

Action plan of the International Coral Reef Initiative (ICRI) Secretariat (2016-2018)

Adopted on November 4th, 2016, at the 31st ICRI General Meeting (Paris, France)

Theme 1 – "Help raise awareness of how coral reefs and related ecosystems help to fight climate change"

COP21 was the first agreement to place such importance on the ocean. This is written into the Paris Agreement and the Agenda for Action, the fourth pillar of the outcome of COP21. The ocean is one of the solutions to climate change. In general, in the face of the challenges of climate change, nature offers solutions, which are often as effective and less costly than infrastructures which separate man from his natural environment. Coral reefs and related ecosystems provide many examples of this.

Awareness of the central role played by the ocean and coastal ecosystems was raised via international mobilization, including the major "Because the Ocean" declaration, endorsed by many States in December 2015 alongside COP21, and several initiatives related to the ocean and coastal management, launched in the framework of the Agenda for Action.

The ICRI Secretariat intends to continue in a similar vein. To do so, along with the ICRI Members, the Secretariat intends taking or encouraging the following actions:

✓ Goal (1) 1: highlight the contribution of coral reefs, mangroves and seagrasses to mitigate and adapt to climate change and its impacts

An ICRI *ad hoc* Committee will list and examine solutions provided by coral reefs and coastal systems to mitigate and adapt to climate change ("green solutions"). It will also examine how best to combine these "green" solutions and "grey" infrastructures, with a view to increasing resilience. It will identify examples of good practices for future projects. Special attention will be paid to mangroves, which store up to three to five times more carbon than a tropical forest with the same surface area. In Indonesia, for example, it is estimated that mangroves store some 3.14 billion tonnes of carbon, mainly in soil.

The Committee will identify best practices for assessing emissions reductions resulting from the restoration of mangroves and seagrass beds.

The *ad hoc* Committee will compile a list of Nationally Determined Contributions (NDC) and adaptation strategies from member countries to illustrate the status of coral reefs, mangroves and seagrasses and by extension, oceans therein.

✓ Goal (1) 2: encourage financing for projects and initiatives which help protect and restore coral reefs, mangroves and seagrasses

- (i) The Secretariat intends to (re)mobilize donors in order to encourage interaction between them and project leaders. A list of the major projects involving coral reefs will be drawn up, with the support of major multilateral and bilateral donors. The analysis will help set out the main geographical regions concerned, the nature of the financed actions, the characteristics of the ecosystem, etc. This work will, in turn, enable geographic areas and less financed themes/those requiring extra attention to be identified in order to alert the donors.
- (ii) The Secretariat also intends to consult with the main multilateral and bilateral donors to highlight the innovative financing mechanisms to protect and preserve coral reefs and related ecosystems. Innovative projects are underway or are being prepared (payments for services provided by ecosystems, insurance mechanisms, eco-tourism, etc.). Their implementation may, for example, encourage new projects to be developed. From a recipient's point of view, these examples can encourage States and local communities to launch new initiatives aimed at protecting reefs, with the support of donors. Donors will continue to be consulted to encourage such initiatives.
 - ✓ Goal (1) 3: increase knowledge on the role of coral reefs, mangroves and seagrasses in interactions with the climate and the ocean, as well as knowledge of the effects of these interactions on these ecosystems

Encourage ICRI Members to mobilize their national experts at the Intergovernmental Panel on Climate Change (IPCC) on the situation and challenges relating to coral reefs, mangroves and seagrasses, so that these ecosystems are fully recognized in the IPCC special report on climate change and oceans and the cryosphere.

The Secretariat will also approach the UNFCCC and IPCC Secretariats to raise the issue of coral reefs and related ecosystems, in the context of the preparation of the "Special Report on the impacts of global warming of 1.5 °C above pre-industrial levels and related global greenhouse gas emission pathways".

Theme 2: "Meet international requirements regarding coral reefs"

Coral reefs are receiving growing international attention. Action plans from Multilateral Environmental Agreements (MEAs) recognize them, following on from the Aichi Biodiversity Targets and Action Plan. Adopting a resolution on the sustainable management of coral reefs, at the second session of the United Nations Environment Assembly (UNEA-2) in May 2016 is part of this process. The situation of coral reefs, mangroves and seagrasses should also be improved



by the high priority given to issues relating to the ocean on the international scene. The ICRI Action Plan must help to implement international commitments which have already been made in these areas, as well as to work to promote new commitments.

