

# Minutes of the 30<sup>th</sup> ICRI General Meeting

Pattaya, Thailand, 1- 4 December 2015

## Minutes of the General Meeting

### **DAY 01**

The 30<sup>th</sup> ICRI General Meeting (GM), and the second and final meeting under the 2014-2015 Japan-Thailand Secretariat, was held from 1<sup>st</sup> to 4<sup>th</sup> December 2015 in Pattaya, Thailand. Through the support from Japan and UNEP, delegates from several countries and organisations were able to attend and participate in the meeting. In total, 69 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:

- Malaysia
- Cambodia
- The Reef-World Foundation

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

Mr. Nipon Phongsuwan (Thailand) co-chaired Session 1 of the meeting.

#### **1.1 Official opening**

Mr. Sakda Vicheansil, Deputy-Director-General, Department of Marine and Coastal Resources, Ministry of Natural Resources and Environment, Thailand opened the meeting, and highlighted the importance of coral reefs in supporting Thailand's economy, but also stressed on the growing threats from human activities and climate change that challenge the Kingdom's resource management and conservation efforts. He reinforced Thailand's commitment to safeguard the long-term sustainability of her coral reefs and associated ecosystems, and announced the enactment of the "Marine and Coastal Resources Management Promotion Act" in June 2015 as a positive step towards improving legislation and enforcement. He called on the global community, through networks like ICRI and her partners, to continue working together to find effective, timely and creative solutions to address the growing threats faced by the marine and coastal environment while promoting greater awareness and appreciation among all stakeholders.

Ms. Makiko Yanagiya, Deputy Director, Biodiversity Policy Division, Nature Conservation Bureau, Ministry of the Environment delivered welcoming remarks. Ms. Yanagiya summarized the outcomes of the 29<sup>th</sup> ICRI GM, and highlighted the anticipated outcomes from the 30<sup>th</sup> GM. She wished members a productive meeting and hoped it would serve as an avenue for generating new ideas and

action within the network, in an effort to realize the common goal of coral reef conservation within member countries and around the world.

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

Mr. Phongsuwan presented the overall meeting agenda, and invited inputs and comments from the floor. As no additional agenda items were proposed, members endorsed and adopted the agenda.

## **1.3 Presentation by New Members**

The ICRI Secretariat received official letters of interest from Malaysia, Cambodia and Reef-World Foundation indicating their intent to become ICRI members.

### **1.3.1 Malaysia**

Mr Abdul Rahim bin Gor Yaman, Director, Division of Planning and Management, Department of Marine Park (DMPM), Ministry of Natural Resources and Environment (MNRE), Malaysia, opened the session by recommending Malaysia's inclusion to the ICRI family, and highlighted the country's emphasis on conservation and sustainable utilization of her rich natural marine resources. Mr. Abdul Rahim gave an overview of marine protected areas (MPAs) in Malaysia, which started out as Fisheries Prohibited Areas in the 1980's, and later re-gazetted as MPAs following the establishment of the DMPM. Today, the DMPM manages 42 MPAs distributed within Peninsular and East Malaysia, with all Parks declared as no take zones. These Parks cover an area of almost 6,500km<sup>2</sup> and account for 1.4% of Malaysia's territorial waters, which is still below the recommended Convention on Biological Diversity (CBD) target 10% of MPA. DPMP is a technical department and oversees a wide-range of functions, including the conservation and management of marine biodiversity and threatened species, rehabilitation of degraded areas, research and monitoring, enforcement of regulations and acts, management tourism and recreational activities, and scaling-up public outreach and awareness programs through closer collaborations with local communities, NGOs and local universities. To achieve its mandate, DMPM depends on funding from federal sources that are supplemented by other sustainable financing mechanisms like revenue generated from conservation fees and the MPA Trust Fund.

The Strategic Action Plans, reviewed and updated every five years, articulates the overarching management framework for Malaysia's MPAs, and it provides guidance for the development Park specific management plans. To date, management plans for three MPAs have been prepared.

At the federal level, research and monitoring will continue to play a pivotal role to guide management action, and will focus on resource and water quality monitoring, habitat mapping and rehabilitation programs, carrying capacity assessments, economic valuation studies and biological and ecological studies of endangered marine species.

Malaysia acknowledges the journey in conserving her invaluable marine resources, and strongly encouraged members to accept her request for membership to ICRI. Malaysia will benefit from the

exchange of knowledge and experiences among ICRI members, while her participation will further strengthen regional representation in the organisation.

*Supporting documents: Presentation “Marine Protected Areas in Malaysia”*

### **1.3.2 Cambodia**

Mr. Heng Sovannara, deputy director of the Fisheries Administration, Cambodia, delivered Cambodia’s intent to join ICRI. Mr. Sovannara shared that Cambodia’s coastline, which stretches 435km along the Gulf of Thailand, supports a diverse range of habitats and living resources that are still relatively intact and support important nursery and feeding areas for a variety of important species that contribute to the yearly harvest of between 50,000 to 80,000 tons from Cambodia’s marine waters. He also highlighted the increasing threats from unsustainable and destructive fishing practices, sedimentation, pollution, increasing population and coastal development, which put pressure on the long-term sustainability of the resources.

To address this, the Fishery Administration prepared the National Action Plan (NAP) for Coral Reef and Seagrass Management in Cambodia 2006-2015, which specified targets of at least 8.4 km<sup>2</sup> of coral reef and 90 km<sup>2</sup> of seagrass areas under appropriate form of sustainable management by 2016. The aims of the NAP are to protect and conserve these ecosystems while addressing poverty alleviation and improvement of living conditions of Cambodians who are dependent on these resources. To this end, the Fisheries Administration has established the First National Coral Reef MPA around the Koh Rong Group of Islands. The administration is currently working in collaboration with various partners such as Flora and Fauna International, Coral Cay Conservation, Marine Conservation Cambodia and Song Saa Resort to collect baseline socio-economic, biological and ecological data for preparing habitat distribution maps that will contribute to zoning planning. Besides the National MPA, numerous local MPAs for coral reef, seagrass and mangrove ecosystems in Kampot, Kep, Koh Kong and Preahsihanouk Provinces have also been established in partnership with local authorities and communities.

Cambodia acknowledged the work undertaken by ICRI in protecting the world’s coral reefs and related ecosystems, and looks forward to learning from the experiences of ICRI members to better manage and conserve her marine habitats. Mr. Sovannara closed by encouraging members to accept Cambodia’s request for membership to ICRI.

*Supporting documents: Nil*

### **1.3.3 Reef-World Foundation**

Ms. Chloe Harvey from the Reef-World Foundation, shared that the Foundation was registered as a charity in the United Kingdom in 1999 with a mission to inspire and empower people to act in conserving and sustainably developing coastal resources, particularly coral reefs and related ecosystems, for the benefit of local communities, visitors and future generations.

The Reef-World Foundation has a long history working with numerous partners in the region, and through a UNEP-COBSEA funded program, co-developed the flagship Green Fins program that is an effective approach for encouraging best practice for environmentally sustainable in the diving and snorkelling industry. The program is currently active in 20 dive destinations in six countries, and has

over 400 dive and snorkel centre members. The strength of the program lies in its certification process that accredits dive centre operations based on a code of conduct and a robust assessment system. The program supports operators develop or strengthen the implementation of relevant regulatory frameworks and provide strategic outreach to as government partners, dive centres and their customers, and is a good example of a strong public-private partnership model.

