



CORAL TRIANGLE INITIATIVE

ON CORAL REEFS, FISHERIES AND FOOD SECURITY

Activity Report: Regional Exchange on Designing and Supporting National and Regional MPA Systems in the Coral Triangle

Sanur, Indonesia March 26-30, 2012



USAID | **ASIA**
FROM THE AMERICAN PEOPLE



CORAL TRIANGLE CENTER



Activity Report: Regional Exchange on Designing and Supporting National and Regional MPA Systems in the Coral Triangle

Sanur, Indonesia March 26-30, 2012

**Prepared for the US Agency for International Development
By Tetra Tech ARD, Inc. under Contract No. EPP-I-00-06-00008-00**

US CTI Support Program Document No. 06A-USCTI-I2

DISCLAIMER

The views expressed in this document do not necessarily reflect the views of the United States Agency for International Development or the United States Government

Cover Photo: Balicasag Fish Sanctuary Credit: AP Maypa

CONTENTS

CONTENTS	1
ACRONYMS	4
EXECUTIVE SUMMARY	7
I.INTRODUCTION	11
II.SESSION PROCEEDINGS	14
DAY 1, 26 MARCH 2012	14
Session 1.1. Opening, Workshop Overview and Introductions	14
Session 1.2a. Context and Summary of Status of MPA Networks/Systems in the Coral Triangle	18
Presentation: Global context of MPA networks/systems	18
Presentation: Overview of MPAs and networks/systems in the Coral Triangle and scoping report on technical assistance required to improve MPA networks and move toward CTMPAS.....	22
Overview of MPAs and networks/systems in the Coral Triangle.....	22
Scoping report	24
Session 1.2b. Review of REXI outputs	26
Session 1.3-1.4. Country Status Reports on System/Network Development and Forum	29
Philippines	29
Timor-Leste	32
Solomon Islands	34
Malaysia.....	36
Indonesia	40
Session 1.5. Overview of MPA Network Frameworks	43
Session 1.6. Successes and Challenges in Networks/Systems in the Coral Triangle with Implications for CTMPAS	47
Group 3	47
Group 2	48
Group 1	49
DAY2, 27 MARCH 2012	52
Session 2.1. Review of Day 1 and Overview of Day 2	52
Session 2.2. Defining Ecological and Science-based Guidance into MPA Networks	52
Integrating fisheries, biodiversity and climate change objectives into resilient MPA network design in the Coral Triangle.....	52
Presentation – Dr. Alison Green (TNC)	52
Discussion.....	53
Overview on FAO Technical Guidelines for Responsible Fisheries: MPAs and Fisheries	55
Presentation -- Dr. Rudolf Hermes (FAO)	55
Discussion.....	56
Session 2.3. Tools (Part 1) Ways of Integrating Themes in CTMPAS	58
USCTI CCA Toolkit.....	58
Presentation – Mr. Scott Atkinson (CI).....	58
Discussion.....	59
Integrating marine and coastal management approaches in the Coral Triangle.....	60
Presentation – Mr. Scott Atkinson (CI).....	60
Discussion.....	61
Report-out.....	62
Session 2.4. Tools (Part 2): Role of CT Atlas in CTMPAS	63
Coral Triangle Atlas.....	63

Presentation – Mr. Nate Peterson (TNC).....	63
Discussion.....	65
Session 2.5. Tools (Part 3): Role of MPA Learning Network in CTMPAS	69
Role of MPA learning network in CTMPAS.....	69
Presentation – Rili Djohani (CTC).....	69
Discussion.....	71
Session 2.6. CTMPAS Framework #1: Principles, Objectives and Benefits for CTMPAS (Regional and National Systems).....	73
General participant comments and recommendations.....	73
Session 2.7. Briefing for Day 3 Field Trip.....	75
DAY3, 28 MARCH 2012	77
Session 3.1. Case Study: Local MPA Network.....	77
Session 3.2. Overview of Day 3.....	77
Session 3.3. Case Study: Sub-National MPA Networks (Bali MPA)	77
A Network of Marine Protected Areas in Bali -- Putu Liza Kusuma Mustika, Tiene Gunawan, I Made Jaya Ratha (CI).....	77
Presentation – Ms Mustika.....	77
Discussion.....	80
Session 3.4a. CTMPAS Framework #1: Review of Principles, Objectives and Benefits for CTMPAS (Regional and National Systems)	82
Report out	82
Indonesia.....	82
Timor-Leste.....	82
Solomon Islands.....	83
Philippines.....	83
Malaysia.....	83
Discussion.....	83
Session 3.4b. CTMPAS Framework #2: Priorities, Criteria (Ecological, Social, Governance) and Categories of MPAs for CTMPAS for CTMPAS (and National Systems).....	85
DAY4, 29 MARCH 2012	87
Session 4.1 Review of Day 3 and Overview of Day 4	87
Outputs from Session 3.4 breakout discussions: Selection criteria for CTMPAS	88
Governance criteria.....	88
Social criteria.....	89
Ecological criteria	90
General comments.....	91
Session 4.2. National Biodiversity Assessment, Gap Analysis and Criteria Used in Indonesia 	92
Presentation: Defining geographic priorities for marine biodiversity conservation in Indonesia – Tiene Gunawan, Mark Erdmann and Crissy Huffard	92
Session 4.3. CTMPAS Framework #4: Building the CTMPAS (or National) System.....	94
Report-out and discussion.....	95
Strategic approach.....	95
Building and Defining CTMPAS.....	95
Implementing CTMPAS.....	96
Discussion.....	97
Session 4.4. CTMPAS Framework #5: Defining Management/ Coordination of Implementation	97
Group 1: Institutional home of CTMPAS coordination	98
Group report.....	98
Participant comments.....	98
Group 2: Role of TWG and scientific advisory group in the CTMPAS	99
Group report.....	99
Participant comments.....	99
Group 3: Data sharing system (CT Atlas) home and support	100
Group report.....	100
Participant comments.....	101
Session 4.5. CTMPAS Framework #6: Regional Action Plan.....	102

Session 4.6. MPA Learning Network: Review and Discussion	102
CTC as resource organization for CTI MPA Learning Network and CTMPAS	102
Presentation – Rili Djohani (CTC).....	102
Small group discussion results.....	104
DAY5, 30 MARCH 2012	106
Session 5.1. Overview of Day 5	106
Session 5.2. CTMPAS #7: Finalize Action Plans	106
Group 1: Strategic Planning.....	106
Group report.....	106
Participant comments	107
Group 2: Defining and Building CTMPAS.....	107
Group report.....	107
Participant comments	107
Group 3: Implementing/Operating CTMPAS	108
Group report.....	108
Session 5.3. Finalize Priority Actions for MPA TWG Lead	109
Group 1. Strategic Planning: Institutional structure for coordination of the TWG	109
Group 2. Defining and Building CTMPAS.....	110
Group 3. Implementing/Operating CTMPAS	111
Discussion	112
Session 5.4. Draft TOR for MPA REX4: Management Effectiveness in Early 2013	112
Results of MPA REX2 on MPA management effectiveness and Development of TOR for MPA REX4....	112
Presentation – Dr. Alan White (TNC/CTSP)	112
Discussion: Country progress reports and topic ideas for REX4.....	113
Wrap up and Closing	117
ANNEXES	118
A1. Agenda (as published, does not reflect changes during actual workshop)	118
A2: List of Participants and Resource Persons	124
A3. MPA Regional Exchange Partners.....	128
A4: Participants Breakdown by Gender and Organization	130
A5: List of Presentations and Other Workshop Materials	131
A6: Minutes of the 1 st Formal MPA TWG Meeting.....	133
A7: Minutes of the 2 nd MPA TWG Meeting.....	134
A8: Draft Outline (version 0) for CTMPAS Framework	139
A9: Worksheet I.I. Identifying underlying principles and objectives used in the design of national mpa networks (with country inputs)	140
A10: Index to Compilation of Sample MPA Network Frameworks.....	141
A11: Integration Checklist.....	142
A12: CTMPAS Design Principles and Objectives (Consolidated Edited Output from Session 2.6)	144
A13: Revised Draft Outline for CTMPAS Framework.....	145
A14: Proposed Selection Criteria for CTMPAS from Session 3.4 (Annotated).....	149
Governance criteria	149
Social criteria.....	150
Ecological criteria	151
General comments.....	152
A15: Draft List of Actions and Activities for CTMPAS.....	153
Strategic Planning	153
Define & Build.....	154
Implementation / M&E	155
A16: Draft Terms of Reference of the CTI MPA TWG.....	156
A17: Participants Evaluation.....	161

ACRONYMS

ACB	ASEAN Centre for Biodiversity
ADB	Asian Development Bank
ASEAN	Association of Southeast Asian Nations
ATSEF	Arafura-Timor Seas Expert Forum
BOBLME	Bay of Bengal Large Marine Ecosystem
BSSE	Bismarck Solomon Seas Ecoregion
CAKE	Climate Adaptation Knowledge Exchange
CBD	Convention on Biological Biodiversity
CCA	Climate change adaptation
CCRF	Code of Conduct for Responsible Fisheries
CI	Conservation International
COFI	Committee on Fisheries (FAO)
COREMAP	Coral Reef Rehabilitation and Management Program
CT	Coral Triangle
CT6	CT Countries (Indonesia, Malaysia, Philippines, Papua New Guinea, Solomon Islands, and Timor-Leste)
CTC	Coral Triangle Center
CTI-CFF	Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security
CTMPAS	Coral Triangle Marine Protected Area System
CTSP	Coral Triangle Support Partnership (USAID/Asia)
DENR	Department of Environment and Natural Resources (Philippines)
EAF	ecosystem approach to fisheries
EAFM	ecosystem approach to fisheries management
EBM	ecosystem-based management
EcoGov	Philippine Environmental Governance Project
EEZ	Exclusive Economic Zone
EO	executive order (Philippines)
FAO	Food and Agriculture Organization
FSM	Federated States of Micronesia
GEF	Global Environment Facility
GIS	Global Information System
HELCOM	Helsinki Commission (Full name: The Baltic Marine Environment Protection Commission)
HLFR	High-Level Financial Roundtable
ICM	Integrated coastal management
ICRI	International Coral Reef Initiative
ICRS	International Coral Reef Symposium
IEC	Information, education, and communication
IUCN	International Union for the Conservation of Nature
IUU	illegal, unreported and unregulated (fishing)
IWLearn	International Waters Learning Exchange and Resource Network (GEF)

JCU	James Cook University
KKI	Komunitas Konservasi Indonesia (Indonesian Conservation Community)
KKP	Kementerian Kelautan dan Perikanan (Ministry of Marine Affairs and Fisheries, Indonesia or MMAF)
km	kilometre
LEAP	Local Early Action Plan (for Climate Change Adaptation)
LGU	Local government unit
LIPI	Lembaga Ilmu Pengetahuan Indonesia (Indonesia Institute of Science)
LMMA	Locally Managed Marine Area
LMP	League of Municipalities of the Philippines
LN	Learning Network
LPAN	Lauru Protected Area Network (Solomon Islands)
M&E	Monitoring and evaluation
MEAT	Management Effectiveness Assessment Tool
MEDNet	Marine Protected Area Proposal for the Mediterranean Sea
MedPAN	The Network of Managers of Marine Protected Areas in the Mediterranean
MEOW	Marine Ecoregions of the World
MEP	management effectiveness planning (Timor-Leste)
METT	Management Effectiveness Tracking Tool (WB/WWF Alliance, Philippines)
MM	Ministerial Meeting
MMAF	Ministry of Marine Affairs and Fisheries (Indonesia)
MOA	memorandum of agreement
MOF	Ministry of Forestry (Indonesia)
MOSTI	Ministry of Science, Technology and Innovation (Malaysia)
MOU	memorandum of understanding
MPA	marine protected area
MPAME	MPA management effectiveness
MSN	MPA Support Network (Philippines)
MSY	maximum sustainable yield
NAPA	National Adaptation Programmes of Action
NCC	National CTI Coordinating Committee
NGA	national government agency
NGO	non-governmental organization
NKSNP	Nino Konis Santana National Park (Timor-Leste)
NOAA	National Oceanic and Atmospheric Organization (USA)
NORAD	Norwegian Agency for Development Cooperation
NPOA	National Plan of Action
NRC	NOAA Research Council
NTA	no-take areas
OSPAR	Convention for the Protection of the Marine Environment of the North-East Atlantic (Oslo-Paris Convention)
PAMB	Protected Area Management Board
PAWB	Protected Areas and Wildlife Bureau (Philippines)
PEMSEA	Partnerships in Environmental Management for the Seas of East Asia

PENRO	Provincial Environment and Natural Resource Office (Philippines)
PERSGA	The Regional Organization for the Conservation of the Environment of the Red Sea and Gulf of Aden (formerly Programme for the Environment of the Red Sea and Gulf of Aden)
PhilReefs	Philippine Coral Reefs Information Network
PHPA	(Direktorat Jenderal) Perlindungan Hutan dan Pelestarian Alam (Directorate-General of Forest Protection and Nature Conservation, Ministry of Forestry, Indonesia)
PI	Program Integrator (for USAID/Asia US CTI Support Program)
PNG	Papua New Guinea
PO	people's organization
PPP	public-private partnerships
Ramsar	Ramsar Convention on Wetlands
REAP	Regional Early Action Plan (on Climate Change Adaptation in the CTI-CFF)
REX	regional exchange (USCTI)
RPOA	Regional Plan of Action
SCTR	State of the Coral Triangle Report (CTI)
SIDA	Sweden International Development Cooperation Agency
SILMMA	Solomon Islands Locally Management Marine Area
SMART	specific, measurable, achievable, realistic, timely (objectives)
SOM	Senior Officials' Meeting
SPSTI	Samahang Pangkaunlaran ng San Teodoro, Inc. (Batangas, Philippines)
SSME	Sulu-Sulawesi Marine Ecoregion
TMP	Tun Mustapha Park, Malaysia
TNC	The Nature Conservancy
TOR	terms of reference
TWG	technical working group
UN	United Nations
UNEP	United Nations Environment Programme
UPMSI	University of the Philippines Marine Science Institute
UQ	University of Queensland, Australia
URI	University of Rhode Island, USA
US CTI	United States Support to the Coral Triangle Initiative
USAID	United States Agency for International Development
USG	United States Government
VA	vulnerability assessment
VA-LEAP	Vulnerability Assessment-Local Early Action Plan
VIP	Verde Island Passage (Philippines)
WB	World Bank
WCMC	World Conservation Monitoring Centre
WCPA	World Commission on Protected Areas
WCS	Wildlife Conservation Society
WDPA	World Database on Protected Areas
WFC	World Fish Centre
WPP	Wilayah Pengelolaan Perikanan (Indonesian: Regional Fisheries Management)
WWF	World Wildlife Fund for Nature

EXECUTIVE SUMMARY

BACKGROUND

The Coral Triangle Initiative for Coral Reefs, Fisheries and Food Security (CTI-CFF) successfully concluded on 30 March 2012 the *Regional Exchange on Designing and Supporting National and Regional Marine Protected Area (MPA) Systems in the Coral Triangle*. The event was held to address Goal 3 (MPAs established and effectively managed) of the CTI-CFF Regional Plan of Action (RPOA) and, specifically, to initiate the process of developing a framework for a Coral Triangle MPA System (CTMPAS). The CTI countries and partners identified this as a priority activity to support the development of a regional MPA system that contributes to the following action items under Goal 3 of the CTI-CFF RPOA:

- Action 1 (Jointly establish overall goals, objectives, principle, and operational design elements for a Coral Triangle MPA System [CTMPAS] centered around priority MPA networks) and
- Action 3 (Build capacity for effective management of the CTMPAS).

The RPOA defines CTMPAS as “composed of prioritized individual MPAs and networks of MPAs that are connected, resilient, and sustainably financed, and designed in ways that (i) generate significant income, livelihoods, and food security benefits for coastal communities; and (ii) conserve the region’s rich biological diversity.” CTI-CFF member countries include Indonesia, Malaysia, Papua New Guinea (PNG), the Philippines, Solomon Islands and Timor Leste, which are often collectively called the CT6.

Held in Sanur, Indonesia on from 26-30 March 2012, the four-and-a-half-day event was hosted by the Government of Indonesia through its CTI-CFF National Coordinating Committee (NCC) and the Coral Triangle Center (CTC), with assistance from the US CTI Support Program (USCTI) and the CTI-CFF Regional Secretariat. It was the third MPA regional exchange organized so far under CTI-CFF, the second regional exchange to focus on MPA network and system design, and the first to substantively deal with the development of CTMPAS. It consisted of workshops and expert and case study presentations, and included a visit to a local MPA network. A total of 53 participants, including 14 official delegates from five of the CT6, attended (PNG did not send a delegation).

The first MPA regional exchange that tackled MPA network / system design and operations was held in Phuket, Thailand, in June 2010. That activity produced the following results:

- 1) A collective review of the current principles, objectives, models and regional case studies of MPA networks;
- 2) The practical application of common network principles through the initiation of parallel designs of national MPA network pilot sites in each country;
- 3) The drafting of priority objectives for a CTI Regional MPA System that could eventually be managed cooperatively by the CT countries; and
- 4) The identification of next steps toward collective efforts on MPAs and MPA networks.

OBJECTIVES

At this Sanur regional exchange, the CT6, along with their partners and experts, defined the objectives and initial structure for the CTMPAS, and set in motion the process of developing the CTMPAS framework. The specific objectives were:

- 1) Share experiences and understand the status and context of progress on MPA networks/systems in each of the CT6.
- 2) Share the latest technical and scientific guidance on MPA network design and implementation and discuss strategies to apply this new information in CTMPAS.

- 3) Review the regional context, including the contribution of CTMPAS to the region and countries, and refine the benefits and objectives for CTMPAS.
- 4) Develop a CTMPAS Framework (goal, objectives, strategies and actions)
- 5) Develop a Roadmap to operationalize the framework and other recommendations to the MPA TWG.
- 6) Conduct MPA Learning Network activities (site visit, dialog)
- 7) Conduct an MPA Technical Working Group (MPA TWG) meeting with associated outputs including recommendations to the Senior Officials Meeting (SOM) and draft terms of reference (TOR) for the 4th Regional MPA Activity on MPA Management Effectiveness (MPAME) to be conducted in late 2012. This was the second formal meeting of the CTI-CFF MPA TWG since its inception at the 7th CTI-CFF Senior Officials Meeting (SOM7) and 3rd Ministerial Meeting in the last quarter of 2011.

RESULTS

Target results

The following results were expected and achieved:

1) **Country status reports on MPA network/system development**

- *Indonesia* – Indonesia has about 15 million hectares of MPAs including a number that form part of various networks, such as, the Coral Reef Rehabilitation and Management Program (COREMAP), Raja Ampat MPA network, Bird's Head MPA Network (Seascape), and a number of proposed networks.
- *Malaysia* – Most marine parks in peninsular Malaysia are being managed by the federal government (the Department of Marine Parks) and some are under the state government (state-level MPAs), including Sarawak and Sabah states. In Sabah, the state parks are managed by Sabah Parks, which is now developing the 1.028 million ha Tun Mustapha Park (TMP) according to a zoning scheme based on a mixture of social and biophysical principles.
- *Philippines* -- There are about 40 subnational MPA networks or alliances in the Philippines. Together they involve some 270 coastal cities and municipalities and 484 existing MPAs covering approximately 815km². The networks vary in size (number of member MPAs and coverage area), governance arrangements and objectives. Only 24 percent are active (i.e., meeting regularly).
- *Solomon Islands* – The Solomon Islands has about 92 Locally Managed Marine Areas (LMMAs) along the central coast down to the western side of the country, but the area of coverage is not fully documented. These LMMAs are all community-based and coordinated at the national level by the Solomon Islands Locally Managed Marine Areas (SILMMA). In some areas, there are MPA networks at the provincial level, and in a few cases, networking also happens at the community level.
- *Timor-Leste* – There is an ongoing process to start small MPAs in three areas, namely the Nino Konis Santana National Park (NKSNP), which was declared in August 2007, Batugade and Atauro. Seven MPA sites have been identified in the NKSNP.
- *Indonesia, Malaysia and the Philippines* are also involved in the Sulu-Sulawesi Marine Ecoregion (SSME), an ecological and management network. There are still no functional mechanisms to connect the management units across the three countries.

2) **Draft Outline for the CTMPAS Framework and Action Plan** with key substantive components to define, build and operate the CT MPA System (**Annex 13**), including:

- *CTMPAS design principles and objectives* (**Annex 12**)
- *Proposed selection criteria for CTMPAS* (**Annex 14**)

- 3) **Proposed Priority Actions / Draft Work plan for 2012-2013** to complete the framework and begin implementation of the CTMPAS (**Annex 15**). Key next steps include:
- *April 2012* -- Complete CTMPAS Workshop Report and socialize the status of the CTMPAS during regional events; Develop monitoring and tracking indicators
 - *May 2012* – MPA TWG approves 1 year Work Plan, and the Writing Team begins full draft of CTMPAS Framework and Action Plan
 - *July 2012* – Draft CTMPAS Framework and Action Plan are presented and shared at the International Coral Reef Symposium for early comments and information gaps
 - *July/Aug 2012* – CTMPAS Writing Team meets to revise Draft Framework and Action Plan using inputs from CT6 and the ICRS Symposium
 - *Oct/Nov 2012* – Establish the CTMPA operational home institution (with the Regional Secretariat) and seek partners for CTMPAS at CTI Business Forum
 - *Dec 2012* – Complete CTMPAS Framework and Action Plan to be presented for approval and action to the CTI-CFF Senior Officials; Site recruitment to start in early 2013
- 4) **Recommended tools and approaches** for use in developing and supporting CTMPAS, including:
- *CT Atlas* (<http://ctatlas.reefbase.org>) -- The CT Atlas is an online GIS database that is being developed with the support of USCTI as a collaborative effort between six NGOs, namely WWF, TNC, IUCN, WCS, ReefBase and WorldFish. It responds to the need for a centralized system of storing information and cataloging the different datasets on MPAs and coral reefs and other information required to produce maps for resource management planning, as well as for communicating the issues and challenges that the CT6 face.
 - *CTI Climate Change Adaptation (CCA) Toolkit* (http://www.usctsp.org/file/1331278160Tool_I_Benchmarks_US_CTI_CCA_Toolkit_Version_I.pdf) – This toolkit was developed by the USCTI through a series of consultations between experts, government representatives and various stakeholders from the CT6. It provides a framework for achieving the objectives of natural resource management and long-term sustainability, CCA, disaster management, risk reduction and community development.
 - *CTI Integration Toolkit* (see draft *Integration Checklist* in **Annex 11**) -- The *Integration Toolkit* is intended to help integrate the five themes or goals of the RPOA in specific places at multiple scales, e.g. a seascape or priority geography where there is a network of MPAs. It will include at least two main tools, both currently still under development. These are: (1) a guide describing the step-by-step process to apply appropriate tools to improve integrated management, and (2) a policy brief that explains why decision-makers should and how they could support an enabling environment for integrated management towards Ecosystem Based Management (EBM).
 - *CTI MPA Learning Network* (<http://www.facebook.com/CTI.MPA.Learningnetwork>) -- The CTI learning network planning workshop in March 2011 identified MPAs as one of four priority areas for developing learning networks. Shortly thereafter, under a grant from USCTI, the Coral Triangle Center (CTC) began to develop the CTI MPA Learning Network in coordination with the CTI-CFF Regional Secretariat. An initial network design was presented and a set of learning activities (site visit, dialog) were conducted by the CTC and included in the CTI MPA Regional Exchange.
 - *Compilation of Sample MPA Network Frameworks* – This includes papers describing some of the MPA network frameworks currently existing in different parts of the world. An index to these papers is shown in **Annex 10** and the references and full Annotated compilation were distributed to participants and are available on the CTI-CFF website along with other REX materials.

- 5) **Scope and objectives of the 4th CTI MPA Regional Exchange (the 2nd on the topic of Management Effectiveness)** were discussed and agreed. Countries will share their initial experiences in applying the Management Effectiveness Assessment Tool introduced in the September 2011 CTI MPA Regional Exchange, and other methods. A country host for the REX will possibly be Timor-Leste (if election plans will allow) and possibly Malaysia as an alternative. First quarter of 2013 was proposed as the date for the REX.
- 6) **2nd CTI-CFF MPA TWG Meeting** that identified the CTMPAS writing team and validated the recommendations from the regional exchange. The meeting also resulted in the adoption of the MPA TWG Terms of Reference (TOR) (**Annex 16**). The minutes of this meeting are included in **Annex 7**.

Others

In addition, the countries discussed the following matters related to the operationalization of the CTMPAS and generally agreed that:

- 1) *Institutional home of CTMPAS coordination* – The Regional Secretariat has the official mandate and therefore the overall responsibility for coordinating regional programs and activities in the CTI-CFF, whether or not they are the direct implementers. In view of this, the institutional home of CTMPAS coordination will also be the Regional Secretariat's responsibility. If another organization is engaged to handle CTMPAS operational coordination, that organization will be accountable and will have to report to the Regional Secretariat. The possibility of an interim home for the CTMPAS was discussed and left for future consideration.
- 2) *Role of the CTI-CFF MPA TWG in CTMPAS* – The TWG agreed it is mainly responsible for the following:
 - a. Providing technical guidance for operational activities of CTMPAS, e.g. defining criteria for choosing MPAs.
 - b. Attending SOM and other high level meetings (this is primarily a responsibility of the TWG Chair).
 - c. Facilitating planning for completion of the CTMPAS action plan
 - d. Providing guidance on CTMPAS operations
 - e. Designing a monitoring and evaluation system for the CTMPAS
 - f. Coordinating research and development for CTMPAS
 - g. Prioritizing CTMPAS actions in the CTI action plan and recommending such actions to the SOM
 - h. Soliciting scientific guidance as needed
 - i. Preparing annual work and financial plans
- 3) *Scientific advisory group* – It would be useful to have a scientific advisory group to help advance the CTMPAS process. In general, having an advisory group provides the following benefits: (a) neutral advice; (b) leveraging of resources; (c) research and development; and (d) advice on strategic directions. If a decision is made to create the scientific advisory group, the MPA TWG would be tasked to develop its TOR in relation to the TWG and CTMPAS.
- 4) *Data sharing system (CT Atlas) home and support* -- The data should reside within each of the countries, but a neutral body such as WorldFish may be needed to act as interface and facilitate data access across the various national databases. It is assumed that the Regional Secretariat will coordinate the required contractual arrangements and perform other functions necessary to make this happen.

