



ICRI Member's Report

BRAZIL

Reporting period December 2017 – November 2018

1. **Reporting on the ICRI Plan of Action 2016-2018.** *Your responses will help inform the Secretariat about members' contributions toward the previous Plan of Action.*
 - a. **Please list any relevant examples from your organisation/country of investment/projects to protect and restore the natural infrastructure of reefs and mangroves.** (See Goal (1) 2

Brazil's Chico Mendes Institute of Environment is working on several National Action Plans, including National Plans for mangroves (Legal Order ICMBIO n. 9, January 29, 2015) and coral environments (Legal Order ICMBIO n. 19, March 9, 2016).

Coral reefs: The National Action Plan for Coral Environments Conservation (PAN Corais) includes and establishes priority conservation strategies for 52 species of fish and aquatic invertebrates considered to be endangered, listed in the National List of Endangered Species and other associated species.

PAN Corais has been implemented in 18 focus areas located along the Brazilian coast, from the State of Maranhão to Santa Catarina, including areas within the Exclusive Economic Zone, in addition to its territorial sea.

10 specific objectives were defined:

I – To promote the integrity and maintenance of habitats, ecosystem services and populations of target and benefited species.

II – To contribute to the management and monitoring of fishing activity in coral reef environments.

III – To use ecosystem-based approach to promote the sustainable exploitation of fish stocks.

IV – To enhance the general knowledge about coral reef environments that are still poorly known.

V – To minimize use conflicts and negative impacts to the coastal and marine region inflicted by activities and developments that directly or indirectly affect coralline environments.

VI – To contribute to the organization of tourism activity in coral environments in order to minimize its impact, considering the local socioeconomic situation.

VII – To prevent the introduction and spreading of invasive exotic species in coral reef environments and evaluate and mitigate impacts in already affected regions.

VIII – To evaluate and minimize chemical, physical, organic and biological pollution in coral environments.

IX – To promote the revision, integration, innovation and effectiveness of the current public policies considering the sustainability of coral environments perspective, in

the social, environmental and economic contexts, broadening and strengthening participatory mechanisms and social control in the management of territories.

X – To evaluate and highlight the role of environmental services of coral reefs in climate change related issues and its impacts, as well as to develop strategies for the successful mitigation and adaptation of these environments based on the building of specific scenarios.

The previous objectives comprehend 146 actions and over one hundred organizers and contributors of various institutions.

Periodic Assessment: The action plan has been evaluated annually to review and adjust the implemented measures. In addition, a mid-term evaluation is expected to be administered half-way through the project's cycle and a final assessment, to be administered in the end of the management cycle.

Mangroves: The National Action Plan for the Conservation of Threatened and Economically-Important Species of the Mangrove Ecosystem (PAN Manguezal) is aimed at conserving Brazilian mangroves, reducing degradation, and protecting the focal species of the National Action Plan, maintaining their areas and traditional uses, based on the integration between the different instances of both the public power and society, incorporating traditional and academic knowledge.

It is made up of eleven specific objectives, each with its own actions, being:

- I. Contribute to the effectiveness of territorial planning in areas of mangrove and associated ecosystems (landholding regularization/ territorial planning)
- II. Contribute to the strengthening of social participation and integration between government agencies by means of public policies on strategic areas of the PAN Manguezal.
- III. Adequate the legislation in accordance with regional specificities for the implementation of fisheries and aquaculture management at the areas of the PAN, taking into consideration the participation of traditional people and communities.
- IV. Reduce impacts resulting from different types of pollution and from the introduction of exotic species at mangroves and associated ecosystems.
- V. Reduce habitat loss and expand mangrove and associated ecosystems recovery and conservation areas.
- VI. Reduce risks of environmental accidents and mitigate their socio-environmental impacts in activities that directly or indirectly affect mangrove and associated ecosystems.
- VII. Strengthen the supervision and monitoring of licensed enterprises with potential for negative impacts, as well as mangrove and adjacent areas.
- VIII. Inhibit the implantation and expansion of economic enterprises that result in negative impacts for the mangrove ecosystem.
- IX. Contribute to the eradication of shrimp farms and salt evaporation ponds' enterprises at the intertidal zone, and to the recovery of ecosystems already affected by these practices.
- X. Train social agents and managers involved in the PAN Manguezal.
- XI. Elaborate communication strategy for the PAN Manguezal.

A Brazilian Mangrove Atlas¹ was launched in July 2018.

¹ http://www.icmbio.gov.br/portal/images/stories/manguezais/atlas_dos_manguezais_do_brasil.pdf

- b. **Has your organisation/country made any progress in the following areas to target anthropogenic pressures?** Please give detail below.
Note: If no change since your last ICRI member report, please write 'no change'.

