## Minutes of the 29th ICRI General Meeting

Okinawa, Japan 20 - 23 October 2014

## **Summary of the General Meeting**

The 29<sup>th</sup> ICRI General Meeting, and the first under the 2014-2015 Japan-Thailand Secretariat, was held from 20 to 23 October 2014 in Okinawa, Japan. Through the support from Japan and UNEP, delegates from several countries and organisations were able to attend and participate in the meeting. In total, over 40 delegates from 20 ICRI member countries and organisations attended the meeting (Appendix 1).

Observers from the following countries and agencies were welcomed at the meeting:

- Cambodia
- Singapore
- Indian Ocean Commission
- The Reef-World Foundation
- United Nations University Institute for the Advanced Study of Sustainability.

## 1. Reports from ICRI Bodies

### Secretariat Report

The Secretariat introduced a new reporting template for members, which provided a structured approach for analysing the information in the reports in addition to outlining ongoing member's activities.

The Australia-Belize Secretariat presented its achievements during their 2012-2014 hosting tenure.

The Japan-Thailand Secretariat elaborated on the three main themes for the ICRI Plan of Action 2014-2015, namely engaging other sectors, promoting marine spatial planning for coral reef management, and revisiting ICRI's place among multilateral environmental agreements, other international bodies and initiatives, which will be carried out through a 20-year review of ICRI's activities and achievements.

A working group convened to discuss and refine the action plan for the 20-year review, and based on its outcome, the Secretariat will undertake the revised project in two stages:

- 1. Prepare a compilation of ICRI's achievements
- 2. Based on the compilation, develop a questionnaire survey for ICRI members to help improve ICRI's relevance and value for its members.

Results from the project will be circulated to members before the 30<sup>th</sup> ICRI General Meeting in 2015 for subsequent discussions at the meeting.

A brief report was presented from the coral reef resilience side event at the CBD COP 12 in Pyeongchang, Republic of Korea, jointly organised by the ICRI Secretariat and UNEP on 10 Oct 2014. Feedback on the event was positive and encouraging: the event was seen as well-organized, with good technical content and meaningful discussion.

## **GCRMN**

Based on the successful publication and subsequent profiling of the report *Status and Trends of Caribbean Coral Reefs: 1970-2012* as well as the convening of the Curaçao workshop in August 2014, the Caribbean GCRMN network has been revitalised. This has

laid the foundation for improving data collection and archiving, including through identification of core indicators and methods, as well as improving network coordination and interaction through a regional GCRMN committee.

The GCRMN East Asia network successfully organised the 3<sup>rd</sup> Asia-Pacific Coral Reef Symposium in Taiwan in June 2014, which resulted in the adoption of the Kenting Declaration. In addition, the GCRMN East Asia network has begun the process for the undertaking of a similar in-depth regional analysis as the Caribbean report, while recognising issues related to funding availability, analyses methods, data analyses expertise and data ownership.

A working group discussed issues related to global GCRMN governance and main activities towards achieving its objectives. A revised brief description of GCRMN's mandate was developed. It was agreed that preparation of regional periodic assessment reports, based on the process piloted in the Caribbean, is the main substantive activity of GCRMN, providing a foundation for other outputs such as global reports. Several priority follow-up actions for the network were identified, including the development of guidance on preparing regional reports. The report from the working group is incorporated into the minutes of the 29<sup>th</sup> ICRI General Meeting (Appendix 2).

#### Ad hoc committees

The *Ad Hoc* Committee on Economic Valuation of Coral Reef Ecosystems provided a brief overview of activities, including the training workshop "From Ecosystem Services Valuation to Action – Informing Decision Making in the Caribbean", held on Bonaire on 16-18 September 2014, under the auspices of ICRI and the Netherlands Ministry of Economic Affairs. Minor revisions of the Committee's Terms of Reference were recommended, including drawing on the workshop outcomes in preparation of technical briefs.

The *Ad Hoc* Committee on Coral Reef Associated Fisheries provided a brief overview of activities including the production of a SCRFA/ICRI report entitled *Status Report – World's Fish Aggregations 2014*. An updated Terms of Reference was also tabled to include: provide an information sheet on the importance of sustainable reef associated fisheries to the health of coral reefs; link with the Regional Lionfish Committee to provide an update to ICRI about the impact of lionfish on fisheries species in the Caribbean; and provide an update to ICRI on land-use and fishing impact on bumphead parrotfish, a fish species essential to coral reef health.

The *Ad Hoc* Committee on Caribbean Regional Response to Lionfish Invasion reported on its main activities since the last general meeting, including promoting the use of the regional strategy published in 2013, promoting the establishment of local/national strategies, developing a web portal on lionfish in collaboration with the US National Oceanic and Atmospheric Administration (NOAA), and promoting the control of lionfish in MPAs. A revised Terms of Reference was proposed, which includes disseminating lessons learned, and if appropriate, guidelines, particularly on prevention, early detection and actions, to other regions; and identifying the possible options for migrating the RLC to a committee that will address, in general, other marine invasive alien species, including pathway vectors.

The *Ad Hoc* Committee on Enforcement and Investigation gave updates on its activities and introduced the Hawai'i Coral Ecological Characterization Tool which takes into account coral type, size, and functions/services in assessing the value of coral reefs. The committee suggested that the valuation tool be uploaded onto ICRI Forum within the ICRI members-only section, as well as the Terms of Reference on vessel grounding be revised to include the component on oil spill natural resource damage investigation approaches.

Revised Terms of Reference of four *ad hoc* committees were adopted: Economic Valuation Committee (<u>Appendix 3</u>), Coral Reef Associated Fisheries (<u>Appendix 4</u>), Regional Lionfish Committee (<u>Appendix 5</u>) and Enforcement & Investigation (<u>Appendix 6</u>).

#### CBD COP 12 outcome

To update the specific work plan on coral bleaching<sup>1</sup>, the Conference of the Parties to the Convention on Biological Diversity at its 12th meeting<sup>2</sup> adopted the priority actions to achieve Aichi Biodiversity Target 10 for coral reefs and closely associated ecosystems as contained in the annex to decision XII/23 as an addendum to the programme of work on marine and coastal biodiversity. The decision further urges Parties and invites other Governments and relevant organisations to implement the activities contained therein, where applicable and in accordance with national capacity and circumstances, for enhanced implementation toward achieving Aichi Biodiversity Target 10.

## Adopted document from the Meeting

A resolution on "promoting an integrated approach to community-based coral reef conservation and management emphasizing land-sea connectivity" (<u>Appendix 7</u>) was adopted, following revisions to the motion developed based on the Technical Workshop on Engaging Other Sectors.

### 2. Regional Initiatives

#### **UNEP**

UNEP Coral Reef Partnership and Regional Seas Programme has continued with numerous activities, several in partnership with the ICRI Secretariat or ICRI *Ad Hoc* Committees, on addressing reef resilience, implementing the ecosystem services approach, sustainable tourism, data and information for policy formulation and policy outreach.

UNEP, through the Global Coral Reef Partnership with Regional Seas, champions the use of a resilience-based approach to enhance prospects for coral reef ecosystem service provision in the face of climate change. A resilience workshop organised by UNEP in Phuket, Thailand, May 2014, provided a number of key recommendations that are being pursued. This includes the development of guidance on application of resilience-based approaches in spatial and sectoral planning. UNEP also mentioned upcoming reports on resilience in marine spatial planning as well as the importance of mesophotic reefs for reef resilience, and invited collaboration on these.

Furthermore, through a partnership with The Reef-World Foundation, the Green Fins initiative continues to grow in strength and gain traction regionally in Southeast Asia through private-public partnerships that promote best practice within the diving industry, including structured capacity-building programmes that promote citizen science. Green Fins members have successfully implemented effective actions to reduce environmental risks associated with dive tourism, through modified industry practices as well as regulatory reform.

## Indian Ocean Commission

With the injection of new funds, the Southwestern Indian Ocean Island States coral reef network has been revived and reenergised, specifically to implement the Mauritius Strategy in the Eastern-Southern Africa and Indian Ocean (ESA-IO) Region.

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<sup>&</sup>lt;sup>1</sup> Decision VII/5, annex I, Appendix 1.

<sup>&</sup>lt;sup>2</sup> Held on 6-17 October 2014 in Pyeongchang, Republic of Korea.

#### ICRI East Asia

ICRI East Asia regional workshops date back to 1996, with nine workshops covering a wide range of topics related to the understanding, management and conservation of coral reefs organised over the period of 1996-1998 and 2008-2013. The last workshop in 2013 in Singapore focused on assessing management effectiveness of MPAs, and members presented follow-up activities following the workshop.

The database "Coral Reef MPA of East Asia and Micronesia" was initiated as part of the ICRI Secretariat Plan of Action 2005-2007, and was undertaken in two phases from 2005 to 2010. The project helped to update information on the region's MPAs, and was subsequently incorporated into the ReefBase GIS platform.

Although members had recommended the continued development of the MPA database project at the 9<sup>th</sup> East Asia Regional Workshop in 2013, a working group appointed to assess its feasibility found that the cost associated with the continued development was disproportionate to its current usage and utility to countries within the region.

With regard to the regional capacity building workshop series, ICRI East Asia members agreed to terminate the database theme. A working group comprising the ICRI Secretariat and members from Cambodia, Thailand, Singapore and Vietnam will continue to discuss the details for the next workshop, which will focus on spatial planning for effective MPA management, with an outline prepared by January and Terms of Reference finalised by March 2015.

In addition, the Secretariat was recommended to link up with other regional agencies such as the ASEAN Centre for Biodiversity to pursue options on the continuation of capacity building, e.g., in database development and management for Cambodia and other East Asian countries.

## 3. Technical Workshop on Engaging Other Sectors

Effective coral reef management at the local level can be achieved by leveraging on the human elements, and the five case studies presented in this session illustrated that regardless of the specific programme objectives, the overarching goal of conserving coral reef resources were achieved through activities that engaged multiple stakeholders within a localised context. For a community-based coastal management programme to succeed, it needs to be based on a good understanding of the local environment and to consider the relationship between terrestrial and coastal ecosystems. Programmes should be preceded by a clear vision that is effectively communicated to stakeholders, and where feasible, working with them to develop localised management and implementation plans. The case studies showed that strong stakeholder ownership of programmes had increased management effectiveness and conservation of resources, which in turn, led to improved livelihoods for local communities. The case studies also highlighted the opportunities for engaging interested celebrities and the media in mainstreaming the conservation message, which can lead to the development of potential revenue streams that contribute towards the long-term sustainability of local programmes.

While activities on the ground help to operationalise conservation programmes, the need for international partnership programmes and initiatives was highlighted as a means to facilitate networking and implementation across local, national, regional and global levels.

## **Minutes of the General Meeting**

#### DAY 1

## **SESSION 1: Opening & Membership**

### **Official Opening**

The meeting was opened by Parliamentary Vice-Minister Madam Hinako Takahashi who echoed the importance of coral reefs for Okinawa and our shared responsibility to pass coral reefs on to the next generation. She wished members a productive meeting and hoped it would serve as an avenue for information sharing.

Mr. Niphon Phongsuwan, Expert in Marine and Coastal Ecology Research, Department of Marine and Coastal Resources, Thailand, delivered welcoming remarks.

Prof. Robert Baughman, Executive Vice President for Sustainable Development of Okinawa from the Okinawa Institute of Science and Technology Graduate University (OIST), welcomed participants to the Institute. He stated that the interactions at this meeting are valuable as well as timely, since OIST is planning to expand into the area of marine science research.

## **Presentation and Adoption of the Agenda**

The meeting was co-chaired by Japan and Thailand.