UPCOMING KEY MILESTONE ACTIVITIES

The CTMPAS Framework and Action Plan is scheduled to be fully drafted, reviewed, finalized and presented to the CTI 8th Senior Officials Meeting for endorsement later this year.

I. INTRODUCTION

The 3rd Coral Triangle Initiative for Coral Reefs, Fisheries and Food Security (CTI-CFF) Regional Exchange (REX3) on marine protected areas (MPA) focused on developing a framework for a Coral Triangle Marine Protected Area System (CTMPAS), which is Target 1 under Goal 3 of the CTI-CFF Regional Plan of Action (RPOA). The RPOA defines CTMPAS as “composed of prioritized individual MPAs and networks of MPAs that are connected, resilient, and sustainably financed, and designed in ways that (i) generate significant income, livelihoods, and food security benefits for coastal communities; and (ii) conserve the region’s rich biological diversity.”

Held in Sanur, Indonesia on March 26-30, 2012, this activity was hosted by the Government of Indonesia through its CTI-CFF National Coordinating Committee (NCC) and the Coral Triangle Center (CTC), a Sanur-based NGO, with assistance from the US CTI Support Program (USCTI) and in coordination with the CTI Regional Secretariat. CTI-CFF is composed of six countries, namely, Indonesia, Malaysia, Papua New Guinea (PNG), the Philippines, Solomon Islands and Timor-Leste, which are often collectively called the CT6.

This activity aims to support one regional collective action through developing the regional MPA system, while supporting one parallel activity that focuses primarily on national settings but links through common elements into a regional program by contributing to CTI prioritized Actions:

- Action 1 (Jointly establish overall goals, objectives, principle, and operational design elements for a CT MPA System centered around priority MPA networks) and
- Action 3 (Build capacity for effective management of the CTMPAS).

Action 1 was prioritized at the May 2010 *CTI Regional Priority Actions and Coordination Workshop*, with the following activity objective defined:

- Conduct workshop(s) to establish the goals and operational design for a CTMPAS (Preparation includes national workshops, regional workshops, CT6 focal points, and collaboration between regional scientists and CT6).

The first regional exchange responding to this objective was held in Phuket, Thailand, in June 2010. That activity produced the following results:

1. A collective review of the current principles, objectives, models and regional case studies of MPA networks;
2. The practical application of common network principles through the parallel designs of national MPA network pilot sites in each country;
3. The drafting of priority objectives for a CTI-CFF Regional MPA System that could eventually be managed cooperatively by the CT6; and
4. The identification of next steps toward collective efforts on MPAs and MPA networks.

The 2nd CTI MPA Regional Exchange was held in Batangas, Philippines, in May 2011 and focused on *Monitoring and Evaluation for Improving MPA Management Effectiveness*, with the following results:

- 1) Understanding of currently accepted concepts, models, lessons and approaches in MPA management that may be applicable in the development and operation of effective MPAs in each of the CT6 countries as well as regionally.
- 2) A tested MPA monitoring and evaluation (M&E) system that could help to inform the development of an MPA effectiveness tool for each country.
- 3) A draft field-tested roadmap or activity design for each country outlining the next steps toward monitoring and improving MPA effectiveness.

- 4) Draft next steps based on the lessons learned to help guide the 3rd MPA Regional Exchange on the development of a CTMPAS.



Participants at the Regional Exchange on Designing and Supporting National and Regional MPA Systems in the Coral Triangle, held on March 26-30, 2012, in Sanur, Indonesia. (Photo: US CTI PI/A Sia)

This REX3 built on the work toward developing the CTMPAS, checking on the progress of the national pilot MPA systems and acting on the needs for design and technical support for a regional MPA system. It consisted of five days of workshop with expert and case study presentations, and included a visit to a local MPA learning site to share local best practices as well as demonstrate the role of an MPA network in local, regional and national initiatives. It was attended by 53 people representing the CT6 and their development partners. The CT6 were officially represented by 14 delegates, most of them government managers and staff involved in MPA work in their respective countries. All countries except PNG were

represented.

On the last day of the REX, the CTI-CFF MPA Technical Working Group (TWG) convened to discuss outstanding matters related to the CTMPAS. It was the second formal meeting of the CTI-CFF MPA TWG since its inception at the 7th CTI-CFF Senior Officials Meeting (SOM7) and 3rd Ministerial Meeting in the last quarter of 2011.

OBJECTIVES AND EXPECTED RESULTS

As a follow-through activity of the regional initiative to establish the CTMPAS, this 3rd MPA Regional Exchange was designed to support the development of national and regional MPA systems in the CT6. The specific objectives were:

- 1) Share experiences and understand the status and context of progress on MPA networks/systems in each of the CT6.
- 2) Share the latest technical and scientific guidance on MPA network design and implementation and discuss strategies to apply this new information in CTMPAS.
- 3) Review the regional context, including the contribution of CTMPAS to the region and countries, and refine the benefits and objectives for CTMPAS.
- 4) Develop a CTMPAS Framework (goal, objectives, strategies and actions)
- 5) Develop a Roadmap to operationalize the framework and other recommendations to the MPA TWG.
- 6) Conduct an MPA TWG meeting with associated outputs including recommendations to the Senior Officials Meeting (SOM) and draft terms of reference (TOR) for the 4th Regional MPA Activity on MPA Management Effectiveness (MPAME) to be conducted in late 2012.

There were four target results:

- 1) Draft strategy and framework for developing, supporting and financing a CTMPAS.
- 2) Proposal for 2012-13 priority actions workplan in support of the RPOA MPA goal.
- 3) List of recommended tools and approaches to be used in developing and supporting the CTMPAS.
- 4) 2nd CTI-CFF MPA TWG Meeting.

The 2012-13 priority actions work plan would be considered in the preparation of the CTI-CFF Financial Resources Strategy for 2012-13 to be submitted to the CTI High-Level Financial Roundtable (HLRF) supported by the Asian Development Bank and scheduled for 3 May 2012. The Roundtable is a venue for the CT6 to generate additional funding for the implementation of their National Plans of Action (NPOA), RPOA and the Regional Secretariat, and for the donors to communicate their funding priorities.

II. SESSION PROCEEDINGS

The overall conduct of the workshop was facilitated by Dr. Alan White(TNC), lead for the USCTI regional MPA theme, and Ms. Anne Walton, Program Director of the International MPA Capacity Building Program at the National Oceanic and Atmospheric Administration (NOAA), with support from the MPA REX Planning Team.

The first half of the workshop reviewed progress made in developing national MPA networks/systems, provided critical background information on designing MPA networks and systems that are resilient to climate change and integrated with CTI-CFF's fisheries management objectives, and further developed common definitions and objectives for the proposed CTI-CFF system. It included presentations from the CT6 and MPA experts on the most recent guidance on designing MPAs/networks. The latter part of the workshop focused on developing and refining a CTMPAS framework, preparing recommendations for the CT6 to adopt, and developing a CTMPAS framework work plan that prioritized actions leading to the adoption of the CTMPAS framework and its work plan, and other supported CTI-CFF priority setting activities later this year.

In a sidebar event at the end of the workshop, the MPA TWG held their second official meeting to discuss the following:

- 1) Minutes of 1st CTI MPA TWG meeting
- 2) TOR of the CTI MPA TWG
- 3) Next steps toward the completion and adoption of CTMPAS framework and strategy
- 4) Priority MPA regional activities for presentation to HLFRR
- 5) MPA M&E indicators and reporting system
- 6) CT Atlas and information sharing
- 7) Scope and objectives of the next MPA REX on management effectiveness

The first formal MPA TWG meeting was held on 27 October 2011 in Sari Pan Pacific Hotel, Jakarta, Indonesia. The minutes of the first and second TWG meetings are shown in Annexes 6 and 7, respectively, and are not discussed further in this Session Proceedings.

Day 1, 26 March 2012

Discussions and workshop outputs from Day 1 would provide material for the introductory sections of the CTMPAS Framework (“*Section 1: Background and Purpose*” and “*Section 2: CT6 National Programs and Mandate for CTMPAS*”).

SESSION I.1. OPENING, WORKSHOP OVERVIEW AND INTRODUCTIONS

The workshop was officially opened at 8:55a.m. Presiding the opening session were Dr. Sukoyono Suseno, Executive Chair of the CTI-CFF Interim Regional Secretariat; Mr. Prasmadji Narmoko (Ministry of Marine Affairs and Fisheries Indonesia [MMAF]) representing the Government of Indonesia; Dr. Alan White (The Nature Conservancy [TNC]), representing USCTI; and Ms Lynette Laroya, representing the current Country Chair of the MPA TWG, the Philippines.

In his opening statement, Dr. Suseno noted that while the CTI-CFF RPOA MPA goal defines only one target, “it is a very big target to have a region-wide CTMPAS in place and fully functional.” He commended the CT6 and their development partners for organizing a workshop to specifically address this important target.

He added: “A very important task that hopefully this workshop could also accomplish is... to develop a Regional MPA financial strategy. We need to be able to determine how much and what kind of resources would be needed to implement our plans and where [financing] will come from.” He also informed participants, “ADB is hosting the HLFR at the 45th Annual Meeting of the ADB Board of Governors. Partners, potential donors and other key stakeholders are invited to discuss the financial needs of the CT6 in implementing their respective CTI-CFF national plans of action (NPOA) and RPOA... A marketplace will be set up where representatives from the CT6 and TWGs will present their funding priorities to potential donors through interactive displays and discussions. I hope [the MPA TWG] will not miss that opportunity.”

Dr. Suseno also revealed that the 3rd Ministerial Meeting held in Jakarta, Indonesia in October 2011 had decided to “put in motion the establishment of the permanent CTI-CFF Regional Secretariat this year, 2012.” The handover from the current Interim Regional Secretariat to the permanent Secretariat is supposed to occur around October 2012, he said. “The question is not only ‘Can the CT6 establish the permanent Secretariat (within the prescribed time)?’ but ‘What kind of organization will be handed over when the time comes?’ I guess everybody will agree that... we can’t just hand over the organization without first trying to reinforce its capacity.”

Lastly, Dr. Suseno challenged participants to “actively support and get involved in ... the writing of the State of the Coral Triangle Report (SCTR) and the development of the regional M&E system and mechanism.”

Mr. Prasmadji, in his capacity as Executive Secretary of NCC Indonesia, officially opened the workshop. He stressed the Indonesian government’s “continuous support to the management and utilization of marine and fishery resources in the Coral Triangle” and outlined their national targets for coral reef management, including (1) management of marine and fishery resources in an optimal and sustainable manner; (2) establishment and management of MPAs and aquatic species; (3) empowerment of small islands for sustainable investment and development; and (4) reduction or elimination of illegal, unregulated and unreported fishing (IUU) and other activities that damage marine and fishery resources.

“Indonesia has committed 20 million hectares of marine conservation areas by 2020. In the medium term we have set a goal of 15 million hectares by 2014, and at present we have already reached this target,” Mr. Prasmadji related, citing in particular the Anambas Islands marine conservation area in the province of Riau Islands, which covers approximately 1.2 million hectares. “A marine zoning approach will be applied in the area for better management which will include youth education, marine tourism and fisheries,” he added. “I believe that this management approach will later contribute to the establishment of a set of performance indicators for marine conservation areas.”

He said the meeting was an opportunity for the CT6 to improve their “internal technical capacity through sharing of information and lessons, networking and engaging support from partners, which will in turn improve our ability to work as a stronger team at the national level as well as at the regional level.” He concluded: “We need to take advantage of our relationships and focus on the



Opening session presided by (from left) Dr. Alan White (TNC/USCTI MPA Lead), Mr. Narmoko Prasmadji (Ministry of Marine Affairs and Fisheries-Indonesia); Dr. Sukoyono Suseno (CTI Interim Regional Secretariat), and Ms Lynette Laroya (Philippines/MPA TWG Chair)(Photo: US CTI PI/A Sia)

many tasks before us in order to reach our final goals of better management and protection of our coral reef resources.”

For his part, Dr. White briefly related the work that went into organizing the workshop and congratulated the CT6 for their tremendous effort in setting up MPAs and providing support to their management. “It’s impressive in this region how well we’re doing in moving toward an MPA system,” he said. “We’re not there yet, but we’re making good progress.”

He recounted some important milestones leading up to this workshop, starting with the Manado Declaration that created the CTI, through the adoption of the RPOA which set “established and effectively managed” MPAs as a major goal, to two MPA REX’s that defined the strategies and actions toward achieving this goal.

This MPA REX3 would build on the work done at REX1 held in Phuket in 2010, “where we laid out the first set of objectives for the CTMPAS,” said Dr. White. He added: “In May last year in the Philippines, we also had REX2 focused on MPA management effectiveness, which is a parallel theme within our overall work to improve the management of our MPAs. So we now actually have a good history of work toward achieving our MPA goal.”

He told participants to expect a busy week ahead. “The objectives of this workshop are quite high. Our agenda is full, and we have our work cut out for us,” he said. “I hope that we can keep our workshop as informal and interactive as possible but also get a lot of work done.”

Ms Laroyadescribed the challenge awaiting participants in this week’s workshop. “One key question we need to answer this week is ‘How to we make the CTMPAS happen and how do we make it work?’” she said. “We have a wonderful opportunity in this workshop to share our experiences and the lessons we learned from the implementation of MPA networks in our respective countries. We may have different ways of networking our MPAs, but we each have experiences that offer lessons we can all learn from and hopefully apply to build a CTMPAS.”

She added, “Among our major objectives for the week is to prepare a framework and roadmap for achieving our CTMPAS target. These outputs will be submitted to the TWG and if adopted will subsequently be presented to the SOM and serve as guidance for planning our next activities, including the MPA REX4.”

Mr William Jatulan (PI), segued into the workshop proper by presenting the event overview and workshop flow. He reiterated that the focus of the workshop would be on developing the CTMPAS strategy and framework, which would include goals, objectives, strategies and specific actions “to guide us in implementing the CTMPAS.” In addition, the workshop would draw up an action plan for operationalizing the framework. This action plan and other recommendations from the workshop would be taken up in the 2nd official meeting of the MPA TWG to be convened at the end of the five-day workshop.

The workshop was designed so that each session would contribute toward the development of the CTMPAS framework and strategy based on the outline shown in Annex 8. Mr. Jatulan outlined the workshop flow as shown below. He said participants will be asked to fill out worksheets throughout the workshop to help them as well as the resource persons keep track of discussions and make adjustments in the agenda if necessary.

Day 1 – Expert presentations on MPA networks, their context and framework, and case studies on MPA networks in the CT6 and around the world, which describe some of the successes that can be replicated and challenges to overcome in the development of the CTMPAS. This would provide material for the introductory sections of the

CTMPAS Framework (“Section 1: Background and Purpose” and “Section 2: CT6 National Programs and Mandate for CTMPAS”).

- Day 2 – Expert presentations and exercises to define MPA objectives and principles for developing the CTMPAS and discuss tools (CT Atlas, integration tools, learning network) that can support the CTMPAS. Day 2 sessions would input into “Section 4. Defining CTMPAS” of the framework and strategy, specifically by defining the ecological, social and governance principles and objectives of the CTMPAS.
- Day 3 – Site visit to a local MPA network to share local best practices and demonstrate the role of the MPA network in local, national and regional initiatives; expert presentations, case studies and exercises to discuss and define MPA network categories and criteria, and priorities for ecological, social and governance themes. Today’s outputs would contribute additional material for developing “Section 4. Defining CTMPAS” of the CTMPAS framework and strategy, specifically toward defining the CTMPAS structure, criteria and priorities.
- Day 4 – Expert presentations and exercises to define the following: (1) site nomination and selection process, (2) management and coordination mechanisms, (4) tools that can support the CTMPAS (CT Atlas, learning network, etc.) and (4) regional action plan. Outputs from today’s discussions would serve as input to “Section 5. Building CTMPAS” and “Section 6. Implementing CTMPAS” of the CTMPAS framework and strategy.
- Day 5 – Validation of outputs and recommendations on the CTMPAS framework and strategy, and finalization of regional action plan; 2nd formal MPA TWG meeting to review and adopt action plan.

Introduction and leveling of expectations of participants immediately followed Mr. Jatulan’s presentation (see Annex 2 for List of Participants and Resource Persons). Participant expectations are shown in Table I.1.1 below.

Table I.1.1. Participant Expectations

<ol style="list-style-type: none"> 1) Get knowledge and share experience in developing and managing MPA networks 2) Identify key factors for successful management of MPA networks. 3) Better understanding of MPA networks. 4) Consensus among CT6 to cooperate through MPA networks. 5) Offer Philippine sites for CTMPAS 6) National MPA network and experience to contribute to regional MPA network 7) Learn how to assess effectiveness of MPA networks (e.g. tools, mechanisms, measurement parameters). 8) Sharing of experiences and best practices. 9) Greater interaction among the CT6 at community, national and regional levels 10) Opportunities for learning and collaboration. 11) Share tools, methods and approaches used in Eastern Indonesia to design and implement MPA networks 12) Leverage work to Coral Triangle levels 13) Understand country and CTI needs and how resource people can support this. 14) Identify joint collaborative activities based on common principles and guidelines 15) Share some of the latest science that helps us provide advice on how to design MPAs and monitor and measure them. 16) Contribute based on our experience working in the Bird’s Head seascape and Bali, Indonesia tools and approaches on developing the CTMPAS. 17) Maximize sharing and learning among CT6 and partners. 18) Input on the MPA Learning Networks, how to set up learning sites across CT and connecting peers of MPA managers and communities. 19) Find out and understand better what the CTI MPA objectives are going forward. 20) Inform participants about a new tool available from the UN Food and Agriculture Organization (FAO) on MPAs for fisheries management purposes. 21) CT6 take ownership of the CTMPAS. 22) Develop regional action plan; highlight milestones and resources that are required to help implement next steps. 23) Solid work plan/action plan with the next steps as an outcome as well as support resources identified and ways that USCTI can assist the action plan 24) Provide a briefing on CT Atlas; open channels to share and update data to map and develop MPA systems in the Coral Triangle; discuss how to make better use of the CT Atlas; learn about protocols for mapping MPAs in the CT6.

SESSION 1.2A. CONTEXT AND SUMMARY OF STATUS OF MPA NETWORKS/SYSTEMS IN THE CORAL TRIANGLE

This plenary session consisted of two presentations on (1) the global progress in scaling up to networks of MPAs; and (2) an overview of the status of MPAs and networks/systems in the Coral Triangle, with key findings of a scoping report on the technical assistance required to improve MPA networks in the CT and move toward a CTMPAS. The first topic was presented by Ms. Walton, and the second by Dr. White. An open discussion immediately followed each presentation.

Presentation: Global context of MPA networks/systems

Ms. Walton cited the following quote from the NOAA Research Council (NRC, 2000) to make a case for MPA networks: "...well-planned networks provide important spatial links needed to maintain ecosystem processes and connectivity, as well as improve resilience by spreading risk in the case of localized disasters, climate change, failures in management or other hazards, and thus help to ensure long-term sustainability of populations better than single sites." She said, "We're getting more value out of working together as networks of MPAs because we're able to protect resources, ecosystems, habitats and living marine resources in ways that we can't with individual MPAs. And this is true also in terms of sharing capacity and management of networks of MPAs."

She reminded participants that the CTI "is working within the framework of three inter-related functions and benefits or categories of creating MPA networks," as follows:

- 1) Ecological -- a network can help maintain functional marine ecosystems by encompassing the temporal and spatial scales of ecological systems.
- 2) Social -- a network can help resolve and manage conflicts in the use of natural resources.
- 3) Governance -- a network can help facilitate the efficient use and management of resources.

She added, "There's not always a clear distinction between these three functions or categories. There's a lot of overlapping, and there are also a lot of different ways that social, ecological or governance-based MPA networks are defined."

Ms. Walton listed several examples of MPA networks at different scales of management, i.e., regional, national and sub-national. **Regional networks** refer to MPA networks that are trans-boundary, meaning they involve 2 or more countries. Based on the 2008 WCPA/UNEP review, which was updated by IUCN in 2010, there are 20 regional MPA networks on record, including, (1) Mesoamerican Barrier Reef, (2) Gulf of Mexico, (3) Northeast Pacific, (4) Southeast Pacific, (5) Eastern Tropical Pacific, (6) Baja to Bering, (7) Scotian Shelf, (8) East Africa Marine Ecoregion, (9) Indian Ocean Commission, (10) Western Africa Regional Network, (11) PERSGA MPA Network, (12) Caspian Regional MPA Network, (13) Southeast Asian MPA Network, (14) Sulu-Sulawesi Marine Ecoregion, (15) Natura 2000, (16) MedPAN, (17) OSPAR, (18) Helcom, (19) Antarctic, and (20) Arctic.

In particular, Ms. Walton described the following examples of regional networks (see also Table 1.2a.1):

- 1) The *Eastern Tropical Pacific Seascape* includes island archipelagos in the Pacific Ocean side of South America, Central America and North America, namely, Costa Rica, Panama, Colombia and Ecuador. It started off with Ecuador, the southernmost country, and Costa Rica, the northernmost country, which do not share a boundary but have multiple MPAs with a high level of connectivity. Panama and Colombia learned about the plan, and in 2004, the four countries decided to sign an agreement to manage the seascape as a single unit, primarily on the basis of the very high level of connectivity there. "There are nine currents that come together in the area, and four of them are major currents, so there are a lot of resources moving between south and north," Ms. Walton explained. "We also see major El Niño and La Niña events that move pretty consistently and somewhat predictably from south to north, so there's plenty of reason beyond the connectivity for the countries to manage this

area as one management unit. When I started with this program in 2005, they wanted to first create cluster World Heritage Sites. The idea was to bring management up to a level where it was consistent across the island archipelagos, get World Heritage Site designation for all the MPAs, and then start to manage for some of the common resource management issues that they had.”

- 2) The *MedPAN (Network of Managers of MPAs in the Mediterranean)* South in the southern and eastern Mediterranean involves 11 non-EU countries where the political landscape is changing very rapidly, such as in Morocco, Algeria, Syria, Tunisia, Egypt and Libya. “These 11 countries are very different politically, and the way they designate authority for MPAs is very different from one country to the next. More than anything, political will varies a lot from country to country,” Ms. Walton observed. “The premise for networking is that these countries are underserved by NGOs and could help each other by working together. It’s working well in terms learning exchange and capacity building, but beyond that it’s not a very functional network.” This is primarily a social or learning network; not yet designed to be an ecologically coherent network of MPAs.
- 3) The *Regional Network of MPAs in West Africa* includes 23 MPAs in six countries in an area known as “the Shoulder of West Africa.” Said Ms. Walton, “The network consists of national park-based MPAs, which include areas of upwelling connected by currents, so there’s a lot of ecological connectivity. But it is also a social network because one of its main concerns is the socioeconomic welfare of the communities throughout the region, as well as governance-based because it has a governance structure— a secretariat facilitates and coordinates network activities). They are now developing a management framework that can be adopted by the different MPAs across the region.”

National MPA networks are those that are located within a single country. The UNEP/WCPA/IUCN database currently lists 30 of them, said Ms. Walton. She cited the following countries: (1) Bahamas, (2) Belize, (3) Cuba, (4) Jamaica, (5) Grenada, (6) Chile, (7) Ecuador, (8) Peru, (9) Venezuela, (10) Brazil, (11) Mexico, (12) USA, (13) Canada, (14) Tanzania, (15) Seychelles, (16) South Africa, (17) Madagascar, (18) Yemen, (19) Philippines, (20) Indonesia, (21) Vietnam, (22) Palau, (23) Fiji, (24) New Zealand, (25) Australia, (26) United Kingdom, (27) Germany, (28) Netherlands, and (29) Croatia.

From the above list, three examples were presented (See also Table 1.2a.1):

- 1) The *Vietnam* national MPA network includes 15 MPAs which were selected based on ecological principles, but function more as a social network. Based on surveys done in 2000 and 2001, the 15 sites were designated based on ecological criteria to capture the different habitats throughout the country’s 3,000km coast. Ms. Walton noted, “These MPAs have a common governance overlay -- they were all initially managed under the Ministry of Fisheries, now they are managed under the Ministry of Agriculture and Rural Development. They have formed a secretariat and they meet and share capacity but they don’t function as an ecological network.”
- 2) The *Belize* national MPA system is both an ecological and social system. Ms. Walton explained, “The whole exclusive economic zone (EEZ) of Belize is zoned and within it they created a network of MPAs, so functionally the MPAs are a kind of zone. The sites were selected based on their ecological representativeness, but the network has a very strong social component because its designation was based on the guiding principle ‘*that the potential contribution of the protected areas system to national development and poverty alleviation should be maximized.*’”
- 3) The *Palau* national MPA network is one of the few examples of MPA networks created under a challenge, in particular the Micronesia Challenge. Because of this, it has a strong governance component, although it is also an ecological and social network. It also has a strong biophysical basis, because the sites were selected based on biophysical criteria, including representativeness and replication, critical area and connectivity. In addition, the

MPAs also function as a social and governance network because they are implemented as community-based and tenure-based MPAs under consistent national policy.

