

Photograph courtesy of Eric Clua/CRISP



# A CONTINUING CALL TO ACTION

---



# A CALL BY THE MEMBERSHIP OF THE INTERNATIONAL CORAL REEF INITIATIVE (ICRI) - OCTOBER 2013



*"We also recognize the significant economic, social and environmental contributions of coral reefs, in particular to islands and other coastal States, as well as the significant vulnerability of coral reefs and mangroves to impacts including from climate change, ocean acidification, overfishing, destructive fishing practices and pollution. We support international cooperation with a view to conserving coral reef and mangrove ecosystems and realizing their social, economic and environmental benefits as well as facilitating technical collaboration and voluntary information sharing."*

- The Future We Want: the outcome statement of the 2012 United Nations Conference on Sustainable Development (Rio+20) as adopted by the General Assembly of the United Nations



Photograph courtesy of Jerker Tamelander

# THE CONTEXT



Coral reefs are in serious decline globally, especially those near shallow shelves and dense human populations. It has been estimated that 19% of the earth's coral reefs have already been seriously degraded or lost and greater than 60% are under immediate and direct threat. This decline is likely to lead to the loss of most of the world's reef resources during the next century and seriously affect the lives of 500 million people, of which 30 million are largely dependent on reefs for their livelihoods.

The International Coral Reef Initiative (ICRI) is a partnership among governments, international organisations, and non-government organisations which aims to preserve coral reefs and their related ecosystems in a framework of sustainable use. It was initiated by the governments of Australia, France, Japan, Jamaica, the Philippines, Sweden, the UK and the USA and was announced at the first meeting of the Conference of the Parties to the Convention on Biological Diversity in 1994.

First published in 1995, the ICRI Call to Action aims to raise global awareness on the continuing decline in the health of the world's coral reefs and encourages action to address coral reef issues. The Call was 'renewed' at the inaugural International Tropical Marine Ecosystems Management Symposium (ITMEMS) in 1998.



*"Often referred to as the "rain forests of the sea", tropical coral reefs rank among the most biologically rich and productive global ecosystems and are representing social, economic and environmental benefits for millions of people."*

- Report of the Secretary-General of the United Nations, August 2011



Photograph courtesy of Sandrine Job/CRISP

# PROGRESS HAS BEEN MADE



ICRI was founded to raise the profile of the plight of coral reefs on the world stage, bringing the spotlight on their ecological, economic, social and cultural value to a large proportion of the world's population. ICRI members were urged to draw the attention of managers, senior policy makers, funding organisations, scientists and politicians to the issues that faced coral reefs.

The informal nature of ICRI makes it challenging to quantify its influence over time in terms of on-the-ground progress towards sustainable management of coral reefs. However, in this regard it is worthwhile reflecting on:

- the congruence of ICRI's work with the establishment of reef-related international action targets such as:
  - The World Summit on Sustainable Development 2002 Earth Summit MPA networks target;
  - The Convention on Biological Diversity 2002 biodiversity targets relating to eco-region protection, marine protected areas containing coral reefs and sustainable fisheries;
  - The subsequent 2010 Aichi Biodiversity Target 10 dealing specifically with coral reefs leading to the declaration of new marine protected areas, including locally managed areas as well as Large Marine Protected Areas such as the Papahānaumokuākea Marine National Monument or the Phoenix Islands Protected Area; and
- the advent of transformative regional initiatives such as the Coral Triangle Initiative, the Micronesia Challenge and the Caribbean Challenge.

Aside from influence in the above global advancements in coral reef conservation, ICRI can identify tangible achievements clearly of its own making:

- Raising global awareness on all aspects of the goods and services from coral reefs, and the values and challenges facing coral reefs and related ecosystems resulting in the declaration on two occasions of the 'International Year of the Reef' in 1997 and 2008;
- Gaining recognition of the importance of ICRI by its reference in the Report of the Secretary-General of the United Nations in 2011;
- Creating a forum for regular discussion of coral reef management issues and solutions through meetings of ICRI members and the International Tropical Marine Ecosystems Management Symposia;
- Producing regular global and topic-driven reports on the status of coral reefs through its Global Coral Reef Monitoring Network, thereby bringing international attention to their plight and helping to guide policy and actions;
- Helping to raise the global standard of monitoring of the socioeconomic conditions of the world's coral reefs through the Global Socioeconomic Monitoring of World's Tropical Ecosystems (SocMon) Network;