The following ICRI members sent apologies to the ICRI Secretariat: Brazil, Colombia, Costa Rica, Cuba, Egypt, Honduras, Panama, Monaco, South Africa, the United Kingdom, Blue Ventures, Coral Cay Conservation, Fondation pour la Protection de la Biodiversite Marine (FoProBiM), Interamerican Association for Environmental Defense (AIDA), Marine Ecosystem Services Partnership (MESP), National Coral Reef Institute, Project AWARE Foundation, World Resources Institute (WRI), International Union for Conservation of Nature (IUCN), UNEP Caribbean Environment Programme, Coastal Oceans Research and Development in the Indian Ocean (CORDIO), United Nations Development Programme (UNDP) and Malaysia (observer).

The overall agenda was presented. An additional agenda item, i.e., a presentation on the Great Barrier Reef Long-Term Sustainability Plan, was proposed. The agenda was then adopted.

## **Observers**

Observers from the following five countries and agencies were welcomed to the Meeting:

- Cambodia
- Singapore
- Indian Ocean Commission
- The Reef-World Foundation
- United Nations University Institute for the Advanced Study of Sustainability.

Dr. Lena Chan, Director, National Biodiversity Centre, National Parks Board (NParks), Singapore presented an overview of Singapore, with a focus on conservation of land, including mangroves, intertidal mudflats and coral reefs. She discussed the challenges of



balancing conservation of their rich biodiversity with development. As the lead technical agency dealing with marine biodiversity and integrated coastal management, NParks uses the following key approaches:

- Mainstreaming
- Safeguarding & enhancement
- Survey, monitoring & research
- Knowledge management & synthesis
- International participation.

Dr. Chan also shared news of the establishment of Singapore's first marine park—Sisters' Island Marine Park—which was chosen for its diverse marine life, variety of habitats and good hydrodynamic connectivity.

Supporting document: Presentation "Marine Biodiversity Conservation in Singapore"

Co-Chair noted that the Integrated Coastal Management in Singapore is similar to ICRI's principles and looked forward to Singapore's participation as a member in the near future.

## **SESSION 2: Reports from ICRI Bodies**

## **Members' Reports**

The ICRI Secretariat briefed members on the reports received:

The ICRI Secretariat (Masako Iwamoto) shared the new Member's Report template and asked for feedback on ease-of-use and suggestions on how to reflect new developments in multi-year projects.

The ICRI Secretariat (Tadashi Kimura) summarised the results of the members' reports. Reports from 23 out of 35 member states and 14 out of 18 member organisations were received. Governments reported an average of 3.9 projects (85 projects in total) while organisations averaged 3.2 projects (45 projects in total). A broad range of projects were reported, including a significant number of research and monitoring programmes as well as integrated management programmes, aiming to measure and reduce anthropogenic pressures on reefs from land-based activities, fisheries and tourism. At least 60 percent of member governments and organisations were found to engage multiple sectors in their projects. In the matter of zoning, it was noted that organisations (25 percent) were more successful when compared to governments at 7 percent.

## Supporting documents:

- Presentation "Explanation of the new template for the Member's Report"
- Presentation "Results of the Member's Report"
- Report from Tanzania on coral reef monitoring

Tanzania (Rose Sallema Mtui) presented an overview of the country and its coral reef monitoring activities. She discussed the problems that threaten coral reefs in the area, such as dynamite fishing, coral mining and coral bleaching. This is of concern, as currently Tanzania is also engaged in oil and gas exploration and extraction, which presents a new challenge to its coral reef conservation.

Monitoring can sometimes be life-threatening as evidenced by an attack (with acid) of a fisheries officer and the burning of a marine patrol boat by anonymous culprits in northern Tanzania. The presenter shared some recommendations, which included increasing

awareness to all levels, especially to the judiciary sector, local community and policy makers. Law enforcement and establishment of alternative livelihood options are also important areas for future focus to reduce pressure on fishing. In her concluding points, the presenter stressed the need to develop proposals and do further research on coral reef ecosystems which are geared towards involving local government authorities and also neighbouring countries (regional collaboration).

Supporting document: Presentation "Tanzania monitoring report"

Report from Australia: Reef 2050 Long-Term Sustainability Plan

Australia (Margaret Johnson) provided an update on the strategic assessment of the Great Barrier Reef Marine Park and coastal areas which led to the Reef 2050 Long-Term Sustainability Plan. Its vision is for the Great Barrier Reef to continue to demonstrate value as a World Heritage Area and support a wide range of sustainable economic and social activities. Australia highlighted the outcome-oriented framework with which they will work on for the Great Barrier Reef Marine Park. They are in the final stages of planning and hope to complete by year-end.

Supporting document: Presentation "Reef 2050 Long-Term Sustainability Plan"

#### Discussion:

- Since Tanzania's conservation laws are under review, there was a query as to whether the terrestrial parks chose to include the National Environment Management Council in their deliberations to strengthen conservation. It was clarified that policy issues were mainly discussed in parliament. The government has not paid too much attention to issues such as dynamite fishing. Last year, however, there were discussions about treating it as a crime punishable by law.
- The Secretariat of the Convention on Biological Diversity (CBD) shared its plan to conduct a Sustainable Ocean Initiative regional workshop on capacity building in 2015 in the Western Indian Ocean region, and enquired on Tanzania's priority needs for capacity development related to marine and coastal biodiversity. It was noted that scientific information and capacity, including monitoring capacity, are lacking to effectively address potential impacts of oil and gas exploration activities on marine and coastal biodiversity, among others.
- When asked if there is a formula for taxation or sanctions, Tanzania responded that it
  proposed institutionalizing ecosystem services that incur costs.
- It was brought to attention that in the US report, there are 20 coral reef species listed as endangered. The listing, while negative, helps conservation efforts as they stand to gain more attention.
- A comment was made on the member's report template. The new presentation format appears more structured. Using the right indicators will ensure reports are focused on clarity and effectiveness. On the issue of documenting new developments for multi-year projects, it was suggested that short-term milestones could be useful for monitoring progress over the longer term.

#### **Secretariat Reports**

• Report from the Australia-Belize Secretariat 2012-2014

The former Australia-Belize Secretariat (Anne Caillaud) briefly summarised ICRI activities during its tenure from 2012-2014. Achievements included the revision of the ICRI *Call to Action* and *Framework for Action 2013*; organisation of two General Meetings in Australia and Belize; funding of four projects, of which three were completed successfully; and in



improving the ICRI website and social media outreach. The 2012-2014 Secretariat was able to contribute effectively in the international arena, including through publishing translations, as well as supporting GCRMN and various high-level side events.

Supporting document: Presentation "Report on ICRI-funded activities by the Australia-Belize Secretariat"

• ICRI Plan of Action 2014-2015 from the Japan-Thailand Secretariat

The ICRI Secretariat presented its Plan of Action for the next two years under the new Secretariat hosts of Japan and Thailand which includes:

- Engaging other sectors: ways to engage other sectors to address anthropogenic pressures, including climate change and ocean acidification.
- Promoting reef zoning for multiple use: as many countries have problems planning and implementing sustainable exploitation of reef resources, the potential of reef zoning for multiple use (e.g., tourism, fisheries, biodiversity conservation) and ways to introduce it will be explored.

A suggestion was made to change the word *reef zoning* to *marine spatial planning*, as *reef zoning* does not cover all management options.

 Revisiting ICRI's place among multilateral environmental agreements, other international bodies and initiatives. A 20-year review of ICRI's place in the international conservation community will be conducted.

Supporting document: Presentation "Introduction of Plan of Action 2014-2015 by the Japan-Thailand Secretariat"

• Launch of ICRI's 20-year review

The ICRI Secretariat (Tadashi Kimura) presented a concept note for a 20-year review to address the third theme of the ICRI Plan of Action: 'Revisiting ICRI's place among multilateral environmental agreements, other international bodies and initiatives'.

ICRI, initiated in 1994, was formed by eight governments to promote the conservation of coral reefs and associated ecosystems. Following a 10-year review, which showed significant success, ICRI aims to revisit its role in the international arena with a 20-year review to plan for its future direction.

A phased approach for the review was proposed:

Phase 1: Information collection involving surveys and desk research

Phase 2: Data analysis and assessment

Phase 3: Reporting

Phase 4: Review: the report will be reviewed by a working group, finalised and shared at the next meeting.

Comments on the concept note:

- While the review appears to be a valuable exercise, there should have been a
  working group formed to help scope the report. A working group was suggested for
  the concept note preparation.
- The original mandate of ICRI was not to influence the international community, but to influence governments. Hence, a review for the proposed purpose may not be in



ICRI's best interest. It was also noted that the processes described in the concept note does not address coral reef conservation well.

• It was suggested that the Secretariat contact former ICRI members who are no longer members to get feedback on why they left the group (e.g., Sweden).

A working group was formed to discuss the 20-year review concept note. (See p. 25 for subsequent discussion on the 20-year review.)

Supporting document: Presentation "Launch of ICRI's 20-year review"

## Working Group for 20-Year Review Concept Note:

Secretariat (Lead), Margaret Johnson and Anne Caillaud (Australia), Aurélie Thomassin (France), Loúreene Jones (Jamaica), M. Shiham Adam (Maldives), Ricardo Gómez Lozano (Mexico), Rose Sallema Mtui (Tanzania), Christine Dawson (USA), Si Tuan Vo (Vietnam), Francis Staub (ICRI Forum), Jerker Tamelander (UNEP)

 Report on ICRI activities at the Twelfth Meeting of the Conference of the Parties to the Convention on Biological Diversity

CBD's 12<sup>th</sup> Meeting of the Conference of the Parties (COP 12) was held from 6-17 October 2014 in Pyeongchang, Korea. Tadashi Kimura provided an overview of a joint side event organised by UNEP and ICRI. Titled "Managing coral reefs for resilience to climate change", the event showcased the progress and key priorities towards meeting Aichi Target 10. The side event aimed to share information on coral reef planning and management approaches.

Christine Dawson from the US State Department commented that feedback from a US delegate who attended the event was encouraging. The delegate had found the event to be informative, with robust, meaningful discussions.

Supporting document: Presentation "Report on ICRI activities at CBD-COP12 side event"

• Report on funds from Monaco

The ICRI Secretariat (Masako Iwamoto) provided an account of expenditure for the funding of 5,000 Euros generously offered by Monaco. Most of the funds went to the Big Ocean's publication of Guidelines for the Design and Management of Large-Scale MPAs and the workshop on Economic Valuations in Bonaire.

The previous Secretariat (Anne Caillaud) explained that Monaco had been an active supporter during the Australia-Belize hosting. When approached for funding of the Big Ocean publication, Monaco provided the funds which were received just after the secretariat transition.

Supporting document: Presentation: "Report on funds from Monaco"

#### **Ad Hoc Committees**

Existing *Ad Hoc* Committees (AHC) reported on their work since the last ICRI General Meeting in October 2013.

AHC Economic Valuation of Coral Reef Ecosystems

Jerker Tamelander, Head, UNEP Coral Reef Unit, provided a brief overview of the committee's activities, especially the workshop proposed at the 28<sup>th</sup> ICRI General Meeting in

Belize focusing on policy-oriented economic valuation. The training workshop was entitled "From Ecosystem Services Valuation to Action – Informing Decision Making in the Caribbean", held on Bonaire on 16-18 September 2014, organised under the auspices of ICRI and supported by the Netherlands Ministry of Economic Affairs and numerous other partners.

The workshop brought together 20 resource managers from 15 countries across the Caribbean and used an interactive, practical approach that allowed for greater knowledge exchange. Participants also shared experiences and challenges from their countries. The feedback has been encouraging. (For more info, see http://www.icriforum.org/node/1606.)

Next plans include broadening communication on committee activities and outputs, using existing platforms such as ICRI, the Marine Ecosystem Services Partnership (MESP), The Economics of Ecosystems and Biodiversity (TEEB) and the French Initiative for Coral Reefs (IFRECOR). Policy briefs will also be produced for wide dissemination.