Subnational MPA networks are smaller (than national) groupings of MPAs within a single country. The UNEP/WCPA/IUCN database lists a total 35 subnational MPA networks in: British Virgin Islands, Colombia, Ecuador, Mexico, USA, Canada, Mauritius, South Africa, Madagascar, Yemen, Philippines, Indonesia, PNG, Solomon Islands, Kiribati, New Zealand, and Australia.

Ms Walton presented the following examples of subnational MPA networks (see also Table 1.2a.1):

- 1) In the *Gulf of California, USA*, there are 11 MPAs in the Sea of Cortez that have been designated as a network under the national park system. The network is not yet complete. “They’re creating an ecological network because there’s high endemism and high species diversity (about 770 species) in this area,” she related. “The gap analysis has been a long involved process to identify where additional sites need to be designated, and they’re still trying to understand how to build off the network that they already have. They’re looking at slicing and dicing the area at three different places: (1) under their current network of MPAs, which covers 14,925km²; (2) include ‘especially important areas’ that have already been designated, which will increase total coverage to 15 percent of the Gulf of California; and (3) include areas that are part of important ecological process, which will bring total area to 24 percent of the Gulf.”
- 2) The *Socotra Archipelago*, which includes four islands and rocky outcrops of Yemen in the Arabian Sea, has a network of community-based MPAs. This is an area where there is high connectivity that is connected to a large marine ecosystem. The whole EEZ around the islands is zoned, and the MPAs comprise a zone designation within the larger zoning plan.
- 3) The *Phoenix Island Protected Area* in Kiribati, a very remote part of the world, was designated as both an ecological and a social network. The approach is “to learn how nature and people can function harmoniously where distance and isolation are both a challenge and the saving grace,” Ms Walton said. “This is a very pristine area where human habitation has not occurred on an on-going basis because there’s no way to support human communities there, which has been its saving grace. Only one island is inhabited by a caretaker community of about 50 people. It’s considered a model for what a pristine place might look like and how it might recover from climate change impacts.”

“There are different motivations and drivers for starting to build MPA networks and some of these have created new incentives in some parts of the world to start ‘challenges,’” Ms Walton noted.

Some of these challenges and their targets are as follows:

- 1) Micronesia Challenge (Federated States of Micronesia [FSM], Guam, Palau, Marshalls) – 30 percent nearshore ecosystems under protection by 2020; probably the most well-known.
- 2) Caribbean Challenge (Dominican Republic, Grenada, Jamaica, Bahamas) – 20 percent nearshore marine resources under protection by 2020
- 3) Philippines -- 10 percent marine waters fully protected by 2020
- 4) New Zealand -- 10 percent marine environment protected by 2020
- 5) UK -- network of Marine Conservation Zones established by 2020
- 6) Western Indian Ocean Challenge – focused on adaptation; recently initiated by Seychelles and currently still being developed.

Globally, the total coverage for MPA networks is as follows (IUCN Summary of MPA Status):

- Total number of MPAs: *approx. 5880*
- Coverage area: *over 4.2 million km² of ocean*
- Percent of coverage: *1.17 percent of marine area of world*
- Continental shelf coverage: *4.32 percent (most MPAs tend to be nearshore)*
- Off-shelf coverage: *0.91 percent*
- Total ocean protection has *risen by 150 percent since 2003 (because of a few very large areas that have been put under protection in just the last 5 years)*

- Latest trends a shift to very large MPAs, 11 MPAs larger than 100,000 km² together making up 60 percent of the global coverage

Table I.2a.1. Examples of MPA Networks

Regional networks			
Network name/members	Type	Purpose	Other details
1) Eastern Tropical Pacific Seascape (Costa Rica, Panama, Colombia & Ecuador)	Ecological, Governance	To improve existing management	<i>Total Area:</i> 2,110,000 km ² , includes EEZ and high seas <i>Agreement:</i> In 2004, signed San Jose Declaration to establish network from existing MPAs <i>Management:</i> Rotating secretariat, developed Action Plan plus annual work plans, national and regional support to develop integrated management strategies
2) MedPAN South (11 Non-EU Countries of Southern & Eastern Mediterranean)	Social	Aims to create new MPAs and improve management effectiveness; and create a functional social network for underserved Mediterranean MPAs	<i>Challenges:</i> Huge range of cultures, countries and languages, capacity and political will very low <i>Results:</i> Strong social network developed between mentors
3) Regional Network of MPAs in West Africa (23 MPAs in 6 countries)	Ecological, Social, Governance	High levels of biophysical connectivity through the Canary Island and Guinea upwelling, and the movement of migratory species	<i>Goal:</i> To ensure, at the scale of the ecoregion that: “the preservation of a coherent set of critical habitats . . . for the regeneration of natural resources and the conservation of biodiversity to the benefit of the societies”. <i>Administration:</i> A secretariat facilitates and coordinates the network activities with technical assistance from PRCM and financial support from international partners
National networks			
Country/members	Type	Site selection/design	Other details
1) Vietnam	Ecological, Governance	15 MPAs, selected based on representative biological and physical characteristics	<i>Management:</i> All managed under the Ministry of Agriculture and Rural Development <i>Social network structure:</i> established to increase coordination and cooperation between sites: elected governing board and by laws established
2) Belize National MPA System	Ecological, Social	Currently includes 25 MPAs, started by ranking existing MPAs, then building off of those	<i>Guiding Principle:</i> “that the potential contribution of the protected areas system to national development and poverty alleviation should be maximized” <i>Management:</i> MPAs an integral part of the national ICZM Plan, the MPAs representing different zones within in the broader national plan
3) Palau National MPA Network	Ecological, Social, Governance	Based on both biophysical and socio-economic principles including representation and replication criteria, critical area criteria and connectivity criteria	<i>Legal basis:</i> Under Micronesia Challenge; network goal legislated by Protected Areas Network of 2003 <i>Implementation:</i> Community level <i>Target:</i> committed to protecting 30 percent of nearshore waters by 2020 through national network of MPAs
Sub-national networks			
Location	Type	Purpose & Need	Other details
1) Gulf of California, Mexico (11 MPAs in Sea of Cortez)	Ecological, Governance	High endemism (approx 770 species) and high species diversity	<i>Approach:</i> Gap analysis conducted by partnership of government institutions, 180+ national and international experts contributed to site selection <i>Protection:</i> currently: 14,925 km ² ; if include “especially important areas” – then 15 percent, if include “ecological processes” – then 24 percent coverage of GoC
2) Socotra Archipelago, Yemen (4 islands and rocky outcrops)	Ecological, Social	A system of protected areas within larger managed area (elaborate zoning plan) at juncture of 3 LMEs	<i>Site selection:</i> For convenience, and to minimize loss to local communities; good representation of biotopes and of coral, fish, algal and sea grass communities; connectivity not addressed
3) Phoenix Islands Protected Area, Kiribati (South Pacific)	Ecological, Social	One of the most remote island chains on earth and could be one of the last atolls and reef island archipelagos in pristine condition	<i>Site Selection:</i> 8 uninhabited islands except for largest atoll of Kanton, total area = 408,250 km ² <i>Approach:</i> “to learn how nature and people can function harmoniously where distance and isolation are both a challenge and the saving grace”

About 15-22 percent of the world's reefs are currently being protected; 17 percent of mangroves; 10 percent of seagrasses; 8 percent of estuaries; and 2 percent of seamounts (Wood, 2008). "We're starting to talk about size and spacing the MPAs out," said Ms. Walton. In terms of placement, about 56 percent of MPAs are within 10-20 km from another MPA, while 78 percent are about 20-150 km from another MPA. Moreover, many MPAs are ecologically connected to up to 10 others.

"We still have ways to go. We're still learning to manage and govern MPA networks especially at the regional level where we're looking at transboundary MPAs," Ms. Walton remarked. She concluded with the following recommendations from UNEP WCMC:

- 1) Continue and expand existing efforts
- 2) Collaborate and coordinate
- 3) Harmonize terminology and approaches so that progress can be measured
- 4) Improve reporting and monitoring at national, regional, global level (management effectiveness)
- 5) Use WCPA-Marine Checklist for Evaluation (plus other tools that are also valuable)
- 6) Establish management and governance of MPA networks

Presentation: Overview of MPAs and networks/systems in the Coral Triangle and scoping report on technical assistance required to improve MPA networks and move toward CTMPAS

Overview of MPAs and networks/systems in the Coral Triangle

In his presentation, Dr. White said the expansion of MPAs and MPA networks in the Coral Triangle is primarily driven by two factors: (1) the wealth of coral reefs in the region (the CT6 has about 30 percent of the world's coral reefs) and (2) the threatened status of many of these reefs. "Over in Melanesia, the reefs are under lower risk, but there's a new report that's coming out soon that projects that within 50 years almost all of the reefs in the Coral Triangle are going to be under high or very high risk," Dr. White revealed. "We need to make them less threatened in the future, and most of us agree that if effectively managed, MPAs do protect the environment, they do bring the ecosystem to amore normal functioning state, and enhance the health of the marine environment."

Reminding participants about their mandate under the RPOA to develop the CTMPAS, he noted that the conceptual vision of the RPOA for the CTMPAS "gives us some parameters for what we need to do." The RPOA defines the CTMPAS as "a comprehensive, ecologically representative and well-managed region-wide system composed of prioritized individual MPAs and networks of MPAs that are connected, resilient and sustainably financed; which is designed to generate significant income, livelihoods and food security benefits for coastal communities, and conserve the region's rich biological diversity."

Dr. White introduced some of the specific agenda items that would be discussed during this week's workshop and MPA TWG meeting. They included:

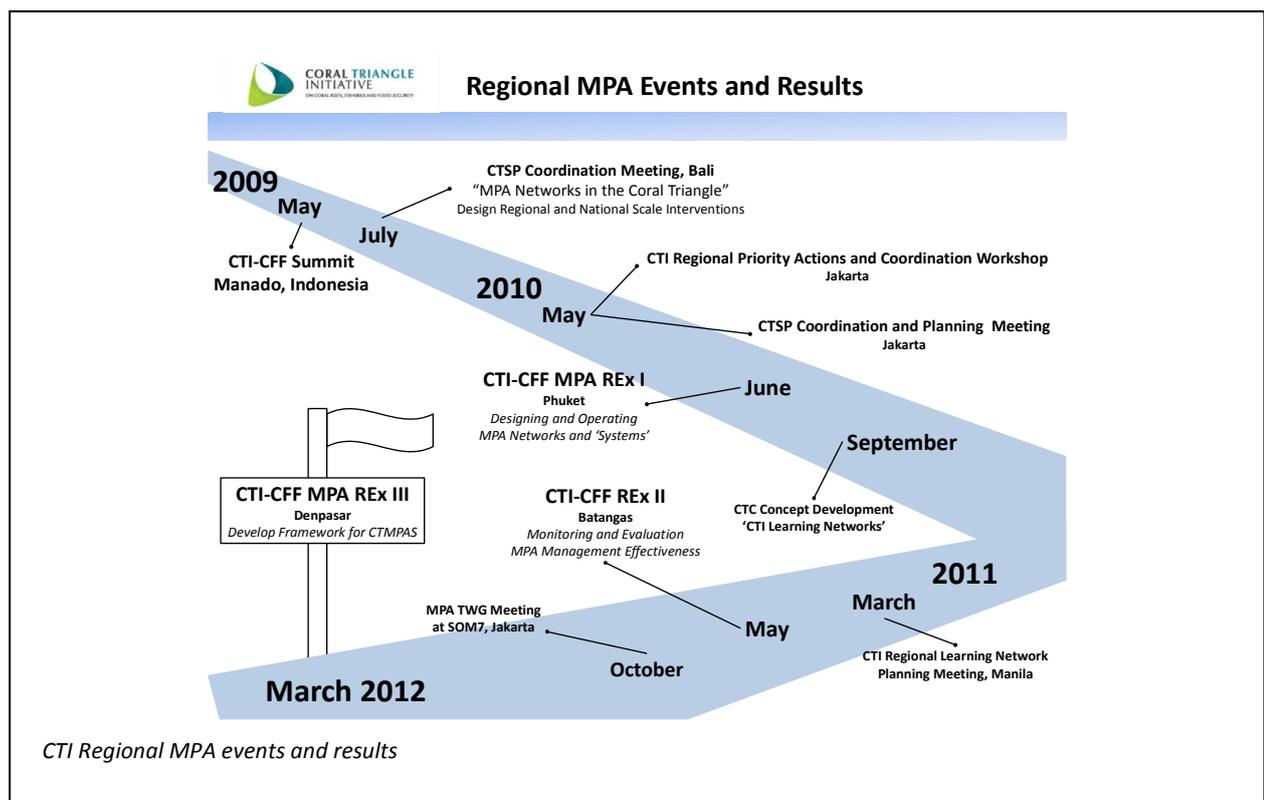
- 1) Indicators for monitoring progress toward RPOA Goal 3.
- 2) Progress in CTMPAS work;
- 3) Findings of the scoping report on technical assistance needs in the Coral Triangle, in particular with respect to developing an MPA network design that contributes toward achieving the RPOA goals and incorporates climate change and fisheries management considerations;
- 4) Some MPA network design guidelines; and
- 5) Sources of support for CTMPAS.

Indicators for RPOA Goal 3. There are three top level indicators that have been put forward for monitoring progress toward RPOA Goal 3. Dr. White urged participants to study the indicators and

“decide if you agree with them, because there may be some opportunity to change them if you think they are not doable.” The indicators include:

- 1) Percentage or area of total marine and coastal habitats in some form of protected status by habitat type
- 2) Percentage or area of each major marine and coastal habitat type in strictly protected “no-take replenishment zones” – the idea here is because of the threats around the region we need more areas that are really strictly protected and we need to measure how well they are being managed.
- 3) Percentage or area of total MPAs under effective management within each country.

Indicator I “may be measured using some of the data we’re collecting for the CT Atlas,” Dr. White said. He also noted the need to measure the extent of strictly protected areas and areas under effective management because of the degree of threat to coral reefs in the region and the fact that although many areas have been declared as MPAs, “management effectiveness is still rather low.”



Progress in CTMPAS work. Dr. White briefly described the history of the work done in the CTI focusing on the MPA workstream (see graphic). “We’re actually moving quite well toward developing our CTMPAS,” he observed. “There’s also a parallel workstream that looks at how well MPAs are managed (management effectiveness) as opposed to how well they’re designed, and we have to bring those two together to come up with an effective overall system of MPAs.”

Some of the work being done to support CTMPAS is described below:

- 1) A report on integrating climate change and fisheries objectives into resilient MPA network design principles – this includes a set of design principles that can address the objectives of climate change adaptation (CCA), fisheries management and MPA.
- 2) Scoping study to determine the technical assistance needed to accomplish the CTMPAS work – the study looked at the kind of strategic and applied science needed to accomplish the CTMPAS objective, the type and location of assistance and needs for true integration overtime beyond USCTI.

- 3) Decision support for MPA network design and tracking progress primarily through the CT Atlas, a major info system – the datasets in CT Atlas can be used to analyze the status of MPAs and how they are contributing to habitat protection, gaps in implementation, and progress over time.
- 4) Partnerships to support the work that is being done by the CTI, including regional-to-local conservation strategies and modeling to support CTMPAS, such as:
 - Regional scale models, e.g. James Cook University (JCU) and University of Queensland (UQ)
 - Analysis of national MPA coverage and connectivity
 - Study on how spillover from MPAs benefits fisheries and how to more accurately measure spillover
 - Integration of fisheries, climate change and MPAs in “integration” sites
 - Analysis of minimum sizes of MPAs for resilience

Dr. White highlighted some of the data in the CT Atlas that show how many MPAS have been established in the region. “But we still have some discrepancies in our information sources,” he observed. “It has really been a challenge to get all the information in the most consistent way that will give us a comparative view of what MPAs are actually already there. Also, although we have many areas under legal protection within the CT6 – something like 16 million hectares of legally protected MPAs based on some sources (Table 1.2.2) -- not all of them are being effectively managed.”

Table 1.2a.2. Area of MPAs in Coral Triangle Countries

Country	CT Atlas (hectares)	Other sources*
Malaysia	75,447	524,965
Indonesia	9,575,335	13,900,000
Philippines	4,198,281	1,494,300
PNG	114,856	142,094
Timor-Leste	55,600	55,600
Solomon Islands	19,457	19,190
TOTAL	14,038,975	16,136,149

*Other sources: Malaysia: Marine gap analysis report; Indonesia: Reported by government; Philippines: Weeks et al. 2010; PNG: Not known; Timor-Leste: Known marine area of NKSNP; Solomon Islands: Not known

Scoping report

The scoping report was based on interviews with about 150 government and NGO resource persons, including academics and scientists. It assessed the technical assistance needs of the CT6 as they pursue the goals of the RPOA and the integration of the fisheries management, MPA and CCA. “One of the things we realized was that well-designed MPAs could support multiple objectives, and that we need to not only protect biodiversity but also to integrate climate and fisheries management in the way we think about MPAs and MPA systems so that we’re accomplishing multiple objectives in our work and contributing to all 5 goals of the CTI,” Dr. White said. “Such integration and how we can do that effectively in our work would be the focus of some of our discussions this week.”

He presented some findings from the report, as follows:

1. There’s strong support for integrating fisheries, biodiversity and climate change objectives into MPA network design.
2. Technical assistance required for MPA network design is at multiple scales:
 - Regional CTMPAS
 - National
 - Subnational
 - Eco-regional/Trans-boundary
3. The CT6 are committed to developing CTMPAS through the CTI RPOA
4. At the first MPA Regional Exchange workshop, the CT6 agreed to focus on:
 - a. Jointly establishing overall goals, objectives, principles and operational design elements for the CTMPAs

- b. Each country contributing at least one well designed and effectively managed MPA network to the CTMPAS (learning sites)

“This week we’re going to take a first look at the criteria for choosing or nominating a site to the system,” Dr. White said.

In addition, the survey revealed that:

- 1) All CT6 are signatories to CBD and required to do a marine gap analysis to identify and fill gaps in their MPA network
- 2) All except one have completed a marine gap analysis to varying degrees
- 3) Most are not interested in doing more gap analysis at present; they are more interested in moving ahead and focusing on what they can implement and improve.

Also, the surveys indicated that there are several transboundary management areas in the region which require special attention, including:

- 1) Sulu Sulawesi Marine Ecoregion (Philippines, Malaysia and Indonesia)
 - Countries prefer to focus on MPAs in country, and have not addressed the overall transboundary nature of management because the area is quite large.
 - Data and governance deficiencies are an important issue.
- 2) Lesser Sunda Ecoregion (Timor Leste and Indonesia): A scientific design of a resilient MPA network has been completed and the results used for:
 - Timor-Leste national marine gap analysis
 - MPA network design at integration sites:
 - Savu Sea Marine National Park – biggest in Indonesia at 3.5 million hectares, but just beginning to be designed for an MPA network
 - Nino Konis Santana National Park, Timor-Leste

MPA network design guidelines. Quoting Ms. Walton, Dr. White reminded participants that “networks that replicate are important but useless if not effectively managed or protected.” He added, “This was the theme of our last workshop and we mustn’t forget it, because we can spend a lot of time in developing the most integrated system with the best resilient design in the world but if it’s not implemented we’re not going to accomplish much.”

Well-designed MPA systems and networks can provide (1) demonstration sites for integrating multiple objectives into the MPA network design and (2) leverage to ultimately scale up to an ecologically connected network for the region. “The initial design will likely not be based on connectivity around the region but rather on finding well-functioning smaller networks and starting to add them to the regional system,” said Dr. White. He outlined some “very simple parameters” that he said should be part of the region’s MPA systems. These include:

- 1) Best practices for planning MPA networks (WCPA 2008)
 - a. Clearly defined goals and objectives
 - b. Legal authority and long-term political commitment
 - c. Stakeholder participation
 - d. Use of best available science and precautionary approach
 - e. Integrated management frameworks
 - f. Adaptive management and effectiveness measures
- 2) Basic ecological guidelines for designing resilient MPA networks (WCPA 2008)
 - a. Include the full range of biodiversity in the biogeographic region
 - Representation
 - Replication
 - b. Ensure ecologically significant areas
 - Unique or vulnerable habitats
 - Foraging or breeding grounds
 - Source populations
 - c. Maintain long-term protection

- Spillover of larvae, juveniles, adults
- Adaptive strategies (seasonal closures)
- d. Ensure ecological linkages (however, the scale may be small, at least initially)
 - Connectivity between linked habitats and species movements
 - Adult movement patterns
 - Larval dispersal
- e. Ensure maximum contribution of individual MPAs to the network
 - Size
 - Spacing
 - Shape

“We have to be careful about the definitions that we’re using, and that we have a common idea of what we’re talking about,” Dr. White pointed out. “Individual sub-national MPA networks should strive to be true ecologically connected networks, but at the regional level, we are developing a framework for the CTMPAS which is composed of MPAs or networks of MPAs (including networks of MPA networks) that will not be an ecologically connected network of MPAs until we have the information and knowledge to take it to that level. This is only just evolving, we’re not there yet. Being clear on what we can and cannot do is important as it will affect how we choose our principles and objectives for the CTMPAS.”

He added: “Within the CT, our MPA networks will have to contribute to an integrated coastal management (ICM) system because we know we have multiple needs -- we’re trying to manage fisheries, we’re trying to manage for tourism, we’re trying to protect diverse kinds of habitats, we have all these various uses going on. So we’re really trying to develop a multiple-use system or framework while keeping in mind the best science available. We cannot be stuck on MPAs just being one way or doing one thing. Our MPAs have to be part of an adaptive and integrated system.”

USCTI support for CTMPAS. Dr. White assured the countries that USCTI, through CTSP and other partners, “will continue to provide technical support for integrating multiple objectives into the MPA network design at multiple scales in the CT and to address high priority needs for improving our ability to do so.” Currently, he said, CTSP is providing technical support to design an ecologically connected MPA network for the CT by (1) developing a region-wide GIS database of data layers required (CT Atlas); (2) facilitating high priority science to provide key information (e.g. connectivity); and (3) through this workshop, facilitating a CTMPAS design. He concluded, “We want to get feedback from all of you on how we can support the process effectively as well as address some of the high priority science needs to take the CTMPAS forward.”

SESSION I.2B. REVIEW OF REX1 OUTPUTS

This session consisted of (1) a plenary presentation to review the principles, objectives and benefits of the CTMPAS as agreed to by the countries at the MPA REX1 in Phuket, Thailand in 2010, and (2) an open forum on the status of MPAs and its implications for the CTMPAS. **Mr. Scott Atkinson** (CI) and **Ms. Walton** presented the outputs of REX1 and facilitated the open forum that followed their presentation.

Mr. Atkinson related how the REX1 outputs were produced, saying, “We know that a regional system of MPAs is going to take a lot of work to create, so we started with looking at what possible benefits the countries thought they could get from having a CTMPAS, both regionally and nationally. We then identified the principles that would support the benefits, and finally we developed an initial set of objectives to guide the development of the CTMPAS.” Now that these principles, objectives and benefits had identified, however, “we [had] better be clear on what these terms mean,” he added.

Ms. Walton agreed. “When we reviewed the recommendations that came out of the Phuket REX1, we saw that there weren’t parallels between the different groups in terms of building or designing the MPA networks,” she observed. “So we thought we should take a step back and come to a common understanding of the terminology that we use when we talk about the CTMPAS.” She highlighted some common terminology used in designing MPA systems (Table 1.2b.1).

Table 1.2b.1. Defining and applying terminology on MPA systems

	PRINCIPLES	OBJECTIVES	EXAMPLE of RESULTS	EXAMPLES OF HOW DESIGN PRINCIPLES ARE APPLIED TO NETWORK DESIGN
	<i>A fundamental idea or concept that serves as the foundation for a chain of reasoning.</i>	<i>Based on the stated principle, it is an end that can be reasonably achieved within an expected timeframe, with available resources and is measurable.</i>	<i>The potential outcome of having met your objectives.</i>	<i>A standard that is used in the design of the MPA network in order to meet the stated objective.</i>
ECOLOGICAL	REPRESENTATIVENESS	All ecosystems and habitats (and their biodiversity) within the region are represented in the MPA network. Oceanographic conditions, bathymetry, geology, and cultural and heritage values should be included.	<ul style="list-style-type: none"> ✓ Migratory range of turtles protected ✓ Spawning grounds of target fisheries protected ✓ Sites of endemic species included 	<u>Mesoamerican Reef (MAR) Program</u> (Mexico, Belize, Guatemala, Honduras). Performed a region-wide assessment of MAR to identify priority conservation sites based on geographic distribution of ecologically significant areas, such as nurseries or feeding grounds that functionally linked to reefs by physical and ecological processes.
SOCIAL	RESILIENCE	Incorporate and enhance the capacity of socio-ecological systems to cope with, adapt to, shape, change, and respond to uncertainty.	<ul style="list-style-type: none"> ✓ Natural resources are maintained in a healthy condition and are able to recover from a stress ✓ Diversity of livelihoods and adequate household incomes ✓ Increase in food security status 	<u>Fiji LMMA</u> . Local communities are engaged in the design of community-based networks of protected areas, increasing their skills in resource planning, monitoring, analysis and communication and their ability to respond to new conditions in their ecosystem and social status
GOVERNANCE	INTEGRATED COASTAL MANAGEMENT AND/OR ECOSYSTEM-BASED MANAGEMENT	Develop legal authorities and institutional frameworks needed to effectively manage MPA networks that take into consideration multiple sectors and jurisdictions that impact each other.	<ul style="list-style-type: none"> ✓ New fisheries policy across 3-country seascape incorporated ✓ Ecosystem-based management approach ✓ Climate change impacts addressed at the regional level in fisheries programs 	<u>Eastern Tropical Pacific Seascape</u> (Costa Rica, Panama, Colombia, Ecuador). In 2004, the 4 countries signed the San Jose declaration agreeing to establish an MPA network with a rotating secretariat to coordinate integrated management country plans across the network.