Photograph courtesy of Jerker Tamelander

- Instigating a dynamic network of many of the world’s leading coral reef science and conservation organisations through the International Coral Reef Action Network (ICRAN, 2000-2011);
- Encouraging and supporting collaboration and coordination at national and regional levels through:
  - Regional initiatives (East Asia Regional Activities, CORDIO in the Indian Ocean, CRISP in the Pacific)
  - National initiatives such as the French Coral Reef Initiative (IFRECOR)
  - Technical committees focused on regional issues (e.g. the Ad hoc Committee on Caribbean Regional Response to Lionfish Invasion)
  - A focus on regional days at meetings of ICRI members.
- Facilitating coordinated action and capacity building on key contemporary issues facing coral reef managers including (but not limited to):
  - climate change adaptation;
  - marine protected areas;
  - coral reef associated fisheries (e.g. fish spawning aggregations);
  - trade in coral and coral reef species;
  - coral diseases;
  - enforcement;
  - evaluation of management effectiveness;
  - economic valuation of coral reefs;
  - marine invasive alien species (particularly the lionfish);
  - mangrove forest management.

Despite these achievements, major challenges continue to face coral reef managers. The four cornerstones of ICRI (Integrated management; Capacity building; Science and monitoring; and Review) remain as relevant in the early part of the 21st Century as they did when first conceived in 1995, but they now have to be addressed through the lens of climate change which poses an overarching threat on top of the multiple other stressors on these ecosystems.



*“As a partnership among governments, international organizations and non-governmental organizations, the International Coral Reef Initiative (ICRI) was launched in 1994 as the only global entity devoted solely to coral reef conservation.”*

# ... BUT THE CHALLENGES CONTINUE



The threats underlined in this Continuing Call to Action remain largely the same as in 1994. Humankind has not changed its fundamental behaviour towards its natural environment: the world's population continues to climb, and the majority of humans live in close proximity to the marine environment, which is heavily utilised for economic, social and cultural purposes.

Further, the consequences of climate change, including many serious and irrevocable impacts, are now better understood than when ICRI was initiated. There is overwhelming scientific consensus that the Earth's climate is changing, driven primarily by greenhouse gas emissions from human activity. Elevated sea surface temperature, along with ocean acidification, are likely to be the most significant global threats to coral reefs. Direct evidence of the widespread negative effects of climate change on coral reefs have already been observed, and immediate action is required to prevent the loss of the world's reef resources during the next few decades.

The threats to reef health are varied, complex, and multiplicative. Increasingly, the capacity of coral reefs and related systems to adapt to the changing climate is being compromised by direct anthropogenic stress. As population levels continue to rise, contributing factors include:

- Unsustainable and destructive resource extraction, catchment run-off; shipping; and coastal development including tourism and recreation;
- Inadequate planning, zoning and management of coastal water and land use.



Photograph courtesy of Rich Carey



Photograph courtesy of Thomas Vignaud/Alofa Tuvalu



***“Despite their importance, coral reefs are facing numerous local and global threats caused by human activity and climate change. Unsustainable fishing practices, coastal development, pollution, ocean warming and ocean acidification have already damaged one fifth of the coral reefs beyond repair and predictions are alarming should no change occur.”***

- Report of the Secretary-General of the United Nations, August 2011

# THE CONTINUING CALL TO ACTION



The nations and organisations supporting the International Coral Reef Initiative (ICRI) acknowledge that in the nineteen years since its inception, ICRI has been the catalyst for a major improvement in the global awareness of the values of coral reefs and related ecosystems and the threats those systems face. In that time much progress has been made to understand and address those threats. Nevertheless, the plight of coral reefs continues to be a source of great concern. Coral reefs:

- continue to be degraded by a range of pressures; and
- are now affected by a number of anthropogenic and natural processes not clearly understood at the time of ICRI's inception.