There are plans to publish a Best Practice guidance document for countries on implementation of compensation mechanisms focusing on coral reefs. A report on the technical feasibility of developing biobanking of offsets for reefs and associated ecosystems (mangroves and seagrasses) is also planned.

#### Discussion:

- France informed that IFRECOR is currently conducting an evaluation of ecosystem services provided by coral reef and associated ecosystems in all French over-seas territories. This evaluation is already done for New Caledonia, Martinique and Guadeloupe. A policy brief has been designed for each, dedicated to policy makers. These briefs may serve as a good example of a communication tool.
- The concept of mitigation banking was introduced as a way to define payment services.

#### AHC Coral Reef Associated Fisheries

Martin Russell, Chair, Science and Conservation of Fish Aggregations (SCRFA), provided an overview of what fish aggregations are and their vulnerability and importance to coral reef health. He detailed the web-based Fish Aggregation Database, which held 888 records as of 20 Oct 2014 on more than 200 fish species from 52 countries. He stressed the importance of including the protection of fish aggregations in coral reef planning, adding that out of the 35 ICRI member countries, 21 currently have one or zero records in the database. Member countries can add records. The database is available on <a href="https://www.screfa.org">www.screfa.org</a>.

Using current information in the database, SCRFA and the *Ad Hoc* Committee produced a report entitled *Status Report – World's Fish Aggregations 2014*. The Report states that 26 percent of the world's fish aggregations are declining, and 4 percent have gone. Mr. Russell requested the Report be disseminated via the ICRI member network.

He also shared a 3-minute film "Snapper Spawn" that highlights the state of world fish aggregations and supports the status report. Many species of fish aggregate to spawn and are vulnerable to fishing. A fishing enterprise could easily wipe out entire aggregations.

### Discussion:

A point was raised about the global database for fish aggregations, in which there is
only one record of spawning aggregation for some ICRI member countries. It was
clarified that there are probably many aggregation sites yet to be entered into the
database, or are at this stage unknown. Most countries may have the data, formally

or otherwise; it is a matter of finding the data and entering them into the database to help better our understanding of the status of aggregations globally.

 Vietnam shared that it has information on aggregations. The information is based on observations, and not scientific study. There is awareness on the importance of aggregations; however, no monitoring has taken place. Vietnam enquired if such observations could be recorded as data. The committee responded that the existing information could be entered into the database, noting its source and quality.

## Supporting documents:

- Presentation "Coral Reef Associated Fisheries"
- Status Report World's Fish Aggregations 2014: http://www.scrfa.org/images/stories/pdf/Status\_Report\_Worlds\_Fish\_Aggregations\_ 2014.pdf
- Film "Snapper Spawn": http://www.scrfa.org/about-aggregations/educational-materials/documentaries-films.html
- AHC Caribbean Regional Response to Lionfish Invasion (Regional Lionfish Committee, RLC)

Ricardo Gómez Lozano of the Yucatán Peninsula and Mexican Caribbean National Commission of Natural Protected Areas (CONANP) gave a brief overview of activities from the committee. Established in 2010, the committee is a result of the combined efforts of UNEP, the US National Oceanic and Atmospheric Administration (NOAA), Regional Activity Centre for Specially Protected Areas and Wildlife (CAR-SPAW), CONANP, Reef Check Dominican Republic, etc., and has worked with a number of country partners in the Caribbean region to promote the use of *Regional Strategy for the Control of Invasive Lionfish in the Wider Caribbean* published in 2013 and to support the development of local strategies in their respective countries. The committee has also been involved in workshops to discuss lionfish control strategies.

The committee is in collaboration with NOAA, University of the West Indies, REEF, CAR-SPAW and CABI to create a web portal<sup>3</sup> for knowledge exchange. The portal is also expected to serve as a clearing house to filter information on lionfish that is inaccurate.

Mr. Lozano discussed next steps which include exploring the possibility of migrating the 'lionfish' committee to a 'marine invasive alien species' committee, continuing to support countries to develop their strategies of control, and promoting among the fishery and marine protected area managers the need to develop effective local response plans.

#### Discussion:

- An enquiry was made about the factors that contributed to lionfish becoming invasive in the Caribbean; for instance, Kenya has lionfish, but it is not invasive. It was clarified that the lionfish is native to Indo-Pacific coral reef ecosystems, but has established itself as a highly problematic alien species that poses a serious threat to coral reefs in the Caribbean. Predators exist but biological controls are not the same in all waters. If the reefs were healthy, other species could not invade the ecosystem. As soon as the food chain/reefs are damaged, the invasions occur.
- A point was made about how lionfish are likely eating juvenile commercial fish species such as groupers and lobsters, which may compound the already heavy loss of fish from fishing.

Supporting document: Presentation "Regional Lionfish Committee"

<sup>&</sup>lt;sup>3</sup> Now available at: http://lionfish.gcfi.org/index.php

## AHC Enforcement and Investigation (Coral Reef CSI)

David Gulko from the Enforcement & Investigation Committee discussed how its original protocols and trainings have been revised to meet more specific needs. A total of 700 managers have been trained since 2007.

In response to a request made at the last General Meeting, the committee has stepped up efforts to understand the issues from large vessel groundings and oil spills. A major challenge was in holding the right people accountable once loss was established. The first step would be to form a baseline, i.e., which coral reefs existed before the vessel grounding. Often, in the case of damage to the reef, the responsible party would pay a fine for the loss based on the damage at that point. However, this fine typically does not account for the total cost of all of the services that the damaged reef provided over time, i.e., in replacement, services, lost time. In consideration of this problem, a functional coral ecological assessment tool is needed.

Mr. Gulko highlighted a valuation system used in Hawai'i, the Coral Ecological Characterization Tool, to gauge the value of coral reef loss. This value assessment tool has been developed and used in Hawai'i for both planned and unplanned impacts, as well as for scaling mitigation projects. Depending on interest from ICRI partners, the tool could be modified to make it regional in nature for ICRI member use.

#### Discussion:

- It was clarified that the tool is easy-to-use, requiring minimal training. It is low cost and can be used anywhere. While it does not give a monetary value, it allows the user to differentiate between coral species that have varying values.
- Countries with coral reefs are the owners of the reefs. From a restoration standpoint, the tool can be used to address the losses, in conjunction with the countries' existing laws, rules and penalties.

Supporting document: Presentation "Enforcement and Investigation"

Co-Chair requested that the *ad hoc* committees review their terms of references over the duration of the meeting. (See p. 23 for subsequent discussion on terms of references.)

Report from the Twelfth Meeting of the Conference of the Parties to the Convention on Biological Diversity: Priority Actions to achieve Aichi Biodiversity Target 10 for coral reefs and closely associated ecosystems

The CBD Secretariat (Jihyun Lee) provided some background on the Strategic Plan for Biodiversity 2011-2020, especially with regards to Aichi Target 10 on the anthropogenic pressures on coral reefs.

The CBD Secretariat highlighted the priority actions to achieve Aichi Biodiversity Target 10 for coral reefs and closely associated ecosystems, which was adopted by the Conference of the Parties to CBD at its 12<sup>th</sup> meeting in its decision XII/23. The focus of the action plan is to further consolidate and strengthen comprehensive efforts to manage coral reefs as ecological and socio-economic systems and enhance the resilience of coral reefs and closely associated ecosystems, among others, upon which 12 percent of the world's population depend for their livelihoods.

Key issues under the agenda item on marine an coastal biodiversity at COP12 included discussing ecologically or biologically significant marine areas (EBSAs), addressing the



impacts of various threats to marine and coastal biodiversity, including the above-mentioned priority action plan, and facilitating capacity building and partnerships opportunities within the framework of the Sustainable Ocean Initiative.

The CBD Secretariat expressed its great appreciation to ICRI members and the ICRI Secretariat for providing inputs to the preparation of the above-mentioned priority actions.

Supporting document: Presentation "CBD-COP12: Priority Action Plan for Coral Reef Conservation"

## **Global Coral Reef Monitoring Network Updates**

• Report on GCRMN in the Caribbean Region

Jeremy Jackson of the Global Coral Reef Monitoring Network (GCRMN) highlighted several achievements.

Launched in July 2014, the latest GCRMN report entitled *Status and Trends of Caribbean Coral Reefs: 1970-2012* (the Caribbean Report) showed that there was more than 50 percent decline in coral cover between 1970-2012. He noted however that some areas were doing well. The primary drivers of decline were local impacts of overfishing and coastal development, and not climate change as expected. This indicates that, while climate change is a growing threat, local management that decreases human impacts has significant influence over the future health of reefs in the region. The Recommendation adopted at the 28<sup>th</sup> ICRI General Meeting in Belize—which urged nations and multilateral groupings of the wider Caribbean to protect parrotfish and similar herbivores—was a result of this report (see "Recommendation on addressing the decline in coral reef health throughout the wider Caribbean: the taking of parrotfish and similar herbivores" at http://www.icriforum.org/icridocuments/icri-official-documents).

There was extensive media interest on the report, including a New York Time op-ed entitled 'We can save the Caribbean's coral reefs'. Such media attention has helped stimulate a major effort to revitalise the Caribbean GCRMN.

Rubén Torres from Reef Check Dominican Republic shared highlights from the Curaçao Workshop which had three major objectives: improve data collection and archiving; improve network structure for greater interaction and information exchange; and identify ways to increase financial support for the Network.

Key lessons from the Caribbean Report analysis included:

- Large amounts of scientific and monitoring data exist in literature, and much remains unpublished. This can be of great benefit for regional analyses.
- Data, however, need to be vetted prior to inclusion in a regional analysis of the kind carried out in the Caribbean.
- It is important to draw conclusions about the causes of reef decline and mechanisms for recovery, based on data. While findings may at times be counterintuitive or even controversial, it stimulates much-needed dialogue.
- Regional networks need well-defined goals to stimulate discussion, integration and potential action, as well as instil and maintain a clear sense of purpose.

Supporting document: Presentation "Caribbean region: Caribbean report and workshop"

## Report from GCRMN East Asia

Tadashi Kimura provided a brief review of the 3<sup>rd</sup> Asia-Pacific Coral Reef Symposium which was held in Taiwan from 23-27 June 2014. With the theme 'Challenges of Asia-Pacific Coral Reefs under the Changing Ocean', the symposium brought together more than 500 participants from 39 countries. He discussed one of the major outputs of the symposium, the Kenting Declaration of Coral Reef Conservation, which aimed to ensure the future of coral reef ecosystems and prevent them from going extinct.

He also shared highlights of the GCRMN East Asia Regional Meeting on data analysis held on June 24. There is need for more in-depth regional analysis instead of status reporting alone. The major issues in this region are funding, method and data ownership. Possible approaches to address these issues were identified as follows:

- Assess data availability with national coordinators
- Formulate a core team with regional experts
- Develop appropriate methods of meta-data analysis and mechanism of data collection.

Supporting document: Presentation "GCRMN East Asia / Asia Pacific Coral Reef Symposium (APCRS)"

## Report from GCRMN Meeting on GCRMN Governance

Jerker Tamelander commended the team on the outputs from the Caribbean Report, adding that, the report gave actionable outcomes for policy makers and managers, and constitutes a useful ICRI product. However, he also observed that while the Caribbean Report process has revitalised the GCRMN network in the Caribbean, global coordination and engagement with other regional networks remains weak.

The GCRMN working group (see <u>Appendix 2</u>) proposed developing a Guidance document on the process of developing a regional GCRMN report, which would enable replication of the Caribbean work in other regions. The document should encompass steps in the process, advice on avoiding potential pitfalls, etc.

The working group also noted that the process for developing GCRMN regional reports can be integrated into relevant existing projects or projects under development. Opportunities may exist e.g., in the Western Indian Ocean.

The importance of reporting that results in clear policy, management and monitoring recommendations is critical, and that GCRMN can utilise existing mechanisms for uptake and impact among governments, including ICRI and Regional Seas Conventions and Action Plans.

