



## International Coral Reef Initiative (ICRI)

### Member's Report | 38<sup>th</sup> General Meeting

9<sup>th</sup> – 13<sup>th</sup> September 2024 Jeddah, – Kingdom of Saudi Arabia

**Reporting Period: 2023 & 2024**

#### A. Member Information:

- Name of ICRI member: Ministry of the Environment and Climate Change of Brazil (MMA)
- Name of person(s) completing member's report: Ana Paula Prates and Beatrice Padovani Ferreira
- Position/Title:
  - Director of Ocean and Coastal Management at Brazil's Ministry of the Environment and Climate Change
  - Full Professor at University Federal of Pernambuco
- Email: [ana.prates@mma.gov.br](mailto:ana.prates@mma.gov.br); [beatrice.ferreira@ufpe.br](mailto:beatrice.ferreira@ufpe.br)
- Are you a designated ICRI Focal Point:  Yes  No
  - If no, please indicate who you are completing the form on behalf of:
- Which was the last General Meeting you attended: ***38<sup>th</sup> ICRI General Meeting in Kailua-Kona, Hawai'i from September 19<sup>th</sup> – 23<sup>rd</sup> 2023. Reporting period: 2021 - 2023***
- Will you be attending the 38<sup>th</sup> ICRI General Meeting in Jeddah, Kingdom of Saudi Arabia:  Yes  No
- Member social media:
  - Twitter/X: @mmeioambiente
  - Instagram: @mmeioambiente
  - LinkedIn: <https://www.linkedin.com/company/ministério-do-meio-ambiente/>

**B. Reporting on the implementation of the ICRI Plan of Action 2021-2024: turning the tide for coral reefs.** *Your responses will help inform the Secretariat about members' contributions toward the current Plan of Action. You can download the ICRI Plan of Action here: <https://icriforum.org/documents/plan-of-action-2021-2024/>*

What are the main contributions you, as an ICRI member, have made to the ICRI Plan of Action?

*Theme 1 - Preparing for the Future: Promoting Resilient Coral Reefs*

*Theme 2 - Coral Reef Science and Oceanography: Advancing and Utilizing the Latest Science and Technology*

*Theme 3 - Local Threat Reduction: Integrating Response Planning Frameworks*

*Theme 4 - Diversity and Inclusion: Expanding the Coral Reef Community*

*Answer:*

The main contributions of the Ministry of the Environment and Climate Change (MMA) to the ICRI Plan of Action have been achieved through partnerships and across multiple areas, addressing all four key themes.

**Theme 1 - Preparing for the Future: Promoting Resilient Coral Reefs**

. **BNDES Corals** - In collaboration with the Ministry of the Environment and Climate Change, a Call for Projects was launched with funds from the Brazilian Development Bank (BNDES). The BNDES Corals Call for Proposals aims to strengthen resilience and contribute to reducing losses and recovering Brazilian coral reefs.

It complies with the BNDES Socio-Environmental Fund guideline aimed at supporting projects to mitigate and adapt to climate change, recovery, conservation and preservation of the environment and is part of the BNDES Blue Initiative, which seeks to enhance the BNDES' ongoing actions, generating synergies between them and opening up new fronts.

. The 'BNDES Corals' Call for Proposals totalled 60 million reais or US\$ 11 mi.

. **Global Coral Reef Fund** - Brazil has passed the first phase with FUNBIO, the Brazilian Fund for Biodiversity, as a proponent, and is now preparing the full proposal for approval by the GFCR. The proposal, covering the main coral reef areas of Brazil, aims to support actions that promote protection, mitigation of the impacts of the main drivers of coral degradation, and the transformation to coral-friendly businesses, through blended finance arrangements.

**Theme 2 - Coral Reef Science and Oceanography: Advancing and Utilising the Latest Science and Technology:**

. **Mapping of seamounts chains:** the mapping of islands, atoll, and seamounts chains of Fernando de Noronha and the North (Ceará), which together extend for 1,300 km, were mapped with towed cameras developed by the LECOR Lab of the Oceanography Department at the University Federal de Pernambuco. In addition, through the application of pre-processing, post-processing and image enhancing techniques, landsat-8 data were used to

detect possible negative (e.g. shelf valleys) and positive (e.g. reefs, seamounts) features on the seabed. The survey revealed important and extensive coral reef formations and in 2024 detected bleaching for the first time at mesophotic depths. The area is also an EBSA (CDB), Environmentally and Biologically Significant Area but faces threats from oil exploration, fishing and climate change. The survey was carried out and funded by the Federal University of Pernambuco, the Coastal Reefs Institute, CEPENE, WWF-Brazil, and the Boticário Foundation. The creation of a Marine Environmental Protection Area covering over 12 million hectares was proposed by those Institutions and submitted to the Chico Mendes Institute for Biodiversity Conservation (ICMBio).