Accordingly, ICRI members **CALL** upon all those with influence over the sustainable management of coral reefs and related ecosystems to continue efforts to:

1. manage coral reefs and related ecosystems in a manner that recognises the connectivity of land and sea and the cumulative impacts of anthropogenic pressures, and seeks to build resilience of natural systems to withstand the long term effects of a changing climate (**Integrated Management**);
2. build capacity in all facets of marine conservation and sustainable use, to disseminate and apply best practices and engage communities in the sustainable management of coral reefs and related ecosystems (**Capacity Building**);
3. support research including citizen science approaches to afford the widest possible ability for countries and communities to assess and report on the status, health and threats to their coral reefs in a coordinated, comparable and accessible manner (**Science and Monitoring**); and
4. review impact of actions taken, assess management effectiveness and apply adaptive responses (**Review**).



*"... We need to improve, quickly and comprehensively, on existing efforts to protect reefs and the services they provide humanity. It is encouraging that our collective ability to do so has become stronger, with new management tools, increased public understanding, better communications, and more active local engagement."*

- Reefs at Risk Revisited  
Publication of the World Resources Institute, 2011

Photograph courtesy of Thomas Vignaud/CNRS



# A FRAMEWORK FOR ACTION 2013

*A roadmap for the ICRI continuing call to action*



One of ICRI's Foundational documents, its Framework for Action, was adopted in 1995 along with the Call to Action, and reaffirmed in 1995 at the first International Tropical Marine Ecosystems Management Symposium (ITMEMS1). The Framework for Action identified mechanisms by which the Call could be implemented at global, regional and local levels, in four major areas which have become ICRI's four cornerstones:

- Integrated management
- Capacity building
- Science and monitoring
- Review.

This updated Framework for Action is designed to provide high-level guidance to governments and other stakeholders to implement management strategies and actions based on global best practices. It now includes a Vision statement, upon which underlying approaches and desired long-term outcomes are based. It also suggests strategies and approaches to best achieve these outcomes.

The Framework for Action builds upon and reflects the approaches established by major international processes, including the Convention of Biological Diversity's Strategic Plan for Biodiversity 2011-2020 (and particularly Aichi Target 10); the UN Secretary General's Report on the Protection of coral reefs and related ecosystems for sustainable livelihoods and development (A/66/150); Rio + 20's outcome document 'the Future We Want', the United Nations' 67th General Assembly Resolution on Oceans and the Law of the sea (particularly paragraph 200 which acknowledges the work of ICRI) and Resolution on Sustainable Fisheries.

## OUR VISION

*"Coral reefs and related ecosystems are used and managed in an ecologically sustainable manner to enhance their resilience and provide goods and services for generations to come."*



# INTEGRATED MANAGEMENT



'Integrated management' refers to the adaptive, holistic, risk-based approach to management of coral reefs ecosystems, which takes into account the connectivity of land and sea influences and the cumulative impacts of anthropogenic uses and natural disturbances. It seeks to promote ecologically sustainable management through a long-term balance of ecological, social, cultural, economic and governance objectives. It integrates concerns of all stakeholders, including direct users, the private sector, various levels of governments, coastal communities and the civil society to increase resilience and maintain environmental services. ICRI adopted this concept as the best approach for sustainable management of coral reefs and related ecosystems in 1995 and continues to promote it within international, regional and national arenas. Today, this approach can be adopted by countries with an aim to achieving the Aichi Targets, and particularly Target 10.