## Discussion:

- It was pointed out that GCRMN nodal activity in the Southwest Indian Ocean could be revitalised as part of activities under projects in the region.
- It was suggested that regular contributions by ICRI member countries could constitute one means of achieving a more stable funding base for GCRMN.
- France indicated that they may provide support toward preparation of a GCRMN Pacific regional report starting in 2015, and requested collaboration and support from other entities. The idea was well-received, and UNEP expressed an interest in working with France.

• It was clarified that the preparation of the Caribbean report was supported by IUCN, UNEP, the ARC Centre of Excellence and many other partners, to cover cost of workshops, data verification, data file structure, report preparation etc. However, data used for the study were contributed on a voluntary basis from numerous sources including countries, organisations and institutions, and constituted very significant cofinancing of the report. This has been the operating principle of GCRMN since its inception.

(See p. 24 for subsequent discussion on GCRMN governance.)

## **SESSION 3: Regional Initiatives**

### **Reports from Regional Initiatives**

UNEP Global Coral Reef Partnership

UNEP (Jerker Tamelander) presented a brief overview of the global partnership that mobilises UNEP, Regional Seas and other partners in actions to increase use of the ecosystem approach to sustain ecosystem services, using coral reefs as a flagship and indicator system.

Partnership activities promote implementation of ICRI's *Call to Action* and *Framework for Action*. Recent activities include organisation of a Scientific Workshop on Coral Reef Resilience in Planning and Decision-support Frameworks (Phuket, Thailand, 29 April to 1 May 2014); Two subregional workshops for development of lionfish action plans focusing on Mesoamerica and South America, with ICRI AHC Regional Lionfish Committee; a Workshop on the implementation and effective communication of ecosystem services valuation studies in the Caribbean, 16-18 September, Bonaire, with ICRI AHC Economic Valuation; a Regional Green Fins network meeting in Bangkok, April 2014; and a Media tour to El Nido, Philippines, June 2014. Green Fins implementation in Asia is ongoing, and support was provided towards the successful GCRMN reporting and networking activities in the Caribbean. The partnership has also provided input towards updating the CBD specific work plan on coral bleaching, the 3<sup>rd</sup> SIDS conference and the SAMOA Pathway, and the World Coral Reef Conference, among others.

Supporting document: Presentation "UNEP Coral Reef Partnership / Regional Seas"

 Green Fins: A regional initiative for managing the impact of diving and snorkelling activities on coral reefs

Chloe Harvey, representing The Reef-World Foundation, provided a summary on Green Fins, a public-private partnership to protect and conserve coral reefs from the impacts of diving and snorkelling activities.

She highlighted the six critical aspects which have made Green Fins a functional and meaningful regional initiative:

- 1. Effectively applies best environmental practice;
- 2. Builds capacity of local Green Fins management teams (individuals from local and national authorities and NGOs) and diving communities to protect marine resources;
- 3. Creates opportunities for the revision and strengthening of regulatory frameworks and existing conservation initiatives;
- 4. Builds valued public-private partnerships;

- 5. Acts as a broker for integrated coastal zone management; and
- 6. The approach is proven and replicable.

The Green Fins approach is currently being applied within diving destinations of Thailand, Malaysia, Indonesia, the Philippines, Vietnam and the Maldives to implement effective policies and practices to reduce environmental risks. With regular contact, many dive centres have managed to reduce their impact on coral reefs.

Next steps involve the continued development and implementation of Green Fins, while enhancing its sustainability and replicability. Specific activities include: Making a stronger case for Green Fins through economic analysis of its impact on the environment as well as business operations; Building a long-term sustainability model for Green Fins to support continuous operations in multiple locations; Developing further the various Green Fins tools as well as the network; and Communication and outreach, including translation of key Green Fins materials into priority languages such as Chinese, Japanese and Korean.

Supporting document: Presentation "Green Fins, a regional initiative for managing the impacts of diving and snorkeling activities on coral reefs"

Report on the Southwestern Indian Ocean Island States coral reef network

The Indian Ocean Commission (Said Ahamada) gave a brief update on the Indian Ocean Island States which include Madagascar, Comoros, Reunion/France, Mauritius and Seychelles. Their coral reef monitoring network was created in October 1997 and launched in March 1998 to promote Integrated Coastal Management. The network was involved in providing training and equipment for national teams, monitoring and vulnerability mapping, and regularly contributing to national, regional and GCRMN reports. However, the weak institutional setup and lack of funding had slowed it down.

With renewed funding, the network has been able to support several new projects to develop and strengthen national and regional capacity in managing marine ecosystems for sustainable biodiversity conservation. Specific interventions include GIS training, MPA management, GCRMN and Reef Check monitoring, web database development and the rebuilding of the southwestern Indian Ocean islands' network. The network plans to adopt the Coral Reef Information System (CRIS) for regular reporting purposes, including a GCRMN status report of the region (2015/2016).

Supporting document: Presentation "Strengthening Southwestern Indian Ocean Island States' coral reef network"

## Enhancing resilience of coral reef ecosystem

UNEP Resilience Workshop and future directions on reef resilience

Jerker Tamelander discussed the importance of coral reef resilience in tackling the current challenges faced by coral reefs. With a fifth of the world's coral reefs lost and 60 percent in immediate threat from climate change and ocean acidification, the concept of resilience provides a platform to respond better through planning and management that increases prospects for continued ecosystem service provision and adaptation.

Mr. Tamelander briefly reviewed ICRI resolutions and statements in support of coral reef resilience from 1999 to date. He highlighted a recent article in the journal Global Change Biology (2014) that supports the idea that a resilience-based approach is better able to address strategically different types of stress on reefs, as well as link ecosystem services to

the people who depend on them. He also emphasised many examples from the GCRMN Caribbean Report that illustrate how reef resilience is important in a changing climate.

He provided an overview of the workshop on Coral Reef Resilience in Planning and Decision-support Frameworks held in Phuket, Thailand from 29 April to 1 May 2014. Key recommendations included the need for guidance on the selection and use of coral reef indicators in planning and management. While biodiversity conservation and fisheries management remain the most obvious applications of resilience data, it was also seen as relevant for coastal tourism and land-use planning. Marine spatial planning was discussed as an opportunity to use an intersectoral process to reduce negative impacts on coral reefs from marine uses.

He gave a brief outline on the guidance document in the pipeline, *Integrating Reef Resilience Science into Spatial Planning: A Guiding Framework*, being prepared by UNEP, IUCN, National Coral Reef Initiative (NCRI) and The Nature Conservancy (TNC), and announced the preparation of a report on mesophotic reefs and their relevance to coral reef resilience, by UNEP, GRID-Arendal and other partners.

Supporting document: Presentation "Enhancing resilience of coral reef ecosystems"

## Wrap-up and Closing

The Chair gave a brief recap on the sessions and closed the meeting for the day.

#### DAY 2

## ICRI East Asia Regional Meeting

Chaired by Mr. Si Tuan Vo from the Institute of Oceanography, Vietnam Academy of Science and Technology, the meeting was called to order.

Review of ICRI East Asia Regional Workshops

The Chair provided some background on the inception of ICRI's East Asia Regional Workshop in 1996. After two additional workshops in 1997 and 2001, there was a break until the workshops were revived in 2008 in Japan.

The Chair touched on the development of their regional strategy *ICRI East Asia Regional Strategy on MPA networks 2010*, noting that it has been their guide for action planning. Discussions in the later regional workshops focused on the implementation of the strategy. The Chair added that the regional workshops were now moving in a new direction focused on capacity building.

2015 marks five years since the regional strategy was developed. Although not everything in the strategy has been achieved, progress on MPA network development must be evaluated to determine further recommended actions.

• Updates on MPA Management Effectiveness from ICRI East Asian Countries

In September 2013, ICRI East Asia held a capacity building workshop on MPA management effectiveness in Singapore. Members of ICRI East Asia provided updates on actions taken for MPA management effectiveness in their respective countries since the 2013 workshop.

#### Cambodia

Cambodia (Vibol Ouk) discussed the methods of MPA management employed by a national technical working group that oversees all sectors under fisheries. A provincial management committee works as the coordinating group, and a technical team works for the establishment and management of MPAs. Zoning focuses on sustainable usage of resources, rather than conservation.

Consultations are held with all levels of stakeholders. There is a five-year implementation plan which people have to respect as being under management protection.

#### Indonesia

Indonesia (Cherryta Yunia) shared the list of tools used to manage its MPAs including the Rapid Assessment and Prioritization of Protected Areas Management (RAPPAM), Management Effectiveness Tracking Tool (METT), and MPA Mpumalanga Protected Area Expansion Strategy (MPAES). She added that currently Indonesia is developing case studies for several MPAs and collecting monitoring baseline data.

Indonesia developed *Technical Guidelines for Evaluating the Management Effectiveness of Marine, Coasts and Small Islands Conservation Areas* (known as e-MPA or E-KKP3K), which provides clear directions on evaluating management effectiveness and sustainability of MPAs. Next steps include familiarization and training for national and local governments, as well as the establishment of baseline and implementation of e-MPA to all MPAs.

Supporting document: Presentation "Towards effectiveness management of MPAs in Indonesia"

#### The Philippines

The Philippines (Angelita Meniado) highlighted that the country has 1,816 MPAs, both nationally- and locally- managed, and uses assessment tools such as Management Effectiveness Assessment Tool (MEAT) and Management Effectiveness Tracking Tool (METT). The Philippines is working in collaboration with the MPA Support Network (MSN) which includes national government agencies, academic institutions, and non-governmental organisations. Results of the assessment form the basis of determining MPA awards and recognitions, which serve as an incentive and reward system for supporting and encouraging outstanding local efforts and improving the level of management effectiveness of the MPAs.

Also, 40 MPA networks/alliances have been established, covering over 270 municipalities and cities. Two assessment tools are currently being piloted to evaluate the performance of existing local government networks that are implementing joint coastal resource management efforts.

Next steps for the Philippines are to continue its assessment of the MPAs, integrate tools, update the MPA database, develop information sharing protocols, improve management effectiveness and sustain MPA awards and recognitions.

#### Thailand

Thailand (Niphon Phongsuwan) presented on developments in three aspects: research, management and legalities.

In research, the long-term monitoring and mapping of reef resilience have been conducted. There are 24 indicators for assessment using semi-quantitative methods to investigate reef resilience in Thailand.

He highlighted that there was an urgent need for trans-boundary conservation and management with neighbouring countries, such as Myanmar, to protect Thailand's coral MPAs. Future plans include a collaborative programme with regional partners, especially in trans-boundary conservation with training on coral taxonomy and survey methods.

In management, he shared activities such as the mooring buoy project by government and local collaborators, zoning for diving activities and outreach on reef conservation, Green Fins project and SMART Patrol programme.

In the legal aspect, he mentioned the establishment of a new Act "The promotion of management of marine and coastal resources", which is authorised by the Department of Marine and Coastal Resources.

Supporting document: Presentation "Update on Activities for Improvement Marine Protected Area Effectiveness in Thailand"

#### Vietnam

Vietnam (Giang Thu Nguyen) shared that it has a total of seven MPAs under management, and monitoring activities are only conducted by scientists. She added that while the ecological aspects of the coral MPAs have improved, fishery resources have not.

In a survey of an MPA by local authorities, it was found that the MPA had improved livelihoods and the availability of basic amenities like electricity. However, she added that the budget for MPA management has been cut due to the economic downturn.

#### Japan

Japan (Makiko Yanagiya) gave a brief overview of its National Biodiversity Strategy 2012-2020. She discussed the new Kerama Islands National Park in Okinawa for which the 'Law for the promotion of eco-tourism' is being implemented. The vision, guidelines and rules were developed by the local government and certified by the Ministry of the Environment.