. **Long-term Ecological Program (PELD):** Federal Government initiative to set up a network of reference sites for scientific research on the subject of Ecosystem Ecology. The studies focus on Brazilian ecosystems, their biodiversity, natural processes, and the effects of human impacts and environmental changes on ecosystem functioning. These long-term research efforts are crucial for investigating the relationships between biodiversity, ecosystem functioning, public health, and human well-being. They are also vital for training human resources and strengthening graduate programs in Ecology and related fields. The data collected through PELD, which includes extensive long-term datasets on ecosystems and their associated biota, is highly relevant for Brazil. The program is part of the International Long Term Ecological Research (ILTER) network, which aims to facilitate international cooperation among researchers involved in long-term ecological research. Four PELDs cover coral reefs in Brazil: PELD TAMS, PELD CCAL, PELD ABRS, and PELD ILOC. All are funded by the National Council for Scientific and Technological Development (CNPq) and State Research Funding Agencies (FAAPs) (<https://peldcom.eco.br/lista-dos-sitios-peld/>).

. **Cooperation agreement** - The Ministry of the Environment and Climate Change has signed a 'Technical Cooperation Agreement' with Mapbiomas to update the Atlas of coral reefs and the Atlas of mangroves in Brazil. Mapbiomas is a collaborative network made up of NGOs, universities and technology start-ups. They produce annual mapping of land cover and use and monitor water surface and fire scars on a monthly basis with data from 1985 onwards. Since August 2024, Mapbiomas has also started mapping shallow reefs. ([https://brasil.mapbiomas.org/wp-content/uploads/sites/4/2024/08/Fact\\_Colecao-9\\_21.08-OK.pdf](https://brasil.mapbiomas.org/wp-content/uploads/sites/4/2024/08/Fact_Colecao-9_21.08-OK.pdf)).

### ***Theme 3 - Local Threat Reduction: Integrating Response Planning Frameworks***

. In January 2024, the Chico Mendes Institute for Biodiversity Conservation carried out a **Workshop to prioritise the creation of federal protected areas**, including areas with coral reefs and mangroves (like the seamount chain areas mentioned above)- ICMBio/MMA. The target is to increase terrestrial and marine protected areas to 30 per cent by 2030.

. **National plastic-free ocean strategy** - A national plastic-free ocean strategy is in the final stages of preparation, scheduled for December 2025.

**SIMAClim** The Environmental and Climate Change Synthesis Center project SIMACLIM originates directly from the Brazilian Network for Global Climate Change

Research – Rede CLIMA, and was proposed based on the experiences accumulated and developed by the network over more than a decade. SIMAClim has three main goals:

- (i) Integrate the research accumulated and ongoing by Rede CLIMA with experiences from other national and international research networks and groups. This involves organizing and synthesizing information to assist state planning in meeting climate change agreement goals and in drafting and revising related documents and treaties.
- (ii) Support the Ministry of Science, Technology, and Innovation (MCTI) in aligning strategies with the United Nations Sustainable Development Goals (SDGs).
- (iii) Identify opportunities for climate adaptation actions, economic valuation of renewable energy potential, and Brazilian biodiversity as a central element of the bioeconomy. This aims to address the complex effects of global climate and environmental changes, including future projections.

The first two synthesis to be produced are on Amazonian Tipping Points and The coral reef crisis: coral bleaching and climate change. The I Workshop on Coral Bleaching and Climate Change was one of the two first synthesis workshops of SIMACLIM. It took place in Recife, Brazil, between May 6-8, 2024, and brought together academics and policy-makers from different institutions and countries, including representatives from Brazil's ministries of the environment and of foreign affairs, and from UN Habitat.

#### ***Theme 4 - Diversity and Inclusion: Expanding the Coral Reef Community***

Various projects involving local community engagement are developed in Brazil, carried out by NGOs, universities, and companies, for awareness and conservation of coral reefs.

Several ONGs and Research Projects develop and incorporate Citizen Science, Outreach and Environmental Education campaigns in their scope. This includes the Pelds (Long term ecological projects of CNPq) that also have a Communication project (PELDCOM) to integrate initiatives.