In particular, REX1 reviewed the guidance prescribed by IUCN, which classified the principles, objectives and benefits into three categories, namely, (1) ecological; (2) social; and (3) governance. Mr. Atkinson recounted that based on this framework participants went through a brainstorming and prioritization process and eventually agreed on the set of initial principles, objectives and benefits for CTMPAS shown in Table 1.2b.2. He added, “We want to review this list and decide as a group if these are the objectives that we still want to pursue for our CTMPAS. Or do these objectives need to be refined and adapted? Are these SMART (specific, measurable, achievable, realistic and time-bound) objectives?”

Table 1.2b.2. Prioritized list of CTMPAS principles, objectives and benefits from MPA REX1 (Phuket, 2010)

NETWORK TYPE(S) OR CATEGORY(IES)	NETWORK OBJECTIVES (what is to be achieved)	BENEFITS (now "RESULTS")	OVERALL RATING
SOCIO-ECONOMIC	To improve sustainable management and use of marine resources	Regional food security	H
ECOLOGICAL	To manage and protect a large percentage of the full range of critical habitats required by these species throughout their life cycles	Management of migratory/threatened species	H
ECOLOGICAL	To develop a regional system of MPAs resilient to climate change and other threats	Resilience of critical marine habitats and resources at the regional level	H
GOVERNANCE	To collaborate on key projects such as research, capacity development, and knowledge management tools, for the design and implementation of MPA network design.	Efficiency of scale and opportunity for synergy	M
GOVERNANCE	Decision makers, stakeholders and supporters have sufficient knowledge to commit to improved design, implementation and management of MPAs and networks, and for policy development. OR Decision makers, stakeholders and supporters have sufficient knowledge for: <ul style="list-style-type: none"> • improved design, implementation and management of MPAs and networks, • policy development, • building political will. 	Knowledge of resource status and MPAs in the CT area	M?
GOVERNANCE	To adopt common principles for effective MPAs and network management that can be implemented according to the needs of each CT6 country.	Consistent standard for MPA management	M?
GOVERNANCE, SOCIO-ECONOMIC	Effective alternative livelihoods strategies, MPAs across national boundaries, facilitating multi-national MPAs, implementation of international agreements and standards	Sharing lessons learned and best practices	L/M?

The open forum generated the following discussion:

Ms. Ahasanal Kasasiah (Indonesia) – These network objectives seem to be very broad and not measurable.

Ms. Walton -- That was also our observation from looking at the objectives when we were preparing for this workshop. Remember, these recommendations are two years old. If we think that things are now not lining up as clearly and cleanly as they could, then let's go back, agree on some definitions and refine this into something that we can move forward with. But we're hoping that some of the national work that you have been doing was at least based on and informed by these recommendations so that we can build on that to develop a regional framework. Our intention here is to improve the work from Phuket, tighten it up, but not invalidate it.

Dr. Rudolf Hermes (FAO) – I would like to point something out that strikes me as a little inconsistency. The last item (in Table 1.2b.2) on implementation of international agreements and standards is given low and medium priority, but higher up in the list there's an item on protection of migratory species that actually relates to international agreements and standards and it is given a high priority. I think both items should be high priority.

Ms. Walton – Those are essentially one and the same objectives, as you pointed out, but they have different drivers. Prioritization is often dictated by where the political will is coming from, and where a need is coming from. The low priority item is a need that's at the national level as opposed to the high priority item that's more of a need at the international level. But that is a really keen observation, and I think it shows some of the contradictions that we're creating.

Mr. Ari Soemodinoto (TNC) – It seems we're jumping out with these objectives and benefits. If we're working with a project, we usually start with a conceptual framework. Also it seems

that these network objectives are not the objectives but maybe the goals. Not even one of these objectives is SMART enough to be considered as an objective.

SESSION 1.3-1.4. COUNTRY STATUS REPORTS ON SYSTEM/NETWORK DEVELOPMENT AND FORUM

This session combined Session 1.3 and Session 1.4 in the published agenda (Annex 1). Its objective was to establish where the CT6 are with regard to MPA system/network development. The five countries present each reported on their progress using the following outline:

- 1) Examples of MPA networks
 - a. How many MPAs in your country are participating in network development and how were you able to get them engaged?
 - b. What kind of network are you designing for MPAs in your country (e.g., social, governance, biophysical)? How was this decision made, and what is the basis for this decision?
- 2) Facilitating and hindering factors for MPA network development and management
 - a. What is the enabling environment that has allowed you to move this process forward?
 - b. Conversely, what have been the obstacles that have prevented you from moving forward?
- 3) Approaches on moving MPA network towards becoming operational – How are you moving your MPA network towards becoming operational (doing something collectively as a network)?
- 4) MPA network targets or milestones
 - a. Is there a target for what you ultimately want to achieve as a network, or milestones along the way?
 - b. What is your anticipated timeline for moving toward these achievements?
- 5) Added value of working as a network of MPAs -- What is the anticipated added value of working as a network of MPAs that you would not get from just having single sites?
- 6) Some thoughts on how the country-wide MPA network might contribute to improve MPA management effectiveness at the CTI regional scale.

Before the country presentations, Ms. Walton requested participants to “listen and see whether each presentation clearly articulates the design principle, network objectives and anticipated results of a national MPA system or network” and to write down their thoughts in a tally sheet (Worksheet 1.1, Annex 9.1). She explained, “We’re trying to identify what is going to be the foundation for building a regional network, and there may be some key things that you will capture in your worksheet that we can go back to that will help us build the regional foundation. We don’t want to create something new for the region; we want to build on what you’re doing at the national level.”

Philippines

Presentation

Presenter: Lynette Laroya

Examples of MPA Networks in the Philippines. There are about 40 subnational MPA networks or alliances in the Philippines. Together they involve some 270 coastal cities and municipalities and 484 existing MPAs covering approximately 815km². The networks vary in size (number of member MPAs and coverage area), governance arrangements and objectives. Only 24 percent are active (i.e., meeting regularly). (Horigue et al, in review) In general, the following network types are implemented in the Philippines:

- 1) Biophysical (based on larval dispersal and fish movement)
- 2) Socioeconomic (involving communities with common socioeconomic objectives)

- 3) Governance (generally based on institutional or organizational arrangements and composed of local government units [LGUs])

Some examples:

- 1) Southeast Cebu Coastal Resource Management Council
 - A governance network composed of 21 locally managed MPAs in 7 municipalities in central Philippines
 - Covers 101.45km of coastline and 620.78km² of municipal waters
 - Includes 5.54km² of coral reefs, 1.84km² of mangroves, and 5.22km² of seagrass beds
 - Major fishing areas
 - Formally established in April 2005 through a memorandum of agreement (MOA) between the member LGUs
 - A co-management arrangement managed by a committee composed of the vice mayors of the member LGUs (see graph below)
 - Objectives
 - i. To strengthen institutional mechanisms for local governance on coastal management
 - ii. To promote inter-LGU and multi-institutional collaboration in addressing common issues on coastal law enforcement, fisheries and habitat management
 - iii. To engage coastal communities (one of the most important components of this network) in the protection and conservation of coastal and marine resources
 - Management features
 - i. Each of the 7 member LGUs contribute to the operation of the network and the council.
 - ii. Individual MPA level operations are not included in network's budget.
 - iii. LGUs are locally responsible for the implementation of their respective MPAs but generally follow the framework set at the network level, so they are moving in the same general direction.
- 2) Proposed MPA Network in Taytay, Palawan
 - Primarily an ecological network based mainly on the presence of spawning aggregation sites
 - Intended to help improve management of live reef fisheries in Palawan
 - May include additional component MPAs nearby that are not necessarily spawning aggregation sites but are important for climate resilience
- 3) MPA and Enforcement Networks the Verde Island Passage
 - Province-wide ecological and governance networks in four provinces, for example:
 - i. Batangas network – 12 member LGUs; 35 MPAs
 - ii. Oriental Mindoro network – 8 member LGUs; 15 MPAs
 - A primary objective is to protect what has been reported to be “the center of the center of marine biodiversity in the world”
 - Harmonized legislation and law enforcement (what is not allowed in one municipality is not allowed in all the other municipalities)
 - Recommendations
 - i. Improve awareness among key LGU officers
 - ii. Address need to sustain network of managers
 - iii. Involve national government agencies in the Network to ensure that national policies are being adopted by the LGUs
 - iv. Strike a balance between community-based management and LGU support

Facilitating factors for MPA development

- 1) National policy (1998 Fisheries Code) advancing the protection, conservation, and management of coastal and marine resources
- 2) Collaboration/partnerships among LGUs
- 3) Access to technical assistance from academic institutions/research organizations (combination of technical know-how and local initiatives, especially by communities)

Hindering factors for MPA development

- 1) Low technical and financial capacity
- 2) Potential displacement of fishers due to no-fishing policy in MPAs (a universal problem, especially for developing countries)
- 3) Forces external to the community
- 4) Mismatch between institutional/political boundaries and resource boundaries (political issues are sometimes a major problem)

Approach to operationalizing MPA network

- 1) Multi-level government support (national government, LGUs, academic institutions, communities)
- 2) Technical assistance to provide science-based information to MPA network management
- 3) Coordination between MPA managers and LGUs responsible for managing coastal development, fisheries, and mangroves and other habitats (NGO plans and programs cannot be implemented if they are not acceptable to the LGU and communities)

MPA network targets or milestones (Philippine Development Plan for 2011-16)

- 1) The Plan, anchored on President Benigno S. Aquino III's 16-point "Social Contract with the Filipino People," envisions inclusive growth for the country.
- 2) *Chapter 10 : Conservation, Protection and Rehabilitation of the Environment and Natural Resources* of the Plan defines the following objective: "Establish a network of protected areas in coordination with other LGUs based on ecological, social and economic considerations (ecosystem resiliency and biological connectivity) to address the impacts of human induced factors and climate change"
- 3) Increasing recognition of the need to accelerate MPA development: "If we continue to establish small MPAs and manage them individually, it will take us 100 years to achieve our target of protecting 10 percent of the coral reefs in the Philippines. We need to establish MPAs with larger areas and to network them so we can achieve our target."

Added value of working as a network of MPAs. Generally, "creating networks of MPAs increases ecological effectiveness and administrative efficiency." Specific advantages include:

- 1) *Biological and ecological advantages*
 - Valuable and representative marine habitats are at least partially protected as reflected by habitat quality and species richness
 - Migratory and wide-ranging species are protected by continuous corridors of MPAs
 - Upstream/downstream impacts on living and marine resources are managed at the appropriate scale
 - Threatened, vulnerable or overexploited species of a given area will have adequate habitat space to support their life history
 - Fisheries production for a given management area is enhanced because of larval production and dispersal, and fish spillover effects are maximized
- 2) *Administrative and pragmatic advantages*
 - Develops logical choices on how to expand MPAs effectively and how to efficiently manage them based on the network design
 - Provides a rationale for individual MPA stakeholders or communities to coordinate with each other to share their experiences and resources, and to enhance efforts in protecting their respective MPAs

Potential contribution to improving MPA management effectiveness at the CTI regional scale

- 1) Opportunities to share best practices and lessons through learning exchanges, networking, mentoring opportunities
- 2) Opportunities to add new science-based information to knowledge management systems in the CTI

Discussion

Ms. Walton – These different networks were created at different times under different frameworks. Do you have any intention, or was there any attempt to synchronize them at a national level? How are these networks contributing to an overall national objective that you might have? Or does it work just to keep them as separate subnational networks?

Dr. Aliño – There's a trend toward synchronization between the 40 local networks so there would be complementation within a national system perspective, or at least in terms of overall goals and how the national system can support local networks and vice versa to accelerate fulfilment of national commitments to international agreements.

Ms. Walton – Perhaps one of the last points of the presentation about the need for multi-level government support alludes to that. You have policy at the national level, and you have something happening at the local level but there needs more integration up and down.

Ms. Laroya – We have several laws that provide for the protection of coral reefs, but we want to develop a national policy that explicitly says that we should have a network of MPAs. We're working on that now.

Dr. Aliño – We need to integrate not just policy but other support as well.

Timor-Leste

Presentation

Presenter: Aleixo Leonito Amaral

Examples of MPA networks. There is an ongoing process to start small MPAs in three areas, namely the Nino Konis Santana National Park (NKSNP), which was declared in August 2007, Batugade and Atauro. Seven MPA sites have been identified in the NKSNP; these are Com, Tutuwala, Jaco Island, Lore, Mehara, Muapitine and Bauro. In Com, the MPA will be located along a 3km coastline near the public port and extend to 1km from the shore; it will be no-take zone. At Jaco Island, where the community is heavily dependent on fishing, the MPA will not be totally closed off to fishing but some gear restrictions will be put in place to minimize impacts, with an option to declare a no-take zone in the future.

Facilitating factors for MPA network development and management

- 1) Community enthusiasm for and awareness of the benefits of MPAs
- 2) Involvement and support of local leaders and traditional leaders (village councils) in MPA development

Hindering factors for MPA network development and management

- 1) Communities have limited knowledge on marine ecology.
- 2) Some communities that use marine resources live far from the coastal area and have limited of information regarding MPA.
- 3) There is a communication gap between MPA practitioners and local community due to language barriers.

Approach to operationalizing MPA network

- 1) Network model
 - Socio-cultural: Will involve and link community conservation groups
 - Governance: Will have a law enforcement component
 - Ecological: Will consider biophysical components, including habitats (coral reefs, mangroves, seagrass) and living organisms (reef fish, etc.)
- 2) Decision-making process
 - Decision-making starts at the local community level (community consultations)
 - Decisions are made by the village-level government as well as traditional leaders based on government decree or fisheries regulation as well as village regulations (traditional management). There is a need to integrate traditional management and the formal management system into one national MPA management system.
 - The preferred overall approach is integrated management that is both government-supported and community-based.

MPA network targets or milestones

- 1) Establish a national network linked to the regional network
- 2) Maintain and improve biodiversity in each site
- 3) Increase and generate income for the fishers and local community
- 4) Increase number of tourists
- 5) Develop study site

Added value of working as a network of MPAs

- 1) Regional and International networking
- 2) International comparative study on biodiversity
- 3) Social and cultural study

Potential contribution to improving MPA management effectiveness at the CTI regional scale

- 1) Opportunities to share experiences and knowledge in developing a network model that includes the following components:
 - Community involvement and participation
 - Local government support
 - Local community and traditional leader support
 - Fishers and coastal community

Discussion

Ms. Walton – As you designate more MPAs would they necessarily be done under the national park system or could MPAs be established independently as community-based and locally managed MPAs?

Mr. Amaral – Of the three sites already designated, one is in the national park and the other two – Atauro and Batugade – are not. For those MPAs in the national park, we need to follow national park regulations, but outside the national park, in the other regions, we just identify the sites and develop a management system for each site.

Mr. Handoko Adi Susanto – The national park has been designated, but the MPAs have not. Could you tell us about the progress there as well as in Batugade and Atauro?

Mr. Amaral – The national park consists of both marine and terrestrial components. In the beginning, the whole area from the beach up to 3 nautical miles offshore within the park was designated as a protected area, which meant it was restricted for some types of activities, such as commercial fishing. We have since identified specific sites to really protect or designate as

no-take zones or MPAs. This process is still in progress. Outside the national park, an NGO project worked in 2004 with the government to establish Atauro and Batugade MPA pilot projects, as we called them at the time. This process involved community consultations in these two sites, and the communities already designated certain areas to protect. It is now being continued as part of the CT Pacific Program supported by ADB, which also includes Solomon Islands and PNG. If we combine Atauro and Batugade with the NKSNP, we're looking at quite a huge area of MPAs that we hope can be linked or networked with each other and later connected to national and regional systems. We also hope that when the MPAs become fully established, we can talk with Indonesia to establish a trans-boundary MPA, especially with West Timor, with whom we share a boundary.

Solomon Islands

Presentation

Presenter: Peter Kenilorea

Examples of MPA networks. The Solomon Islands has about 92 LMMAs along the central coast down to the western side of the country; coverage area is not properly recorded. Some features:

- 1) There are three levels of networking:
 - At the **national level**, the Solomon Islands Locally Managed Marine Areas (SILMMA) network coordinates LMMA activities.
 - In some areas, there are MPA networks at the **provincial level**, such as the Lauru Protected Area Network (LPAN) in Choiseul and similar networks in Isabel and Central Province.
 - Networking also happens at the **community level**, for example, through the Roviana Conservation Foundation, which assists communities around Roviana and Vonavona Lagoons in Western Province.
- 2) Coordination and support are provided through:
 - SILMMA (national and regional levels)
 - i. Coordination
 - ii. Information sharing
 - iii. Awareness raising
 - NGOs (local level)
 - i. Technical expertise
 - ii. Financial support
 - iii. Awareness raising
- 3) Network design
 - Community-based networks – All LMMA networks are community based, and most are primarily concerned with socio-economic objectives, e.g. fish for *kai kai*(consumption), income generation (ecotourism), and restocking to promote production
 - NGO-based networks – These community-based networks are supported by NGOs, and generally focused on the conservation of biodiversity/species, such as in the TNC-assisted Arnavons Community Marine Conservation Area, where three communities in Choiseul, Santa Isabel and Waghena Islands are working together to protect important nesting grounds for hawksbill turtles.
 - Governance-based networks – A ridge-to-reef conservation plan has just been developed that provides some guiding principles for MPA systems. The CTI NPOA also provides some guidance and in some provinces, such as Choiseul, there are provincial conservation plans to guide MPA network planning.

Facilitating factors for MPA network development and management

- 1) Legislation -- Protected Areas Act (2010); Fisheries Act (1998)
- 2) Policies -- CTI NPOA; ridge to reef framework
- 3) NGOs – community-driven support

Hindering factors for MPA network development and management

- 1) Customary tenure system – Some communities do not understand the need for MPAs, and in some areas there are some disputes under the customary tenure system that hamper the development of MPAs and MPA networks.
- 2) Lack of sustainable financing for management –Financial support in most cases ends when assisting NGOs leave their project sites.
- 3) Compliance and enforcement issues

Approach to operationalizing MPA network. LMMA networks in general are anchored on community-based management and the well-tested premise that for networks to happen, we need partnerships across all sectors that need to be involved in MPA management and resource protection. The participation of communities is especially critical because, in the Solomon Islands, the communities are in nearly all cases the resource owners.

MPA network targets or milestones

- 1) National
 - SILMMA Vision – a well-resourced network for information sharing to ensure well informed decision-making by members on sustainable resource management
 - Ridge-to-reef targets – 10-20 percent of coastal communities in LMMAs under management
 - CTI NPOA – 25 percent of coral reefs declared as MPAs, with 40 percent under effective management
 - Inshore Fisheries – 50 percent of coastal communities in LMMAs
- 2) International
 - UN Convention on Biological Diversity (CBD)
 - CTI RPOA

Added value of working as a network of MPAs

- 1) Exchange of LMMA practitioners between sites
- 2) Cost (community-based management spread out translates to minimal cost)
- 3) Improved coordination
- 4) Improved policy support
- 5) Resilience

Potential contribution to improving MPA management effectiveness at the CTI regional scale

- 1) Enhanced resilience (by reducing impacts on resources)
- 2) Refugia for migratory species
- 3) Best practices (community-based conservation)

Discussion

Mr. Atkinson – Does the national government recognize the creation of LMMAs by communities so that they can be part of a national MPA network?

Mr. Kenilorea – Yes. In fact, SILMMA holds office in the Department of Fisheries and Marine Resources.

Dr. Green – Previously in discussions with the Solomon Islands government, Gizo was nominated as the area for USCTI technical assistance to focus on, with the participation of a stakeholder group that will review the network or integration framework for that. Would it be right to say that that is not happening now?

Mr. Jimmy Kereseke (Solomon Islands)– The initial focus was Gizo, but we are not aware where they are now or what they’ve been doing in terms of accomplishing this stakeholder group review.

Dr. Hermes –I find it interesting that you listed customary and tenurial rights under challenges because in Southeast Asia, customary rights are usually regarded as facilitating factors. In what way are they challenges?

Mr. Kereseke – It’s both. There is an opportunity to harness customary rights as an enabling factor for community engagement in MPA networks, but it can also be a challenge in cases where there are disputes within or among communities that prevent them from working together.

Ms. Walton – I understand that in most cases, communities with tenure are the ones that are encouraged to participate in the LMMA network. Is that right?

Mr. Kenilorea – Yes, it’s one of the criteria. Communities that have clear customary and tenurial rights are prioritized because neither the government nor the NGOs really want to have to face tenurial disputes.

Mr. Kereseke – That’s the usual way site selection is currently done in the Solomon Islands. At the same time, when a community expresses interest in being part of the LMMA network, we need a mechanism to guide how we respond to such interest. In Choiseul, for example, we developed a concession plan to respond to their interest. I think we also need to have that kind of plan at the national level so that we will know how to respond to similar requests or expressions of interest from other communities.

Dr. Green – That is the case as well in PNG. When we did the Kimbe Bay MPA network design, we took into account ecological and social criteria but the most important information that drove site selection was community willingness. In the Solomons, they have taken that to another level – they’ve identified places where there’s a good match between community willingness and other criteria, and they’ve really done it better.

Malaysia

Presentation

Presenter: Fazrullah Rizally Abdul Razak (Sabah Parks)

Examples of MPA networks. Most marine parks in peninsular Malaysia are being managed by the federal government (the Department of Marine Parks) and some are under the state government (state-level MPAs), including Sarawak and Sabah. Sabah is a special case, because the state parks there are managed by Sabah Parks. The presentation focused on the proposed Tun Mustapha Park (TMP) in Sabah, which has the following features:

- 1) Coverage: Approximately 1.028 million hectares (Banggi Island, the biggest island within the park, is bigger than Singapore); it includes more than 50 islands
- 2) The area is divided into three districts (Kota, Kota Marudu and Pitas), each headed by a district officer.
- 3) Total population: 80,000 (mostly coastal) and majority are fishers.
- 4) High biodiversity marine ecosystem, but highly threatened (fish blasting, cyanide fishing, overfishing)

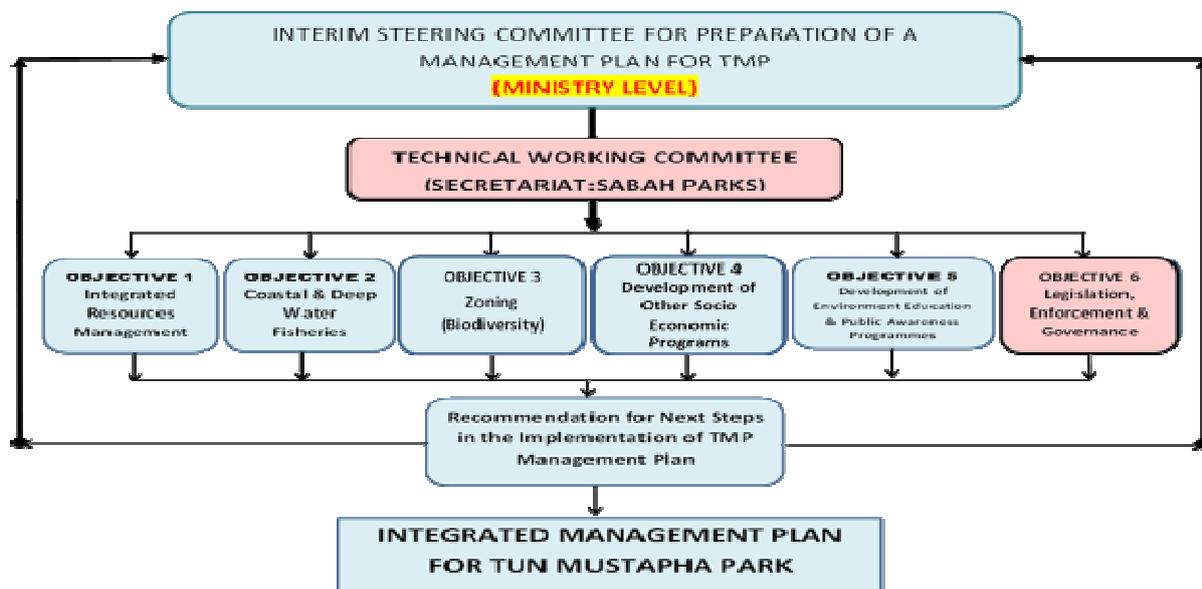
5) Conservation status

- 2001: Identified as a Priority Conservation Area for the Sulu-Sulawesi Marine Ecoregion, which is ranked Globally Significant (Turtle Islands Heritage Protected Area)
- 2003: Approved by the Sabah State Cabinet for listing as a national park.
- Sabah Parks has forged a partnership with WWF-Malaysia to prepare an Integrated Management Plan for the proposed park. Through a grant from the Coral Triangle Support Program (CTSP), the agency has hired a secretariat to establish an Interim Steering Committee headed by the Ministry of Tourism Sabah.
- No-Take-Zone is being implemented in 2 pilot sites (Maliangin Sanctuary and Kampung), and a demonstration site in Berungus is being established to showcase MPAs benefit
- Community-based approach is employed in some areas, where the communities themselves declare and manage small areas of no-take zones and general use zones with government support.
- Drafting of zoning scheme started; proposed zoning includes several zone categories namely, No Take, Multi-use, Community Use, Special Managed and Buffer zones.
- Preparation of zone maps by Sabah Parks and WWF-Malaysia, under the guidance of the University of Queensland. Maps will be reviewed by Interim Steering Committee and then presented for stakeholder feedback.