Supporting document: Presentation "Kerama Islands National Park"

Discussion on country updates:

- Clarification was sought on the terms conservation zone and protection zone in Cambodia, and how to distinguish between the two. Cambodia stated that the conservation zone is a 'no take' zone, while the protected zone is a buffer area, the space around the conservation zone. Small-scale fishing activities are allowed here for families. The areas for the different zoning types (i.e., conservation zone, protection zone) are determined based on research and consultations with the community and other stakeholders.
- When asked how the Philippines organises its MPA networks, it was noted that individual locally-managed MPAs—which are usually small in size and are strictly 'no take zones'—are linked and formed into a network purposely to optimise ecological and social connectivity for improved management effectiveness and increased fish yields. The establishment and management of an MPA network involves the participation of various local chief executives with political jurisdiction over the individual MPAs as well as several local communities, stakeholders and MPA managers.

A typical network consists of 8-10 MPAs that share a common set of rules to govern the ecological area as well as collective goals and interest, and are willing to collaborate on management efforts, share experiences with one another and enhance each other's efforts in managing their respective MPAs. Illegal fishers

cannot fish indiscriminately because of these common rules. A Memorandum of Agreement and/or Understanding is forged by and between various local governments to manage the MPA networks.

- A query was raised with regards to zoning and activities that are allowed, if countries used IUCN guidelines. It was explained that in East Asia, IUCN guidelines are considered by countries, but their actual systems are more flexible in practice: in other words, biodiversity and fisheries management varies across different countries. For instance, there are national parks in Thailand that are not as protected as national parks in other countries. Within the region, IUCN guidelines are followed in principle; however, in terms of management, the implementation of guidelines is diverse.
- A comment was made about IUCN categories. Singapore noted that it has issues
  with the categories as they are restrictive. The guidelines do not allow for the ranges
  globally. There is more diversity in protected areas than is acknowledged by IUCN.
- Cambodia stated that it uses both IUCN and local guidelines. The choice depends on the supporting agency and respective situations.
- The Chair agreed that there are some challenges in applying the IUCN definition for designing MPAs. Given the fact that the IUCN definition does not include terrestrial components, some MPA management boards could not regulate human activities on islands or nearby coasts. He added that in the East Asian region, more than coral reef or fisheries management, there was a need for guidelines in community development, livelihood management and tourist impact management.
- Clarification was sought on the term community zone. It was explained that these are zones provided by the government for communities living close to fishing areas to ensure they derive some fishing benefits.
- Update on MPA database capacity building workshop

Kohei Hibino provided a brief overview of the database "Coral Reef MPA of East Asia and Micronesia" which was initiated from 2005-2007 as Phase 1. In Phase 2 (2008-2010), MPAs were updated in collaboration with ReefBase using their GIS. Country-based pages were developed so that each country could use the information and update their data offline on ReefBase independently.

Indonesia was the first to start using the online/offline country page system. Some countries developed and started using the CT Atlas. Thailand uses a separate database, also hosted on ReefBase.

Based on discussions during the last regional meeting in Singapore, it was decided that the MPA database would be maintained. Consultations were underway with the WorldFish Center (ReefBase) to see if they could support it. It was found that if the number of countries intending to use the database was small, they could update and maintain the database without funds. Substantial updates, however, would require funding.

Discussion ensued on the utility of conducting the MPA database workshop in 2015 and how best to make use of the database "Coral Reef MPA of East Asia and Micronesia".

- Cambodia stated that it has raw data but does not know how to manage them. The
  data come from its partners, especially from dive centres and various foundations. It
  stressed the need for capacity building in database management.
- When asked about collaborating with the regional database in ASEAN Centre for Biodiversity (ACB), it was clarified that ACB had not been consulted because ICRI's Coral Reef database started much earlier. There have been discussions with ACB more recently, however nothing materialised.

- The database has several components, including data, validation, analysis and maintenance. It was noted that this is a huge endeavour, and one workshop would not be enough to cover all aspects. Validating data alone would require several workshops.
- For Thailand, it was found that the database is useful, under the ReefBase umbrella.
   If it is independent, it may be dissolved. As long as it is under ReefBase and the data managers from East Asian countries are authorised to access and enter the data online, the budget for maintaining the database will not be as high.
- A comment was made on the possibility of replacing the capacity building workshop with one on marine spatial planning.
- The Chair commented that it is important that every country uses the outputs from the online/offline system. Many countries are not considering updating data in the database, and this is a big concern. In such an instance, holding a capacity building workshop for a database that is not being used does not make sense.
- A point was raised about whether the MPA database meets the needs of the countries. Most countries know their own MPA data and information. So perhaps the database is useful for countries to know about MPAs in other countries.
- It was noted that some countries use the database for management. At the same time, the data need to be reported to the CBD as well. Members feared that there may be several parallel databases, which will not help advance the countries.

**Recommendation**: The MPA database capacity building workshop slated for 2015 is terminated. The database management for regional and national levels are to be maintained. The Secretariat has been asked to consult with ReefBase and ACB on possible collaboration.

Supporting Document: Presentation "Update on MPA database workshop"

Next Regional Workshop

Members discussed the next regional workshop slated for November 2015:

- Declining fisheries could be an interesting topic, especially with regards to the importance of fisheries and reef fisheries and ways to manage the decline.
- A query was raised about the funding for the workshop and if the Japanese government would continue to support it. In addition, a suggestion was made to run the workshop back-to-back with the next ICRI General Meeting to save some funding. Japan responded that the funding could not be confirmed, as budgets would be decided in December. The Chair requested members to work with the assumption that there would be funds.
- Various topics were suggested including marine spatial planning, fishery management, coral reef resilience, terrestrial activities/watershed among others. However, prioritization for topics could not be done as yet.

A working group has been identified to develop the terms of reference. The coordinator (Tadashi Kimura) is tasked with preparing an outline for discussion in January 2015 following budget decisions in December. The terms of reference are to be finalised by the end of March 2015.

#### Working Group to develop Terms of Reference:

Niphon Phongsuwan (Lead, Thailand); Karenne Tun (Singapore); Makiko Yanagiya (Japan); Giang Thu Nguyen (Vietnam); Loke Ming Chou (Singapore); Tadashi Kimura (Coordinator); Si Tuan Vo (Vietnam); Thamasak Yeemin (Thailand); Vibol Ouk (Cambodia)

## **SESSION 4: Technical Workshop**

A half-day workshop on *Engaging other sectors: Community-based coral reef management* was organised by the Secretariat. The workshop was chaired by Professor Makoto Tsuchiya of the University of the Ryukyus.

Twelve additional participants from Okinawa joined this workshop.

The Chair provided some context to the topic. This workshop would explore the relation between terrestrial and coral reef ecosystems, the watershed approach and payments for environmental or ecosystem services.

Supporting document: Presentation "Introduction"

### Case studies on community-based management efforts

The following five reports were presented from ICRI member countries:

• Japan Report: Coral restoration efforts in collaboration with our local communities in Okinawa

Daijiro Kamiya of the Okinawa Prefectural Government discussed coral restoration efforts in collaboration with local communities. In charge of protecting wildlife, including coral reefs, their coral restoration work includes 160 islands and 400 types of corals. They have faced challenges such as coral bleaching, crown-of-thorns starfish infestation, misuse of reefs and land development that has caused red soil runoff. There have been some countermeasures, including the establishment of an Ordinance for Prevention of Red Clay Runoff in 1994.

Okinawa Prefecture collaborates with groups such as local fishery cooperatives, universities, research institutions and NGOs to support coral reef restoration and conservation initiatives. By having local stakeholders take charge of the initiatives, restoration efforts are managed in a sustainable manner.

Supporting document: Presentation "Coral restoration efforts in collaboration with our local communities"

 Dominican Republic Report: Private sector involvement in marine conservation and management

Rubén Torres from Reef Check Dominican Republic provided some background on the La Caleta MPA which supports between 30-40 fishers. With 15 percent coral cover and low fish populations caused by overfishing, unregulated diving and diver anchoring, there was no management structure in place and no funding.

A co-management model with the Ministry of Environment, Reef Check and La Caleta Fishermen and Tourism Service Providers (Cooperativa de Pescadores y Prestadores de Servicios Turísticos de la Caleta; COOPRESCA) was struck. It involves capacity building, self-imposed no-take zones, mooring and park boundary delimitation, economic alternatives, PR and communications.

The community-based business model focuses on eco-tourism and sustainable practices. Outcomes of the activity include:

 Sustainable alternative options for fishers to move away from fishing to tourism (with diving boats), which took several years to put in practice.

- An increase in fish populations, especially parrotfish.
- Public relations initiatives in the form of parties with movie star endorsements, which were successful in fundraising efforts.
- Coral nurseries in the area that are 100 percent private sector funded.
- Adopt-a-coral programmes initiated.

Supporting document: Presentation "Private sector involvement in marine conservation and management in the Dominican Republic"

 Mexico Report: Coastal communities support and promote conservation and protection of coral reef and related ecosystems

Ricardo Gómez Lozano gave an overview of the Cabo Pulmo National Park, the only coral reef in the Gulf of California. Exploited since the 1920s, reef fish communities suffered. The fishery sector finally initiated a project to protect and restore marine and coastal resources in 1990. The Cabo Pulmo National Park was established in 1995.

The park is a great example of sustainable tourism with recovery of fish stocks and coral cover. Between 1990 and 2009, fish stocks have recovered by 400 percent. Thousands of fishers benefit from this marine park, as they realise tourism is more lucrative than fishing. The area is now a principal dive site in the Mexican Pacific.

In the case of the Biosphere Reserve Bonco Chinchorro, the Queen conch population declined due to poaching caused by its high prices. In 2012, a closed season was introduced for the following five years. With participatory surveillance, conch relocation, bans on harvesting and confiscation of boats/gear, poaching has been reduced by 80 percent. The conch population has since increased 30 percent from 2012 to 2014 alone.

Supporting document: Presentation "Mexican coastal communities support and promote conservation and protection of coral reefs"

• Japan Report: Coral reef conservation by Sekisei Lagoon Restoration Project, based on a comprehensive management approach with various stakeholders' participation

Tomomi Saito, Naha Nature Conservation Office in the Ministry of the Environment, Japan, discussed the coral reef conservation work in the Sekisei Lagoon. The area provides for fishery, tourism and cultural activities.

Degradation of coral reefs was first observed in the late 1970s to 1980s as seen in the crown-of-thorns outbreak. Large-scale coral beaching and red clay runoff also affected corals. Restoration efforts have been initiated by residents, non-profit organisations, experts and government agencies. The long-term goal, i.e., 30 years (2007-2037), is to have restored the rich coral reef ecosystems to what they were in 1972 at the time of the area's designation as a national park.

Supporting document: Presentation "Coral reef conservation by Sekisei Lagoon Restoration Project, based on a comprehensive management approach with various stakeholders' participation"

 Vietnam Report: Community involvement in coral reef restoration and management in Cu Lao Cham MPA and Nui Chua National Park

Si Tuan Vo from the Vietnam Academy of Science and Technology provided an overview of Cu Lao Cham MPA and Nui Chua National Park.

In the MPA, serious flooding during the rainy season causes heavy runoff that is detrimental to the reefs. With over 600 households, of which 80 percent depend on fisheries, this is of great concern. To encourage community involvement, zoning and regulation development has been conducted with local community participation. The community was provided training on monitoring coral reefs, fisheries resources and environmental concerns.

Today, tourism has become an important livelihood option for the Nui Chua National Park community over the last three years. Juvenile lobsters for cage culture in Vietnam bring in revenues of nearly one million USD a year. Socio-economic assessment and monitoring is conducted annually.

Restoration of living resources including giant clams, cone shell, Strombus snail as well as turtle conservation are focal activities of the National Park. To sustain the project, they have identified alternative livelihood options such as the manufacturing of seaweed-based products.