Conscious Conduct in Reef Environments Campaign: this initiative is part of the Campaign for Conscious Conduct in Natural Environments promoted by the Ministry of the Environment and Climate Change. The aim is to inform users of conservation units and environments with coral reefs about the importance of preserving these areas and to encourage responsible practices during recreational activities in places with coral reefs. This campaign is being evaluated for relaunch in 2025.

Examples of Institutions that develop diversity and inclusion actions through coral reef monitoring and education are:

Coral Vivo Project (<https://coralvivo.org.br/>)

De Olho nos Corais (<https://www.instagram.com/deolhonoscorais/>)

Reef Check Brasil (<https://www.instagram.com/reefcheckbrasil/>)

Instituto Recifes Costeiros (<https://www.recifescosteiros.org.br/>)

EcoNoronha (<https://www.instagram.com/eco.noronha/>)

Monitora/ICMBIO (<https://www.gov.br/icmbio/pt-br/assuntos/monitoramento>)

Projeto Conservação Recifal/APA Costa dos Corais (<https://conservacaorecifal.com/>)

- (ICRI) What are your upcoming priorities for coral reefs?

Answer:

- Establish, organise and structure the Brazilian Coral Reef Conservation hub/node
- Prepare and publish the National Strategy for the Conservation and Sustainable Use of Coral Reefs
- Participate in the new National Action Plan for the Conservation of Coral Reef Environments (PAN Corais) cycle that recently opened
- Climate Plan - Adaptation: The Ministry of the Environment of Brazil is currently coordinating, under the technical and scientific guidance of the Ministry of Science, Technology and Innovation of Brazil, the drafting of the new Climate Adaptation Plan, which will collectively agree on the construction of a long-term sustainable development path (2024 to 2035). One of the climate adaptation plan actions is related to Coral Reefs.
- New NDC with ocean-based actions
- Updated of Atlas of Coral Reef in Brazil

**C. Reporting on the Restoration of Coral Reefs** (*Target 2 GBF/Action Point 3 Coral Reef Breakthrough*)

- (ICRI) Are you able to estimate the total area (km<sup>2</sup>) of coral reef under active restoration and the total area you consider to be ‘restored’, as a result of your organisation/country’s in 2023?
  - Total area under active restoration in 2023:  km<sup>2</sup>
  - Total area considered to be restored in 2023:  km<sup>2</sup>
- (ICRI) If available, please provide further information on the total area considered to be restored, and under active restoration for the total period of the restoration programme, including the timeframe:

Answer:

In Brazil, coral restoration has been carried out through local experiments mainly by two startups. The startup Carbono 14 (<https://carbono14.co/>), located in “Baía de Todos os Santos” in the state of Bahia, reported that in 2022, 20 nurseries and 1,000 colonies of *Millepora alcicornis* were installed and subsequently restored in an area of 5,000 square meters. In 2023, an additional 750 colonies were transplanted onto the coral reefs, bringing the total to 1,750 colonies in this area.

The startup BioFábrica de Corais (<https://biofabricadecorais.com/>), based in Porto de Galinhas, Pernambuco, has been engaged in coral restoration experiments since 2017. Active restoration efforts are currently underway, including surveys and mapping. In 2023, BioFábrica managed 49 nurseries and 2,758 fragments of *Millepora alcicornis*, achieving a survival rate of 71.93% for the colonies.

There are also initiatives to recover and restore mangroves, ecosystems adjacent to coral reefs:

The “Floresta Viva - Manguezais do Brasil” was a call for proposals, launched by the National Bank for Economic and Social Development (BNDES) through a public call for proposals worth R\$44.4 million, is intended to support projects to recover native vegetation in mangrove and sandbank areas in the country, with the aim of recovering 1,700 hectares of mangroves and sandbanks.

([https://www.funbio.org.br/programas\\_e\\_projetos/florestaviva/manguezaisdobrasil-2/](https://www.funbio.org.br/programas_e_projetos/florestaviva/manguezaisdobrasil-2/))

iii) The National Program for the Conservation and Sustainable Use of Brazil's Mangroves - ProManguezal, was instituted in June 2024, after more than fifteen years of work by federal environmental institutions on this issue, in a rich process of construction with government sectors, academia and civil society. ProManguezal aims to conserve, restore and sustainably use the biodiversity and ecosystem services associated with Brazil's mangroves, taking into account the various pressures on the ecosystem, including climate change.

- (ICRI) For the purpose of the above, please provide definitions for how your programme/organisation/country considers coral reefs to be:
  - A) Under active restoration
  - B) Restored

*Answer:*

*Under active Restoration:*

N/A

*Restored:*

N/A

### Does your country have any restoration policies or regulations?

Many locations have outdated and insufficient regulations for coral reef restoration, resulting in inadequate oversight of restoration efforts. In addition, the absence, limitations, or differences among regulations between countries prevents the development and implementation of effective regional coral reef conservation strategies.