Encourage ban of plastic microbeads in cosmetic products. (See Goal (3) 2)

Brazil has undertaken a voluntary commitment to the World Ocean Conference, in June 2017, titled "Development of a national strategy to combat marine litter." Brazil has followed UN Resolutions on the subject - Resolution 1/6 and Resolution 2/11, which mention a ban on microbeads as a goal, but, at the same time, urges people to reflect on the cost-effectiveness of the alternatives. It is important to mention that Brazil should follow UNEA. In June of 2018, The Ministry of The Environment signed a norm that create the National Plan to Marine Litter and it was created a Commission that had the first meeting on august, 2018. Until March 2019 the National Plan will be launch. The Law Project number 6528/2016 is at Deputy Chamber and have received an approval from the Commission for Economic Development in October and is ready to be voted.

Improve regulation and enforcement to reduce direct anthropogenic damage due to dredging and physical alteration of reef structures. (See Goal (3) 3)

In Brazil, ports and dredging activities must be licensed by state and national Environmental Agencies. Federal environmental licensing is done by the Brazilian Institute for the Environment and Natural Renewable Resources (IBAMA). Also, to obtain authorization for marine disposal of dredged material, an environmental licensing protocol must be followed according to the CONAMA (Brazilian National Council of the Environment) resolution 237/1997.

Deployment of mooring devices limiting the mechanical destruction of coral reefs and seagrasses. (See Goal (3) 4).

The National Law for Environment Crimes, number 9605/1998 indicated that anchoring in coral reefs is not allowed.

The rules on anchoring in coral reefs and seagrass in Brazil, when existing, are only for MPAs and are recommended in specific actions or zoning plans that are part of the MPAs management plans. For example, Abrolhos National Marine Park has mooring devices on sandy areas for tourist and research boats, the number of boats is also controlled. At Rocas Atoll Biological Reserve, where only research is allowed, a fixed mooring is used by the boat that takes the research teams to the Atoll. At Fernando de Noronha National Marine Park, an important tourist destination and diving, in most dive sites the boat anchorage is not authorized. At Costa dos Corais Marine Protected Area (sustainable use), anchoring is not allowed in coral reefs and seagrass in 135 km extension, however enforcement is a challenge in such a large area.

- c. **Did your organisation/country celebrate International Year of the Reef?** Please give details below. (See Goal (5) 1

<http://www.mma.gov.br/biodiversidade/biodiversidade-aquatica/zona-costeira-e-marinha/campanhas-de-conservacao-da-biodiversidade-marinha.html>

<http://www.pontenova.com.br/index.php/colunistas/ricardo-motta/item/6689-2018-ano-internacional-dos-recifes-de-coral>

<http://www.mma.gov.br/informma/item/14567-noticia-acom-2018-01-2793.html>

<http://www.icmbio.gov.br/cepsul/destaques-e-eventos/580-ano-internacional-dos-recifes-de-corais.html>

<http://www.edhorizonte.com.br/noticias/recifes-corais-conservacao-marinha/>
<https://geografiavisual.com.br/fotografias/recifes-de-corais-explicados-em-5-imagens>

<http://noticias.ambientebrasil.com.br/clipping/2018/01/12/141199-paises-reforcam-acoos-para-protger-corais.html>

<http://radios.ebc.com.br/tarde-nacional/2018/01/pesca-predatoria-poluicao-e-asso-reamentos-dos-rios-tem-levado-ao>

2. **Contribution to the ICRI Plan of Action 2018-2020 and upcoming ICRI general meetings.** *Your responses to the following questions will assist the Secretariat in assessing contributions towards the major themes of the draft ICRI Plan of Action 2018-2020.*

Theme 1 - Promote effective and adaptable solutions to improve the protection of coral reefs

- a. **Which of the below topics do you consider to be the three top challenges that your organisation faces in managing coral reefs?**
Please select from the options below:

- Climate change impacts
- Inadequate planning, zoning and management
- Unsustainable resource extraction
- Tourism and recreation
- Shipping
- Coastal development
- Dredging
- Illegal and destructive fishing
- Fish and coral trade
- Marine debris
- Other. Please specify: invasive species

- b. **Please list any examples of innovative management practices that your organisation/country is involved in, such as use of VMS, drones & ecological mooring devices.** Include their limits, conditions of implementation, financing and an assessment of their results and links for more information if possible.

Regarding VMS systems, at the National level Brazil has a system of Tracking of Fishing Vessels by Satellite (PREPS) that was established and regulated through Interministerial Normative Instruction No. 2 of September 4, 2006 - Special Secretariat for Aquaculture and Fisheries of the Presidency of the Republic - SEAP / PR, Ministry of Environment-MMA and the Brazilian Navy.