Supporting document: Presentation "Community involvement in coral reef restoration and management in Cu Lao Cham MPA and Nui Chua National Park, Vietnam"

## **Introducing International Frameworks**

Following the five case studies, the International Partnership for the Satoyama Initiative and the Sustainable Ocean Initiative were introduced as frameworks that may help promote and expand such community-based conservation and management efforts.

## International Partnership for the Satoyama Initiative

Kaoru Ichikawa from the United Nations University briefed members on the Satoyama Initiative. Launched during CBD COP 10 in October 2010, the International Partnership for the Satoyama Initiative (IPSI) is a multi-stakeholder partnership of national and local governments, NGOs, indigenous and local community organisations, private sector, academic, international and UN organisations.

Activities include knowledge facilitation, policy, research, capacity building, awareness-raising and financial support. IPSI serves as a link between the local and international communities to engage in international policy discussions and in the efforts towards achieving the Aichi Biodiversity Targets and Sustainable Development Goals (SDGs).

Supporting document: Presentation "Sharing knowledge and experiences for promoting sustainable production landscapes and seascapes: The International Partnership for the Satoyama Initiative"

## • Action Plan for the Sustainable Ocean Initiative (2015-2020)

The CBD Secretariat (Jihyun Lee) shared an overview of the Sustainable Ocean Initiative (SOI) Action Plan, which was presented at the SOI High-Level Meeting, convened as a parallel session to the CBD COP 12 High-Level Segment in Pyeongchang earlier in October.

The Aichi Biodiversity Targets, adopted by the Conference of the Parties to the Convention on Biological Diversity (CBD) in 2010, laid out an ambitious agenda to reverse global biodiversity loss, including marine and coastal biodiversity. In order to achieve these targets, there is an urgent need to enhance the capacity of countries to improve on-the-ground implementation. SOI, which is being coordinated by the CBD Secretariat, aims to address this need by providing a holistic and strategic framework through which to address capacity

development needs of countries to improve the conservation and sustainable use of marine and coastal biodiversity. It builds on existing efforts, resources and experiences in an integrated and holistic manner by enhancing partnerships, building on lessons learned and knowledge gained, and facilitating improved coordination among sectors and stakeholder groups and across multiple scales in order to meet regional and national priorities for capacity building. The Action Plan for the SOI (2015-2020) will provide for a systematic framework for mobilizing necessary resources and partnerships to implement various capacity building activities as outlined therein.

## Supporting documents:

- Presentation "CBD's Sustainable Ocean Initiative: A global platform for partnerships and capacity building toward achieving Aichi Biodiversity Targets in marine and coastal areas"
- Action Plan for SOI: http://www.cbd.int/doc/meetings/mar/soiom-2014-02/official/soiom-2014-02-actionplan-en.pdf

Following presentations from various country members and international frameworks on their community-based coral reef conservation activities, the Chair opened the floor for discussion:

- A question was raised on the importance of landscapes and seascapes. The Satoyama Initiative's scope includes habitats and people—one cannot be separated from the other. With lands traditionally managed by farmers, the whole area tends to support the community. In terms of biodiversity, both water and land are important for ecological services to be effective.
- Clarification was sought on the Okinawa Prefecture's presentation, which reported that red clay runoff was reduced by 40 percent. Is this figure considered a success? It was clarified that the figure was a comparison based on the situation before the ordinance was enacted. They found that the soil runoff was coming from a construction site. Once this runoff was contained, the situation improved. Runoff from agriculture use, however, has not been curbed. Since the ordinance was enacted in 1994, there has been a reduction, yet there are still issues with regards to agriculture-related soil runoff.
  - The coordinating body exists, but they have been unable to address the problem because agricultural cultivation has not been held accountable. There should be greater enforcement.
- A comment was made about the Indian Ocean region, where communities depend on resources and participatory approaches. Community-based management seems to be in fashion, and yet there are challenges in the management of the resources. Usually it belongs in the hands of power, i.e., the governments. For communities to be able to participate in the management of resources, they need to be strengthened technically, legally and financially. Efforts are underway in the region to create legal text that gives communities some management power.

The Chair thanked the participants and commended the interpreters for their excellent simultaneous interpretation between English and Japanese.

#### SESSION 5: Discussion on Draft Motion

"Motion (draft Resolution) on implementing community-based coral reef conservation and management through a watershed-based approach" (Revised title: "Resolution on promoting an integrated approach to community-based coral reef conservation and management emphasizing land-sea connectivity")

The original motion had been circulated among ICRI focal points and posted on the ICRI website on 6 October 2014 for review. Several members sent feedback prior to the general meeting, and a revised motion was presented during this session to elicit further feedback.

#### The Chair moderated the discussion:

- Various points were raised on the structure and use of terminology:
  - The first paragraph is important and appropriate. The second paragraph is lengthy but has value with regards to the activities.
  - The phrase in the 2<sup>nd</sup> paragraph can be removed, i.e., "and its resulting Manila Declaration...."
  - Begin the resolution with the most recent information before the 2011 GCRMN report.
  - o Paragraph 4 should be moved up and swapped with paragraph 1.
- It was suggested that the CBD COP 12 decision XII/23 be referred. On another note, a point was raised that the CBD decision (decision XII/23) may not be directly related to community-based coral reef conservation. The CBD Secretariat, however, clarified that various elements in the priority actions (annex to decision XII/23) in fact addresses the issues related to community-based coral reef conservation.
- Since the resolution refers to many external documents, a question was raised about the definition of *watershed* and whether it is uniform across all documents.
  - The ICRI Secretariat clarified that the phrase water catchment area—which had been used in the original draft of the motion—was rephrased for consistency, following the term watershed used in the annex to CBD decision XII/23 on priority actions.
  - It was stressed that the wording needed clarity. Sometimes, as seen in volcanic pacific islands, water does not go through a river; instead it gets pushed through a basalt layer into the ocean and onto the reefs.
  - It was pointed out that according to the US Environmental Protection Agency (EPA), watershed includes underground water.
- A suggestion was made about the title. Two major issues seem to be embedded in the motion, and it may be more appropriate to propose two separate motions: 1) community-based coral reef conservation and 2) watershed-based approach. For example, in Okinawa, it was not enough to liaise with coastal communities alone. Communities in the higher land areas would need to be consulted as well.

In the interest of managing time, the Chair invited members to email the Secretariat with further comments and suggestions for improvement by 19:30 on Day 3 of the meeting. The resolution would be finalised following their input. (See p. 24 for subsequent discussion on the motion.)

#### DAY 3

#### FIELD DAY

ICRI delegates had the opportunity to participate in a field trip. Three options were provided to illustrate the coral reef related activities being carried out in Okinawa:

- Option 1: Coral restoration center and mangrove estuary managed by local communities
- Option 2: Tropical Biosphere Research Center of University of the Ryukyus, and Okinawa Churaumi Aquarium
- Option 3: Kerama Islands National Park.

#### DAY 4

## **SESSION 6: Meeting Outcomes**

## **Report back from Ad Hoc Committees**

AHC Economic Valuation of Coral Reef Ecosystems

Jerker Tamelander presented the revised terms of reference of the *Ad Hoc* Committee on Economic Valuation for 2015, with maintained overall objectives and minor modification of activities, most of which are on-going. Reference to the regional workshop was removed since it has been completed. Based on the outputs from this workshop, the committee recommended that it produces technical briefs in activity 4 (instead of the original plan of producing policy briefs), which will include recommendations for communicating results of ecosystem services valuation to policy makers.

The amended Terms of Reference for the committee were adopted (Appendix 3).

AHC Coral Reef Associated Fisheries

Martin Russell presented amendments to the terms of reference of the *Ad Hoc* Committee on Coral Reef Associated Fisheries. Amendments were made with regard to the *Status Report – World's Fish Aggregation 2014* which is completed and will be provided as a PDF document on the ICRIforum site<sup>4</sup>. The portion on training provisions has been removed.

The Terms of Reference for 2014-2016 are fisheries aggregation-related, with a focus on getting ICRI members to populate the global database.

The following additional terms were proposed:

- Produce an information sheet on the importance of sustainable reef associated fisheries to the health of coral reefs.
- Link with the Regional Lionfish Committee to provide an update to ICRI about the impact of lionfish on fisheries species in the Caribbean.
- Provide an update to ICRI on land-use and fishing impact on Bumphead parrotfish, a fish species essential to coral reef health.

The Chair encouraged members to contribute to the database on fish aggregations. The amended Terms of Reference were adopted (Appendix 4).

 AHC Caribbean Regional Response to Lionfish Invasion (Regional Lionfish Committee, RLC)

Ricardo Gómez Lozano presented the Terms of Reference of the Regional Lionfish Committee (RLC) which were last amended two years ago. He pointed out there was only one change in point number 4 on revising the RLC to include other marine species.

The Chair requested changes to paragraphs 1 and 3 in terms of the word *support*. When asked what it implied, it was clarified that *support* in this context meant time to help countries, and engaging the Secretariat to find resources and funds to run some of the committee's activities.

<sup>&</sup>lt;sup>4</sup> Now available at: http://www.icriforum.org/icri-documents/icri-publications-reports-and-posters/status-reportworlds-fish-aggregations-2014

Clarification was sought on point number 4 about marine invasions. It was suggested that the phrase *introductory pathways* would better reflect the other invasions. With regards to point number 7, it was agreed that guidelines on how lionfish behave would be useful to promote awareness.

The new Terms of Reference for the committee were adopted (Appendix 5).

• AHC Enforcement and Investigation (Coral Reef CSI)

David Gulko presented the terms of reference for the *Ad Hoc* Committee on Enforcement and Investigation, with recommendations that the Coral Ecological Characterization Tool be uploaded on the ICRI Forum in the ICRI members-only section.

At the previous General Meeting, it was suggested that the committee include oil spills when investigating environmental damage since many vessel groundings could be differentiated between small-scale and large-scale events, with varying impacts. The committee revised the point about vessel groundings to include a component on oil spill natural resource damage investigation approaches.

The amended Terms of Reference for the committee were adopted (Appendix 6).

## **Adopted Document from the Meeting**

 Resolution on "promoting an integrated approach to community-based coral reef conservation and management emphasizing land-sea connectivity"

Comments and suggestions were received from members over the duration of the General Meeting, and the Resolution paragraphs were revised accordingly.

It was suggested that, in the motion, the use of *CBD Parties* be rephrased. There also needs to be a reference to CBD decision XII/23: "Noting the decision of the Twelfth Meeting of the Conference of Parties to the Convention on Biological Diversity on marine and coastal biodiversity, which includes *Priority actions to achieve Aichi Biodiversity Target 10 for coral reefs and closely associated ecosystems* (annex to decision XII/23)."

A point was raised on the inclusion of specific entities, as other organisations may wonder why they were not included. A list of any kind is exclusionary and limiting (e.g., IUCN is not in the list). The paragraph was then revised to: "Contribute to the sharing of information and experience in fora provided by relevant conventions, organisations or initiatives."

The revised motion was adopted as a resolution (Appendix 7).

#### **Miscellaneous Business**

Report from GCRMN Working Group

Jerker Tamelander provided a brief overview of the Working Group meetings on GCRMN.

The group discussed and provided recommendations on GCRMN's primary purpose and objectives; Main GCRMN activities towards achieving its objectives; Needs and requirements in terms of coordination, scientific direction and strengthening (of) the network; and Follow-up actions.

A revised overarching statement to describe GCRMN's main purpose was developed: "GCRMN supports ICRI by working through a global network to strengthen the provision of best available scientific information on and communication of the status and trends of coral reef ecosystems, for their conservation and management."

It was agreed that preparation of regional periodic assessments is the main substantive activity of GCRMN, providing a foundation for its other activities and outputs, including global reports. The Caribbean process provides a blueprint for this. The need for the development of a guidance document on the process of preparing a regional GCRMN report was recognised. It was also recommended that GCRMN utilise existing mechanisms for uptake and impact of its findings.