6) Network design

- MPA zoning is based on a mixture of social and biophysical principles, i.e. biophysical principles guide the integration of fisheries, biodiversity and climate change, and socioeconomic principles provide guidance for involving the community.
- Adapted from work by Leanne Fernandes et al (USAID/ASIA, CTSP, 19 January 2012).
- Co-management approach being considered based on governance principles – the Interim Steering Committee involves various stakeholders (see graph below).

Tun Mustapha Park interim steering committee organizational structure.



Facilitating factors for MPA network development and management in proposed TMP

- 1) Government commitment: In 2003, the Sabah State Cabinet approved the listing of TMP as an MPA.
- 2) General awareness and continuing support from government (especially the Sabah Tourism Ministry) and communities.
- 3) Involvement of stakeholders (especially the communities) in the steering committee and the preparation of management plan.

Hindering factors for MPA network development and management in proposed TMP

- 1) Complicated procedures resulting in delays in the listing of the park.
- 2) Differences in approach between different agencies with different interests in managing the area.
- 3) Lack of appreciation among communities of the difference between Category 2 national parks (large natural or near natural areas set aside to protect large-scale ecological processes) and Category 6 protected areas (protected areas with sustainable use of natural resources), under which TMP will be listed.

Approach to operationalizing MPA network in proposed TMP

- 1) Co-management and stakeholder involvement/collaboration – Various stakeholders are represented in the Interim Steering Committee, and in addition, consultations with stakeholders (especially local communities) help guide the preparation of the park management plan.
- 2) Gradual addition in the park design of closely monitored and guided pilot projects to demonstrate MPA benefits.

MPA network targets or milestones for proposed TMP

- 1) Main objectives
 - Conserve marine biodiversity
 - Develop fishery industries (traditional and commercial)
 - Eradicate poverty among coastal communities within TMP
- 2) Target milestones
 - Preparation of integrated management plan (in progress)
 - Public consultation on draft management plan conducted and feedback integrated into final draft plan
 - Integrated management plan completed, adopted by the Sabah Parks Board of Trustees (agency responsible to make sure that the area is gazetted) and implemented
- 3) Timeline
 - February 2011-June 2013: Completion of management plan
 - 2015: Target date for final listing of proposed TMP (leading up to this deadline, a roadshow will be conducted to raise public awareness of the TMP)

Added value of working as a network of MPAs

- 1) Improved management effectiveness through sharing of information and experiences.
- 2) Improved response to stakeholder needs.
- 3) Increased knowledge in migratory and threatened species that provide basis for integrated ecosystem management.
- 4) Generation of new scientific information to improve network design and management plan
- 5) Opportunities for sharing technical knowledge.

Potential contribution to improving MPA management effectiveness at the CTI regional scale

- 1) Increased opportunities for information sharing, knowledge exchange, technology transfer, capacity development and collaborative scientific research between countries.
- 2) Shared capacity for sustainable management of MPA.

- 3) Development of standards for managing and evaluating MPAs.
- 4) Development of criteria and indicators of MPA management effectiveness.
- 5) Improved quality of life of local community.
- 6) Enforcement of laws on transboundary resources.
- 7) Collaborative and comparative assessment of ecosystem services provided by MPA.

Discussion

Ms. Kasasiah – Is TMP an MPA network or a single MPA? It seems there is actually no local MPA or district MPA in the area yet? My understanding of a network is that it should be developed by linking small MPAs based on certain criteria.

Mr. Abdul Razak – I would consider TMP as an ecological network when it is finally established. It's a very big area with many different habitats and resources that are ecologically interconnected. It hasn't been gazetted as a marine park yet but we have a commitment from the Sabah Government that it will be. I would also stress that the area has three districts which are distinct from each other and need to be connected, so TMP would be a governance network as well.

Dr. Green – I was at the zoning workshop at the UQ and I can tell you that based on the draft zoning plan, TMP is designed to have an ecological network of no-take zones.

Ms. Kasasiah – If that is the case, would that not make TMP a single MPA that was developed based on ecological connectivity? Aren't we supposed to build a network by connecting small MPAs? In Indonesia, the law states that "MPA networks... shall be implemented through cooperation of all connected management units/levels."

Dr. Green – You can do it two ways. You can design a network that will achieve your ecological, social and governance objectives by having a collection of small MPAs that all add up to something big, or you can declare a large MPA, and then zone it so that the component parts add up to a network, which seems to be the primary approach in Malaysia, as opposed to Melanesia, where networks are built by connecting a collection of small areas. It's just a matter of scale. In any case, ecologically or socially or in terms of governance, they're all networks.

Mr. Atkinson – I like to think of NKSNP, Savu Sea and similarly large parks as management areas. I know they are gazetted parks, but they will have MPAs inside them that may be ecologically interconnected or need to be linked as a social or governance network based on certain criteria. Conceptually, this allows me to see how they meet the criteria for designing and planning an MPA network.

Ms. Walton – We're actually starting to see this more holistic approach in more places, where you have MPAs within a totally zoned area based on an integrated coastal zone management model. And it does seem to make more sense, because what happens between MPAs is important and must be managed – we cannot manage an MPA network effectively without considering the impacts that happen outside the individual MPAs within that network. My question is, are you considering the creation of additional MPAs if needed to complete your network objectives? Would you look outside of the Sabah boundaries to accomplish that?

Mr. Abdul Razak – Yes, we're thinking of linking TMP with other national parks in peninsular Malaysia. We're still not sure how to do that, because MPA networks are a new concept for Malaysia.

Indonesia

Presentation

Presenter: Ahsanal Kasasiah

Examples of MPA networks. Indonesia has about 15 million hectares of MPAs (Table 1.3.1), including a number that form part of various networks, such as:

- 1) Coral Reef Rehabilitation and Management Program (COREMAP)
 - Implemented in 15 Districts, 314 villages
 - Established “village level-community-based” MPAs (very small MPAs)
 - Divided into 14 district-level MPA networks that form the COREMAP network
- 2) Raja Ampat MPA networks – ecological and management (social-governance) MPA networks covering 1.8 million hectares. It is part of a bigger network called Bird’s Head Seascape, so it is a network within a network. It includes:
 - 23 village-based MPAs (no take zones)
 - 5 district MPA networks (Ofiau Boo, Misool, Ayau- Asia, Selat Dampier, T. Mayalibit)
 - 2 national MPAs
- 3) Bird’s Head MPA Networks (Seascape) – ecological and management (social-governance) networks that include:
 - 7 district MPA networks (Raja Ampat Networks, Kaimana, Sorong)
 - 4 national MPAs (Raja Ampat, Waigeo Barat, Cendrawasih, Padaido,)
- 4) Proposed Bali MPA Network – an ecological and management (social-governance) network currently under development as part of the bigger Lesser Sunda MPA Networks. It was initiated by the provincial government, which plans to establish a network that spans all of Bali Island. When completed, it is expected to cover about 73,000 hectares, including 9 MPAs:
 - Three declared MPAs in Buleleng (Pemuteran, Lovina and Tejakula) – 14,040.83ha
 - Two suggested MPAs in Karangasem (Tulamben-Karangasem and Padang Bai – Candidasa)
 - One declared MPA in Nusa Penida (Klungkung) – 20,057 ha
 - One proposed MPA in Badung (a surf reserve)
 - One proposed MPA in Jembrana
 - The waters of Bali Barat National Park – 3,415 ha
- 5) Proposed Lesser Sunda MPA Networks – ecological and management (social-governance) networks spanning three provinces and possibly two countries. When completed, it will involve around 100 MPAs in Indonesia (e.g. Savu Sea MPA, Bali MPAs, Gili Matra, Alor, East Lombok, etc.). It may also include still unidentified sites in Timor-Leste.
- 6) Proposed Bastunamata Network (Batam-Anambas-Natuna-Karimata) – located in the east coast of Sumatra
- 7) Proposed Aceh MPA Network – part of the west coast of Sumatra, still at a preliminary stage of development
- 8) West Coast of Sumatra MPA Network – ecological and management network that includes:
 - 3 Provinces (Aceh, North Sumatra, West Sumatra)
 - Over 15 District MPAs
 - 1 National MPA
- 9) Sulu-Sulawesi Marine Eco-region (SSME) – an ecological and management network involving three countries (Indonesia, Malaysia and the Philippines). There are still no functional mechanisms to connect the management units across the three countries and in some cases within each country. In Indonesia, five MPAs are involved (Berau, Nunukan, Bunaken, Bonebolango, Minahasa Selatan).

Table 1.3.1. MPAs in Indonesia (as of 2011)

No	Category	No	Size (Ha)
A	Initiated by Ministry of Forestry (MOF)	32	4,694,947.6
1	Marine National Parks	7	4,043,541.3
2	Marine Recreational Parks	14	491,248.0
3	Marine Wildlife Reserves	5	5,678.3
4	Marine Nature Reserves	6	154,480.0
B	Initiated by MMAF	66	10,717,578.7
1	Marine National Parks	1	3,521,130.0
2	Marine Nature Reserves	3	445,630.0
3	Marine Recreational Parks	6	1,541,040.2
4	District-based MPAs	56	5,209,778.5
	TOTAL	98	15,412,526.3

Facilitating factors for MPA network development and management

- 1) Legal basis for MPA network development – The mandate to develop MPA networks is explicitly addressed by Article 19 of Government Regulation No. 60/2007 on fishery resources conservation, which states:
 - MPA networks at local, national, regional and global may be established inline with MPA management purposes.
 - MPA networks are developed based on biophysical connectivity supported by scientific evidence, including oceanography, fish bioecology and ecosystem resilience.
 - MPA networks at national and local levels shall be implemented through cooperation of all connected management units/levels.

Approach to operationalizing MPA networks

- 1) Initial steps taken:
 - Supported and strengthened national and district MPAs through the:
 - i. Establishment of management bodies
 - ii. Adoption of management plans
 - iii. Capacity building (with assistance from NOAA, USAID and USCTI)
 - iv. Development infrastructure
 - v. Creation of a working group on sustainable financing for MPA management in Indonesia
 - vi. Conduct of gap analysis for protected areas (including MPAs)
 - vii. Identification of new MPAs based on certain criteria, including representativeness.
 - viii. Development of management effectiveness indicators
 - Identified potential networks based on biophysical characteristics and, primarily, on socio-economics and governance level and management.
- 2) Develop MPA management plans (in progress)
- 3) With partners' support, further develop MPA networks, e.g., Bird's Head seascape (with CI), Bali MPA Networks (with provincial government of Bali), Lesser Sunda (with TNC), etc.
- 4) Strengthen regional cooperation through SSME and Bismarck Solomon Seas Ecoregion (BSSE):
 - Implement of a new project under SSME (Sulu Celebes Sea Sustainable Fisheries Management)
 - Design a network of protected areas to safeguard marine turtles in the SSME
- 5) Develop the marine ecoregions based on diversity, irreplaceability, vulnerability and representativeness, which be translated into MPAs.
- 6) Draft National Grand Strategy for MPA Networks.
- 7) Establish national guidelines and ministerial decree on MPA networks (in progress).

MPA network targets or milestones

- 1) 2014 : 15 million ha (completed as of 2011)

- 2) 2020: 20 million ha
- 3) 2030: 30 million ha (10 percent of Indonesian territorial waters)

Added value of working as a network of MPAs/potential contribution to MPA management effectiveness at the CTI regional scale

- 1) Harmonization of program and activities among MPAs
- 2) Standardized management procedures and measures
- 3) Sharing of financial burden and allocation to manage MPAs
- 4) More effective management of transboundary issues
- 5) Sharing of lessons
- 6) Improved communication
- 7) More effective coordination of law enforcement
- 8) Improved program monitoring and evaluation
- 9) Increased MPA management effectiveness and efficiency

Important ingredients for success

- 1) Multilevel government support
- 2) Strong partnerships between stakeholders (commitment and co-management)
- 3) Strong regulations and policies
- 4) Effective management of single MPAs within the networks

Discussion

Mr. Nate Peterson – I am loosely aware of the transfer of management of certain MPAs from the Ministry of Forestry (MOF) to the MMAF. Is this reflected in Table 1.3.1?

Ms. Kasasiah – Eight national MPAs have been transferred from the MOF to the MMAF, and 6 MPAs are still with MOF. We formed a team to work together on the issues between the two ministries.

Mr. Suraji – MOF has already transferred 8 MPAs consisting of 3 marine reserves, and 5 marine national parks. These are shown in the table.

Mr. Peterson – One of our goals at the CT Atlas is to get the most accurate information and represent the countries as best as we can. So it's helpful for us to understand the framework with which you work so we know who has the information and which information might be most important. Mangroves have always been a fuzzy area for us. Do they get counted under fisheries or forestry? I hope to learn more from this group here how to better account for these things.

Ms. Kasasiah – We've been facing those issues for more than 10 years. The MOF says mangroves are part of the forests, while we (MMAF) say that mangroves are fish habitats. So we sat together, tried to define which areas are our responsibility and which ones are under the MOF, and we came up with – not an agreement actually –but a decision that if you're dealing with mangrove issues in the context of fisheries, then they should be the responsibility of MMAF, and if you're working on mangroves from the forestry perspective, then that should be the MOF's responsibility. The Ministry of Environment and Natural Resources also asked about their role in mangrove management and there are no clear answers yet. We have a strategic plan that addresses some of the issues, but it hasn't been approved yet. The problem is really at the local level, where there is confusion over the delineation of responsibilities.

Dr. Green – You mentioned a draft ministerial decree on MPAs. What aspect of MPAs is the decree going to focus on?

Ms. Kasasiah – We have a mandate under Government Regulation No. 60 of 2007 to develop a ministerial decree on MPA networks based on a strategic plan that we drafted in 2006. We’re doing some work on that decree now, but it’s still at a very early stage.

SESSION 1.5. OVERVIEW OF MPA NETWORK FRAMEWORKS

After focusing on the national perspective, the discussion shifted back to global developments. Dr. Stacey Tighe (CTC/PI) started off the discussion with a presentation on the larger policy and governance structure of MPA network frameworks and the important elements that should be considered in the development of a network framework.

Dr. Tighe defined a framework as “a basic structure underlying a system or context that everyone can use as a guideline or a touchstone as they go and develop the different pieces of the overall design, and a basis for policies and approaches that is widely accepted to guide the design and operation of a system.” In this sense, an MPA network framework must be comprehensive enough to address each of the elements of the definition of an MPA network, she added, citing in particular a definition adapted from TNC, WWF, CI and WCS (2008), which describes an MPA network as “a comprehensive, ecologically representative and well-managed region-wide system, which is composed of prioritized individual MPAs and networks of MPAs that are connected, resilient and sustainably financed, and is designed to generate significant income, livelihoods and food security benefits for coastal communities, and conserve the region’s rich biological diversity.” (Table 1.5.1)

Table 1.5.1. Elements of an MPA network framework based on MPA network definition adapted from TNC, WWF, CI and WCS (2008)

MPA Network Definition	Required Section in CTMPAS Framework
Operating cooperatively and synergistically →	<i>Define a Management/Cooperation Mechanism</i>
At various spatial scales →	<i>Define a “set” of sites at local/community scale, national scale and regional scale (we have to have a structure both in the governance and in the definitions that help us figure out what those sets are, and what the purposes of those sets are)</i>
With a range of protection levels →	<i>Define a “set” of sites with different Uses/Restrictions and Protection Level (Science Reserve, No-Take Zone, etc.)</i>
Designed to meet objectives that a single MPA or reserve cannot achieve →	<i>Define a “set” of sites with different Ecological, Social, or Economic Objectives, Principle (Redundancy) and Target Habitat/Species/Structure</i>
Based on ecological, social/learning, and/or governance/management criteria →	<i>Define a set of design parameters or criteria to meet the system Objectives</i>

More specifically, Dr. Tighe listed important aspects of building MPA networks and illustrated how they fit into the network framework (see graphic below):

- 1) Best practices for planning and implementation
- 2) Setting MPA networks in a broader context
 - Economic and social considerations
 - Spatial and temporal considerations
 - Scientific and information management considerations
 - Institutional and governance considerations (leverage existing institutional arrangements; no need to reinvent the wheel)
- 3) Political will and leadership
- 4) Public education, communication and awareness
- 5) Monitoring and assessment
- 6) Compliance and enforcement (at the national or regional level, support enforcement by improving the quality of local enforcement through training and capacity development programs)
- 7) Sustainable financing



Key aspects of building MPA networks (IUCN 2008)

Dr. Tighe also presented a compilation of best practices based on work done by WCPA/IUCN and TNC that she said could further guide the countries as they develop their MPA network framework (Table 1.5.2). “The TNC list is actually a set of guidelines for learning networks, but except for the part about structure design, it actually works well for MPA networks,” she pointed out.

Dr. Tighe also presented a review of different MPA network frameworks from across the world to provide examples of what the CTMPAS might want to consider having in their own framework. The review included the networks listed below (websites for more info also noted).

- 1) Regional networks/systems: (a) OSPAR (Oslo Paris Convention - NE Atlantic, 12 countries) – one of the most developed regional networks; employs scorecards, checklists and guidelines for management and site selection that have already been applied in practice; <http://www.ospar.org> (b) Oceana MEDNet (MPA network proposal for the Mediterranean Sea); <http://oceana.org/en/eu/our-work/habitats-protection/mediterranean/mednet/overview> (c) Mesoamerican Caribbean Reef <http://www.icran.org/action-mar.html>
- 2) National networks: (a) Belize <http://www.ecomarbelize.org/coral-network.html>; (b) USA; http://www.mpa.gov/pdf/national-system/finalframework_full.pdf (c) Canada <http://www.dfo-mpo.gc.ca/oceans/publications/dmpaf-eczpm/framework-cadre2011-eng.asp>
- 3) Subnational networks: (a) Gulf of Mexico, USA; <http://www.mpa.gov/nationalsystem/gulf/> (b) Lesser Sundas www.reefresilience.org/pdf/LSE_MPA_Design.pdf

More detailed descriptions and official documents about these networks, including the overview comparative review document with comments, notes and recommendations, can also be downloaded from the USCTI portal at www.uscti.org under the Workspaces Section. To access the portal, log in through username: **coral** and password: **triangle** (non-case sensitive). The tables in Annex 10 can serve as an index to the sample frameworks. For instance, if you are looking for a network that has a way to prioritize sites, you may find two networks listed in the index that have examples of that, and you can download the relevant files and look at their approach.

Drawing on these examples, Dr. Tighe described three general phases in building the framework and MPA system:

- 1) Define the system

- 2) Build the system (early implementation)
- 3) Operate the system

Most of these systems reviewed developed strategically, and a typical process of establishing a regional network might involve several steps, such as:

- 1) Define goal and geographic area -- In CTI's case, the goal is RPOA Goal 3 and the area is made up of the CT6.
- 2) Define ecoregions – *How an ecoregion is defined will depend on the network objectives and the practicalities of management.* For example, in the Mediterranean, they initially defined their ecoregion based on MEOW (marine ecoregions of the world) but it did not fit their needs, so they used their fisheries zones for the Mediterranean, which (a) already had a reporting structure; and b) was more feasible for what they were doing.
- 3) Define objectives/priorities/structure of your desired system: *this is often based on network-owner's ecological, socio-economic and governance context, and their design principles*
- 4) Conduct ecoregional assessment – At smaller scales or where scientific research, evaluation and assessment are already going on, the assessment is sometimes done before everything else. At larger scales, this is often not possible, in which case some ecological assessment may be done later as part of a gap analysis.
- 5) Nominate existing national MPAs/networks – There are two general approaches to doing this: 1) identify the objectives first, then go through an inventory of existing MPAs and decide which ones should be part of the network; or 2) set the objectives, identify the areas that are ecologically connected and should be protected for various reasons, determine which ones have been declared as MPAs, and declare those that are not. "In most cases, you nominate what you have, sometimes over years," said Dr. Tighe.
- 6) Categorize and initiate an inventory of sites, habitats, species, etc. Already in the initial system
- 7) Conduct a gap analysis to define the gap between the current status of protection/management and the targets
- 8) Recruit/develop other MPAs to fill the gap

Table 1.5.2. Compiled Best practices for developing Networks

STANDARD	WCPA/IUCN 2008 Best Practice	TNC Network Best Practices
CLEAR STRATEGIC PURPOSE	Clearly define network goals and objectives	Assess Needs and Define Goal Define Outcomes & Milestones
EFFECTIVE LEADERSHIP	Presence of legal authority and long-term political commitment	Define Leadership Function, Skills, Level of Effort
COMMITTED MEMBERSHIP	Encourage Stakeholder participation	Determine Network Size and Geographic Scope; Select Members (MPAs); Enlist Members; Include related members/orgs
DESIGN FOR INSIDE CONTEXT (MPA structure)	Make best use of available information & precautionary approach	n/a
DESIGN FOR EXTERNAL CONTEXT (e.g. CCA, ICM, Disaster management)	Develop Integrated Management Frameworks (CCA, EAFM)	n/a
MEASUREMENT AND ADAPTIVE MANAGEMENT	Employ Adaptive Management Measures	Evaluate activities. Evaluate Progress. Evaluate Outcomes.
WELL DESIGNED and EXECUTED ACTIVITIES	n/a	Assess Individual and collective needs; Design activities to meet member's needs
DOCUMENT LESSONS LEARNED	n/a	Packaging Lessons Learned; Sharing Lessons Learned; Deploying Network "Members" to coach younger sites
ADEQUATE RESOURCES	n/a	Define and Secure scoping and design costs; Define activities and co-financing support from various sources for Launch and Operation

“This is the common current practice, but it is not carved in stone, so we do not have to do everything, only those steps that are applicable to our particular situation,” Dr. Tighe noted. In the case of the Philippines where networks are formed by connecting existing MPAs based primarily on social and governance objectives, the network development process generally followed the coastal management planning process: (1) Identification of shared issues and opportunities; (2) planning and formation/strengthening of network management council; (3) implementing coordinated programs and policies; (4) monitoring and evaluation; and (5) feedback and IEC. “Most MPA networks are compilations, not complete ‘sets.’”. If we cannot afford to protect everything, the strategic questions become: “How much do we need? How do we find the ‘most important’ sites to add or fill gaps? How do we recruit those sites into our system?”

Dr. Tighe added: “In the case of the CTMPAS, right now we’re only still looking at defining the framework but we really have to make some decisions before we leave this workshop how we’re going to deal with some of the issues about building and operating it.”

She concluded: “We are ready to start building MPA networks, working with what we already have to compile geographic sets; identify gaps in function, value, stewardship and nests; and work toward adding priority sites. We must aim to manage our MPAs holistically and adaptively.”

Discussion

Ms. Shahima Abdul Hamid (Malaysia) – How long would it take and how much would it cost to develop a network and how many people would be required?

Dr. Tighe – For OSPAR, which is perhaps the best organized network right now, it took about five years to select sites and complete their network design. If you are just compiling data and don’t do major scientific surveys, it shouldn’t be all that costly. In many cases, you invite MPAs that already exist or bring in volunteer MPAs to join your network, so you build the network slowly over many years. MPA networks are living networks. You will be constantly adding to and amending them.

Ms. Abdul Hamid – We are now in the process of identifying new MPAs and this year we are doing a major scientific expedition for peninsular Malaysia as well as Sabah and Sarawak. The scientific expedition alone will take two months, and it will cost about one million ringgit. How much longer after we finish the survey would it take before we can have a set of MPAs that we can network?

Dr. Green – Once you’ve done your survey, you might feel you have all the information you need, it shouldn’t take very long to identify appropriate MPA sites. When you have the information GIS layers, the actual analysis can be done [in] about one week. What takes a long time is the process of defining objectives, gathering the information you need, defining your framework and all the stakeholder consultations involved. If the process is community-driven, it might take even longer. The process in Kimbe Bay took two years to get to a point where the decision was made to form the network, and five years later the network is still being developed. We can only go as fast as the communities are interested and willing to go. The scientific process is a bit technical but it is not the hard piece. It can probably be done in six months once you have all the data. You’ve got a lot of GIS capacity in Malaysia. All you probably need is a little bit of advice. During this week, if it’s helpful, I would be happy to sit down with you and help you plan, so you can get started.

Dr. Tighe – They are employing one person full time at the CT Atlas to work on MPA data entry and manipulation. [That should help us compile the GIS information regionally]

Dr. Green -- I just want to make a point: you're never done building your networks. You try and do the best you can the first time. If you can, you will want to do everything that the science suggests you should do but in many cases that is not possible. So you take a multi-stage approach, perhaps aim for smaller objectives and build on those. Just aim to do the best you can each time, then review and amend as more science comes in, perhaps every 5-10 years.

Ms. Laroya – For the purpose of the CTMPAS, how do we define an MPA network? Should we as a group agree on some criteria or parameters that will tell us that we have the minimum set of MPA sites across the region that qualify as a network? I don't need an answer right now but hopefully we can agree on a definition before this workshop ends.

Dr. Aliño – In our work with the USAID Philippine Environmental Governance Project (EcoGov), we defined certain parameters for functional MPA networks. For example, we agreed that member MPAs should have joint activities, and then we identified the types of joint activities that a network should undertake to achieve, for example, the objective to strengthen MPA management. The key thing is to highlight the added value or benefits that the network generates, perhaps by accelerating resource recovery or improving management effectiveness.

Mr. Jatulan – When do we say that we have an MPA network in the CTI context is a question that this group will have to answer. We will discuss this in the next sessions as part of our CTMPAS framework.