|  |   |
|--|---|
| <b>Objective</b>   | Manage coral reefs and related ecosystems using an ecosystem approach, recognizing place based activity; connectivity within and among ecological, social, economic, and institutional systems; as well as with attention to scale; resilience of ecological and social systems; and long-term provision of ecosystem services.   |
| <b>General Approach</b>  | Integrated management, using a strategic, risk-based, informed approach, provides a framework for effective coral reef and related ecosystem management which supports natural resilience, ecosystem service provision, and enhances the ability to withstand the impacts of climate change and ocean acidification.  |
| <b>Desired outcome</b>   | There is a demonstrable reduction in the threats to coral reefs and related ecosystems through management action.   |
| <b>Strategies and approaches</b>   | Encourage governments to develop and implement legislation and integrated management programs, including through Marine Spatial Planning approaches (including targets and incorporating zoning and enforcement, managed access and participatory governance), to ensure that threats to coral reefs are systematically addressed. These programs may include addressing:   |
|  | <ul style="list-style-type: none"> <li>• Land-based sources of marine pollution, including land use in coastal areas and watersheds</li> <li>• Strategic planning of coastal development</li> <li>• Disaster risk reduction</li> <li>• Climate change adaptation</li> <li>• Ports and shipping, including ballast water management and dredging</li> <li>• Fisheries management, including enforcement and management of access, trade, etc.</li> <li>• Tourism and recreation</li> <li>• Traditional uses of marine resources</li> <li>• Prevention and management of marine Invasive Alien Species</li> <li>• Water quality assessment and management</li> <li>• Heritage management</li> <li>• Compliance</li> </ul> |
|  | As part of these programs, encourage governments to conduct ecosystem-based strategic assessments of pressures and impacts, including cumulative impacts and their effect on ecosystem service provision and value, as well as of management arrangements to deal with such impacts.  |
|  | Promote and replicate successes in integrated management as appropriate, including new technologies that can help achieve the desired outcome.  |
|  | Encourage the mainstreaming of sustainable coral reef management into the activities of relevant international agencies, programs and conventions, financial institutions and the donor community.  |
|  | Encourage effective regulation and management of trade in marine wildlife and products.   |
| Promote review and, where appropriate, reformulation of existing domestic legal instruments that promote sustainable management of coral reefs and their related ecosystems. |   |

# CAPACITY BUILDING



Capacity building includes establishing and strengthening human resource and institutional capabilities for improved management of coral reefs and related ecosystems. It is an important part of ICRI’s work and a key element of its philosophy, reflected in General Meetings and on-ground activities through its networks, committees and regional initiatives. It encompasses a number of elements, including training, public awareness, stewardship, networking, education and partnership approaches.

|                                  |   |
|----------------------------------|---|
| <b>Objective</b>                 | To build capacity in all facets of management of coral reefs and related ecosystems and support dissemination and application of best practices to achieve the widest possible engagement of all stakeholders in planning and management activities.  |
| <b>General Approach</b>          | Continued collaboration, partnerships, outreach, information sharing and education to ensure the uptake of best practices and encourage behavioural change. This can only be successful if the diversity of cultures, traditions and governance among nations and regions are taken into account.   |
| <b>Desired outcome</b>           | Persons who have influence in the management of coral reef and related ecosystems have the knowledge, tools and capital necessary to apply best practices, adapted to the cultural and socio-economic context.  |
| <b>Strategies and approaches</b> | <p>Support and facilitate technical collaboration and voluntary information-sharing on all aspects of sustainable management of coral reefs and related ecosystems, including through regional and topical efforts carried by ICRI Networks, Ad Hoc Committees and regional initiatives, as well as other relevant regional mechanisms such as Regional Seas programmes.</p> <p>Encourage cooperation and collaboration amongst countries to set up networks of Marine Protected Areas or Locally Managed Marine Areas; investigate, support and encourage transboundary management of large Marine Protected Areas (including regional ocean governance initiatives) through bilateral or multilateral cooperation and pooling of resources.</p> <p>Promote improved access to training in financial (including public and non-public sources of funding), administrative (including business planning) and technological topics to enable improved collaboration, information sharing and management.</p> <p>Continue to encourage and support public awareness and education programs, and run global awareness raising campaigns on the values and threats to coral reefs through the declaration of International Year of the Reef (IYOR) years, such as was done in 1997 and 2008.</p> <p>Encourage reef stewardship through partnerships between governments, communities and the private sector, and encourage community-based management approaches.</p> |



Photograph courtesy of Eric Clua/CRISP



Photograph courtesy of Thomas Vignaud

# SCIENCE & MONITORING



Targeted science and monitoring are vital to assess the status of coral reefs, evaluate the success of management and conservation actions and develop more effective management practices. Recognising this, ICRI founded the Global Coral Reef Monitoring Network (GCRMN) in 1995, to document the ecological condition of coral reefs, strengthen monitoring efforts, and link existing organisations and people collecting coral reef data worldwide. The GCRMN has since its inception produced regular reports on the Status of Coral Reefs of the World, along with regional and issue-specific reports as well as practical guides. ICRI will continue supporting and promoting the work of the GCRMN to better understand status and trends of coral reefs health worldwide, and ensure that best available information is used by managers to make evidence-based decisions.



