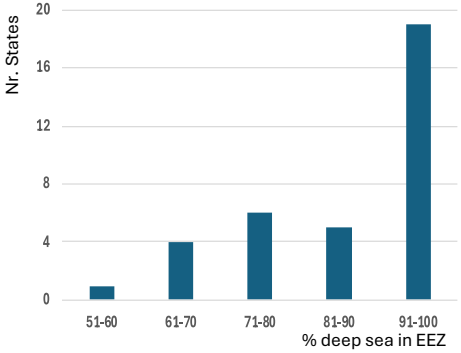
Brasilia, Brazil
April 23–25, 2025

unesco
Intergovernmental Oceanographic Commission

Sub-Commission for the Caribbean and Adjacent Regions

Subcomisión para el Caribe y Regiones Adyacentes





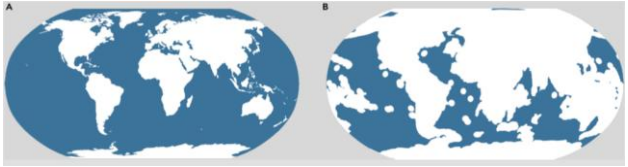
19 of 35 states in the Wider Caribbean have an EEZ with >90% of deep-sea (>200 meters)

19 de los 35 estados del Gran Caribe tienen una ZEE con >90% de mar profundo (>200 metros)

Data from Esri's How much deep-sea is in your EEZ? https://www.arcgis.com/apps/dashboards/c508abed461d4d49aa7c17d38949ce79

The areas beyond national jurisdiction (ABNJ)

- Remote, vast unexplored areas up to 6,500 meters
- global common
- EIAs, effective management of resources urgently required
- Increasing uses since early last century, further and deeper
- fishery, radioactive waste disposal, oil and gas extraction, dumping of waste and sewage sludge, plastic litter climate change
- Emerging activities marine carbon dioxide removal (mCDR) DSM and effects in the large space and time scales



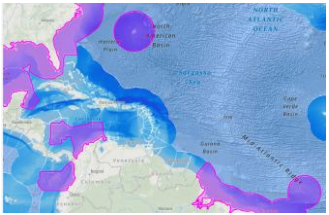
Jouffray et al., 2020

The BBNJ Agreement

- ABNJ governance mechanism
- Agreement under the UN LoS BBNJ Agreement
  - Conservation and sustainable use of marine biological diversity
  - Access and benefit sharing to Marine Genetic Resources
  - Area based management tools including Marine Protected Areas
  - Environmental Impact Assessments
  - Capacity building and the transfer of marine technology
- The BBNJ Agreement still requires parties to sign, ratify and implement

OET, 2020

Cooperation for robust science



Only 5 nations have research vessels and technology to study the deep sea, its biodiversity and resources and build capacity at sea

- Decision making and management need best available scientific knowledge
- Collaborative efforts in global networks (DOSI, DOOS, POGO, ODL)
- Technical and human capacity for deep-sea needed
- of states.
- 2022IOCARIBE Ocean Decade CD WG deep sea session recognized
    - tdeep-sea exploration & research important
    - lack of access to infrastructure and tools
    - Financial and personnel resources are priority
- Results are comparable to the ODL global assessment
    - Prioritizing deep-sea exploration with tailored strategies for each location

2022 GLOBAL DEEP-SEA CAPACITY ASSESSMENT KEY FINDINGS

1 Many who consider deep-sea exploration & research important do not have deep-sea tools & technologies

Respondents for numerous subregions, particularly Micronesia, Melanesia, Western Africa, and Eastern Africa, felt that deep-sea exploration & research were considered important in their location but did not have access to the tools needed to do deep-sea work.

2 In many places, there is expertise but not technology

In every subregion, respondents indicated that the presence of in-country individuals with deep-sea expertise exceeded the availability of deep-sea tools. More access to vessels, DSVs, sensors, and data tools would activate available expertise to conduct locally-led deep-sea exploration and research.

3 More deep submergence vehicles are needed globally

Deep submergence vehicles were the technical capacity that had the lowest presence, access, and satisfaction worldwide. More access to lower-cost, easy-to-use technologies suitable for deep water would be transformative globally.

4 Non-research assets could be available for deep ocean research

While vessels were the technical capacity with the most extensive presence worldwide, in general, vessels were the technical capacity to which respondents had the second-lowest access. Unlocking access to additional vessels for use in research would be transformational.

5 Funding is the top challenge

Survey respondents identified funding as the single greatest challenge, followed by human capacity and knowledge, access to vessels, and access to deep submergence vehicles to undertake deep-sea research. Low-cost solutions are key to increasing access to the deep sea.

6 Prioritizing deep-sea exploration is essential

Many respondents felt that their countries did not consider deep-sea research and exploration important. Making stronger internal cases for why deep-sea exploration is critical in each location could be beneficial in securing support.

7 Tailored strategies are needed for each location

Better understanding the physical environment can help ensure the greatest return on investment. For example, in Central America, Melanesia, and Western Asia, 75% of all EEZs lie between 200 to 4,000 m, and all African EEZs are less than 6,000 m. Creating deep-ocean technologies and strategies tailored to each location would be more efficient than a one-size-fits-all approach.

8 Detailed research and inclusion matter

The results of this study were more nuanced than expected. We documented previously underreported details, from the available human capacity to possible vessel access. The very act of including and reaching out to people in locations often under-resourced and overlooked in many global studies created a community and a sense of inclusion that made the effort and detail of this report and future studies of its kind valuable in many ways.

OCEAN DISCOVERY LEAGUE

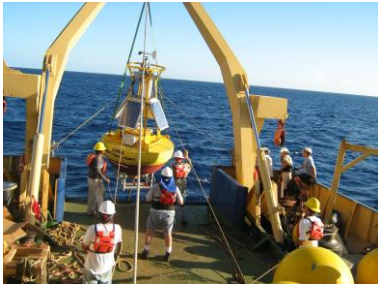
unesco
Intergovernmental Oceanographic Commission

Sub-Commission for the Caribbean and Adjacent Regions

Subcomisión para el Caribe y Regiones Adyacentes

@UNAM

Slide 4 bis



@CICESE

unesco
Intergovernmental Oceanographic Commission

Sub-Commission for the Caribbean and Adjacent Regions

Subcomisión para el Caribe y Regiones Adyacentes

- Critical need to have access to the best available deep ocean scientific information and knowledge to guide in upcoming UN negotiations
- More experts are needed
- Supporting CD work at sea is urgent
- Take advantage of existing research vessels, the regional experts and the networks working in the region.

18th SESSION IOCARIBE

unesco
Intergovernmental Oceanographic Commission

Sub-Commission for the Caribbean and Adjacent Regions

Subcomisión para el Caribe y Regiones Adyacentes

THANK YOU
MUCHAS GRACIAS
MERCI BEAUCOUP