The Foundation will continue to develop and implement the Green Fins program to enhance its long-term sustainability and replicability across a wider global community.

Ms. Harvey reinforced the Foundation's request to join the ICRI family to leverage on the experience of the ICRI members and to ensure that the Foundation's programs remain relevant to current coral reef conservation landscape. As an ICRI member, the Foundation can help disseminate the outcomes of ICRI (and other international initiatives and conventions) to key environmental champions in the public and private sectors, and encouraged members to accept the Foundation's request for membership to ICRI.

*Supporting documents: Presentation "The Reef-World Foundation"*

Members joined Mr. Phongsuwan to welcome two countries and organization as ICRI members by unanimous applause.

## **2. SESSION 2: Reports from ICRI bodies**

Ms. Makiko Iwamoto (Japan) co-chaired Session 2 of the meeting.

### **2.1 Members' reports**

#### **2.1.1 Summary of Members' Report**

Mr. Tadashi Kimura, from the Japan Wildlife and Research Centre (JWRC) and representing the ICRI Secretariat, summarized the results of the members' reports that were based on the revised reporting format presented at the 29<sup>th</sup> ICRI GM.

The Secretariat received 11 out of 33 and eight out of 32 government and organization reports. Governments reported an average of 5.1 projects (59 projects in total) while organizations averaged 4.0 projects (32 projects in total). Activities focusing on "Science and monitoring" theme dominated Government projects, while "Capacity building" and "ICM" activities were similarly represented. "Capacity building" and "Science and monitoring" activities were equally represented in organization projects, with "ICM" related activities not far behind. "Review" activities were not highly prioritized and were the lowest for both. Organizations tended to engage other sector slightly more frequently than governments, while governments reported higher successful zoning activities.

*Supporting documents: Presentation "Summary Results on Members' Reports"*

#### **2.1.2 Blue-Finance Barbados Project**

Ms. Angelique Brathwaite (Barbados) shared the plans for transforming the Barbados Marine Managed Area (BBMA) into a world-class destination to experience marine biodiversity, and highlighted the focus on strong stakeholder engagement in the planning process. The need for sustainable financing was acknowledged at the onset of the project, and working with Blue-Finance (BF), the public-private partnership (PPP) model was identified as a mechanism to help achieve the objectives.

Mr. Nicholas Pascal (CRIOBE-Blue-Finance) elaborated on the progress of the BF Barbados Project, an initiative first proposed during the 28<sup>th</sup> ICRI GM. The driving force behind the project was the recognition that new approaches for securing sustainable financing was required, and focused on the BMMA as the first demonstration site, where BF assisted with setting up the PPP negotiations. Under the partnership agreement, the Ministry of Environment and Drainage outsource the management of the BMMA to an operator, who will absorb all financial risks and reduce the need to invest public funds. The operator will generate stable revenues from the tourism “fees”. Currently, BF is supporting zonation efforts within the BMMA, continuation PPP arrangement and helping coordinate fund raising activities with impact investors.

Moving forward, the project is looking at initiating a feasibility study in Colombia, and initiating similar projects at one Caribbean site and one other regional seas site.

*Supporting document: Presentation “Blue Finance Quick Updates”*

### **2.1.3 Komodo National Park**

Ms. Tri Wahyuni from the Ministry of Environment and Forestry, Indonesia, presented on waste management strategies practiced within Komodo National Park, one of the important region within the Coral Triangle and a UNESCO World Heritage site.

The main driving force for the program was to address increased tourism pressure to the area. The 5-year project, initiated in 2014 in partnership with WWF, involves wide ranging stakeholder involvement. The Integrated Waste Management (IWM) Project is aimed at a creating a model of sustainable waste management within Komodo National Park (KNP), and started with an inception study by WWF in 2014. Moving forward, the project aims to improve community opportunities and the private sector to manage waste and benefits from waste management and advocating local government to produce policy to support waste reduction program in Manggarai Barat.

*Supporting document: Presentation “Integrated Waste Management (IWM): Building Partnership for Effective Management of Komodo National Park”*

### **2.1.4 15 Years of IFRECOR**

Mr. Francis Staub (ICRIForum) shared that since its creation in 1999 by the French government, IFRECOR worked for the sustainable protection and the preservation of coral reefs within France’s territories, and comprises scientists, NGOs, socio-economic professionals and parliamentarians. Mr. Staub highlighted some of IFRICOR’s past, ongoing and future activities, and described the fourth 2016-2020 action plan that will be adopted by the national committee of IFRECOR March 2016. The new plan will continue working on and enhancing past work to tackle issues related sustainable management of coral reef, mangroves and seagrass.

The activities organized in celebration of IFRICOR's 15th Anniversary included the production of a video, fund raisers, meetings during COP21, publication on the impact of climate change on infrastructure in coastal and inter-tropical marine zones.

Mr. Nicolas Pascal followed up with an update on IFRECOR's project on economic valuation of coral reef ecosystem services, which covered 10 overseas territories between 2009 and 2015. Using the TEEB approach, the project, undertaken in collaboration between four research institutes, demonstrated the role of coral reef in the economic development of islands. Particularly, coral reefs generated €450M to the island's GDP every year, with investments by over 700 companies and supporting over 20,000 jobs directly. Coral reefs also provided over €600M of coastal protection services, and captured over two million tons (Mt) of carbon dioxide, while supporting a total stock of between 40 and 60Mt.

*Supporting document: Presentation "IFRECOR: 15 years toward coral reef management"*

## **2.2 Secretariat Reports**

### **2.2.1 Case Studies by WWF Japan**

Ms. Masako Iwamoto (Japan) explained that the rationale behind the preparation of the case studies, which was proposed during the 29<sup>th</sup> ICRI GM, was to highlight the implementation of coral reef conservation and management through community-based approaches that emphasized land-sea connectivity.

Mr. Masayuki Gonda (WWF Japan) shared on lesson learned from the case studies, which were compiled from eight model sites located in Fiji, Indonesia, Japan, USA, Australia, Granada, Maldives and Thailand.

The study identified three common success indicators among the eight model sites, namely, the establishment of local community based conservation initiatives; active and sustained community engagement to mainstream activities among local stakeholders; and a strong scientific basis for evaluating progress and sharing the information with local communities and government. In addition, all studies highlighted the strong emphasis of ICM, and reinforced the need to establish strong stakeholder engagement, particularly to leverage on traditional uses of the environment; the adoption of adaptive management that considers benefit of stakeholders; active engagement of policy makers within each community; and the need for strong science throughout the life of the project.

*Supporting document: Presentation "Case Studies: From Ridge to Reef. Implementing coral reef conservation and management through a community-based approach emphasizing land-sea connectivity"*

### **2.2.2 ICRI 20-Year Review**

Mr. Tadashi Kimura, on behalf of the ICRI Secretariat, summarized the outcome of the desktop review of ICRI's 20-year history, a key deliverable of current 2014-2015 ICRI Secretariat. Mr. Kimura explained that due to a delay in the preparation, the Secretariat would not present the report for

adoption at the 30<sup>th</sup> GM; instead, the Secretariat will upload the draft report on ICRI Forum subsequent comments and inputs by members before its adoption remotely.