<https://www.marinha.mil.br/salvamarbrasil/Sistema/preps-programa-nacional-de-rastreamento-de-embarca%C3%A7%C3%B5es-pesqueiras-por-sat%C3%A9lite>

This program has the purpose of monitoring, fishing management and control of operations of the fishing fleet as well as the potential to improve the safety of fishermen on board. This system includes licenced vessels above 20 Gt and all the lobster fishing fleet.

Other regional or local programs are also running or under implementation using radar signal systems that can detect fishing vessels of the artisanal fleet. One example is the Projeto radar, a partnership of ICMBIO Center of Biodiversity of the Northeast, the national Fisheries Secretary and The Federal University of Pernambuco.

<http://www.icmbio.gov.br/cepene/o-que-fazemos.html>

The use of drones has been used for research purpose, but no developments for management, such as for surveillance yet have been implemented on coral reef areas yet.

- c. **Please list any examples of innovative funding for management that your organisation/country is involved in.** Include their limits, conditions of implementation, financing and an assessment of their results and links for more information if possible.

The Marine and Coastal Protected Areas Project (GEF Mar) started in 2014 with the main objective is to support the creation, enlargement and implementation of a representative and effective system of marine and coastal protected areas to reduce biodiversity loss. GEF Mar is financed by the Global Environmental Fund with 18.2 million dollars approved by the World Bank.

<http://www.mma.gov.br/areas-protegidas/programas-e-projetos/projeto-gef-mar>

The Brazilian National Coral Reefs Monitoring Program that is underway since 2002, covering 7 MPAs, is conducted as a partnership between the Brazilian

Institute of Environment (ICMBIO)/Ministry of Environment and the Federal University of Pernambuco, with local support from several Universities, NGOs, Dive operators and volunteers. The program is presently funded by the GEF-Mar project.

The TerraMar Project supports integrated and participative management in continental and marine areas in two coastal areas in Brazil: Costa dos Corais Environment Marine Protected Area (400.000 ha including coral reefs and mangroves) and Abrolhos National Park. The Project is financed by German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety, by the Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.

<http://www.mma.gov.br/gestao-territorial/projeto-terramar.html>

The Coral Vivo Project works with research and education for the conservation and sustainable use of reef environments and Brazilian coral communities, acting in an integrated, multidisciplinary and multi-institutional manner. The activities of the project are developed in 4 main axes that communicate with each other: research, education, communication and environmental awareness, and public policies. Coral Vivo is financed by Petrobrás Ambiental. <http://coralvivo.org.br/>

ReBentos (Integrated Network of Benthic Habitats Studies of the Brazilian Coastline) has the objective to create and implement an integrated network of studies of benthic habitats on the Brazilian coast (ReBentos) to detect the effects of regional and global environmental changes on these organisms, initiating a historical series of data on benthic biodiversity throughout the Brazilian coast. <http://rebentos.org/>

Recifes Costeiros Project has the objective of marine research and environmental management experiments to support recovery and conservation of the reef ecosystems of the Coastal Corals Environmental Protection Area. Recifes Costeiros is financed by SOS Mata Atlântica Foundation, Toyota Foundation.

<http://www.recifescosteiros.org.br/projetos/detalhes/projeto-1>

CNPq Long-term Ecological Program (PELD) funds research on important coral reefs sites in Brazil. These sites are also linked to International Long Term Ecological Research Network (ILTER): Abrolhos Bank <https://deims.org/a497328f-1e2d-416c-bc25-6ccf31965af4>; Tamandaré Coastal Marine-Complex <https://deims.org/b6604465-90c8-4ed0-9914-02be6e099e8f>; Brazilian Oceanic Islands <https://deims.org/030bec0b-f6ac-4840-b226-af813258b14b>; Coral Coast Alagoas <https://deims.org/ca82d512-8f32-4153-b6d8-33e979d9c3ac>.

The Abrolhos Network integrates inter-institutional initiatives for research, training, human resources training and environmental management, producing and transmitting knowledge about the largest coral reef in the South Atlantic,

Abrolhos Bank. The Abrolhos Network is financed by CNPq, CAPES FAPES, FAPERJ e ANP/Brasol. <http://abrolhos.org/>

Theme 3 – Support communities reliant on coral reefs

d. Is sustainable tourism development a significant challenge for your organisation?

Brazilian Ministry of The Environment is working with Sustainable Development Goals – number 12.

Tourism is both a challenge and an opportunity. Dealing with trampling on coral reefs, littering, fish feeding and anchoring are some of the challenges. Several institutions/NGOs are working in partnership with local and national government to strengthen community-based tourism.