It was further noted that global coordination of GCRMN needs strengthening, and that a process for transitioning GCRMN to a new institutional structure that provides global coordination while ensuring continuity in science direction should be initiated. This will require preparation of descriptions of the functions and tasks of the global coordinator and science director.

It was recommended that the minutes of the working group be included as part of the General Meeting report.

#### Discussion:

- The Chair commended the group for their efforts and requested that the Working Group Report be included in the minutes (<u>Appendix 2</u>).
- A suggestion was made to establish a working group to support efforts in developing the guidance document.
- The CBD Secretariat shared the possibility of collaboration between GCRMN and the CBD Secretariat at both the global and regional scales, in particular through a series of CBD marine regional workshops to be convened for the description of ecologically or biologically significant marine areas, or through the Sustainable Ocean Initiative.
- Report from 20-Year Review Working Group

The ICRI Secretariat (Tadashi Kimura) presented a summary of the Working Group discussion. The group found the 20-year review to be too broad and lacking in clarity. Suggestions were made to revise and simplify the project by phase. This included a preface statement, assessment and a simpler questionnaire. In addition, Francis Staub (ICRI Forum) would assist in compiling ICRI's key achievements while Christine Dawson (US State Department) offered to formulate questions.

The project would be revised into two steps: (1) 20-year review of ICRI's achievements based on ICRI's archives; (2) Questionnaire survey to ICRI members to identify ICRI's role for each member country/organisation. As follow up, the results from these two steps will be circulated before the next General Meeting in 2015.

#### Discussion:

- The focus on ICRI's role in the international arena was still disputed by some members of the Working Group. It was unclear if the questionnaire and accomplishments would meet the purpose of the review. The next steps were also queried as not all the group members could agree.
  - Tadashi Kimura clarified that the suggestions were obtained from the group. They would reconsider the questions and channel them into the questionnaire.
  - On the issue of conducting the review to move ICRI into the international arena, it was resolved in that the review was needed for other reasons too. It was further

clarified that the inclusion of the international arena was so that the questionnaire would not be limited in any way.

A point was raised that ICRI should just go ahead than wait for the perfect evaluation.
 It was clarified that the review would be more an overview of the last 20 years rather than an evaluation.

To provide historical context, Francis Staub shared some background information. Twelve years ago, ICRI members considered a score card system to evaluate their achievements, but later decided against it. ICRI is a voluntary partnership and members did not want to be evaluated or judged for offering their time and expertise. It was accepted that ICRI can only do what it can. This review would not be an evaluation; it would be an exercise to identify accomplishments. There needs to be an understanding of what ICRI's achievements have been and put them in context.

When the Chair prompted the Secretariat to reflect on the comments, it was noted that the Secretariat had not begun the study. At this juncture, the Secretariat sought ICRI's approval to move ahead.

It was decided that the Secretariat will undertake the revised project in two stages:

- (1) Prepare a compilation of ICRI's achievements
- (2) Based on the compilation, develop a questionnaire survey for ICRI members to help improve ICRI's relevance and value for its members.

Supporting document: Presentation "ICRI 20-year review"

GEF announcement

The GEF-6 Programming Directions include coral reef related goals and objectives both under the Biodiversity and International Waters focal area strategies. The Chair suggested discussion on the opportunities this may provide in a smaller group. Jerker Tamelander provided a brief update on group discussions in plenary. A GEF project strengthening coral reef policy and management e.g., by drawing on GCRMN and coral reef resilience work was considered having merit. It was recommended that UNEP take a lead on developing this, in close consultation with ICRI members, and reporting on progress at GM 30.

## SESSION 7: The Future

#### Upcoming activities and events of interest to ICRI members

ICRI Members were encouraged to participate in several upcoming ICRI or coral reef-related events, including:

- Gulf and Caribbean Fisheries Institute (GCFI) Annual Meeting, 3-6 November 2014, Barbados. Martin Russell will be attending. The meeting will include coral reef and fisheries participants, over 300 people will attend.
- IUCN World Parks Congress, 12-19 November 2014, Sydney. The Great Barrier Reef Marine Park Authority is collaborating with IUCN on this event.
- IFRECOR will be presenting their new plan of action 2016-2020 in early December 2014 in Martinique.

- Southwestern Indian Ocean coral reef network annual meeting, 23-25 February 2015, Rodrigues, Mauritius.
- 12<sup>th</sup> Meeting of the Conference of the Parties to the Convention on Wetlands, 1-9 June 2015, Punta del Este, Uruguay.

Japan (ICRI Secretariat) noted that the budget for the International Tropical Marine Ecosystem Management Symposium (ITMEMS), which is held every four years and was last held in 2011, is pending approval. However, even if the budget is approved, the amount will not suffice to host a symposium; hence, Japan sought the interest of other entities in co-hosting the event. UNEP expressed an interest in taking this forward.

## **Dates and Location of next ICRI General Meeting**

The next ICRI General Meeting will be in Pattaya, Thailand in November 2015 (dates to be advised).

### **SESSION 8: Closing**

## **Conclusions of the ICRI General Meeting**

Co-Chair, Niphon Phongsuwan, summarised the outputs of the General Meeting. This included the Japan-Thailand Secretariat 2014-2015 Plan of Action, the 20-year review, adoption of the Terms of Reference for the four *Ad Hoc* Committees, the revised Resolution and the next ICRI East Asia Regional Meeting.

Supporting document: Presentation "Conclusions of ICRI GM 29"

#### **Closing Remarks**

Co-Chair, Niphon Phongsuwan, thanked participants and observers for their participation and welcomed them to Thailand the next year.

Co-Chair, Naoki Amako, thanked OIST for providing the wonderful venue and the sound crew for supporting the General Meeting from behind the scenes.

The meeting was closed by both Co-Chairs.

## Appendices:

Appendix 1	List of Participants
Appendix 2	GCRMN minutes
Appendix 3	Amended Terms of Reference – Economic Valuation
Appendix 4	Amended Terms of Reference – Coral Reef Associated Fisheries
Appendix 5	Terms of Reference – Caribbean Regional Response to Lionfish Invasion
Appendix 6	Amended Terms of Reference – Enforcement and Investigation
Appendix 7	"Resolution on promoting an integrated approach to community-based coral reef conservation and management emphasizing land-sea connectivity"



## Appendix 1

## 29th ICRI General Meeting – List of Participants

	First Name	Last Name	Organization	Email Address
1	M. Shiham	Adam	Marine Research Centre, Maldives	msadam@mrc.gov.mv
2	Said	Ahamada	Indian Ocean Commission	said.ahamada@coi-ioc.org
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4	Fadhila	Ali	National Environment Management Council (NEMC), Tanzania	fhemedali@yahoo.com
5	Naoki	Amako	Ministry of the Environment, Japan	naoki_amako@env.go.jp
6	Maher	Amer	The Regional Organization for the Conservation of the Environment of the Red Sea & Gulf of Aden (PERSGA)	maher.amer@persga.org
7	Meena	Arivananthan	Panache Facilitation	meena.arivananthan@gma il.com
8	Ronawon	Boonprakob	Department of Marine and Coastal Resources, Thailand	ronawon@hotmail.com
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11	Loke Ming	Chou	National University of Singapore	dbsclm@nus.edu.sg
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13	Yimnang	Golbuu	Palau International Coral Reef Center	ygolbuu@picrc.org
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15	David	Gulko	ICRI Ad Hoc Committee on Enforcement and Investigation	gulkod001@hawaii.rr.com
16	Chloe	Harvey	The Reef-World Foundation - UK	chloe@reef-world.org
17	James	Harvey	The Reef-World Foundation - UK	jj@reef-world.org

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## Appendix 2

### **GCRMN Working Group**

ICRI GM 29, Okinawa, Japan, October 2014 Sunday 19 October, 17:00-19:00; and Monday 20 October, 18:00-19:00

In attendance:

Jeremy Jackson, GCRMN
Francis Staub, ICRI Forum
Makiko Yanagiya and Masako Iwamoto, ICRI Secretariat
Christine Dawson, United States
Aurelie Thomassin, France
Tadashi Kimura and Karenne Tun, GCRMN East Asia
Margaret Johnson and Anne Caillaud, GBRMPA
Si Tuan Vo, Viet Nam
Ricardo Gomez Lozano, Mexico
Ruben Torres, Reef Check Dominican Republic
Shiham Adam, Maldives
Meena Arivananthan, meeting note taker
Said Ahamada, Indian Ocean Commission
Jerker Tamelander, UNEP

## **Summary of discussions**

## Key issues discussed

- GCRMN primary purpose and objectives;
- Main GCRMN activities towards achieving its objectives;
- Needs and requirements in terms of coordination, scientific direction and strengthening the network:
- Follow-up actions.

## Main findings and recommendations

1. The statement describing GCRMN's main purpose and objectives was revised, as follows:

GCRMN supports ICRI by working through a global network to strengthen the provision of best available scientific information on and communication of the status and trends of coral reef ecosystems, for their conservation and management.

- 2. The main substantive activity of GCRMN, providing a foundation for its other activities and outputs, is the preparation of regional periodic assessments drawing on monitoring, research and other data and establishment of regional GCRMN committees, where possible drawing on existing nodes and linked to existing Regional Seas mechanisms. The approach piloted in the Caribbean 2012-2014 provides the blueprint for this.
  - i. The regional assessment report provides a scientific foundation for identification of recommended minimum standards for monitoring indicators and methods as well as actionable recommendations for coral reef policy and management. The regional reports and committees provide a basis for development of more synthetic global reports (see below).
  - ii. The process of developing the regional report also supports the establishment of regional networks of sites and institutions that commit to applying minimum standards in ongoing monitoring.

- iii. Where possible development of regional reports may utilize opportunities provided by ongoing and planned regional initiatives and projects. This would also enable GCRMN to pursue two or more regional processes concurrently. It was noted that:
  - Progress has been made towards a report focusing on the Eastern Tropical Pacific as part of the Caribbean process, and presents an opportunity to develop a regional report in the near future.
  - France may provide support towards development of a Pacific report starting in 2015. Participation by and support from other governments and GCRMN partners is important.
  - GCRMN regional reporting may also be pursued through collaboration and integration with regional projects under development or implementation, e.g., GEF funded LME projects in the South China Sea and the Bay of Bengal, as well as projects in the Western Indian Ocean implemented through COI and the Nairobi Convention.
- 3. The need for development of guidance on the process for development of a regional GCRMN report was recognized, to define key principles for GCRMN regional reports and facilitate the transfer of lessons learned from the Caribbean. This guidance document needs to encompass guiding principles, description of the main steps of the process, key considerations, and helpful recommendations on avoiding pitfalls. The guide should also include information on estimating funding requirements and identifying options for sourcing input/in-kind support through partnering with relevant institutions and projects.
- 4. Producing periodic global reports on the status and trends of the world's coral reefs is an important function of GCRMN. The global report should be prepared through compilation of findings from regional reports and other information. This may be based on a template for sourcing inputs, to be developed, and utilizing the quadrennial ICRS. The science director and global coordinator lead development of the global report. The global report may be produced both as a grey literature report as well as a scientific article in a peer-reviewed journal (e.g., Coral Reefs, the journal of ISRS). The timeframes of ICRS in 2016 and 2020 as well as the Aichi targets were noted.
- 5. **GCRMN** should utilize existing mechanisms for uptake and impact of its findings. ICRI and its members as well as Regional Seas Conventions and Action Plans provide pathways to achieve broad adoption and use of best practice based on GCRMN findings, and related capacity building.
- 6. Global coordination of GCRMN needs strengthening. While GCRMN's work in the Caribbean in recent years has demonstrated a new model for regional reporting, global coordination, networking and liaison has been insufficient. To enable GCRMN to fulfill its role as defined above, the need to transition to a new institutional set up for GCRMN coordination was recognized.