The main objectives of the review are to prepare a compilation of ICRI's achievements, and based on the compilation; develop a questionnaire survey for ICRI members to help improve ICRI's relevance and value for its members.

Mr. Kimura provided a historical timeline of ICRI, the main activities, and key outputs, with the review focusing specifically on key documents, recommendations, resolutions and publications. The review highlighted the important role of ICRI as the only international framework of governments and non-governmental organization focusing on management of coral reefs and related ecosystems.

Dr. Clive Wilkinson followed up with an overview of the history of GCRMN, a key operational arm of ICRI. Gleaning from the lessons learned from his experience, Dr. Wilkinson recommended that the GCRMN should keep publishing regional and global coral reef status and trends a key product of the network; include numbers, statistics or impactful statements that will send clear messages; continue to build and nurture partnerships not competition; archive metadata and summary data, not raw data; and to keep communication within the network open and regular. In essence, he suggested that the GCRMN can initiate "Reef Scientists sans Frontier" initiative to leverage on the pool of scientists keen and able to contribute to regional and global efforts.

*Supporting document: Presentation "20 year review of ICRI activities"*

*Presentation "Comments on ICRI, GCRMN, Climate Change"*

## **2.3 Ad Hoc Committees**

Existing *Ad Hoc* Committees reported on their work since the last ICRI General Meeting in October 2014.

### **2.3.1 Coral Reef Associated Fisheries**

Mr. Nicholas Pascal (CRIOBE-Blue-Finance), on behalf of the committee, provided an update on the committee's activities which included the dissemination of the two short films "Snapper Spawn" and "Spawning Aggregations - Natural Numbers, Episode 05". In addition, the committee continued to provide regular email updates on fish aggregations to members and partners. The committee has continued to engage ICRI members to encourage information submission to SCRFA Fish Aggregation Database, prepared data sheets to highlight the importance of fish aggregations for coral reef health, and published a key paper Fish and Fisheries.

*Supporting documents: Presentation "Coral Reef Associated Fisheries"*

*Status Report "World's Fish Aggregations 2014"*

*Discussion:*

- *On the co-chair's query if the committee intends to continue its work, Ms. Makiko informed members that the ToR for the committee is active till 2016, and thus, the committee is expected to continue its activities.*

### **2.3.2 Ad hoc Committee on Economic Valuation**

Mr. Nicholas Pascal (CRIOBE-Blue-Finance) provided the update on the committee's activities and its strategies moving forward.

The committee recognizes that many other groups are already engaged in economic valuation efforts, and the suggested that the its role should transition from undertaking economic valuation studies to focusing on communicating and raising awareness on the economic benefits of coral reefs and its positive economic returns as a public investment. In addition, the committee should work to encourage countries to apply concrete mitigation strategies and to provide advice to countries wishing to set up a legal framework to encourage private funding for coastal management. These activities are in line with Aichi targets 2, 10 and 20.

To date, the committee has focused on disseminating information on coral reef economic valuation policy briefs support and presentations at events, and coordinated information on relevant international and regional initiatives. Working in close collaboration with IFRECOR, the committee conducted a training workshop on the economics of ecosystem and biodiversity (TEEB) of coral reef in the Wider Caribbean; produced guidelines for mitigation of damages and compensation schemes; and two technical briefs on ecosystem services valuation to policy makers and emerging financing mechanisms and their potential to contribute to long-term conservation financing.

The AHC operate with two separate arms – one focused on communication and dissemination of information and the other focused on preparation of guidelines and technical briefs.

The ToR for the committee remains active till 2016.

*Supporting documents: Presentation "Ad Hoc Committee on Economic Valuation"*

### **2.3.3 Regional Lionfish Committee**

Ms. Angelique Brathwaite (Barbados) gave a brief summary of activities on behalf of the committee, and shared that the purposed of the lionfish management workshop conducted in Panama in November 2015 was to bring together key resource managers, fishermen and decision makers to share information and lessons learned from successfully implemented local or national strategies. The thematic workshop focused on identifying best management tools and effective methods to eradicate lionfish, effective management strategies and policies and raising awareness among stakeholders.

One key recommendation arising from the workshop was the need to create of economic incentives to maintain interest among fishermen and diving operators to continue with lionfish eradication activities. The committee also acknowledged the need to increase outreach and educational

activities and to standardize socio-economic methods and promote sustainable and responsible fisheries by using purpose built traps that only target lionfish as key upcoming activities.

Moving forward, the committee suggested that its focus can be expanded from solely focusing on lionfish to include a broader spectrum of invasive species, and prepared a revised ToR to communicate this new direction.

*Supporting document:*

### **2.3.4 Enforcement and Investigation (Coral Reef CSI)**

Mr. David Gulko (Hawaii), lead for the Enforcement & Investigation Committee, presented on the proposed ICRI Coral Ecological Characterization Tool, which was adapted from the existing tool used in Hawaii to provide a means to evaluate the functional or service value of corals that can be used in decisions regarding costs and effectiveness of transplanting or restoration versus compensatory mitigation measures.

Mr. Gulko summarized the metrics underpinning the ecological coral valuation tool and conducted a walk-through of the tool in Excel, which has been developed to evaluate the ecological value for any coral reef system anywhere in the world. He encouraged members to test the tool and provide feedback for its enhancement.

The committee recommended continuing its activities based on the existing ToR which cover the development of MPA enforcement and compliance standards, providing training for ICRI members and other stakeholders and the development of valuation tools to assess lost in ecosystems services.

*Supporting document: Presentation "Enforcement and Investigation"*

*Excel spreadsheet "ICRI Coral Ecological Characterization Tool"*

## **2.4 Global Coral Reef Monitoring Network(GCRMN) Update**

### **2.4.1 Recap of agreements from GM29**

Mr. Jerker Tamelander (UNEP) gave a brief recap of the GCRMN working group (WG) meeting at GM29, where GCRMN's primary purpose, her objectives and activities towards achieving these objectives were discussed, as well as the needs and requirements for global coordination, scientific direction and strengthening of the network. The WG concurred that GCRMN's main substantive activity continues to be the preparation of global and regional status reports, with the Caribbean report providing a template for subsequent reporting. The need to establish common principals and maintain the network's cohesiveness and independence was also highlighted.

Several priority actions were proposed, including the preparation of a guidance document for preparing GCRMN regional reports which is currently being developed by Dr. Jeremy Jackson. However, limited progress has been made on the other identified priority actions, including the preparation of "job-scopes" for a global coordinator and science director; mapping a process for transitioning GCRMN to a new institutional structure; development of a regional report for the East

Pacific; initiation discussions in other regions; and Identifying focal points in all regions, where possible through processes towards the preparation of regional reports.

*Supporting document: Nil*

#### **2.4.2 Guidance for Regional Reporting Preparation Process**

Dr. Jeremy Jackson (Scripps Institution of Oceanography, Smithsonian Institution and GCRMN), provided an update on the preparation of the guidance document for regional reporting, which is currently being drafted.