In Costa dos Corais MPA, funds from SOS Mata Atlantica and Toyota Foundation support several local initiatives that promote sustainable nature-based tourism practices by local communities, as well as participative zoning plans.

<https://www.sosma.org.br/107488/projeto-toyota-apa-costa-dos-corais/>

The book Community-based principles for MPAs was published by ICMBio in 2018 http://www.icmbio.gov.br/portal/images/stories/comunicacao/publicacoes/turismo_de_base_comunitaria_em_uc_2017.pdf

“Sustentabilidade à beira-mar: um bom negócio”² (Sustainability at sea shore: a good business) was launch in 2018 by Golfinho Rotador and Coral Vivo Project. The book is a guide to implement sustainable management in the economic, environmental and sociocultural: accommodation, bars and restaurants, commercial boat ride and commercial scuba diving.

An initiative for Crowdlearning in MPA sites is also underway, promoted by the Ministry of Environment/Terramar and ICMBio.

e. Is your organisation involved in activities to raise awareness and encourage action to support communities reliant on coral reefs?

Please include details below.

The Ministry of Environment is working to relaunch on November a Campaign for Coral Reefs Conservation, that exist since 2001, for tourist in partnership with managers of Protected Areas and Tourism guides. The material includes a manual, videos and visual materials for the local community.

Theme 4 – Help to reduce anthropogenic threats to coral reefs, particularly those that occur at a global or regional scale

² http://coralvivo.org.br/arquivos/documentos/Guia_Sustentabilidade.pdf

f. Has your organisation made any progress in dealing with destructive fishing and trade? Same actions included in last report.

g. Has your organisation made any progress in dealing with marine debris? Please include details below.

Brazil has undertaken a voluntary commitment to the World Ocean Conference, in June 2017, titled "Development of a national strategy to combat marine litter." Brazil must follow UN Resolutions on the subject - Resolution 1/6 and Resolution 2/11, which mention a ban on microbeads as a goal, but, at the same time, urges people to reflect on the cost-effectiveness of the alternatives. It is important to mention that Brazil should follow UNEA. IN June of 2018, The Ministry of The Environment signed a norm that create the National Plan to Marine Litter and it was created a Commission that had the first meeting on august, 2018. Until March 2019 the National Plan will be launch.

A video was launch on June 5 about marine debris. Available on:

<https://www.youtube.com/watch?v=00UQQx9-GB8>

Brazil in on the ONU Campaign for Clean Oceans and on September a campaign was in some beaches. <http://www.cleanseas.org/>

<http://agenciabrasil.ebc.com.br/geral/noticia/2018-09/campanha-da-onu-promove-mutiroes-de-limpeza-de-praias>

3. Would you like to report on your activities during the ICRI GM? Please give details below.

Yes. We would like to present the Brazilian National Coral Reef Monitoring Program outcomes. The program is underway since 2002, covering 7 MPAs.

4. International events. Please list any upcoming international events relevant to ICRI which someone from your organisation plans to attend in 2018-2019.

- ICRI GM, Monaco, 5-7 Dec 2018
- Conference of the Parties to the United Nations Framework Convention on Climate Change, 3-14 Dec 2018
- Reef Futures 2018: A Coral Restoration and Intervention-Science Symposium, Florida, 10-14 Dec 2018
- Global World Heritage Marine Managers meeting, Alaska, US, 26-31 May 2019

Other:

5. Publications. Please list relevant publications and reports you have released during this reporting period.

A book and a Manual presenting the results of Brazilian Coral Reef Monitoring Program to be released in December 2018.

Atlas dos Manguezais do Brasil (Brazilian Mangroves Atlas) – Instituto Chico Mendes de Conservação da Biodiversidade, Brasília, 2018. 176 p.

([http://www.icmbio.gov.br/portal/images/stories/manguezais/atlas dos manguezais do brasil.pdf](http://www.icmbio.gov.br/portal/images/stories/manguezais/atlas_dos_manguezais_do_brasil.pdf))

Sustentabilidade à beira-mar: um bom negócio. Centro Golfinho Rotador, São Paulo, 2016 44 p. Authors: Cynthia Gerling e José Martins da Silva-Jr.
([http://coralvivo.org.br/arquivos/documentos/Guia Sustentabilidade.pdf](http://coralvivo.org.br/arquivos/documentos/Guia_Sustentabilidade.pdf))

Other publications have been listed throughout the report.

6. ICRI Member Feedback. What do you find most valuable about the ICRI member reports? If you have any ideas for improvement, please list below:

7. General Information. (Note that this information will be posted on the ICRI website on your member page:

[http://www.icriforum.org/about-icri/members-networks.](http://www.icriforum.org/about-icri/members-networks))

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