- (ICRI) Please describe the restoration policies or regulations (if any) that are in place in your country.

*Answer:*

i) There are no coral reef restoration policies proposed in Brazil to date. The development of specific regulations for the restoration of coral reefs is one of the objectives of the national strategy for coral reefs that is currently being drawn up.

#### **D. The Global Coral Reef Monitoring Network (GCRMN)**

The production of future GCRMN reports, both at the regional and global level, relies on the ongoing support of data contributors who are willing to share their coral reef monitoring data for this purpose. As such, from 2024 to 2026, the GCRMN will undertake the rigorous process of developing the **Status of Coral Reefs of the World: 2025** global report, including an extensive data collation process.

[Do you have data to contribute to the upcoming GCRMN global report?](#)

- Please provide the contact information for the data providers to allow for the GCRMN data collation team to request data and discuss the process of data contribution.

*Please add further contacts as needed.*

*Answer:* The GCRMN data collation team is presently been expanded to organize the Brazilian Coral Reef Node. The transition team is listed below for contact.

*Contact Name: Beatrice Padovani Ferreira*  
*Organisation: Federal University of Pernambuco - UFPE*  
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*Contact Name: Ana Lidia Bertoldi Gaspar*  
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**OBS:**

#### **E. Capacity Building & Communications**

[Have you found the ICRI #ForCoral Webinar Series useful?](#)

Through 2024, ICRI has hosted multiple webinars that aim to share knowledge and foster collaboration across critical topics concerning the conservation, protection, and restoration of coral reefs. These webinars form the #ForCoral webinar series, and topics include the 4th Global Bleaching Event, impacts of land-based sources of pollution and National Biodiversity Strategies and Action Plans.

The full list of webinars and recordings can be found here: <https://icriforum.org/forcoral-webinar-series/>

- (ICRI) Did you attend any of the series' webinars, and if so which topics have you found the most useful and engaging? If you did not attend the webinars, please explain why, and how what we could have done better.

*Answer:*

We have participated in all ICRI meetings/webinars last year and this year. Brazil even presented a report at the webinar on “The Status of the Fourth Global Bleaching Event and the role of the global coral reef community”, as part of ICRI’s ForCoral Webinar Series held on 14th May 2024. The webinar on the “Guide for Integrating Coral Reefs and Associated Ecosystems into NBSAPs” is an inspiration in the process of building the National Strategy for Coral Reef Conservation in the face of climate change, aligned with the Kunming-Montreal Global Biodiversity Framework (GBF). You can find more information in the TOPIC of this report.

- (ICRI) Do you have any suggestions or request for topics that you wish for ICRI to host as part of this series? If you have a specific topic in mind, and would like to host a webinar, please indicate below.

*Answer:*

Yes. Given that countries must submit new NDCs to the UNFCCC by February 2025, it would be interesting to have a workshop on how countries are putting specific actions and targets for coral reefs in their NDCs.

Another issue to be addressed would be the need to build scenarios showing the cascade of events and losses of ecosystem services with the loss of coral reefs, for the available climate scenarios.

**Have you found the ICRI communications useful?**

- (ICRI) Do you find the ICRI Monthly Round of News Useful? If yes, what do you like about it and how would you suggest improving ICRI’s communications?

*Answer:*

Yes.

## **F. Kunming-Montreal Global Biodiversity Framework**

ICRI has continually supported the Convention on Biological Diversity and the Post-2020 process, developing a recommendation for coral reef indicators to be included in the Global Biodiversity Framework and supporting Parties during the negotiation process. Following the Framework’s adoption in 2022, ICRI’s support now aims to support parties in implementing

the framework, especially through National Biodiversity Strategies and Action Plans (NBSAPS) and the Marine and Coastal Work Programme.

In 2024, ICRI released [A Guide for Integrating Coral Reefs and Associated Ecosystems into National Biodiversity Strategies and Action Plans](#) to support coral reef countries to integrate coral reefs and associated ecosystems into their NBSAPs.