Dr. Jackson reiterated that the purpose of GCRMN reports is to provide rigorous scientific assessments of the changing condition of coral reef ecosystems and provide actionable recommendations for management and policy. The reports should thus create a standardized inventory and database for the kinds and quality of biological and environmental data; analyze the status and trends of reef populations and environments and assess the multiple factors potentially responsible for changes in reef conditions; make policy recommendations based on the scientific findings; and strive for inclusiveness in strengthening regional networks.

The key lessons learned from the preparation of the Caribbean report were the need:

- for proper planning and development, headed by a strong lead with strong scientific background and the formulation of data sharing agreements
- to recognize costs associated with the process – man time, data management, workshops, etc. - and address funding needs for the duration of the project
- to identify essential data types and screening of data for quality and usability
- for data management and sharing
- for robust data analysis, interpretation and presentation of facts/trends as a basis
- for inclusive report preparation
- for well-planned and engaged launch and outreach activities
- to ensure impact and legacy

*Supporting document: "Guidelines for the development of regional GCRMN reports"*

#### **2.4.3 Status Update on Regional Reporting for the Eastern Tropical Pacific and West Indian Ocean**

Mr. Jerker Tamelander (UNEP) shared that Eastern Tropical Pacific region has a long history of research and monitoring with some datasets going back to the 1960s, but had not previously undertaken a comprehensive coral reef analysis. The recently submitted proposal to CPPS/Lima Convention CoP will allow the region to initiate a project to compiling a complete bibliography on data from the region and work towards preparation of a regional report following the Caribbean report model.

For the Western Indian Ocean, the regional report process was initiated in 2014 through EU funded projects and implemented through the Indian Ocean Commission (COI). To date, an inventory of national monitoring data has been created with workshops and expert meetings organised in 2015

to analyse data and prepare the report, which is planned for completion in the first half of 2016 for launch at ICRS 2016 in Hawaii.

*Supporting document: Presentation “GCRMN Eastern Tropical Pacific and WIO”*

#### **2.4.4 GCRMN Caribbean Report**

Ms. Angelique Brathwaite (Barbados) shared that since the last meeting in Oct 2015, a steering committee has been setup comprising 12 members, and with support from the French government, UNEP-CEP and UNEP coral reef unit.

The committee is currently focusing on monitoring activities, including streamlining monitoring guidelines and testing them. A wide range of data was identified for collection, and discussions are ongoing on how to collect and analyse them. Three levels for monitoring are planned –highly recommended (most rigorous), recommended (basic) and minimum standards (entry-level). A review on existing databases in the region will be undertaken that will form the basis for the development of a regional database.

2016 plans include agreement on socio-economic and ecological guidelines; training workshop (Jamaica April 2016); communication plan for methods and approaches, and promotion of national “buy in” for the guidelines via the SPAW CoP 2016; support biophysical monitoring at one site (Venezuela); submission of abstract at ICRS 2016.

#### ***ENSO and Bleaching***

Dr Mark Eakin (NOAA) presented an overview of the 2014-2016 coral bleaching report and outlook, including the 2015-2016 El Nino event.

Dr. Eakin summarized the timeline for the event, which started in June 2014 in the central Pacific and Caribbean, with bleaching affecting reefs in the south and eastern Pacific in the first half of 2015, with 100% bleaching reported on some area. Bleaching in the Indian Ocean was also recorded in the first half of 2015, although not as severe as the Pacific. In the 2<sup>nd</sup> half of 2015, bleaching in the Central Pacific and Caribbean intensified, with some areas reporting significant mortality (e.g., Kiribati). Overall, bleaching in 2015 particularly severe in Hawaii, with widespread bleaching in the Caribbean. So far, 30% of reefs global exposed to Alert level 1 or 2. Currently, bleaching stress has been suppressed due to the typhoons and monsoons, but some elevated SST is being reported in the CT region.

The current El Nino is considered the strongest recorded, and likely to surpass the 1998 event. El Nino forecast expected to continue into 2016, before tapering off later in 2016. Model predictions for later part of 2016 are not definite. Current data indicate over 80% certainty that 2015 will be warmest year on record, due to continued increase in ocean heat content.

Bleaching risk through March 2016 is low for Caribbean but high in central and eastern Pacific as well as Australia, and southern Indian Ocean. Bleaching risk from April to June 2016 suggest that extensive bleaching is likely to return to the Indian Ocean, Southeast Asia and the Caribbean, with substantial bleaching in the Caribbean extending to the latter half of 2016. The 2016 bleaching

expected to be bad, affecting different regions at different times, and NOAA appealed for ICRI members to submit bleaching observations to its coral watch program.

*Supporting document: Presentation “2014-16 Coral Bleaching Report & Outlook (including 2015-16 El Niño)”*

#### **2.4.5 A World without Reefs? Response to GCBE3**

Dr. Gregor Hodgson (Reef Check Foundation) highlighted the contributions of Dr Jeremy Jackson and Dr Clive Wilkinson, in pushing the coral reef agenda over the last few decades. He encouraged members to respond more aggressively to address changing reef conditions, particularly to encourage governments to invest more resources in addressing the issues. He highlighted the need to improving monitoring programs, so that they are more comprehensive.

The 3<sup>rd</sup> global coral bleaching event is occurring, and more effort needs to be committed to tracking management action, including looking in to genetic solutions to management. With predicted severe bleaching in 2016, Dr. Hodgson has been involved in efforts to lobby and push the coral reef agenda at COP21 in Paris.

Despite the current body of available information, there is still a lack of knowledge on the status of global reefs, although the general trend in decline is apparent. There is therefore a need to improve monitoring and track management actions, promote networking among monitoring units, and generate sustainable funding for long-term monitoring.

*Supporting document: Presentation “A World without Reefs? Response to GCBE3”*

#### **2.4.6 Local Protection and Governance**

Dr Jeremy Jackson (Scripps Institution of Oceanography, Smithsonian Institution and GCRMN), gave a brief overview of the conclusions arising from the 2004 GCRMN Caribbean report, which highlighted the need for strong local protection to help us buy time as we work towards finding concrete solutions.

Long-term data indicate that coral cover in the Caribbean has tapered since the massive die off in the 1970's, prompting the question that if local stressors have been the major drivers of coral decline up, then we should be able to predict geographic variability in coral cover based only socio-economic indicators as the ultimate drivers of local stress. To test this, a study was undertaken to score Caribbean locations with long-term data based upon standard metrics of governance, wealth, population density and effectiveness of fisheries regulations and conducted a Principal Components Analysis (PCA) of the locations based on these four factors.

The study showed the manner in which nations govern themselves, the population densities, and wealth are major determinants of reef health, and therefore, actions to reduce local stress should help to protect and/or restore degraded reefs.

*Supporting document: Presentation “Coral cover, local stress and global climate change”*

### **3. SESSION 3: Regional Initiatives and Global Development**

#### **3.1 UNEP Coral Reef Partnership/ Regional Seas**

Jerker Tamelander (UNEP) presented a brief overview of the global partnership that mobilizes 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.

UNEP supports the increased use of the ecosystem approaches to sustain ecosystem services, using coral reefs as a flagship and indicator system, and working through the network of global technical partners to develop and exchange approaches, tools and policy frameworks.

Focus has been on resilience, valuation of ecosystem services, data and information management for EBM and institutional support and outreach program.