✓ Goal (2) 1: implement the resolution on the sustainable management of coral reefs adopted at the 2nd session of the United Nations Environment Assembly (May 2016)

The UNEA-2 resolution makes many references to the ICRI, both direct and indirect. A consultation meeting on implementing this resolution, organized in Indonesia in June 2016 under the United Nations Environment Programme (UNEP) reaffirmed the ICRI's role in implementing this resolution. In partnership with the UNEP Coral Reef Unit, the Secretariat will help implement the following actions:

- analysis of global and regional policy instruments and governance mechanisms related to the protection and sustainable management of coral reefs;
- support the further development of coral reef indicators, regional coral reef assessments as well as the preparation of a global report on coral reef status and trends through the International Coral Reef Initiative Global Coral Reef Monitoring Network.
- ✓ Goal (2) 2: help to meet the Sustainable Development Goals (SDG), in particular those relating to Goal 14 ("Conserve and sustainably use the oceans, seas and marine resources")

The ICRI Secretariat will produce a summary of the contribution of coral reefs, mangroves and seagrasses to the various SDGs, by identifying concrete examples coming from its Members, if possible which can be replicated. After review and approval by ICRI members, this summary will be presented to the United Nations Conference to Support the Implementation of SDG 14 in June 2017 to encourage awareness of coral reefs, mangroves and seagrasses in this implementation. The study should show that the state of coral reefs is an excellent indicator of sustainable development.

✓ Goal (2) 3: take advantage of upcoming international events to pursue the advocacy for coral reefs and related ecosystems

Several major events will be held in 2017, and represent an opportunity that the Secretariat and ICRI members will exploit to continue to plead for coral reefs and related ecosystems. ICRI will endeavour to expand its audience beyond ministries of environment. Ministries of development and finance will be included.



Theme 3: "Help to reduce human threats to coral reefs and associated mangroves and seagrasses, by making greater use of regulatory tools"

Most of the world's coral reefs are endangered by human activities. It is estimated that in 10 years (between 1998 and 2008), 33% of coral reefs have come under increased threat. Over 60% of the world's reefs are directly and immediately threatened by local pressure such as overfishing and destructive fishing practices, coastal development, pollution of watersheds and marine-related pollution and damage. If we include thermal stress to local threats, about 75% of the world's coral reefs can be deemed to be under threat. ICRI has consistently addressed major anthropogenic threats. In view of the current Secretariat, it will also focus on the following threats, which have been less addressed:

✓ Goal (3) 1: promote legal frameworks for the protection of coral reefs and associated mangroves and seagrasses, with quantified targets and effective enforcement to protect these ecosystems

Based on annual reports from ICRI Members, a summary of existing legislative and regulatory mechanisms will be conducted. In order to recognize the remarkable initiatives taken by States in the area of protection and management of coral reefs and related ecosystems, a prize could even be awarded (like the IFRECOR (French Coral Reef Initiative) prize or CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) achievement certificates).

ICRI Members will also be encouraged to set quantified targets to protect their coral reefs, mangroves and seagrasses. (For example, France has set a target to create action plans with a view to protecting 75% of coral reefs by 2021 and 55,000 hectares of mangroves by 2020 in its overseas departments and territories). The first step is to assess the surface of coral reefs and mangroves currently under protection.

✓ Goal (3) 2: encourage a ban on plastic microbeads in cosmetic products

The spread of plastic microbeads in the marine environment adversely affects biodiversity. It affects fragile ecosystems like coral reefs. ICRI Member States (including the United States and France) have already taken steps to ban these microbeads. ICRI Members will be invited to adopt a recommendation to this end.

✓ Goal (3) 3: improve regulation and enforcement to reduce direct anthropogenic damage due to dredging and physical alteration of reef structures

ICRI Members will be asked to adopt a recommendation encouraging legislative or regulatory measures to be taken against dredging for creating or extending marine or coastal infrastructures

in coral areas (for example, in France, the State has set itself a target to ban deep-sea dredging operations in which coral reefs are present, with the exception of dredging ports for maintenance purposes). Environmental impact assessments are a prerequisite for actions involving the dredging or physical alteration of reef structures. Such actions should be conducted in accordance with the "avoid, reduce, compensate" approach. Measures such as bans constitute a substantial contribution to the protection of coral reefs.