SESSION 1.6. SUCCESSES AND CHALLENGES IN NETWORKS/SYSTEMS IN THE CORAL TRIANGLE WITH IMPLICATIONS FOR CTMPAS

This session consisted of breakout discussions and report-outs on the following:

- 1) Examples of successful networks, components of networks or elements of network development
 - a. Ecological, social and governance
 - b. Which ones can be replicated in other countries (and for CTMPAS)?
- 2) Major challenges
 - a. Ecological, social and governance
 - b. Which challenges are being addressed successfully, where and how?
 - c. Which challenges still need to be addressed and how? Which of the gaps that keep coming up have no clear solutions for now?

Participants were divided into three mixed-country groups, numbered 1 to 3. Dr. Green facilitated.

Report-out

The groups reported in the following order: Group 3, Group 2 and Group 1.

Group 3

Presenter: Anne Walton

Success factors

- 1) Assessment, identification and prioritization of issues – This process helped identify the need for building networks of MPAs rather than just single MPAs.
- 2) Stakeholder participation – The group identified this as a major success area, particularly in terms of:
 - a. Engaging community leaders (e.g., by forming a management committee composed of local leaders) that can help engage, influence or at least communicate with the entire community.

- b. Developing peer-to-peer communication mechanisms that allow people to communicate with others who share similar interests or backgrounds.
 - c. Establishing structures or mechanisms for continuous communication between the communities and the different levels of governments – countries that had such structures found it easier to engage communities in protection efforts.
- 3) Multi-sectoral partnerships for MPA networks – Key partners include the communities, NGOs, research institutions (which provide technical assistance and access to scientific information), government and the private sector.

Challenges and solutions

Challenges	Solutions
Lack of network management plans	Formulate and document replicable frameworks that can be adopted or adapted across the network.
Lack of sustainable financing	Create a financing framework and trust fund.
Low capacity to design and implement network	Implement community-based management.
Inadequate support from policy makers, particular on issues related to: <ul style="list-style-type: none"> a. Lack of continuity in programs and policies from one electoral term to the next resulting in policy and implementation inconsistencies b. Lack of buy-in in general from policy makers c. Conflicting interests or mandates between government agencies 	Socialization

Group 2

Presenter: Rebecca Weeks (JCU)

Success factors

- 1) Support (policy, financing and dedicated resources) from government at all levels is a key factor influencing success.
- 2) Local community participation and support
- 3) Clear and comprehensive plan and process, e.g. the SSME plan and process
- 4) Integration of different governance types, e.g., the creation of a network that includes nationally and locally designated sites and the community has worked well for Raja Ampat.
- 5) Decentralization was a success factor for Indonesia and the Philippines, which wasn't the case in Malaysia.
- 6) Standardized or complementary enforcement – This is particularly relevant in Malaysia, where the success of transboundary management comes from having different enforcement agencies work together and agree on what the regulations are and how they are going to be enforced, and who will play what role in that process.
- 7) Strong and coherent legislation and policy at the national level has translated into action at the local level – Policy coherence is an important factor for success, because strong policy that pulls in different directions may not be enforceable.
- 8) In the Philippines and Malaysia, creating incentives and opportunities for knowledge sharing has encouraged the different groups involved in MPA networks to work together.
- 9) In the Philippines, Indonesia and Malaysia, the scientific community's support has helped the development of MPA networks; in the Solomon Islands, Indonesia and the Philippines, NGO support has been a critical factor for success.
- 10) Partnerships between government, NGOs, community members and academia -- MSN in the Philippines and SILMMA in the Solomon Islands are essentially partnership arrangements that have contributed tremendously to the development of MPA networks in those countries. In Malaysia, public-private partnerships (PPP) have been particularly successful.

The group agreed that all of the success factors above are replicable except (1) and (5).

Challenges and solutions

Challenges	Solutions
Lack of sustainable financing	
Communication issues <ol style="list-style-type: none"> a. Language barriers at the local level, especially in Timor-Leste and PNG, where people in small communities do not speak a common language. b. Lack of a common understanding of MPA, EAFM, etc. (the use of multiple acronyms does not help) c. Lack of clarity on what MPA networks mean at the community level and at different levels of government 	<ol style="list-style-type: none"> a. Train community facilitators.
Gaps in the legal system (Solomon Islands)	
Lack of a centralized database or repository of information (Malaysia, Solomon Islands and Timor-Leste)	
Jurisdictional overlaps and lack of coordination between national and local governments in the Philippines and Indonesia – Although decentralization in these countries is generally regarded as a success factor, it also comes with these challenges.	Malaysia has a centralized management system administered by the Department of Marine Parks. Although not directly applicable to the Philippines or Indonesia, where the government has a decentralized structure, the Malaysian system may have certain coordinative mechanisms that can be adapted at a smaller scale by the other countries, perhaps at the provincial level.
Poverty, population pressure and high dependence on fisheries	Malaysia offers a possible solution in its fisheries exit policy. Established five years ago, the policy proved difficult for government to enforce, but “implementation is improving” (and may offer learning opportunities for other countries).
Conflicting objectives	Define clear objectives and planning processes.
Inadequate implementation policies – Many plans and policies have yet to be translated in operational terms and therefore cannot be implemented.	Define policies for implementation.

Group I

Presenter: Tiene Gunawan (CI)

Taking a different discussion approach, Group I selected one or two MPA networks in each of the CT6 and identified the following successful elements in their design and implementation:

Indonesia

- 1) Bird’s Head Seascape MPA network
 - Addresses the need to protect the area’s high marine biodiversity
 - Based on multiple scale connectivity
 - Includes socioeconomic and governance considerations
- 2) SSME
 - Ecologically connected based on the migration patterns and life cycle of sea turtles
 - Provides a mechanism for transboundary management of migratory species
 - Addresses transboundary governance considerations
 - Has a very detailed work plan

Malaysia

- 1) Tun Mustafa Park
 - Will have progressive zoning (currently in the zone planning stage)
 - Addresses food security, biodiversity and transboundary governance

Solomon Islands

- 1) Choiseul LMMA network
 - Has strong social and governance components
 - Involves a good community network through church activities

PNG

- 1) Kimbe Bay
 - Primarily driven by ecological objectives but addresses both ecological and social issues.
 - Has made progress on governance with strong local legislation support

Timor-Leste

- 1) Ninos Konis Santana National Park
 - Designed to protect a high biodiversity area
- 2) Batugade and Atauro MPA Network
 - Has transboundary governance objectives
 - Designed based on food security objectives

Philippines

- 1) Taytay, Palawan
 - Driven by ecological objectives (to protect spawning aggregation sites)
 - Uses science to inform ecological and governance objectives
 - Social and ecological gap analyses conducted
 - Flexible design (ability to redesign based on new information, e.g. climate change, enforcement and connectivity)
- 2) Verde Island Passage
 - Has an enforcement network
 - Uses science to inform ecological and governance objectives
 - Social and ecological gap analyses conducted
 - Flexible design (ability to redesign based on new information, e.g. climate change, enforcement and connectivity)

Challenges

- 1) Governance issues – For example, scientific activities support the Bali MPA network, but implementation is hindered by issues that stem from having different levels of governance (local, provincial and national) within one network. Also, the MPAs are at different stages of development and in some cases involve multiple jurisdictions that pose a challenge to management.
- 2) Sustainability issues – There is plenty of short-term support for MPAs (usually from NGOs or donor projects), but building long-term support beyond life-of-project remains a major challenge. There are some successful MPAs such as Arnavons that have become self-sustaining and may offer some solutions.
- 3) Need to show benefits of co-management/need to include payment for ecosystem services in the overall planning – Malaysia is working toward a co-management system involving community participation and needs to demonstrate the benefits of co-management, perhaps through payment for environmental services.
- 4) Need to integrate traditional knowledge into MPA management.
- 5) Mismatch between ecological boundaries and political jurisdictions.
- 6) Lack of coordination between different levels of government
- 7) Gaps between individual MPAs within a network in terms of level of effectiveness and stage of development – While assistance may be available to address some of these gaps, often there is no information on what stage in the planning process the MPAs are, so there is no way of knowing what kind of support is needed from the national government.
- 8) Enforcement and gaps in legislation and follow-up actions (e.g. prosecutions) – In Indonesia, there are huge challenges to enforcement, especially in remote areas. Also, there is some disconnect between agencies, so even when violators are apprehended, they are often not

prosecuted. In some cases, the issue is about what law to use to prosecute fisheries violations. The fisheries law carries a small penalty that may not be a sufficient disincentive against violations, but in some cases, such as blast fishing (possession of explosives), the terrorism law (with much stiffer penalties) may be applied.

- 9) Need to build MPA network management into an existing governance framework to improve sustainability.
- 10) Need to establish a full M&E system linked to adaptive management
- 11) Lack of credibility of certain institutions.
- 12) Lack of local capacity to carry out the management.

Day 1 activities ended at 5:45p.m.

Day 2 sessions created input into *Section 4 (Defining CTMPAS)* of the CTMPAS framework and strategy, particularly Session 2.6, that fed into *Section 4.2. Ecological, Socioeconomic and Governance Principles, Objectives and Benefits of CTMPAS* of the revised draft outline of the CTMPAS framework (Annex 13).

SESSION 2.1. REVIEW OF DAY 1 AND OVERVIEW OF DAY 2

Day 2 opened at 8:30 am with a brief review of Day 1 and an overview of Day 2. Mr. Jatulan reminded participants to fill out their worksheets to capture key comments as the discussion progressed. The day's discussions focus on defining ecological and science-based guidance for integration into MPA networks, and various tools and services that the countries could use to help them achieve their network objectives. Also for the first time during this REX, the countries would directly tackle the drafting of the CTMPAS framework based on Day 1 and today's discussions and the principles and objectives identified during the 2010 MPA REX (REX1) in Phuket.

SESSION 2.2. DEFINING ECOLOGICAL AND SCIENCE-BASED GUIDANCE INTO MPA NETWORKS

This session consisted of two plenary presentations. The first presentation, by Dr. Green, was on integrating fisheries, biodiversity climate change objectives into resilient MPA network design; the second, by Dr. Hermes, provided an overview of the FAO guidelines for the integration of MPAs and fisheries objectives. An open forum followed each presentation.

Integrating fisheries, biodiversity and climate change objectives into resilient MPA network design in the Coral Triangle

Presentation – Dr. Alison Green (TNC)

This presentation discussed the work done by CTSP toward developing guidelines, criteria or design principles for integrating fisheries, biodiversity and climate change objectives into the frameworks of MPAs in the Coral Triangle, focusing primarily on biophysical principles for achieving ecological objectives.

In the past, MPA designs have tended to focus on one or the other of the following objectives:

- 1) Biodiversity protection – Conservation NGOs generally focused on establishing MPAs designed to protect biodiversity but not to benefit fisheries
- 2) Fisheries production – Governments and communities often used some types of spatial or temporal closures to achieve fisheries objectives, but did not directly address biodiversity or climate change concerns.

The biophysical principles developed by CTSP are intended to bridge this segregation by designing MPAs to simultaneously address biodiversity, fisheries and climate objectives. The final report (Fernandes et al, 2012) summarizes common design principles for each objective and identifies where they are the same or different. Fifteen biophysical principles for simultaneously achieving the three objectives were identified, five of which are described below. The first two are the same for all objectives, while the others differ somewhat between objectives.

- 1) Where possible, it is good to create a large multiple use area that (a) include but are not limited to no-take zones; (b) apply fisheries restrictions outside of no-take areas (NTAs); (c) prohibit destructive activities; and (d) minimize local threats. In the past, most MPAs were

- strictly NTAs focused on biodiversity protection. NTAs are important, but to achieve fisheries objectives, MPA designs must allow for limited (or restricted) fishing outside the NTAs and be able to address other threats such as destructive fishing and runoff from land.
- 2) Spread the risk by protecting examples of each type of habitat within NTAs.
 - 3) Ensure that NTAs include critical, unique and resilient areas.
 - 4) Consider the following in determining the duration of NTAs:
 - a. To support biodiversity, climate change and fisheries objectives for a range of species, the MPA should be in place for the long term (>20 yrs.), preferably permanently.
 - b. If applicable, include an additional 15 percent of the area in shorter-term protection for fisheries benefits, e.g., temporal closures for spawning areas, or in some cultures (e.g. Melanesia), temporary closure to stockpile fish for feasts/school fees. These measures should be used in addition to, and not instead of, long-term or permanent protection.
 - 5) Take connectivity (how species move around) into account in determining size, spacing and location of NTAs.

The study is still being refined to make the information on fish movement as complete as possible. There are plans to develop communication products for communities to help facilitate discussions on how big their NTAs should be based on their objectives. In the meantime the results are already being used to help the CT6 and implementation partners apply the integration principles at various scales in the CT, for example, in TMP and NKSNP.

Discussion

Dr. Sangeeta Mangubhai – We’ve been applying many of these principles at Raja Ampat to determine where the NTAs should be located. In some places, having small NTAs may offer the best investment ecologically, socially and in terms of governance. But for places that I know in Indonesia and in Malaysia where they are proposing very large MPAs, having many small MPAs may have some implications to the cost of enforcement and socialization. For example in Savu Sea, if you have hundreds and hundreds of NTAs, they would be very challenging to enforce.

Dr. Green – You’re quite right: The biophysical needs to be balanced against other considerations. But now that we have information on the species that communities care about, it is possible to engage stakeholders in conversation in ways we couldn’t before.

Dr. Abd. Ghani – Are you saying that we need to determine fish life history, larval dispersal, etc. in addition to traditional knowledge, before we can determine the size of an MPA? How much time should we spend in designing the MPA then?

Dr. Green – The point is that if you are very clear on what you want to achieve, there is new information that you can use to design an MPA that can help you meet your objectives. It shouldn’t be hard. In fact, now that you have the information, it should be easier. If there is someone who knows how to do this that can help you, it’s not going to take a lot more work. In the past we would be having this conversation without the information so we would default to the advice that you should have many large NTAs. That may be the best thing to do, but it is not always practicable. Now that we have the information, if you can’t have many large NTAs, we can tell you there are other ways to do it.

Mr. Marthen Welly – Sometimes it’s not easy to find a spawning aggregation site in the field and sometimes the spawning aggregation sites disappear or they change. Do we have to change the design if something happens to the spawning aggregation site?

Dr. Green – Spawning aggregations by nature are seasonal. If you know you have an important spawning aggregation site that's still functioning, then it's really important to protect it. But you don't necessarily have to establish an NTA all year. If you know when spawning occurs in a particular area, you could have seasonal closure of that area. Or if you don't know where the spawning area is but know when spawning occurs, you can impose a seasonal ban on fishing. Also if you have areas where there is no more or very little spawning, I would recommend that you still provide some protection to improve the spawning population's chances of recovery. I would just like to add one more point: People have tended to focus more on NTAs as a bad thing, that communities aren't going to like them because they cannot fish there. We have to turn that around and say NTAs are beneficial to fisheries. We need to really think about communicating NTAs in a way that emphasizes their benefits. Scott (Atkinson) is helping us develop communication products to get these key messages to decision-makers, policy makers and communities and other stakeholders. As we go forward, we can give you one-on-one advice on how to do it in your area and hopefully sometime this year, some good communication products will be available. We can try and make them so they can be adapted to the local culture.

Mr. Atkinson – One of the problems is the terminology, how we call the protected area. From the biodiversity conservation point of view, it's called a no-take zone, but from the fisheries perspective, it's called a replenishment zone. Another point that I would like to make is that while we can now tell communities that they don't have to feel bad if they can only do small, I don't think we should say do small instead of big. We should say, do big if possible, but if not, we can still get some ecological benefits from small.

Mr. Amaral – Can you also provide us with concrete examples, real case studies of sites that we can use as reference on how to set up and then manage MPAs?

Dr. Green – Your point is very good. We have to have demonstration sites in some places. And I think there are good examples from some of you here that can be shared with the other countries.

Ms. Walton – It's really important to understand what your objectives are when you're creating biophysical MPAs, and this links to Marthen's (Welly) comments as well. We're seeing a lot of changes in the ocean and climate change is only going to contribute to that. So don't think when you create a network of MPAs – especially if it's an ecological network – that it's going to be set in stone. We need to have clear objectives, and we need a system for monitoring and evaluating changes in our MPAs so that we can check on a periodic basis if we're meeting those objectives, and if we're not because there a lot of changes taking place, then we must be able to re-evaluate our MPA design and modify it if necessary. It seems we're making a huge effort right now, but it's going to be much simpler to make those modifications once everything's in place. We just need to remember that this is not a forever decision we're making now.

Dr. Green – People are also saying that it's a big step to go from zero protection to 30 percent NTA. But you don't have to do it all at once. It can be incremental. You can start for example at 10 percent, but have a plan to revise the level of protection over time. It would be useful to think about what you want to achieve, what you've already got and is it going to achieve your objectives and if not is there something else you need to do.

Mr. Kereseke – In the Solomon Islands, we are dealing mainly with communities and very small NTAs compared to the other countries, so this is good news for us. At the same time, it also tells us that we may be facing some challenges in protecting some species. If there is a species that has a wide range that we need to protect, working with one community may not be enough. In some cases we may have to expand to an area that belongs to another

community, which implies the need for collaboration and cooperation. All marine areas in the Solomons are owned by the communities, and we cannot expand without their cooperation.

Dr. Aliño – I would encourage participatory assessment methods in addition to scientific studies. They can provide information on nursery grounds, as well as encourage community stewardship of the reserve/regulated use areas, enhance juvenile survivorship and promote empowerment of communities within the boundaries of the NTA.

Overview on FAO Technical Guidelines for Responsible Fisheries: MPAs and Fisheries

Presentation – Dr. Rudolf Hermes (FAO)

The presentation started with a brief discussion on the Bay of Bengal Large Marine Ecosystem Project (BOBLME). BOBLME is implemented by FAO and supported by Global Environment Facility (GEF), Swedish International Development Cooperation Agency (SIDA), Norwegian Agency for Development Cooperation (NORAD), WB and NOAA. BOBLME works in eight countries around the extended Bay of Bengal area, namely, Indonesia, Malaysia, Thailand, Myanmar, Bangladesh, India (east coast), Sri Lanka and Maldives, a total area of 6.2 million km² area with a population of 450 million. The project is involved in 10 major areas of work in environment and fisheries, as follows (the project website <http://boblme.org> provides more information about these initiatives):

- 1) Diagnostic analysis and regional strategic action plan;
- 2) Integrated coastal management
- 3) Policy harmonization

Fisheries:

- 4) Fisheries resources assessment and management (sharks and small pelagics except tuna, which is under the Indian Ocean Fisheries Commission)
- 5) Critical habitat management
- 6) Ocean dynamics, productivity and climate change

Marine Protected Areas / Fish Refugia

- 7) Ecosystem health indicators
- 8) Land-based sources of pollution
- 9) Communications

The main focus of the presentation, however, was to provide an overview of the *FAO Technical Guidelines for Responsible Fisheries: MPAs and Fisheries*. The guidelines address the integration of fisheries and biodiversity objectives from the fisheries point of view. They were developed under the FAO Code of Conduct for Responsible Fisheries (CCRF) among many other technical guidelines which have been produced since the CCRF was launched in 1995. The work developed from the realization that, while MPAs are a necessary tool for fisheries management, they cannot address serious problems of overfishing due to excess fisheries fishing capacity or destructive fishing. It goes back to the Committee on Fisheries (COFI) meeting in 2005, where all the countries (including the CT6) asked FAO to develop the guidelines. The first workshop was held in 2006, and the final product came out in late 2011 and was officially launched in 2012. Its target audience includes policy and decision-makers, scientists, managers and practitioners in both fisheries and biodiversity conservation disciplines.

The 200-page publication is intended to provide guidance on the implementation of MPAs with multiple objectives when one of the primary objectives is related to fisheries management. It covers the definition of MPAs, fisheries management and EAF; biological and ecological effects, and social and economic impacts; the institutional, legal and policy context of MPAs; and how to plan and implement MPAs. The guidelines specifically address the interface between fisheries management and biodiversity conservation within the context of a holistic approach *focused on fisheries aspects*, and refer to all kinds of MPAs and MPA networks in all ocean zones. The extent of MPA needed to

protect biodiversity is briefly touched upon, but not in the technical detail that recent research has provided. Also, conflict management is discussed –conflict is inevitable, must and can be managed, and this topic is explicitly included in the guidelines.

Following the release of the *Guidelines*, a workshop was held early this year on “*Putting into practice the FAO Technical Guidelines on MPAs and Fisheries: MPAs as a potential management tool for sustainable fisheries in South and South East Asia.*” The workshop came up with the following findings:

- 1) There is a wide variety of MPAs in the region but very few have explicit fisheries objectives although these are sometimes implicitly referred to under a biodiversity objective.
- 2) There is a legal basis for establishing MPAs in all countries but it rarely covers fisheries management.
- 3) While there appears to be a common understanding of the need for different line agencies to coordinate and collaborate on MPA planning and implementation, there is still insufficient cross-sectoral communication.
- 4) There is recognition of the importance of community involvement and engagement in MPA planning and management, but many MPAs do not sufficiently include local communities in management.
- 5) Information is important but complete data may not be necessary. Better use of data from different sources could be made, combining scientific data, local wisdom and traditional knowledge as well as multi-disciplinary analysis (social/economic and ecological/biological, including oceanographic using remote sensing and productivity data which are now available and accessible).
- 6) Fisheries information is generally not included in MPA planning to the extent necessary and hence MPAs may not yield fisheries management benefits.

The workshop also came up with the following recommendations for the consideration of “governments, regional organizations and projects involved in MPAs in the region”:

- 1) Ensure that when new MPAs are designated, fisheries are taken into consideration and fisheries objectives incorporated when appropriate, and ensure that fisheries spatial management measures are also considered MPAs.
- 2) Review how the legal basis and institutional arrangements for MPA management can be changed to allow integration of fisheries management objectives as well as more equitable benefit sharing, including to local and indigenous communities.
- 3) Increase collaboration and coordination between different line agencies but avoid unclear responsibilities or overlapping mandates (one agency to lead).
- 4) Stakeholder (community) involvement– in particular, small-scale fishers -- has to be ensured throughout MPA planning and implementation and the most effective local level of management should be sought. Tenure and customary rights of small-scale fisheries need to be recognized in this respect.
- 5) Take a step-by-step and precautionary approach, especially in data poor situations – start with something and adjust as new knowledge becomes available (adaptive management). Still, good baseline data are required in order to allow for monitoring of effectiveness.
- 6) Fisheries data and information should be included with all other sources of data and information when establishing MPAs in order to enhance the fisheries management benefits.

Discussion

Dr. Green – We all know and have experienced in our countries the divide between MPAs, which are often seen to be more of a biodiversity tool, and fisheries management, so I’m excited to now hear both sides saying that they want to bridge this divide to do MPAs better. One of the main points raised earlier is that we need to use a more positive term for NTA, and maybe we could adopt the term “fish refugia” that Rudi (Dr. Hermes) used in his presentation.

Mr. Welly – Is there any recommendation for subsidizing MPAs for fisheries, given that MPAs are regarded as a tool for protecting fish stocks? How can we influence policy to subsidize MPA establishment?

Dr. Hermes – That is not an easy question to answer. Not all subsidies are bad, and subsidies in the right places could be considered. I think subsidy to MPAs is well in order especially if it's meant to yield environmental or fisheries benefits, so I would say a cautious yes. If the government comes in to facilitate the establishment of MPAs, that would involve to some extent taxpayer money, which is a form of subsidy. Going to the other end of the scale, welfare to fishers, specifically payments to fishers, is a very difficult topic that I would say should be avoided as much as possible. Alternative income-generating activities are probably a better option.

Dr. Green – One thing we really need to do is to stop thinking that this is bad for fishers and we have to give them money to let us do it. MPAs designed the right way will contribute to fisheries and benefit the fishers. So yes, I would be cautious about paying them. Maybe we should be thinking about how we can communicate this to the communities, that doing MPAs is for their own welfare.

Dr. Gunawan – In their draft management plan, the government of Raja Amat used the term “food security zone” to emphasize that MPAs are designed for fisheries. It's a little bit different from what the law requires but they insisted on using that term.

Dr. Abd. Ghani – Can you give us the MSY (maximum sustainable yield) figure for this region? On habitat degradation, how much is the current estimate of habitat loss? I read a World Bank report saying that USD50 billion per year is lost, which would be around USD500 billion based on a 10-percent discount rate. Also on the distribution of income: How should we distribute benefits among stakeholders in the region?

Dr. Hermes – There is nobody who can tell you the MSY for the region, not even for a single country – it's a myth that dates back to the 1960s. I have some difficulty answering this now because Europe still uses the concept in their common fisheries policy, but the principle just does not apply very well to tropical multi-species fisheries. MSY can be established but you have to re-establish it every year through very expensive surveys, which none of the countries can really afford. But there are other ways of managing fish stocks that do not use MSY. We know from the World Bank/FAO report, *The Sunken Billions*, that you can produce the same amount of fish by cutting fishing effort by half, which would not only make more economic sense, but would also be a climate change mitigation measure because you're burning less fuel to catch the same amount of fish. The damage we do to the atmosphere by overfishing is not yet factored into that USD50 billion. We need to free ourselves from the MSY concept. There are other methods. For example, productivity susceptibility assessment is a method that works well in data-poor situations, and I can point you to literature on <http://apfic.org>, where they have some guidance on different assessment methods. About distribution, nobody would have to distribute the benefits if you integrate in the design small-scale fisheries and MPAs as well as some safeguards to ensure that the benefits will be distributed in an equitable way. For example, MPAs should be managed on the level close to the community, with some tenure rights attached to them so the benefits will go to the communities.

Dr. Green – This is one reason why people are moving more toward an ecosystem approach to fisheries (EAF) rather than MSY. The rationale behind NTAs or fish refugia is that based on the best science, to sustain fisheries, you need to protect at least 30 percent of the spawning potential or biomass of a population. The reality is that MSY doesn't work and it is expensive to apply, while using EAF, if we protect say 30 percent of the spawning stock in a well-designed system, we should be pretty good.