*Supporting document: Presentation “UNEP Coral Reef Partnership / Regional Seas”*

#### **3.2 PERSGA**

PERSGA, the regional organization for the conservation of the environment of the Red Sea and Gulf of Aden, has progressed on its 1982 Regional Action Plan, with activities focusing assessment of coastal-marine environment, the development of guidelines for sustainable resource management, the promotion of the legal basis for cooperative efforts and supporting institutional mechanism. In 2005, the organization prepared the report “Protocol Concerning the Conservation of Biological Diversity and the Establishment of network of Protected Areas in the Red Sea and Gulf of Aden”, which focuses primarily on the conservation of the coral reefs along PERSGA region. Since then, eight MPAs, all containing coral reefs, have been declared, with another four proposed.

In 2011, an MoU for cooperation among port state control was established, followed by an MoU for cooperation in fisheries management & aquaculture in 2014-2015.

PERSGA has also initiated activities to facilitate the region to meet various Aichi targets, focussing on capacity building programs to mainstream biodiversity, promote sustainable fisheries, reduce invasive species, minimize reef loss and restore ecosystems, reduce pollution, and increase the network of MPAs.

*Supporting document: Presentation “PERSGA’s mission and regional initiatives in regard to conservation of Coral Reefs of the Red Sea & Gulf of Aden”*

#### **3.3 Global Development and Environmental Policy Landscape**

Jerker Tamelander (UNEP) noted that ICRI, GCRMN and her partners have a long history in measuring and using coral reef indicators, and recommended that the network consider promoting the use of reef related indicators in the SDG indicator framework, particularly under Goal 14, where current indicators focus more on governance than on state of the marine and coastal environment

With regards to UNEA, he suggested that ICRI members may consider providing inputs on coral reefs to UNEA-2 and in the development of resolutions. In addition, the ICRI GM may also consider providing information, guidance or recommendations in this regard to its membership.

*Supporting document: Presentation “2030 Development Agenda and the SDGs”*

#### **4. Wrap-up and Closing**

The co-chairs gave a brief recap on the sessions and closed the meeting for the day.

## **DAY 2**

### **5. SESSION 5: Technical Workshop on MPA Management**

Mr. Phongsuwan shared that the technical workshop on MPA management was proposed by the 2014-2015 Japan-Thailand ICRI Secretariat to facilitate sharing on case studies and lessons on MPA management among resource managers. In addition, the workshop introduced the application of Marine Spatial Planning (MSP) as a tool to facilitate marine and coastal management, including its role in MPA management.

He introduced the chair for the session, Dr Hugh Kirkman, who has an illustrious academic career before joining UNEP head COBSEA and manage GEF projects.

#### ***5.1 MPA Management and Marine Spatial Planning at Regional and Global Levels***

The opening presentation, given by the session chair, Dr. Hugh Kirkman, focused on marine spatial planning (MSP) and ecosystem-based management (EBM), which should not be confused with maritime spatial planning, which is the usual approach by governments to develop plans to better coordinate the various marine activities, ensuring they are as efficient and sustainable as possible. However, that framework is not comprehensive from an ecosystem perspective due to a lack of integrated governance linking human activities to environmental management that seldom included conservation of marine ecosystems. This is further exacerbated by the increase in coastal development around the world, which inadvertently leads to trade-offs between resource exploitation and ecosystem services. Examples from the oil and gas industries, installation of wind farms, marine pollution and industrial development along coastlines illustrate how such trade-offs, without the benefit of EBM integrated onto the spatial planning framework, have led to the demise of many coastal and marine ecosystems the world over.

Resources managers and the wider conservation community thus need to work to engage industrial stakeholders in EBM by learning and using the language of industry, using case studies to demonstrate how private sector engagement can be achieved, and by showing how EBM increases management efficiency and potential profitability.

One strategy to address this is to make collaborative governance and integrated management synonymous, which emphasized interactions among multiple biophysical and human drivers. This is the key principal underpinning MSP, which focuses on managing multiple use conflicts with the ecosystems they interact with directly or indirectly. The DPSIR (Drivers, Pressures, State, Impacts, Responses) model is a useful tool in MSP that can be adapted and applied for ecosystem management, assessment, indicator selection, and communication. There are many good examples of MSP in action, called as such or referred to by other terms, from the EU, East Asia and Southeast Asia, which illustrate how integrated approaches that includes EBM can benefit all stakeholders while maintaining ecosystem integrity. The goal is for a third of the total area of the EEZs of the world to have approved MSP frameworks by 2025.

*Supporting document: Presentation “Marine Spatial Planning and Ecosystem-Based Management”*

## **5.2 Effective Approaches for Governing Marine and Coastal Areas – A Case for Koh Tao**

Conflicting interests among users on the island of Koh Tao (KT) necessitated the development of new approaches to understand and address these issues, and Dr. Suvaluck Sathumanusphan, from Mahidol University, presented the basis of a study that looked into the system of governance in Koh Tao to identify the principles challenges for achieving the sustainable use of the island's marine and coastal resources.

One key outcome of the study was to acknowledge that governance is more than government; instead, it involves the “interaction of government and the governed”, and is effectively the sum total of influence over human exerted not only by the government, but also by diverse institutions that encompass political, economic, religious, social, media, education and other structures.

Natural resource governance is thus the interaction of the government and its citizens to make and implement decisions affecting natural resources and natural resource users, and should be based on the principals of accountability, participation, transparency, rule of law/predictability and access to justice. Governance should be adaptive with feedback loops that allow review and revisions to strength the process.

The Koh Tao study, which was based on a comprehensive legislative review and questionnaire surveys, showed that respondents prioritized public utility issues as a precursor of environmental decline. The study also highlighted a lack of integration and coordination, a limitation to information dissemination and communication and the uncertainty associated with public participation.

Moving forward, the study identified that for Koh Tao to achieve sustainable management of marine and coastal resources, ~~there needs to be~~ efforts need to enhance the knowledge of responsible organizations, improve the quality of the information and its dissemination, encourage more engaged of public participation, enforce equitable legislation and communicate openly and honestly particularly when addressing problems or complaints.

*Supporting document: Presentation “Effective approaches for governing marine and coastal areas - a case of Koh Tao”*

## **5.3 MPA Management in Thailand**

Dr. Anuwat Nateewathana from the Department of Marine and Coastal Resources, explained that Thailand has always prioritized marine and coastal ecosystem protection, although the decision to implement marine protected areas (MPAs) according to international guidelines was only concretized in 2004, after recognizing that MPAs are useful tools for achieving the conservation and sustainable use of the Kingdom's biodiversity. Thailand subsequently adopted the six IUCN categories for MPAs, which range in protection from strict nature reserves to more intensively managed resource areas.

Thailand's MPAs framework comprise three general categories; areas managed for sustainable use, which may allow extractive uses; areas where extractive uses are excluded and other significant

human pressures minimized (no-take), and general areas covering over the wider marine and coastal environment under a sustainable management framework.

To strengthen Thailand's marine and coastal ecosystem management, a National Advisory Board on Protected Areas (including MPAs) was established in 2011, and working with relevant government and non-government stakeholders, promulgated the Marine and Coastal Resources Management Promotion Act, which was enacted in June 2015, as a tool for establishment and management of MPAs in Thailand.