#### Priority follow-up actions:

- Develop a guidance document on development of GCRMN regional reports;
- Develop descriptions of the function and tasks of global coordinator and science director;
- Initiate a process for transitioning GCRMN to a new institutional structure that provides global coordination while ensuring continuity in science direction:
- Pursue development of a regional report for the East Pacific Report, and initiate discussions in other regions where opportunities exist, including the Pacific;
- Identify focal points in all regions, where possible through processes towards preparation
  of regional reports. The ICRI Secretariat may be able to facilitate this through its
  activities.

## Appendix 3

#### **Amended Terms of Reference 2015**

## ICRI Ad Hoc Committee on Economic Valuation of Coral Reef Ecosystems

Adopted on 23 October 2014 at the 29th ICRI General Meeting (Okinawa, Japan)

ICRI Members agree to extend the work of the ICRI *Ad Hoc* Committee on Economic Valuation of Coral Reef Ecosystems for the next two General Meetings, under the chairmanship of the ICRI Secretariat with the technical assistance of CRIOBE-France. Wide participation by members, and particularly government members, is encouraged.

The Committee was established in January 2008 at ICRI's 21st General Meeting and was originally co-chaired by Mexico, the United States, the World Resource Institute and the ICRI Secretariat. It has already produced a number of outputs including an inventory of studies, articles and publication on coral reef valuation and a framework for Coastal Ecosystem Valuation.

The Committee will build on these achievements, and integrate other relevant achievements<sup>5</sup> by members to work towards a renewed set of objectives.

## These objectives are:

- (i) to raise awareness on the economic benefits produced by coral reef; and their positive economic return as a public investment
- (ii) to encourage countries to integrate a mitigation strategy for coral reefs in their national laws
- (iii) to provide advice and support to countries wishing to set up a legal framework to encourage private funding for coastal management.

#### The Ad Hoc Committee will implement the following activities:

- Activity 1: Continue to work with the ICRI Secretariat to facilitate the dissemination of relevant information on coral reef economic valuation through ICRI channels and within the international arena;
- Activity 2: Act as a coordinating platform to take stock of, and report on, relevant international and regional initiatives such as the ones mentioned in the footnote;
- Activity 3: Draft guidelines of best practice for mitigation of anthropogenic damages to coral, based on case studies and including principles, practical tools (e.g., habitat equivalency calculations, compensation ratios), and guidance on how to draft compensation provisions, obtain guarantees and monitor compensations;
- Activity 4: Produce two technical briefs, summing up:
  - Recommendations for communicating results of ecosystem services valuation to policy makers. Content will be based on the outputs of the Bonaire workshop and include concrete policy questions
  - The emerging financing mechanisms (e.g., offset, access rights) and their potential to contribute to long-term conservation financing.

<sup>&</sup>lt;sup>5</sup> These include outputs by the World Resources Institute on economic valuation in the Caribbean; initiatives by the US National Oceanographic and Atmospheric Administration (NOAA) and TEEB/UNEP (The Economics of Ecosystem and Biodiversity); the World Bank's CCRES initiative (Capturing Coral Reef Related Ecosystem Services); Forest Trends' Marine Ecosystem Services (MARES) Program; SPC's RESCCUE program (Restoration of Ecosystem Services against Climate Change Unfavourable Effects) and work by the French Coral Reef Initiative (IFRECOR)'s working groups on compensation, economic valuation and marine conservation financing.

## Appendix 4

# Amended Terms of Reference ICRI *Ad Hoc* Committee on Coral Reef Associated Fisheries

Adopted on 23 October 2014 at the 29th ICRI General Meeting (Okinawa, Japan)

The *Ad Hoc* Committee on Coral Reef Associated Fisheries was created in 2010 at ICRI's 24 General Meeting in Monaco. Revised Terms of Reference with a focus on fish spawning aggregations were established in the 2013 ICRI 28 General Meeting in Belize.

The Committee is chaired by Science and Conservation of Fish Aggregations (SCRFA).

At the 2014 ICRI 29 General Meeting a report *Status Report - World's Fish Aggregations 2014* and a short film entitled "Snapper Spawn" were provided to ICRI members.

The 2014-2016 Terms of Reference have been adopted as follows:

- 1. Continue to work with ICRI Secretariat to disseminate information on key science and management issues for fish aggregations, and the need to ensure fish aggregations are included in coral reef management planning.
- 2. Engage ICRI members to contribute information to the *SCRFA Fish Aggregation Database* to fill information gaps.
- 3. Depending if adequate information is obtained, produce an updated version of the Status Report World's Fish Aggregations.
- 4. Produce an information sheet on the importance of sustainable reef associated fisheries to the health of coral reefs.
- 5. Link with the Regional Lionfish Committee to provide an update to ICRI about the impact of lionfish on fisheries species in the Caribbean.
- 6. Provide an update to ICRI on land-use and fishing impact on bumphead parrotfish, a fish species essential to coral reef health.

## Appendix 5

# Terms of Reference ICRI *Ad Hoc* Committee

## on Caribbean Regional Response to Lionfish Invasion

Adopted on 23 October 2014 at the 29th ICRI General Meeting (Okinawa, Japan)

Recognizing that the lionfish invasion in the Caribbean region is a mounting threat to the biodiversity and ecological integrity of the region's coral reef ecosystems;

Acknowledging that identifying and implementing measures to control the lionfish invasion, while minimizing other harm to marine ecosystems, are desirable;

Recalling discussions during the Caribbean Day at ICRI's 24th General Meeting and the emphasis placed on invasive lionfish as a high priority threat to the region;

Recognizing the outcomes of the August 2010 ICRI workshop in Cancun as an important step in assembling best management practices as part of a regional strategy;

Acknowledging the decision taken at the 6th Conference of Parties to the SPAW Protocol in Montego Bay, Jamaica, October 2010, to participate in the development of a Caribbean regional response to the lionfish invasion;

Emphasizing the importance of collaboration and coordination with CAR-SPAW, all Caribbean countries and territories, and other key stakeholders in the region;

Recalling the ICRI 2009 Recommendation on Invasive Alien Species;

Recalling the agreement during 25th ICRI General Meeting (Apia, Samoa) on the creation of an ICRI *Ad Hoc* Committee to facilitate a coordinated response to the Lionfish invasion in the Caribbean Region (RLC);

The Ad Hoc Committee (RLC) will extend its work one year, to promote the following activities:

- 1. Promote the use and implementation of Regional Strategy for the Control of Invasive Lionfish in the Wider Caribbean published by ICRI in 2013 and Invasive Lionfish: A guide to control and management published by the Gulf and Caribbean Fisheries Institute in 2012.
- 2. Raise awareness among the fishery and marine protected area managers on the lionfish threat and the need to develop effective local response plans.
- 3. Support countries and territories to develop local strategies, based on the regional strategy.
- 4. Work with the ICRI secretariat to disseminate lessons learned, including, if appropriate, guidelines, particularly on prevention, early detection and actions, to other regions.
- 5. Identify possible options for migrating the RLC to a committee that addresses in general, other marine invasive alien species including pathway vectors.
- 6. Promote the use of the web portal developed in coordination with NOAA, to exchange knowledge and experience in the integrated management of lionfish.
- 7. Build active participation between organizations and countries.
- 8. Report to the 30th General Meeting of ICRI on implementation of actions herein described.

## Appendix 6

# Amended Terms of Reference ICRI *Ad Hoc* Committee on Enforcement & Investigation

Adopted on 23 October 2014 at the 29th ICRI General Meeting (Okinawa, Japan)

The ICRI General Meeting agrees to extend the work of the ICRI *Ad Hoc* Committee for the next two General Meetings, under the chairmanship of the ICRI Secretariat with technical support by David Gulko. Participation is encouraged by members, and particularly government members and experts who could support the Committee in meeting its objectives.

#### Objectives

- i. Provide mechanisms and training support for small scale Marine Protected Areas on enforcement and compliance; and
- ii. Explore and compare large-scale vessel grounding and oil spill natural resource damage investigation approaches, including evidence collection and documentation on coral reef damage which can be used for both restoration and compensation.

The Ad Hoc Committee will implement the following activities:

- Activity 1: Develop an MPA Enforcement and Compliance Strategy (ECS) to be used as a framework for local and regional strategies.
- Activity 2: Develop training programs on enforcement and investigation, based on the CRCSI model, specifically tailored for small-scale MPAs.
- Activity 3: Develop a Large-Scale Vessel Grounding Investigative Protocol Strategy (VGIPS) as a collaborative approach towards the investigation and documentation of natural resources impacts associated with large-scale vessel grounding.
- Activity 4: Organize a committee meeting and expert workshop, subject to funding, to confirm, revise and refine the ECS and VGIPS.
- Activity 5: Establish an information platform to enable the sharing of strategies and mechanisms, with a view to improve both enforcement and compliance efforts within small-scale MPAs and natural resource trustee actions associated with large-scale vessel groundings.

## Appendix 7

## **RESOLUTION on**

# promoting an integrated approach to community-based coral reef conservation and management emphasizing land-sea connectivity

Adopted on 23 October 2014, at the 29<sup>th</sup> ICRI General Meeting (Okinawa, Japan)

*Noting* that fringing reefs are found extensively in Okinawa, Japan, where the 29<sup>th</sup> ICRI General Meeting was held from 20-23 October 2014;

**Recognizing** that coral reefs, especially fringing reefs, are heavily influenced by land-based activities, it is particularly important to consider human activities and impact as part of the measures for coral reef conservation;

**Emphasizing** ICRI's cornerstone on integrated management, specifically to manage coral reefs and associated ecosystems in a manner that recognizes the connectivity of land and sea, and the impacts of anthropogenic pressures;

**Recalling** the "Resolution on using co-management approaches for marine protected areas and other mechanisms for managing coral reefs and associated ecosystems" adopted at the 28<sup>th</sup> ICRI General Meeting in Belize City, Belize;

**Recalling** the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA);

**Recalling** the GCRMN report Catchment Management and Coral Reef Conservation: a practical guide for coastal resource managers to reduce damage from catchment areas based on best practice case studies published in 2011, which introduces 11 recommendations for catchment management;

**Noting** the decision of the Twelfth Meeting of the Conference of the Parties to the Convention on Biological Diversity on marine and coastal biodiversity, which includes *Priority actions to achieve Aichi Biodiversity Target 10 for coral reefs and closely associated ecosystems* (annex to decision XII/23).

Accordingly, ICRI encourages its Members to:

*Consider* the merits of integrated approaches to community-based coral reef conservation and management emphasizing land-sea connectivity;

*Apply* the lessons learned on watershed management for conserving fringing reefs from the cases presented in the workshop at the 29<sup>th</sup> General Meeting and in the GCRMN report, as appropriate;

**Promote**, where appropriate, collaboration among stakeholders that facilitate community-based conservation and management efforts that integrate the conservation and management of the relevant watersheds;

*Contribute* to the sharing of information and experience in fora provided by relevant conventions, organizations, or initiatives.

Accordingly, ICRI requests its Secretariat to:

*Compile* the case studies on integrated approaches to community-based coral reef conservation and management emphasizing land-sea connectivity from submitted ICRI Members' Reports, and organize with reference to the GCRMN report;

**Report** on the compilation of the above case studies at the 30<sup>th</sup> General Meeting in Thailand;

Disseminate the information through ICRI Media and other available and appropriate media.

Accordingly, ICRI requests its Members to:

**Assist** in the compilation of case studies by providing information in addition to the submitted Member's Reports, upon request from the ICRI Secretariat;

**Encourage** similar integrated approaches to community-based coral reef conservation and management emphasizing land-sea connectivity, where appropriate, that would have long-term benefits:

Support the ICRI Secretariat in disseminating the compilation of case studies.