✓ Goal (3) 4: promote the deployment of mooring devices limiting the mechanical destruction of coral reefs and seagrasses

ICRI Members will be invited to recommend banning wild mooring in coral areas and seagrasses, as well as setting up fixed moorings. Furthermore, recommendations should be made to deploy innovative moorings, suited to local conditions and which can limit the phenomenon of chain dredging in corals and seagrasses. Recommendations - and feedback - regarding ecological mooring can be drawn up (systems reproducing neighbouring habitats via functional biomimicry, and which can be linked to cuttings to restore the substrates and encourage recolonization).

✓ Goal (3) 5: review issues related to the impact of sunscreens and other endocrine disruptors on coral reefs, and encourage the production of sunscreens that are proven not to damage coral reefs

An increasing number of studies have highlighted that sunscreens and many cosmetic products contain chemical substances which are a threat to coral reefs. Although statistics vary, it is estimated that on a global scale, between approximately 4,000 and 6,000 tonnes of sunscreen can be found in waters with coral reefs. The industry should produce and distribute alternatives to harmful sunscreens. The Secretariat is mandated to approach industry representatives to strongly encourage such developments. The ICRI will collaborate with relevant organisations to keep building on studies on this issue. ICRI will revert to the matter at its next General Meeting.

Theme 4: "Monitor the state of reefs in order to better manage them"

Since its creation, the ICRI has set up the Global Coral Reef Monitoring Network (GCRMN) with the aim of assessing the state of health of reefs for managers, decision-makers and researchers. These periodical reports are one of the rare sources of information available on the state of health of reefs on a regional and global level.

The ICRI Secretariat will address the global coordination of GCRMN and initiate the development and implementation of a roadmap and lead a working group to undertake that work. The work will also capitalize on the recent good progress made with at the regional level.



✓ Goal (4) 1: promote regional reports on the health of coral reefs

Since the 2014 publication of the Status and Trends of Caribbean Coral Reefs: 1970-2012 report, the GCRMN now prioritizes the publication of regional reports, in order to compile them to publish a global report. During the term of the current Secretariat, a regional report for the Indian Ocean (drawn up by the Indian Ocean Commission under the GCRMN) is set to be published, as well as a report for the Pacific (led by the CRIOBE-CNRS laboratory via a convention with the French Environment Ministry). The ICRI will encourage the publication of these reports and will ensure that they are widely distributed. Furthermore, the Secretariat will encourage the publication of reports for regions in which work has not yet begun or is underway. As part of a partnership with the UNEP Coral Reef Unit, the main lines will be drawn up to facilitate the preparation of these reports.

✓ Goal (4) 2: better monitor the phenomena of coral bleaching

The recent episode of coral bleaching caused by El Niño is thought to be the worst on record. It highlighted the importance of monitoring the effects of these phenomena, and working to mitigate them and, if possible, anticipate them. Given that these events are increasingly frequent, it would be useful to have a global compilation of the results from local monitoring, so as to measure the full extent of the phenomenon.

The Secretariat proposes that the ICRI take up this challenge, firstly by organizing a dedicated workshop at the next General Assembly in 2017, and secondly by submitting a specific recommendation on monitoring coral bleaching episodes. The GCRMN will be called upon.

Theme 5: "Progress via education"

Since its creation, the ICRI has worked to raise awareness among the public and decision-makers about the importance of coral reefs. A network, the International Coral Reef Information Network (ICRIN), was created with this in mind, although a lack of resources had forced it to suspend its activities. It should also be noted that the ICRI's communication actions mainly focused on coral reefs. On the other hand, related ecosystems were not included in these actions. So the ICRI Secretariat intends to strengthen the awareness actions regarding the importance of mangroves and seagrasses.

✓ Goal (5) 1: prepare for the 2018 International Year of the Reef (IYOR)

In 1997, the first IYOR was organized under the ICRI. A second IYOR followed in 2008. On that occasion, over 600 events were organized in 65 countries. It is thus natural for the ICRI to

make 2018 the third IYOR. The Secretariat, with the support of the ad hoc Committee, will work to prepare it and will strive to increase awareness of related ecosystems during the events.

✓ Goal (5) 2: increase awareness among the general public, communities, and young people

The Secretariat will work to promote "educational managed marine areas (EMMAs)". These informal initiatives involving participative management of a marine area by a school or a group of students help to raise awareness among young people about issues regarding the conservation of fragile coastal ecosystems. As the number of EMMAs created increases, the Secretariat should be able to draw on these experiences in order to share them.

The Secretariat will also work to increase cooperation with civil society actors who are mobilized to protect coral reefs and their related ecosystems, as well as oceans more generally, in order to further publicize the priorities of the ICRI.