*Supporting document: Presentation "Marine Protected Areas Management in Thailand"*

*Questions from the floor:*

- *Dr. Abdul Rahim Gor Yaman (Malaysia) asked if the new act is available in English, and Mr. Phongsuwan clarified that the Act is currently being translated and will be made available on the DMCR website.*
- *Dr. Vo Si Tuan (Vietnam) asked how MSP addresses land-based sources of pollution, and if there was a difference with the ICM approach. Dr. Kirkman agreed that there are many similarities between MSP and ICM, and perhaps it is more a case of definition and semantic. Mr. Jerker Tamelander (UNEP) added that MSP should be viewed as a tool used for a planning, which is also a part of the ICM framework.*
- *Ms. Margaret Vakalalabure (Fiji) concurred with the second presentation that communication and inclusiveness are key in reaching out to local communities, as seen Fiji's experience as well, and time invested in engaging them will pay dividends in the long-run. In addition, she opined that the bottom-up approaches can be sometimes be more effective in realizing change in the long-run than traditional top-down approaches. Dr. Sathumanasphan added that approaches should be tailored to meet the unique social, ecological and political realities of each local area, and this will require time invested to understand the situation on the ground and build systems that reflect and build on them.*

#### **5.4 MPA Management – A Case Study from Koh Tao**

Following on from the earlier presentation by Dr. Satumanasphan, Dr. Sakanan Plathong, from the Prince of Songkla University, shared on the issues related to the management of Koh Tao (KT), particularly due to the intensive coastal development to meet the heavy tourism demands, resulting in multiple impacts that damaged vast coral reef areas.

The coral reef participatory management framework was used to identify issues and develop effective management interventions, which leveraged strongly on public participation in natural resources management, and this is communicated in the report "Strategic Plan: Integrated Marine and Coastal Resources Management of Koh Tao". In addition, MSP was used strengthen and streamline existing zoning and management plans.

The study identified several strengths and opportunities that allowed the development of an effective management strategy, particularly support afforded by local communities to promote natural resources conservation. However, the study also recognized limitation related to lack of

technical capacity and manpower among management agencies, sustainable financing, ineffective laws and regulations, and managing the ecological carrying capacity related to tourists numbers.

*Supporting document: Presentation “Management of Coral Reef of Koh Tao.”*

*Questions from the floor:*

- *Ms. Angelique Brathwaite (Barbados) asked if the government viewed the “community agreement” in a positive way, and Mr. Plathong explained that it took time to get support and required active engagement among all stakeholders.*
- *Mr. Nicolas Pascal (France) asked about the financial sustainability mechanism for KT, and Mr. Plathong clarified that funding is provided by the central government and is also supplement by local programs.*

### **5.5 MPA Management – A Case Study from Koh Chang**

Dr. Thamasak Yeemin, from the Ramkamhaeng University, presented the case study and lessons learned from Koh Chang (KC), which was selected a regional demonstration site for coral reef management under the UNEP-GEF project.

There was recognition that the coral reefs of KC, like many other recreational islands with heavy tourism impacts, suffered from sedimentation, unregulated diving and illegal fishing, which were further exacerbated by bleaching event and storms.

A causal chain study was undertaken to identify the root causes of impacts, focusing primarily on activities that increased public awareness and education; enhancing networking among agencies and stakeholders; assessed tourism carry capacity and installation of mooring buoys; increased capacity building; promoted sustainable livelihoods; and improved site management to support coral reef rehabilitation. Outcomes from the study was used to develop a sustainable ecotourism program for KC.

The project showed the benefits of effective collaboration between scientists, local communities and local government officials to integrate scientific data into policy and adaptation practices. In addition, as part of the reef rehabilitation program, the project found that artificial reef sites can be used to support ecotourism and serve as a living laboratories for students. Finally, the project acknowledged that capacity building, public awareness and education through disseminating printed materials and training courses, workshops and seminars for stakeholders, youth, students and local government officials can enhance resilience in coastal communities.

*Supporting document: Presentation “MPA Management – A Case Study from Koh Chang, a regional demonstration site for coral reef management”*

*Questions from the floor:*

- *Dr Mark Eakin (NOAA) asked if any citizen-science type programs have been implemented, e.g., reporting bleaching observations. Dr. Thamasak clarified that currently, only Marine*

*Park officers are involved in recording and reporting incidences, but agrees that a citizen science program will be beneficial and will suggest that the team look into its feasibility.*

- *Ms. Inge Yangesa (Indonesia) asked how illegal fishing is managed in KC to ensure that livelihoods are not affected while ensuring habitat protection. Dr. Thamasak explained that in KC, the main impact was related to gear type, which was addressed by providing the fishermen with alternative gear addressed by providing the fishermen with alternative gear and training on how to use them, all funded through the project and support from the central government.*
- *Dr. Clive Wilkinson (Australia) asked if the focus of the coral transplantation program had shifted from scientist-led rehabilitation to community participation-type programs, and if bleaching resistant corals are considered in the programs. Dr. Thamasak explained that both types of programs are implemented, and that efforts are now being focused on resilient species selection for transplantation following the demise of most of the transplants after the last bleaching event in 2010.*
- *Mr. Jerker Tamalander (UNEP) suggested that to manage diving impacts, the MP management can consider introducing the Green Fins program to the dive operators. Mr. Phongsuwan shared that training for the Green Fins and Reef Watch programs were conducted previously.*

## **5.6 MPA and Ecoregion in the Andaman Sea**

Dr. Petch Manoprawitr, Deputy of the IUCN Southeast Asia Group, presented on efforts to enhance ecosystem resilience through the development of MPA network and MSP in Thailand's Andaman Sea area.

The Andaman Sea hosts 17 national marine parks, 3 non-hunting areas and 1 biosphere reserve, and protects 62% of coral areas, 41% of seagrass beds and 20% of mangroves. However, the 2010 global bleaching event resulted in extensive coral mortality within many reefs area, but affected different areas differently. With rising sea surface temperatures (SSTs) expected to become the new normal, the question on how to manage reefs and increase resilience were raised, and efforts were made to analyze bleaching patterns across Andaman bioregion to identify resistant and fast recovery communities.

A project was initiated to develop resilience indicators and to develop an assessment index to evaluate the resilience potential of reef sites.

The objectives of the resilience assessment index are to guide management by aiding zoning planning, addressing land-based and vessel-based pollution and raising awareness and tourism outreach. The project identified the importance of systematic spatial planning to enhance ecosystem resilience, which should be representative of the area and replicable, include identified critical habitats, and the incorporation of other types of Marine Managed Areas into conservation planning. Understanding regional connectivity was also recognized as an important aspect of the resilience planning, and trans-boundary dialogue between Thailand and Myanmar is required to address the larger resilience question within the Andaman region.

The project identified gaps in knowledge that could be addressed in more detail through more specific projects, including connectivity assessment and the identification of source areas, understanding coral size classes, fish community structure and herbivory within reefs and management effectiveness of MPAs to address resilience.

In addition, current MPA systems should be complimented by development of community-based MPAs or Locally Managed Marine Areas (LMMAs) to enhance connectivity of coastal habitat, near-shore and offshore habitats between formal MPAs. This can lead to optimal MPA network design for Andaman sea area.