Dr. Hermes – And if you find out by M&E that 30 percent NTA in a certain area is not enough, then you can increase it incrementally until you have your resource adequately protected. Or you may find that 25 percent is enough, in which case you can decrease the extent of the NTA.

SESSION 2.3.TOOLS (PART I)WAYS OF INTEGRATING THEMES IN CTMPAS

This session included two presentations: (1) USCTI Climate Change Adaptation Toolkit, and (2) Integrating Marine and Coastal Management Approaches in the Coral Triangle. Both presentations were made by Mr. Atkinson. The first presentation was followed by an open plenary forum, the second was followed by small group discussions and report-out. For the small group discussions, participants were asked to break into country groups and do the following “integration activity”:

- 1) Focus your attention on one Seascape or MPA Network in your country. Focus on a specific managed area, not the entire country. Identify this on the Integration Checklist (Annex 11).
- 2) Work with your team to review the Integration Worksheet. Fill in the check boxes and notes. What activities have been started? What have been completed?
- 3) What are the two highest-priority additional integration activities do you need to do?
- 4) What are the challenges and opportunities for integrating EAFM and CCA into MPA management?

USCTI CCA Toolkit(http://www.usctsp.org/file/1331278160Tool_1_Benchmarks_USCTI_CCA_Toolkit_Version_1.pdf)

Presentation – Mr. Scott Atkinson (CI)

This toolkit was developed by the USCTI through a series of consultations between experts, government representatives and various stakeholders from the CT6. It provides a framework for achieving the objectives of natural resource management and long-term sustainability, CCA, disaster management, risk reduction and community development.

The toolkit includes six main tools:

- 1) Benchmarks for local government on CCA.
- 2) Climate change outreach tool, developed to help communities understand climate change and how it may impact resources in the region, and what communities can do to adapt to such impacts.
- 3) Climate information brief on major climate events recorded in the region and predictions for the region, e.g. changes in the La Niña and El Niño patterns.
- 4) VA-LEAP Guide to doing vulnerability assessment (VA) and creating a local early action plan (LEAP) for CCA.
- 5) Adaptation quick reference guide describing some adaptation measures that communities or the local government can take.
- 6) Monitoring climate change and adaptations

The tool is targeted primarily at the local government and community leadership with NGO support, or people who make up the multi-sectoral “planning and action team” that helps the community to do the adaptations they need. It includes a 22-page flipchart, the toolkit and a booklet for community level use that contains information on climate change and notes to help facilitate the VA-LEAP process, which includes:

- 1) Getting organized
- 2) Raising community awareness
- 3) Assessing non-climate threats (e.g. overfishing)
- 4) Developing a local climate story (local climate trends that provide some indication of the community’s vulnerability to future climate events)
- 5) Assessing vulnerability of target resources

- 6) Identifying early actions to reduce vulnerability
- 7) Finalizing the LEAP (a simple template which can be 2-3 pages describing the steps and measures to be undertaken to promote local resilience and adaptation to climate change)

A second version of the toolkit is being developed incorporating changes based on early feedback about the use of the toolkit. In addition, NOAA and CI are leading the process to develop a technical guide to VA targeted at resource managers. This is based on results from using the VA-LEAP process that indicate a need for more technical guidance on certain issues identified at the community level, such as coastal erosion.

Discussion

Dr. Green – Do you have specific examples of CCA that communities can do?

Mr. Atkinson – We’ve done this process with a few communities and some training has happened in PNG and the Philippines, as well as in Indonesia, which included some participants from Timor-Leste. One of the things that people said they could do was to redesign their managed area system to consider resilience because they hadn’t considered that earlier. Also, they often brought up the subject of coastal erosion, and suggested that they needed to develop a proposal for a grant to address erosion problems (that could also impact MPAs). In this regard, the best advice that we could give is that seawalls are not the best adaptation to coastal erosion, and more technical advice is needed to help develop other adaptation options. One topic that came up a lot in discussions that is explained in detail in the Toolkit is that the best way to increase resilience is to strengthen the health of the overall resource system and reduce vulnerability to both climate and non-climate threats, for example, by putting replicate habitats under protection, or by making sure that all important habitats are protected. The process emphasizes that these measures are particularly critical in the face of uncertainty, and that climate change is a good motivating factor for people to take action and a compelling rationale for accessing funds for resource management activities.

Ms. Abdul Hamid – Is there an early warning process to alert communities and what do communities or managers do (for example, to reduce the vulnerability of coral reefs to an impending major ENSO event)?

Mr. Atkinson – There’s lack of certainty in terms of predicting climate change, but the Toolkit provides information that describes in general terms what is likely to happen during a major climate event and possible ways of dealing with such event.

Dr. Mangubhai – What capacity in the CT do we have? Are there specific groups that the CT6 can tap into that are already implementing, trained or experienced in these adaptation tools?

Mr. Atkinson – Our trainings were done in cooperation with URI (University of Rhode Island) and in the Philippines with several local partners. Among the countries, it seems the Philippines has the most capacity – they have a lot of adaptation tools that are also referenced in the Toolkit, and they appear to be the most knowledgeable in the scientific aspects of CCA. In terms of application at the community level, PNG and Solomon Islands have done the VA-LEAP process and WorldFish, TNC, and PNG LMMA are picking it up. Indonesia and Timor-Leste, particularly Nino Konis Santana, are also using this tool already.

Dr. Tighe – There are a lot of resources out there. The Climate Adaptation Knowledge Exchange (CAKE), <http://cake.org>, is particularly active with excellent information, guides, etc.

Dr. Hermes – CCA is also about engaging policy makers. All your countries have National Adaptation Programs of Action (NAPA) for climate -- make sure that fisheries adaptation is

integrated into that document because the NAPA is usually well funded out of WB-GEF. Once fisheries adaptation is in the NAPA, you would have more room to develop tools.

Mr. Amin Imran— I have two comments. First, I think that we should start thinking of MPAs as a CCA measure, not just as something that needs to be integrated into this framework. By developing a good MPA, we are improving community resilience. Second, with regards to the CCAToolkit, are there any tools targeted directly at the community? How can we translate this into something that the community can use? The Indigenous Peoples' Network uses mostly Audio Visual tools because most people prefer listening and watching than reading. We need to consider this also.

Mr. Atkinson— The Toolkit includes a booklet that's intended to serve the community too, but you're right. We've discovered that we need to make it more visual. We're still working on refining it.

Ms. Walton – Focusing on MPA design, climate resilience would be a key aspect of our MPA network framework. Remember that the Toolkit looks at CCA in general terms, but in this forum we must think about it in the context of designing resilient MPA systems.

Integrating marine and coastal management approaches in the Coral Triangle

Presentation – Mr. Scott Atkinson (CI)

The CT6 have agreed to promote the ecosystem approach, as stated in Section III, Commitments to Action of the RPOA, which reads: "Our countries will promote agreed approaches to managing marine and coastal ecosystems and resources, including the ecosystem approach and the precautionary principle." Ecosystem-based management (EBM) is defined as "an integrated approach to management that considers the entire ecosystem, including humans" (McLeod et al, 2005). It aims to protect ecosystem structure and functioning; is place-based, focusing on specific ecosystems; accounts for the interconnectedness within and among systems; and integrates ecological, social, economic, and institutional perspectives.

One of the current priorities under CTI is the integration of the different workstreams under the five RPOA goals toward achieving EBM. There are several ways to do this at the various scales of management, such as by integrating the RPOA Goals in specific places; through seascape management; through integrated coastal management (ICM); by applying ridge-to-reef approaches; or by using CCA and coastal community resilience as a framework for integrated management. The approaches are all inter-related, with EBM providing the guiding principles across all scales, the integration of the RPOA goals supporting effective management of priority geographies and other managed areas, and seascapes providing a large-scale management framework toward EBM.

Two tools are being considered to guide the integration process under CTI, namely, (1) *The Seascape Guidebook: How to select, develop, and implement seascapes*; and (2) *Integration Toolkit: Guide to integrated management of the CTI goals in priority geographies*.

Developed by CI, *The Seascape Guidebook* defines a seascape as a geographic space, identified by both ecological and strategic criteria, in which an initiative is taking place. It also defines the criteria for identifying seascapes for management, including high biological diversity, ecological and economic connectivity, and aesthetic and cultural value. It also identifies the following nine essential elements of a functional seascape, namely: (1) Enabling legal framework; (2) EBM including MPAs; (3) adequate institutions and capacity; (4) private sector engagement; (5) threatened species recovery; (6) maintenance and restoration of critical habitats and ecosystems; (7) social and political support; (8) human well-being benefits; and (9) sustainable financing and market mechanisms.

The CTI TWG on Seascapes is currently reviewing *The Seascape Guidebook* to try to adopt and adapt it to work for the CTI integration process.

The *Integration Toolkit* is intended to help integrate the themes or five goals of the RPOA in specific places at multiple scales, e.g. a seascape or priority geography where there is a network of MPAs. It will include at least two main tools, both currently still under development. These are:

1. Guide: Step-by-step process to apply appropriate tools to improve integrated management
 - a. Identify your starting point (Where are you in terms of integration at each of the selected geographies?)
 - b. Complete an integration profile (characteristics of the site)
 - c. Create a draft integration timeline
 - d. Develop the spatial and regulatory scheme/process that integrates MPAs, CCA and fisheries for the site
 - e. Review and finalize the integration timeline
 - f. Adapt current management efforts to move toward better integration
2. Policy Brief: Why should and how could decision-makers support an enabling environment for integrated management towards EBM

The process described in the *Integration Toolkit* should result in the following products:

- 1) A *profile* of the managed area;
- 2) A *timeline* that outlines the process and target dates by which integration activities are undertaken in moving toward EBM;
- 3) A *spatial and regulatory scheme* for the managed area that includes integration of the five themes

Discussion

Note: This discussion was conducted after the “Integration Activity”

Mr. Atkinson – The point of the exercise was really to just expose you to the tool and get your feedback. We hope that if you find the tool useful, you would use it later at your site. So let me ask that question first: What do you think of this tool?

Mr. Kereseke – In Choiseul, we have been trying to advance and implement the MPA network. This tool helps us see the gaps, what we need to improve on and what we need to do to improve it.

Ms. Walton – There’s some lumping in the questions that could be sorted out further. Some items need multiple answers, and we had to split them up. Also some of these in my experience are probably not going to be addressed by MPA managers. Items that relate to stock assessments, for example, cannot be answered directly by MPA managers, but you may want to include a question about cooperation or collaboration with the institution or agency that has the authority to do that, which is also important.

Dr. Green – It might be good to phrase these as questions.

Ms. Abdul Hamid – Actually I don’t understand some of these items here, so it will be difficult for me to explain this checklist to my local officers. Perhaps it can be translated in layman’s terms.

Ms. Baskinas – Our group found it difficult to identify integration if the management area is bigger, the scale at which this tool will be used. We chose a site where there are multiple provinces and the assumption is that these provinces are all working as one integrated area. But if you look at the individual provinces you won’t see such integration, because the needs or threats

are not really being responded to across the provinces using an integrated approach. For example the first item in the checklist is about the legal boundaries. At Verde Island Passage, there is a law, Executive Order 578, delineating the management area which spans four provinces, so we define that as our management area. But as you go down the checklist, looking at the interventions, it is difficult to identify integration at the scale of our defined management area, because the interventions are mostly implemented at the local level by the individual provinces or municipalities using different strategies based on their priorities and needs.

Ms. Walton – That’s a really important point because as we’re talking about networks at different scales, how you ask those questions at different scales, and how you respond to each question is going to be very different. It’s really hard to slice and dice it and make a template that allows for those variations. But that’s important because integration could be opposite of how you might expect it to be. You have to be able to allow for figuring that out from the way the questions are asked.

Dr. Green – Maybe these tools need to be made more locally relevant. So if you come up with a template, here are the questions, you need to put them in terms that people can understand in their countries, or fit their management structure. Perhaps a template with some suggested modifications for different countries would be useful.

Ms. Walton – There are two broad categories that need to be explicit that aren’t there. First, integration that needs to take place to address fisheries and climate issues is external integration. Second, governance-based and stakeholder-based integration is internal and perhaps already woven into the checklist but needs to be more explicitly expressed. Many of the comments I heard -- from being able to communicate with stakeholders who speak a different language to some of the governance issues that were brought up by the Philippines – seem to indicate that if you cannot find integration at those two levels, you are not going to find integration throughout the rest of the checklist. So I would start with that as the base and explicitly define those two categories.

Mr. Atkinson– Maybe we can add that in the checklist as a separate strategy, with the necessary actions defined. We’ll follow it up. The integration toolkit is going to be done within a couple of months. We’re going to clean it up and improve it based on the comments we got here and we’d be happy to circulate the revised version to everybody and get your further comments. This toolkit was created very recently and is really still work in progress, so we appreciate your suggestions on how we can improve it.

Report-out

Malaysia – We identified two priority areas, or rather, areas of concern: 1) Effectiveness of enforcement: we have an enforcement plan but implementation is rather questionable because of the large areas of the MPAs; and 2) Anything to do with climate change is a big challenge for us, because we don’t have a climate expert and we are not familiar with climate issues.

Solomon Islands– In Choiseul, one of the things we identified for priority attention is climate change and its potential impacts on the people and the ecosystem. We identified opportunities for integration in the land registration plan of the province. Also we have a 3D model of the area, which is a useful tool for both planning and raising community awareness of climate change because it provides a very visual way of looking at and explaining climate impacts on biodiversity and the community. In terms of challenges, we identified three big ones: (1) Communicating our MPA program to the communities to make them understand why we are doing MPAs, to manage their expectations, and to engage them in the protection effort; (2) need for visual and other communication materials to help improve the communities’ level of

understanding of the issues and solutions; and (3) land-based threats, especially now that there's nickel prospecting going on in the area.

Philippines– In the Philippines, we find that the integration effort should link to the overall local development planning, in particular the land-water-use plan for the area. It should feed into an existing governance system for both land and water use and management. If the work has already started for integrating EAFM, MPA and CCA, that would be a good input to the local policy process, especially if the tools, particularly the mapping tools, will help do the spatial analysis needed to show impacts and threats. The challenge for us is to make sure that the integration of CTI's priority themes and tools in the local governance process actually happens.

Timor-Leste– Our major challenges are as follows: 1) capacity building for MPA, EAFM, and CCA for government staff, technicians and local community; 2) how to improve communication at the community level by translating tools to the local language; and 3) the need to establish institutional coordination mechanisms. We just started our MPA work, and we see it as an opportunity in that, right from the outset, we can begin planning for the integration of MPA, EAFM and CCA and have an integrated plan. The opportunity for us really comes from learning from the other countries, because we can avoid their mistakes and try to do better those things that they already do well.

Indonesia – We chose the Savu Sea area as our site for this exercise. Savu Sea is a national MPA launched in 2009. It covers 3.5 million ha, one province and 10 regencies. All of Savu Sea is a regional fisheries management zone (WPP [*Wilayah Pengelolaan Perikanan*]), which is under the MMAF. The problem is that, while we are making progress in developing the institutions for the MPA, we are not doing so in coordination with the fisheries authority. We understand the need to at least initiate the dialog because there are potential conflicts between the WPP's fisheries objectives and the MPA's conservation objectives, even if sustainable fisheries zones are included in the MPA design. To overcome this issue, our team is proposing to initiate a series of consultations with fisheries institutions on integrating fisheries management measures into the MPA system. We have plenty of opportunity to make this happen, because [both] sectors are within one office area of MMAF. But clearly it is a challenge, too, because despite sharing one office for some time now, we have yet to talk to each other. We do have a steering committee composed of the different stakeholders that is looking into the coordination issue and it is currently serving as our integration group. Locally, there are also some opportunities for integration. For example, in Kupang, Savu Sea, the head of our technical unit is reviewing the zonation that was established there two years ago to hopefully integrate the fisheries and MPA objectives and pave our way to EAFM. In addition, our national government has put all our spawning sites in the Savu Sea under permanent closure. We have not sufficiently considered climate change and VA for this MPA management activity, so that is also a priority. We have some opportunity for the training of trainers under LEAP.

SESSION 2.4. TOOLS (PART 2): ROLE OF CT ATLAS IN CTMPAS

This is a plenary session that includes a presentation on the CT Atlas, followed by an open forum.

Coral Triangle Atlas

Presentation – Mr. Nate Peterson (TNC)

The CT Atlas (<http://ctatlas.reefbase.org/>) is an online GIS database that is being developed with the support of USCTI as a collaborative effort between six NGOs, namely WWF, TNC, IUCN, WCS, ReefBase and WorldFish. The launching of CTI in 2007 provided the opportunity to embed the project in a regional structure for marine resource management, and in 2008, with the launch of

CTSP, a funding structure for collaboration was established. The CT Atlas is intended to serve as an online resource for the CT6, and a third party to provide GIS expertise and mapping service to the countries on a common platform, with common information and common resources. It was developed from the recognition that there is a need for a centralized system of storing information and cataloging the different datasets on MPAs and coral reefs and other information required to produce maps for resource management planning, as well as for communicating the issues and challenges that the CT6 face. This is articulated in the CT Atlas vision “to provide a unique opportunity for any organization working in the Coral Triangle to share their data, and to create a growing, updated database for better management decisions and science.”

The goal of the CT Atlas is “to provide a regional context for scientists and decision makers when designing or planning for marine conservation in the Coral Triangle,” so it directly supports the development of the CTMPAS. The Atlas depicts the Coral Triangle as a “management unit,” initially based on the scientific boundaries of the region. Recently a decision was made to extend the map and include the entire CTI-CFF implementation area, which is made up of the Exclusive Economic Zones (EEZ) of the CT6, to better represent the Coral Triangle as a management unit.

Other recent developments included:

- 1) CT Atlas Workshop, Penang, June 2011, where GIS experts and decision-makers discussed how the Atlas could be improved to better meet the data requirements of the CT6.
- 2) Development of MOUs (memorandum of understanding) for data sharing and collaboration to make sure the government partners are comfortable about sharing data into the CT Atlas. The Philippine MOU has been completed; Malaysia and Timor-Leste are in review, and PNG and the Solomon Islands are in discussion. In the case of PNG and the Solomon Islands, WWF and TNC hold practically all of the protected data but the MOU is deemed necessary to enable those countries to own the information and the decision to share it.
- 3) New partnership with NOAA (on climate data)
- 4) Completion of the CT Atlas Website Version 2 (January 2012), with the following updates/revisions:
 - a. Refined mapping tool includes features such as tool to plot polygon data and point data; facility to turn layers on and off; collapsible menus; navigation tools; facility to export map; topography and satellite imagery, etc.
 - b. Discussion forum
 - c. Reorganized data themes – data can be sorted by themes, keywords, etc. and some data can be downloaded along with relevant metadata. If the data are not available for download, information on where to find them is provided. The data are categorized under the following themes: (1) Habitat – Marine; (2) Habitat – Terrestrial; (3) Base Maps; (4) Managed Areas; (5) Oceanography; (6) Threats; (7) Socioeconomic; and (8) Biological. Because of the difficulty of capturing governance data, governance is not included as a theme, although managed areas would fit into that theme.

The CT Atlas team continues to work with the countries and partner organizations to fill the data gaps, strengthen communications for data sharing and utilization, and answer questions from the countries and address their concerns to make them see the value of using the CT Atlas and make them comfortable about sharing their data. Some upcoming activities include:

- 1) Production of summary statistics for data themes for each country, each ecoregion, the Coral Triangle region defined by scientific boundaries, and the CTI-CFF implementation area. The countries need to agree on the suite of protected areas to be included in the Atlas, so that standard numbers of hectares and other information can be established across the countries.
- 2) Continued improvements to data organization to make the datasets clearer

- 3) Collaboration with ProtectedPlanet.org of UNEP-WCMC (World Conservation and Monitoring Center)
- 4) Presentation at International Coral Reef Symposium (ICRS) (Cairns, July 2012) on standard gap analysis and proxies or alternatives for data poor areas
- 5) Option for one-on-one GIS training in country until September 2012. Funding is available for a CT Atlas GIS expert to conduct a one-on-one GIS training in each of the CT6 (one training for each country).

Discussion

Ms. Mustika-- Can we contribute metadata or non-spatial data, such as socioeconomic data?

Mr. Wen Wen – You can send us any information you have in any format that it is available, if possible with point coordinates to show the location where that information is relevant so we can convert them to spatial data. That would be helpful to us.

Mr. Peterson – Even though the information you’re talking about doesn’t have a boundary that people would recognize, we can plot that as a point on the map that says, for example, there was a study done here related to socioeconomics, and that could be linked to the report or a contact person.

Mr. Atkinson – We just did a rapid ecological assessment in Bali and in Timor-Leste, we have some MPA data. How would you characterize those data? They would include data about the place, status, biodiversity, trends related to different resources, etc. Could you plot that kind of data as a point with a descriptive summary and some link to the report? We have tons of that from all over the world that could be in the database if you could do that.

Mr. Peterson – We can record that as another layer.

Dr. Mangubhai – We have plenty of good rapid ecological assessment data from Raja Ampat, because we’re trying to do the zoning of the MPA network there. We actually worked for a couple of coral ecologists, taking the areal data to try and develop a reef classification system. If you are trying to develop a network of MPAs in your countries, or trying to do zoning of very large MPAs, that kind of information would be very useful. If you could map those as specific data points, that could be useful for large management processes. We’ve done that in TNC in Raja Ampat, and Wen Wen has captured the information in GIS, so we can give you that.

Dr. Green – We’ve done that in many places, including Lesser Sunda, so Bali might have it. My question is about the study that Icha (Mustika) was talking about, which is not so much spatial data but a report of the study. ReefBase already has a big system for recording reports from different parts of the world. I wonder if rather than creating another one, there’s value in linking to ReefBase.

Mr. Peterson – Certainly we could tie in with ReefBase and tap into or link to their database. There’s been discussion about the CT Atlas serving as a data clearinghouse, and whether we do that by housing the data within our servers or at ReefBase or some other locations should not be an issue.

Ms. Walton – Is it possible to develop within the CT Atlas a marine cadaster and really look at the different authorities that are managing coastal management? This kind of information would be useful for planning, particularly when we start to look into climate change and the different activities that are happening in the coastal area. Do you have a way to map out the different management authorities within and around an MPA, for example, so we have a better

understanding of what's being managed and what's not being managed and by whom and what is the geographic extent of those areas of responsibility? It's going to be especially important when we get into zoning and multiple use issues. It's pretty essential in integrated management.

Mr. Peterson – It's not something we've attempted so far. I certainly see the value in doing so. I'll give the team feedback on that.

Mr. Soemodinoto – Could you elaborate on the CT Atlas GIS training? How can we avail of that?

Mr. Peterson – We have funds through a grant under NOAA to do capacity building in each country by having a GIS expert from CT Atlas visit the country to help with any GIS problem they might be having. The funds are available until September 2012. To my knowledge we have funding pretty much for one trip to each country.

Dr. Green – Malaysia said they're interested in the Marxan training. Do we still depend on UQ to do the training or can your people do that? Or did Rebecca (Weeks) say she can do that?

Mr. Peterson – There are a number of resources within our circle here that can provide Marxan training. I can provide training, UQ can, and it seems Rebecca (Weeks) said she can. When it comes to mapping, the CT Atlas is a mapping interface. When we put all your data in the CT Atlas, the Atlas becomes a mapping tool that you can use to make your own maps. There are some things on the maps that you cannot change, like the colors and the logos. But you can make basic maps off of the CT Atlas. One of the recommendations that came out of the Penang workshop was to develop templates for each country. We can do that, or maybe we can have a common template. Just let us know what you need.

Ms. Baskinas – I have two questions. First, what does the team intend to do with the sometimes significant variance between data from different sources for the same parameter? One of the presentations yesterday showed two different figures for the total MPA area in the Coral Triangle. Right now we are writing the SCTR, and we're seeing different estimates of the coral reef area in the Philippines from various sources. If we have the CT Atlas reporting another figure, that will only add to the confusion. My second question is about the sustainability of the CT Atlas. How do you plan to ensure the continuity of the Atlas, which is currently project-supported?

Mr. Peterson – The variance between numbers is certainly a concern that we're trying to address in part through the MOUs. We depend on the countries to tell us which data to use. It's a challenge that I guess goes back to the question about which agencies have authority over certain areas. We're trying hard to reach out to the right people and the right agencies to make sure that we're getting accurate information. It has to be a two-way communication between CT Atlas and the various governments. We've targeted NCC representatives in each of the countries as the go-to person to help ensure that we're getting the most accurate information. If you think the information we have is not accurate, please let us know so we can correct it. None of this is written in stone. On your question about sustainability, our funding through CTSP ends next year, but I'm hearing discussions about new funds coming in.

Dr. White – One reason we're working with WorldFish is because it's a regional institution that's actually done data management for 20 years and they've expressed interest in carrying forward with the CT Atlas. We're hoping that at the end of the funding from USCTI, WorldFish will pick up the Atlas. It will still require some inputs but they said they're going to develop other proposals and come up with funding mechanisms to keep it alive. It really needs a regional body to make it viable in the long term. So we're thinking about that. It's not simple

to ensure sustainability but it is possible. It does require the data inputs of each country as well to make it sustainable, so any ideas on how to make it happen are welcome.