Photograph courtesy of Thomas Vignaud/Alofa Tuvalu

|                                  |  |
|----------------------------------|--|
| <b>Objective</b>                 | To support research and citizen science approaches to enable countries and communities assess and report on the status of and threats to their coral reefs and related ecosystems in a coordinated, comparable and accessible manner.  |
| <b>General Approach</b>          | Research and monitoring programs are essential to ensure that management of coral reefs and related ecosystems is based on best available (scientific) information.  |
| <b>Desired outcome</b>           | Knowledge of the status and trends in coral reefs and related ecosystems health is enhanced and used to inform planning and management, improving management outcomes.   |
| <b>Strategies and approaches</b> | <p>Encourage the participation of governments, resource managers, scientists, the private sector and civil society in, and their contribution to, initiatives such as the Global Coral Reef Monitoring Network (GCRMN) and the Global Socioeconomic Monitoring of World's Tropical Ecosystems (SocMon) Network as a way to strengthen monitoring efforts to document status and trends of the world's coral reefs, dependent communities and sectors.</p> <p>Develop, share and promote best practice tools, protocols and methodologies for reef monitoring, and encourage their adoption through regional intergovernmental mechanisms and uptake by governments as well as a wide range of stakeholders, to broaden the spatial coverage of monitoring whilst strengthening regional networks of data collectors through GCRMN and SocMon regional nodes.</p> <p>Seek practical ways to integrate environmental, management, and socioeconomic data to better understand the primary factors responsible for coral reef decline and how these stresses may be more effectively alleviated.</p> <p>Encourage the development of a statistical framework that enables the adequate analysis of heterogeneous, spatially disparate collections of short time series data to strengthen region-wide or global reporting on the status and trends of coral reefs.</p> <p>Encourage research and monitoring of related ecosystems, particularly seagrass meadows, mangrove forests and tidal wetlands.</p> <p>Disseminate information and results to coral reef and related ecosystem managers on a regular basis to help guide policy and actions.</p> <p>Promote the application of monitoring and evaluation activities of the programs implemented, to determine their effectiveness.</p> |

# PERIODIC ASSESSMENT (REVIEW)



For management to be effective, it needs to be regularly measured, assessed and adapted. Matters such as improved knowledge; the advent of new tools, technologies and management mechanisms; and changes in cultural, geo-political, economic and environmental contexts; call for regular revision and updating of existing management measures to adapt them to changing circumstances. This is the fourth cornerstone of ICRI, which reiterates the cyclic nature of management and the need for continual improvement at both strategic and operational levels through adaptive learning. This can also apply to a review of this framework to reflect current practices, trends in management practices and social and policy priorities.

|                                  |   |
|----------------------------------|---|
| <b>Objective</b>                 | To engage in periodic review of the impact and effectiveness of all elements of management to enable evaluation and refinement of management measures in an adaptive framework.   |
| <b>General Approach</b>          | Periodic assessments of management effectiveness and evaluation of projects and activities to ensure the efficacy of management tools and systems in tackling the range of pressures affecting coral reefs and related ecosystems and protecting the values associated with them. |
| <b>Desired outcome</b>           | Management processes and activities are regularly reviewed and improved using a structured approach, to enhance their ability to effectively reduce pressures and threats.  |
| <b>Strategies and approaches</b> | Implement regular assessments of management effectiveness of all approaches to managing coral reef and related ecosystems, including the assessment of all components of the management process.  |
|                                  | Engage all stakeholders, including indigenous and local communities, in relevant elements of management effectiveness assessment.   |
|                                  | Use the results of these assessments to adapt and improve future management action.   |