*Supporting document: Presentation “Building ecosystem resilience through the development of MPA network and Marine Spatial Planning in Thailand’s Andaman Sea”*

### **5.7 Communities of Sea Gypsies in Relation to Marine and Coastal Management**

Dr. Narumon Arunotai from Chulalongkorn University presented the social science aspect of marine and coastal management. Dr. Arunotai promotes the incorporation of socio-science in the creation of marine protecting areas, which tend to be ecosystems-focused. There is a need to couple the protection of coral reefs and related ecosystems with the protection of the people who traditionally used and often times “wisely”, and in effect, protected them. The Moken or sea gypsies have lived and depended on the resources within the Andaman Sea for centuries and have always lived as independent and free-moving communities.

To strengthen marine and coastal management in Thailand and the region, programs need to be more inclusive. There is a need to reconsider or expand the meaning of “protection” so that it is not prohibition-focused, but instead should be opened up to wider participation and acceptance, enabling local communities to develop areas and forms of protection through social means and based on cultural strengths. This can be achieved by moving away from a top-down designation or establishment of MPAs towards a bottom-up and participatory approach that is process instead of goal oriented.

*Supporting document: Presentation “Sea of hope: connecting local fishing communities with MPAs”*

*Questions from the floor:*

- *Dr Greg Hodgson (USA) suggested that the use of LMMA and MMA can be used regionally instead of MPA.*

### **5.8 Case Study on MPA Management from Cambodia**

Mr. Kim Sokha, the head of Marine Fisheries Conservation Division of the Fisheries Administration, Cambodia, shared on Cambodia’s journey in establishing Cambodia’s first MPA in Koh Rong, covering 40,000ha and includes three community fisheries areas.

The MPA was established in collaboration with FFI, Song Saa Foundation and funded by various countries and agencies, with the aim meet Cambodia's 10-year strategic target, as well as encourage sustainable management of the resources within the area. The project adopted a strong participatory approach, engaging local communities at the early stages of the process to get their support and buy-in. This was complemented by social and ecological surveys to provide the necessary data and information to guide the formulation of the management plan.

Moving forward, long-term habitat monitoring and evaluation programs are being implemented in collaboration with FFI and other stakeholders.

*Supporting document: Presentation "Establishing Cambodia's First MPA - the Story So Far"*

*Questions from the floor:*

- *Dr. Hugh Kirkman (Australia) enquired if the area is an MPA or Fisheries Management Area, and Mr. Sokha explained that based on international terminology, the area is considered as a MPA but is called by a different name under Cambodian law, although the objectives are similar.*
- *Mr. Kee Alfian asked if the planned monitoring program includes other associated ecosystems, and Ms. West explained that the program will include seagrass areas.*

### **5.9 Case Study on MPA Management from Cuba**

Ms. Aylem Hernandez Avila and Ms. Julieta Gonzalez Mendez from the National Center of Protected Areas of Cuba, presented on the main management and planning results from Cuba's experience in managing MPAs.

They shared that the archipelago and the insular shelf of Cuba covers an area of 110,922 km<sup>2</sup>, with 360,000 km<sup>2</sup> of territorial waters. Numerous legal instruments provide the legal framework for *In situ* conservation and management of Cuba's National System of Protected Areas (SNAP), which is coordinated at three different levels, and takes guidance from the National System Plan. Under SNAP, 211 Protected Areas have been identified, of which 104 are MPAs covering an area of 3,304,276.88 hectares, and accounting for over 91% of the total protected areas coverage.

In addition, Cuba has initiated a program on implementing a regional approach to the management of marine and coastal archipelagos in protected areas south of Cuba, with the aim to conserve marine biodiversity and promote sustainably used through an extended, strengthened and integrated network of coastal and marine protected areas in the Southern Archipelagos region. The program core activities include a focus on environmental education, communication and participation; studies on economic valuation of ecosystem services and human welfare within MPAs; sustainable fisheries and tourism within MPAs; administrative strengthening of MPAs; implementation of biodiversity monitoring systems; the control of alien invasive species; and the establishment of nurseries for coral reef restoration within the MPAs.

*Supporting document: Presentation "Marine Protected Areas in Cuba: Main management and planning results"*

### **DAY 03**

#### ***Field Trip***

ICRI delegates had the opportunity to participate in a field trip, and had a choice of diving at two reef areas within or a visit to the Burapha University aquarium and marine laboratory followed by a trip to the floating market.

Option 1: Diving at Koh Pai and shipwreck site

Option 2: Burapha University aquarium and marine laboratory / floating market

## **DAY 04**

### **6. SESSION 6: Meeting Outcomes**

Ms. Makiko Yanagiya and Mr. Niphon Phongsuwan co-chaired Session 6 of the meeting.

#### **6.1 Report back from Ad hoc Committees**

##### **6.1.1 Regional lionfish committee**

On behalf of the regional lionfish committee, Mr. Francis Staub informed that the committee recommended the extension of its ToR for another year to 2016. The committee also proposed to expand the focus of its activities to include general invasive species.

Mr. Dave Gulko supported the proposal, and agreed that it is timely for the committee to expansion the scope of its activities.

As there were no objection by members to the recommended extension of the committee's ToR till 2016, Ms. Yanagiya confirmed the extension, and requested the committee submit the revised ToR to reflect the agreed extension and expansion in the scope of activities.

##### **6.1.2 Enforcement and investigation**

Mr. Dave Gulko, lead for the enforcement and investigation committee, shared that 10 members have asked to trial the ICRI Coral Ecological Characterization Tool, and have provided feedback on additional features they would like to see incorporated into the tool, including a section on decision pathways and results interpretation.

#### **6.2 Miscellaneous business**

##### **6.2.1 Report back from GCRMN side meeting**

Mr. Jerker Tamelander (UNEP) shared the outcomes of the side meeting of the GCRMN that was well attended by representatives from various countries and organizations.

The meeting reaffirmed that the decisions and recommendations from GM 29 provide a set of principles that should guide GCRMN activities and further development, and based on that, a number of additional recommendations were proposed.

There was consensus that ICRI continue to develop and strengthen the GCRMN to ensure that her key objective of preparing periodic regional assessments can be maintained. GCRMN should aim to be the go-to source for coral reef information for multiple users, using scientifically rigorous and inclusive regional and global reporting process, as a means to achieve this.

In summary, the meeting recommended the following activities:

- The current and incoming ICRI Secretariats continue the discuss coordination mechanisms of the GCRMN, with a view to strengthen ownership of the network;

- Develop a draft ToR for the global coordinator, including role in preparation of regional and global reports (recognizing changed requirements as a result of significant progress made in the regional work of GCRMN), and identify possible funding mechanisms;
- Develop list of regional contacts for GCRMN;
- Identification of gaps and opportunities in terms of regional reporting;
- Encourage GCRMN community to participate in ICRS session (session number from JJ);
- Hold a meeting at ICRS for GCRMN representatives from regions attending ICRS, on the sidelines of the symposium.