- (ICRI) Did you use read, use, and/or apply the Guide on integrating coral reefs and associated ecosystems into National Biodiversity Strategies and Action Plans (NBSAPs) useful? *Where possible, indicate specific elements that were useful or alternatively provide information if you did not find the guide useful.*

*Answer:*

The Ministry of Environment and Climate Change of Brazil intends to develop the National Strategy for Coral Reef Conservation in the Face of Climate Change. This strategy aims to integrate all existing Brazilian public policies that improve coral conservation while addressing the impacts of climate change. Throughout its development process, we have used the Kunming-Montreal Global Biodiversity Framework (GBF) as a basis, ensuring that the strategy will be aligned with Brazil's NBSAPs once finalised. The aim of this alignment is to strengthen the resilience of our national Coral Reef Conservation agenda by connecting it to our international commitments. In this context, the “Guide on integrating coral reefs and associated ecosystems into NBSAPs” has been instrumental in helping us understand the links between coral reef conservation and the Kunming-Montreal GBF.

- (ICRI) Did you revise your current National Biodiversity Strategies and Action Plans (NBSAP) to include coral reefs? **N.B.** *if you are not a country representative, are you working with national focal points to help update their NBSAPs? Please provide further details.*

*Answer:*

With the adoption of the new Global Framework by the CBD, member states of the Convention were urged to set new national targets and adapt their National Biodiversity Strategies and Action Plans (NBSAP) to the new guidelines and targets established. Brazil began the process of updating on May, 2023.

Target 2 of the NBSAP seeks to ensure that by 2030 at least 30% of degraded areas in each biome and in the coastal and marine zone, including terrestrial, continental aquatic, coastal and marine ecosystems, are in the process of effective recovery.

Target 8 of the NBSAP seeks to minimize the impact of climate change and ocean acidification on the biodiversity and socio-biodiversity of all biomes and the coastal and marine zone, and to increase their resilience through mitigation, adaptation and disaster risk reduction actions, including through nature-based solutions, ecosystem-based approaches, technological innovations and traditional knowledge.

- (ICRI) How are you planning to implement the Kunming-Montreal Global Biodiversity Framework? Please list the target(s) and decisions that your work attributes to.

*Answer:*

National Biodiversity Strategies and Action Plans (NBSAPs) under construction.

### G. Upcoming events

*Please tick the most any events that you will be, or are planning to attend:*

- September 10<sup>th</sup> – 24<sup>th</sup>: 79th Session of the UN General Assembly (UNGA 79)
- September 23<sup>rd</sup> – 26<sup>th</sup>: GEF International Waters Conference
- October 13<sup>th</sup> – 18<sup>th</sup>: 7<sup>th</sup> International Marine Conservation Congress (IMCC7)
- October 21<sup>st</sup> – November 1<sup>st</sup>: CBD COP16
- November 4<sup>th</sup> – 8<sup>th</sup>: 77<sup>th</sup> Annual meeting of the Gulf and Caribbean Fisheries Institute (GCFI77)
- December 10<sup>th</sup> – 12<sup>th</sup>: The International Mangrove Conservation and Restoration Conference
- December 9<sup>th</sup> – 13<sup>th</sup>: Reef Futures
- June 9<sup>th</sup> – 13<sup>th</sup> 2025: United Nations Ocean Conference
- October 9<sup>th</sup> – 15<sup>th</sup> 2025: IUCN World Conservation Congress
- Other – COP 29 CLIMATE UNFCCC

Please list any upcoming regional / international events relevant to ICRI that your organisation plans to attend:

*Answer:*

CBD COP16 and COP 29 CLIMATE UNFCCC

**H. Publications.** Please list relevant publications / reports you have released recently (+ add a link if possible)

Publication	URL

**I. ICRI Member Feedback.** What do you find most valuable about being a member of ICRI as well as completing the ICRI member reports? If you have any ideas to improve the Member Reports, please list below:

*Answer:*

*For Brazil ICRI membership means involvement in a dynamic network of coral reef conservation and restoration initiatives. Maybe creating online reports through forms to be filled could be a good way to improve synthesise results in a real time manner.*

**J. Contact information & member information.** (Note that this information will be posted on the ICRI website on your member page: <https://icriforum.org/members/>).

*Please use the table below to provide us updates to your member’s focal points as well as the blank cells to indicate changes to information (please add more rows, as needed):*

<b>Focal Point 1:</b>	
<i>Name:</i>	Ana Paula Prates
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<b>Focal Point 2:</b>	
<i>Name:</i>	Beatrice Padovani Ferreira
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<b>Focal Point 3:</b>	
<i>Name:</i>	
<i>Title/Organisation:</i>	
<i>Email:</i>	
<b>Member page updates:</b>	
<i>Section</i>	<i>Update</i>




*Thank you very much for sharing your valuable experiences and information with ICRI. Members reports, meeting outputs and resources will be uploaded to: <https://icriforum.org/events/37th-icri-general-meeting/>*