*Supporting document: Presentation “GCRMN Pattaya minutes”*

Discussion:

- Dr. Hugh Kirkman suggested the inclusion of metadata in the data collection process, and Mr. Tamelander clarified that the recommended process of data collation already captures the collection of metadata.
- Dr. Clive Wilkinson shared that utility of ReefBase as the main database and repository of coral reef related information has become diluted, and commended NOAA for offering to take over the role for collating information and data on coral bleaching.
- Dr. Gregor Hodgson highlighted the need to continually seek sustainable funding to keep the network going, and offered Reef Check as a possible repository for any variety of coral reef datasets in its revised Google Earth database, as well as a place to host the GCRMN Global Coordinator;
- Dr. Margaret Johnson suggested that the discussion be continued in the cloud, and was seconded by Mr. Jerker Tamelander. Dr. Hodgson counter-suggested that a definitive team be formalized with an identified lead before the end of GM30;
- Dr. Wilkinson reminded the meeting that ICRI had previously established a management group specifically tasked to direct and guide the GCRMN, and perhaps the current Secretariat can consider appointing a new management group;
- The Secretariat added that it will take all suggestions and communicate it to members in the coming weeks.

### **6.2.2 South Asia Coral Task Force**

Dr. Monammad Khurshid (Sri Lanka) shared on activities under the South Asia Corporate Environment Program (SACEP), an inter-governmental organization of eight member states (Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka) established in 1982 with the decision body of the governing council comprising of Ministers.

The overall objective of the SACEP is to protect and manage the marine environment and related coastal ecosystems of the region in an environmentally sound and sustainable manner, and this is realized through the SACEP Action Plan that prioritizes activities on integrated coastal zone management (ICZM), oil-spill contingency planning, human resource development and environmental effects of land-based activities.

As part of SACEP’s initiative to safeguard critical coral reef ecosystems, the South Asia Coral Reef Task Force (SACRTF) was established to actively participate and support the effective implementation of existing national regulations, action plans and strategies for the management of coral reefs and associated ecosystems; and to promote the development of the strategic linkages

for enhanced regional cooperation and the establishment of an effective networked system of marine and coastal protected areas in the South Asian Region. The SACRTF comprises two government representatives, one coral reef expert, and one administrative representative from each country, together with international NGO or agencies (e.g. UNEP) representatives.

The Task Forces is currently focusing on improving the effectiveness of management of existing Marine Protected Areas (MPAs), improving information exchange and data management across the region, enhancing regional cooperation and responses to regional marine and coastal resources management challenges, capacity building and implementing viable livelihood diversification for local communities. To date, the Task Force has developed a regional strategy for coral reef management in South Asia, and is willing to be part of the “Global Coral Reef Partnership : Towards an Ecosystem Approach to Coral Reef Management” initiative.

*Supporting document: Presentation “South Asia Coral Reef Task Force”*

## **7. The Future**

### **7.1 Coming Events**

#### **7.1.1 UNEA2**

Mr. Jerker Tamelander reemphasized that ICRI can consider raising relevant issues at the upcoming UNEA2 meeting, and offered UNEP’s assistance to identify key recommendation and to draft the appropriate wording if ICRI so chooses.

#### **7.1.2 ICRS**

Mr. Tamelander reiterated the earlier call by Dr. Jeremy Jackson for members to consider submitting abstracts to the GCRMN session at ICRS 2016 in Hawaii.

Mr. Dave Gulko enquired if ICRI members would like to convene a meeting before the start of ICRS, and offered to host a room at a state government facility or assist to enquire from the symposia organizers if a room at the venue can be made available. Dr. Greg Hodgson supported the proposal, and added that ICRI should make greater effort to engage past members to rejoin while continuing to attract more members.

#### **IUCN WCC**

Mr. Tamelander highlighted that several sessions covering coral reef issues have been identified at the next WCC and recommends ICRI involvement to raise the profile of coral reefs at the congress. NOAA offered to host an ICRI event at the US pavilion.

Dr. Greg Hodgson suggested that ICRI proceed with coordinating a meeting following endorsement by the Secretariat, and the current Japan-Thailand Secretariat offered to coordinate the meeting and finalize details over email. Mr. Tadashi Kimura suggested a side group be formed to discuss this and to prepare a proposal to the Secretariat. As no members objected to an ICRI side meeting at the WCC, the Secretariat asked Mr. Gulko to lead the working group who will formulate the agenda for the meeting. The following individuals and organizations offered to serve on the WG:

Mr. Dave Gulko (Lead)

Dr. Britt Parker (NOAA)

Mr. Jerker Tamelander (UNEP)

Mr. Francis Staub (ICRIForum)

Dr. Margaret Johnson (GBRMPA)

Dr. Ben Palmer (GBRMPA)

Dr. Greg Hodgson (Reef Check)

Dr. Kee Alfian (Reef Check)

Mr. Niphon Phongsuwan (ICRI Secretariat)

Ms. Makiko Yanagiya (ICRI Secretariat)

The current secretariat will consult the incoming secretariat with regards to the meeting.

### **7.1.3 ITMEMS 5**

ITMEMS 5 will be held from 25 to 28 February 2016 in Bohol, Philippines, and the updated information on the symposium has been uploaded on ICRIForum. The partners for the symposium include the governments of Japan and Philippines, UNEP and the Reef-World Foundation. Currently, six sessions have been confirmed, and the draft program, including a 4-day training program for site managers, has been prepared.

### **7.2 Summary of Japan-Thailand Secretariat activities**

Mr. Tasashi Kimura, presented a summary of the activities of the Japan-Thailand Secretariat for 2015-2016. The activities were based on the plan of action 2014-2016 that was presented at GM28.

Two general meetings were convened, and two technical workshops were held in conjunction with in 2015the GMs. In addition, the Secretariat also prepared a 20-year review of ICRI to revisit ICRI's place among multilateral environmental agreements and other international bodies and initiatives.

To maintain and enhance ICRI's visibility in international fora, a side event was held at the CBD COP12 and World Parks Congress in 2014, RAMSAR COP 12, as well as updates on ICRI Forum.

The Secretariat has continued its active engagement with the GCRMN, and supported the work of the current and new *ad hoc* committees. In addition, the Secretariat has also continued supporting activities within the East Asian node.

### **7.3 Presentation of incoming secretariat**

Mr. Sylvian Fourrier from the French Embassy, confirmed France's candidacy in taking over the next ICRI secretariat, which reinforces France's commitment to coral reef conservation, and is aligned

with the continued support of IFRECOR. Currently, the co-secretariat country has not been confirmed.

The ICRI Secretariat will secure member's comments and post the decision on ICRI Forum.

#### **7.4 Closing remarks**

Ms. Yanagiya thanked members for their active participation during the Japan-Thailand ICRI Secretariat term, and highlighted the aim to make a more relevant and operational organization by organizing activities that benefit stakeholders.

Mr. Phongsuwan shared that Thailand benefited greatly from her involvement in ICRI and the secretariat, and thanked everyone, particular, the ICRI GM30 organization committee for the support.

In closing, the co-chairs thanked everyone and looked forward to a continued partnership.

On behalf of all ICRI members, Mr. Jerker Tamelander thanked the Japan-Thailand Secretariat for their leadership during their current Secretariat term. Dr. Clive Wilkinson seconded, and suggested that ICRI form a "Reef Scientists sans Frontier" and to leverage on the existing expertise of retired "grey beards" like himself, Dr. Charles Birkland and Dr. Bernard Salvat who are still active and willing to contribute their time and expertise. He also thanked the US state government, through NOAA, for the continued support to ICRI.

Appendices:

Appendix 1    Agenda

Appendix 2    List of Participants

Appendix 3    GCRMN minutes