Dr. Weeks – Going back to the point about data inconsistencies, I know several gap analyses have been done for parts of the Philippines that come up with different numbers. Part of that obviously comes from the fact that more and more MPAs are being established, but it also arises from the different habitat datasets that are being used. As we get better technology in terms of the satellite mapping of coral reefs those numbers change, sometimes drastically, especially in areas where there's a lot of reef. The CT Atlas team is trying really hard to get good new datasets from the Millennium Reefs Project, which should be consistent across the whole of the Coral Triangle, so one benefit from putting things in and getting analysis out of the CT Atlas is that when you're looking at improvements in terms of percentage covers of mangroves or reefs, this is going to be comparable across all of the countries and all of the parts of your own country. For some countries like the Philippines that have already made much progress in assessing their coral reefs, the downside is that you may end up having another new number, but it's probably going to be a more accurate number. My question to the group is this: Do you see sufficient benefit in having a comparable measure for region that's hopefully based on some really good reef maps?

Mr. Peterson – That's a good point -- we really need to be able to compare apples to apples. That's one benefit of having a central repository of information. We're already using data from the Millennium Reefs Project, those reef data that are contributed by the Millennium Coral Reef Mapping into the global reef data, but they don't have the detailed habitats or reef attributes.

Mr. Wen Wen – For coral reefs, mangroves and seagrass, we could use data from remote sensing studies, but that could also yield different results. Different persons do different things in different ways using different satellite imagery, which can result in wide variances, so we still have to decide what data to use. When we did a gap analysis in Indonesia, we had the complete data, but no one knew where they came from.

Ms Baskinas – I'd like to extend that a little bit. It's not only about mapping out the coastal habitat types but also, in the case of MPAs, being able to see the level of management effectiveness. The CT6 have already started developing their management effectiveness tools. The Philippines has MEAT (Management Effectiveness Assessment Tool), and Indonesia has its own tool, as do the other countries. In addition, countries that access GEF funding are required to use METT (Management Effectiveness Tracking Tool) scores. These different tools measure management effectiveness in different ways. For example, MEAT uses a 4-level evaluation model, while METT scores are presented as percentages. My point is that, to improve comparability, we also need some standards for measuring management effectiveness and the parameters we're going to report. I think the CT Atlas could be useful not only as a repository of information on MPA management effectiveness in the CT but also as a way to set regional standards for management effectiveness. To do that, we will need some comparable measurements across the CT6.

Dr. White – We're hoping to link the CT Atlas to the M&E system, because our indicators actually pertain to MPAs and management effectiveness. But that still comes down to not having consistent data, or sometimes, simply not having the basic data from each country, and not having a common way of describing that. We're trying to improve the MPA data layer -- that's one of our priorities this year -- so we can feed that into the CTMPAS design. But as we already noted, there are big discrepancies between datasets from different sources, and it's not trivial thing to get a consistent dataset out of any country, because even within the country, different datasets are reported for different sources. We've hired somebody in WorldFish to work on that this year and to try to go to each country and begin to sort out

which datasets to include. Any ideas from the group to help make the work easier would be appreciated.

Dr. Tighe – If you say you have funds to send one person, why not do a small workshop where you have as participants those people who will be using it? Then your expert can show them how to use the CT Atlas and what data you need, and they can't leave the room unless they've contributed data from their areas.

Ms. Abdul Hamid – Are you limiting the Atlas to marine data? When we map out our MPAs, normally we also look at land-based data, because we consider land-sea connections in management. We present marine and land-based data in the form of spatial attributes that can easily be seen on the map, so that forest management, wildlife management, geosciences, etc. are considered.

Dr. Green – That would be particularly useful for designing MPAs under a ridge-to-reef management plan, or MPAs that are next to land, where you would want to understand land-sea connections and identify likely impacts from land.

Mr. Peterson – We should be able to include land-based data, and I certainly would like to do that.

Dr. Green – The last couple of years have been really focused on accumulating information. What's really exciting now is that we're at a point where we can start using the Atlas to answer some of our questions and reporting in. Yesterday when we were discussing the RPOA target for the CTMPAS, which is 20 percent representation of habitats, you mentioned that you could do an analysis to see how the CT6 are progressing toward that target. Could you explain how that's done? You also said you are doing a gap analysis. Could you explain what that is? How did you do that analysis? Are you recording against country or ecoregion?

Mr. Wen Wen – Our gap analysis involved calculating the size of the protected reef areas based on the GIS layer that we now have. We do the analysis at both the national and ecoregion scale. At the national, we used the EEZ as the basis. But at the ecoregion, we used the scientific boundaries of the Coral Triangle. We can do an analysis of representation but we need more information for management effectiveness. We also want to improve our data for threatened species and the other components so we can do some analyses for those components as well.

Mr. Atkinson – You're talked about having a contractor in Hawaii who's putting climate change information in the Atlas, and about getting fisheries information. Could you elaborate on what types of data you're trying to put in?

Mr. Peterson – The climate change component is the product of our partnership with NOAA. We have a number of climate change related data – surface sea temperature, sea level rise, chlorophyll, threats, etc. We have reefs at risk data layers in the Atlas that show the threats, but not the VA data from specific sites within the region. We don't have that kind of data. Perhaps we can include it as point data, to show where these studies have been done. We're still trying to get a handle on fisheries, because the CT Atlas has really been more about coastal environments. But maybe we can map out pelagic fisheries and that sort of things. I've seen some fisheries management zone maps out of Indonesia, but I haven't seen one from the other countries.

Dr. White – The focus this year is on MPA and not so much fisheries. Fisheries are rather complicated because they vary so much from one place to another and are very hard to put in a spatial context. We're not focused on that. But climate change is important and we have a partnership with NOAA to put that in.

Dr. Green – In the design for TMP, the fishing zones are mapped and they used that for their analysis. I would encourage people who've done MPA network design to use TMP as a case study. It does not have a data layer for all fisheries attributes, but it's an example of how you can do it.

Dr. Tighe – There are several people working on the VA-LEAP now. It would be nice to also put that in.

SESSION 2.5. TOOLS (PART 3): ROLE OF MPA LEARNING NETWORK IN CTMPAS

In this plenary session, Ms Rili Djohani (CTC) made a presentation on the role of the MPA Learning Network (LN) in the CTMPAS. An open forum followed her presentation.

Role of MPA learning network in CTMPAS

Presentation – Rili Djohani (CTC)

There has been intuitive interest in forming an LN for the Coral Triangle even before CTI was officially launched in 2009. In 2011, CTC facilitated a planning workshop in Manila, where the need for an LN was again reinforced. Before this workshop, CTC conducted a series of surveys to get a more concrete sense of the various CTI partners' interest in the LN, and MPAs came out on top of the list of topics that most respondents wanted to engage on. CTC shared these results in the 2011 planning workshop, which identified MPAs as one of four priority areas for developing LNs. Consequently, under a grant from USCTI, the Center started to develop the MPA LN, partly in response to the apparent demand from CTI partners for such LN but mostly because at that time, the MPA TWG was already well-organized compared to the other TWGs. Since then, CTC has been working with the Regional Secretariat and the PI to design and test a number of LN activities, and through this workshop, it hoped to explore more concrete ways for the MPA LN to support the CTMPAS and identify activities and specific best practices to focus on.

The work done so far is based on the protocol developed by TNC, which includes the following 7 standards and good practices (note that these are the same standards for Networks defined in Session 1.5 on Framework Components):

- 1) Clear strategic purpose
- 2) Effective leadership
- 3) Committed membership
- 4) Well-developed and executed activities
- 5) Adequate resources
- 6) Documenting lessons learned
- 7) Measurement and adaptive management

Some highlights:

- 1) Clear strategic purpose – The general objective as defined at the 2011 LN planning workshop is to promote sharing of MPA knowledge and best practices between the CT6, communities and MPA practitioners within as well as outside the Coral Triangle region. More specific objectives have since been identified, including:
 - a. To connect site managers across the CT6 to improve their capacity to manage MPAs;
 - b. To connect existing MPA networks and leaders across CT6: and
 - c. To catalyze/accelerate learning by supporting linkages between site managers, leaders and existing networks
- 2) Effective leadership – A coordination team is being organized to drive the process forward and grow the network. It includes:

- a. TheMPA TWG as the guiding group and advisory committee.
 - b. CTI-CFF Regional Secretariat as hub for CTI and link to other LNs and resources on matters related to the CTI RPOA.
 - c. CTC as the current facilitator/proposed coordinator.
 - d. Partners that support individual activities (trainings, workshops, surveys, targeted research, documentation of lessons learned, exchanges, etc.).
- 3) Committed membership – Network members will serve as local hub leaders or coordinators. The strategy is to grow membership in two phases, and members are expected to eventually take ownership of and undertake more activities of their own accord as the network develops.
- a. In the 1st phase, ~30 core members are being identified, including representatives of NCCs and MPA focal points, key advisors/ambassadors, key partner organizations, key sponsors and liaisons to other networks.
 - b. 200-500 “prime members”/local hubs will be added in the 2nd phase as the network continues to develop, including CT6 government officers, MPA managers and staff, NGO team members, faculty, researchers, students, members from other networks, supporting partners, and other stakeholders.
- 4) Well-developed and executed activities – A communication platform on Facebook (<http://www.facebook.com/CTI.MPA.Learningnetwork>) has been tested and will be developed further to provide members with an immediate and informal way of having a dialog and communicating their best practices. The CTI MPA LN homepage is also being developed at the CTI website to serve as a library of key references on the design of MPA systems and management protocols as well as an experts and practitioners directory and discussion forum. Meanwhile, an email list that includes the 30 core members is being used to open a dialog on what activities to focus on in 2012. The following activities are proposed:
- a. For small LN teams, identify 1-2 priority activities to address, such as zoning, CTMPAS design, etc.
 - b. For long-term partners, develop programs supporting MPAs and MPA networks.
 - c. For USCTI implementing partners, use the CTI-CFF Web Portal workspace and side events to “meet” and enter into expert dialog with fellow practitioners; make the dialog at CTI events a common practice to take advantage of the opportunity of having several experts in the same venue. Some CTI events planned for the next several months are as follows:
 - ADB HLFRR (Manila, May)
 - Launching of the SCTR, ICRS (Cairns, July)
 - Management effectiveness REX (early 2013)
 - Mayors Roundtable (October)
 - Regional Business Forum (October)
- 5) Measurement and adaptive management – CTC is developing a system with the Regional Secretariat to monitor and evaluate all LN activities in terms of the learning and sharing that are being accomplished each year in order to adapt and fine-tune the LN to the needs and demands of its members.
- 6) Documentation of lessons learned – The plan is to develop a mechanism to facilitate a more meaningful sharing of lessons and information so that they are disseminated to people who can actually use them, including those outside the LN, for example, through the use of easy-to-use online templates.
- 7) Adequate resources – The LN is currently coordinated between the interim Regional Secretariat and CTC. Under the USCTI grant, CTC is committed to dedicate staff time and institutional support to the LN for the next year (up to 2013), after which it will look at partner support or grants specifically for training, learning exchanges, outreach activities, etc. Over time, members are expected to fully engage on and support network activities. The operational arrangements over the short term (2012) and beyond 2013 are summed up below:

- a. Short-term (2012)
 - *Interim Regional Secretariat*: 2 hours/week support staff, protocols
 - *CTC*: Half-time staff responsible for email list, Facebook page for CTI/CTC, support activities
 - *Partner grants*: for training, exchanges, outreach activities, side events
 - *Members*: Self-support on-site, co-host activities
- b. Beyond 2013:
 - *Permanent Regional Secretariat*: 10 percent time co-coordinator, archive
 - *CTC*: 50 percent time co-coordinator for communication, technical support services, advisors
 - *Partner grants*: for training, exchanges, outreach activities, side events
 - *Members*: Contribute time on teams, self-support on-site, co-host activities

To sum up, the responsibility points for the different groups involved in the MPA LN are listed below:

- 1) Core group – identify themes and update members about the latest science
- 2) TWG – focus on developing the CTMPAS and MPA Management Effectiveness Program
- 3) Practitioners – share best practices through Facebook, email, or other communication forums and events
- 4) CTC – explore links to existing networks; organize or commission a small team that can document best practices; develop learning site (Nusa Penida) to showcase best practices, in particular, zoning, consultative governance, and learning site development
- 5) USCTI -- integrate LN activities with other TWG/CTI events using a learning-sharing-documenting (LSD) approach to capture best practices and promote sustainability.

During this CTI Regional Exchange #3 on MPAs, there are three MPA Learning Network Activities scheduled. These activities were developed in coordination with the REX Planning team to best address the issues under discussion for CTMPAS, and are the first MPA Regional Learning Network activities. All three are being conducted by the Coral Triangle Center as a local partner and the acting facilitator/coordinator for the MPA LN in coordination with and on behalf of the CTI-CFF Regional Secretariat. The activities were funded in part by CTC and in part by the USCTI Program Integrator through a small grant. Those three MPA LN activities include a) this presentation on the status of the MPA LN and its possible role in supporting the CTMPAS, b) the site visit of 40 people to Nusa Penida MPA, and c) a networking dinner and round table discussion at the CTC offices (Thursday eve) to help define specific Best Practices and MPA LN activities for 2012/13 that could support national and regional CTMPAS objectives. An Activity Report on these activities is available on CTI-CFF Website and the Coral Triangle Center portal (<http://www.coraltrianglecenter.org>).

Discussion

Mr. Peterson – In one of your earlier slides you pointed out that the MPA LN homepage will host MPA profiles. The CT Atlas is in a good position to provide some baseline spatial data and other information characterizing MPAs. I think it would be wise for us to join hands there so we're sharing resources and not duplicating or creating confusion by having the user go to two different places.

Ms. Djohani – The profiles would really be short descriptions of MPAs which may or may not be available in the CT Atlas, but for sure we will use some facts, figures and maps from the CT Atlas.

Dr. Tighe – The profiles would also be a link to your program rather than a duplicate of it. It would be a doorway to the CT Atlas as well as to other groups that are doing MPA profiles around the world.

- Mr. Peterson** – There definitely should be coordination then. We need to identify together what those links are, and not do things parallel to each other.
- Mr. Kereseka** – You said you are planning to link to other networks. What networks are you looking at?
- Ms. Djohani** – In the Solomon Islands, that would be SILMMA. We definitely want to link with your network, and if we can, help strengthen your network as well.
- Ms. Baskinas** – In the Philippines, we also have an existing MPA network called MSN or MPA Support Network, which includes members from government, NGOs, and academe and the LMP. Is the MPA LN intended to be a regional network? What's the plan?
- Ms. Djohani** – That's definitely the plan. Right now, the MPA LN's main focus is to support the MPA TWG, the CTMPAS and MPAME. In the second phase, the objective is to widen the membership and link to existing networks. But first, we will have to see if that is even a good plan, because if we insist on linking up with the other networks with objectives that are very different from what we are mandated to achieve, we could lose focus and become ineffective.
- Dr. Tighe** – Dr. Aliño, who's the head of MSN, is already on the list of core members. Right now we're working with a small team that will try to start up the Facebook discussion and email list. As soon as that's established, we plan to build up membership of the core team to 30 or 40. The intent right now is to open the door so people can listen and watch and share information. In terms of projects, we're suggesting that the LN should engage on focused small activities related to the RPOA, CTMPAS, and management effectiveness. But it's really up to the members to decide what they want to focus on.
- Ms. Baskinas** – The role of the network will have to evolve also. MSN started as a project-supported initiative but it is now lodged at UPMSI, with Dr. Perry (Aliño) as prime lead, and supported by the other organizations. Because it's already there, we're actually looking at MSN to eventually serve as the MPA TWG for the Philippines.
- Dr. White** – It would seem that linking with MSN would be quite important for bringing the MPA LN to a wider audience within the Philippines. And you might want to do that also with other networks in other countries.
- Ms. Djohani** – I'm not saying that we shouldn't, but in terms of this network responding to the needs that the other networks would have, I think it's really more about sharing: we can access their information and they can access ours. Perhaps over time, the CTI LN can respond to specific requests from the Philippines or other countries, but our focus is on two MPA TWG objectives, namely the regional MPA network design and management effectiveness protocols, and any sharing in that context would be the priority for now, unless, of course, this group decides to address other priorities as well.
- Dr. Tighe** – We're building the core team, and we hope that this workshop can help us solidify our next steps.
- Dr. Aliño** – It's good initially to build the core. MSN actually started with a group of researchers and expanded to other practitioners. Today, aside from just being an LN, it has become a network that provides a wide range of support services to local governments.
- Dr. Green** – Have you considered developing online training or mentoring as a strategy for capacity building?

Ms. Djohani – The CTC website will have such services, but we can also organize that as a specific activity for the MPA LN with partner support.

Dr. Green – I think there is a need not only for online training but also access to experts.

Dr. Tighe – We’ve discussed that, but it’s the core team representing the CT6 that will decide.

SESSION 2.6. CTMPAS FRAMEWORK #1: PRINCIPLES, OBJECTIVES AND BENEFITS FOR CTMPAS (REGIONAL AND NATIONAL SYSTEMS)

In this session, participants started to directly work on the draft CTMPAS Framework, specifically, identifying the principles, objectives and benefits that they believed needed to be included in the regional MPA network design. There were three small mixed-country breakout discussions corresponding to the three categories of network objectives, namely, ecological, social and governance. Participants were encouraged to use in their discussion the information already generated during this workshop, in particular, the following three references:

- 1) Recommendations from the MPA REXI in Phuket
- 2) Worksheet I.1 containing the participants’ notes on MPA network developments as reported by the five countries present in this workshop
- 3) Overview of MPA network frameworks by Dr. Tighe from Session I.5

After the discussions, the three groups immediately reported to plenary, where the countries collectively discussed and agreed on a draft set of principles, objectives and benefits that would form part of the CTMPAS framework and strategy.

The first part of the session was facilitated by Ms. Walton, who reminded participants at the start of their small group discussions that they should build the regional network “off of the efforts that you’re already making and the network frameworks and management approaches you’re already using at the national level.”

Mr. Atkinson facilitated the report-out and discussion.

Report-out and discussion

The principles, objectives and benefits identified by each group are shown in tabular form below as they were reported. Participant comments and recommendations that apply generally to the framework are shown below, while those that are more specific to each category are shown under the relevant table.

These outputs went through a few revisions during this workshop and were further reviewed by the MPA Resource Team after the workshop. The final consolidated table is shown in Annex I2.

General participant comments and recommendations

- 1) The outputs of this session must be checked against the CTMPAS section of the RPOA, which includes annotations that lay down some objectives. In addition, the prioritization or hierarchy of objectives must be guided by the overall goal of CTI-CFF and the extended text of CTI, which clearly defines the focus of this regional initiative, i.e. *Coral Reefs, Fisheries and Food Security*.
- 2) Participant comments and recommendations were limited to the overall concepts underlying each objective. These session outputs still have to be reviewed for clarity and consistency across the three categories and with the RPOA.

- 3) The countries would be given time to review these session outputs before the end of this workshop and agree on the following points:
- Can the objectives be achieved?
 - Are the objectives acceptable to all countries?

Are these the benefits that you want at the national and collectively at the regional level under the CTI?

Ecological

Design Principles	Objectives	Benefits
Maintain ecosystem function and biodiversity:	To develop a system of MPAs that can:	
a. Ecosystem can withstand and/or recover from climate change, etc.	a. Conserve coral reefs and associated habitats that are resilient to climate change (and other threats)	a. Conserve coral reefs... -- ecosystem services such as fisheries, carbon sequestration, coastal protection and habitat for marine resources
b. Maintain ecosystem function	b. Support healthy and increasing fish populations	b. Support healthy and increasing fish population – food security and source of livelihood and ecosystem functions maintained.
c. Viable population; connectivity	c. Maintain or recover populations of threatened species for intrinsic value, education and scientific value and human heritage value	c. Protect endangered species – maintain and recover populations of threatened species for intrinsic value, education and scientific value, as well as human heritage value

Comments and recommendations:

- Explanatory notes may be added under (c) to flesh out more specific objectives, such as the protection of sharks and other species that may not be listed in the *IUCN Red List* but are in reality threatened across the Coral Triangle or in some areas in the region.
- Tourism, a major concern for some countries, is shown under the ecological category as a benefit of conservation rather than an objective.
- There was concern that the ecological objectives as reported were not measurable, and that they needed a timeframe. There was a suggestion to add qualifiers to make the objectives measurable and less ambiguous, for example, “an *ecologically coherent, well-managed* MPA system” (there are ways to measure ecological coherence and effectiveness).

Social

Design Principles	Objectives	Benefits
Communication	In 5 years the CT6 will have built a mechanism to share knowledge and data across the region	It would improve effectiveness and efficiencies between the different countries at the regional level; increased capacity in the CT; build trust between the CT6
Education	In 5 years at least 50 percent of key stakeholders know and understand benefits of MPAs	Improved food security; improved support for MPAs (measured in terms of better compliance by local communities, etc.); improved capacity for MPA management
Cultural values	In 5 years, the management and policies of MPAs will include traditional knowledge and values (local wisdom) in planning and its implementation	Sustainable income, maintain user rights, preserve local values, have greater local support and greater sense of ownership of MPAs by communities and other stakeholders
Sustainability	In 5 years, communities surrounding and within MPAs in CT6 will have improved livelihoods and social welfare	Increased or improved food security and improvement in quality of life and other aspects like incomes and livelihood.

Comments and recommendations:

- 1) Except for the communication objective, these objectives can only be promoted at the regional level; implementation is done at the country level. There may be a need to review and if necessary refine these objective statements to ensure that they are not potentially in conflict with national objectives.
- 2) The socioeconomic/fisheries/food security objectives need to be explicitly stated.
- 3) Consider community/social resilience as an objective.

Governance

Design Principles	Objectives
Integrated management framework for EBM; Political will, leadership and authority Institutional arrangement and coordination Clearly defined objectives Decision making processes Monitoring and enforcement Conflict resolution mechanism	Install coordination mechanism/implementation arrangement for CTMPAs by July 2013 Collaborate on trans-boundary project/program based on CTI-RPOA Early CTMPAS action plan drafted prior to HLFRT and completed in Dec 2013 CTMPAS adopted by CT6 by 2014 (+coordination mechanism. action plan)
Note: This table is not intended to show one-to-one correspondence between design principles and objectives, which were presented as two discrete lists during the workshop.	

Comments and recommendations:

- 1) The group was not able to identify benefits for lack of time.
- 2) Citing the example of SSME, the group proposed the creation of a team to prepare project proposals based on the CTMPAS action plan so that regional priorities will be taken into consideration based on regional needs rather than national needs.
- 3) Consider sustainability of the CTMPAS/reduced dependence on external aid as an objective.
- 4) The group made a distinction between coordination and collaboration. Transboundary collaboration does not have to involve all six countries.
- 5) The functionality objective must be stated, i.e. Establish *functional* coordination mechanisms, institutional and collaborative arrangements.

SESSION 2.7.BRIEFING FOR DAY 3 FIELD TRIP

This was a briefing for Day 3, Session 3.1, which involved a field trip to a local MPA network called Nusa Penida.

Presentation:Nusa Penida MPA – Marthen Welly (CTC)

The 20,000ha Nusa Penida MPA was designated in November 2010 by the head of Klungkung district. The area has about 296 species of coral and almost 600 species of fish, five of which are new species. It is best known as a cleaning station for *themola mola* or sunfish. This deepsea fish appears in the waters of Nusa Penida between July and September every year, drawing thousands of visitors from around the world.

The Nusa Penida MPAs are part of the Lesser Sunda ecoregion. It is also part of a social network under the Bali Marine Conservation Community and a proposed management or governance MPA under the Bali Network. There are 7 zones within the MPA, including a marine tourism zone, special marine tourism zone, core zone, fisheries zone, holy zone, seaweed farming zone, and port zone. In the special marine tourism zone, fishers are allowed to fish only between 4pm and 9am; outside of these hours, only tourism activities are allowed. The holy zone is off-limits to tourists.

Supported by the district government of Klungkung, the provincial government of Bali, CTSP, MPA Governance Program, and the MMAF, CTC, along with the local communities, has completed its baseline study and profile of the Nusa Penida MPA. After about 24 meetings with various stakeholders, it has also completed the MPA's final zoning plan and is now formulating a 20-year management plan and a district decree creating the Nusa Penida MPA management body and a joint patrol team that will include the management body.

There is an opportunity to develop a sustainable financing mechanism, which is a major priority for the Nusa Penida MPA. About 200,000 tourists visit the MPA every year, and based on a willingness-to-pay study, they would pay USD5-15 as entrance fee.

The workshop was adjourned for the day at 5:45pm.

Day3, 28 March 2012

Day 2 session outputs would feed into *Session 4.3 – Ecological, Social and Governance Criteria and Indicators for CTMPAS* of the revised draft outline of the CTMPAS framework (Annex I3). In addition, the ecological, socioeconomic and governance principles, objectives and benefits generated from *Session 2.6* that would be an input into *Section 4.2* would be further refined during this day's sessions, in particular during *Session 3.4a*.

SESSION 3.1. CASE STUDY: LOCAL MPA NETWORK

Field trip to Nusa Penida MPA

Participants set out at around 6:30a.m. to Lembongan Island, one of two sister islands of Nusa Penida in the district of Klungkung, Bali Province. Lembongan is part of the Nusa Penida MPA and site of the only mangrove forest in the MPA. It also has the biggest seaweed farming areas in the MPA.

The field trip had three objectives:

- 1) Share local best practices;
- 2) Demonstrate the role of the MPA network in local, national and regional initiatives; and
- 3) Promote the MPA as a learning site and understand its value as a learning destination.

Participants interacted with community members, who talked about local resource management initiatives, in particular three Best Practices that are developing on this site: DataCollection and Zoning Process, Public Consultation and Government Commitment, Developing an MPA Learning Site. A more complete report of the Site Visit is available in a separate but linked report on the CTI-CFF and the CTC Websites.

SESSION 3.2.OVERVIEW OF DAY 3

At 2p.m. after the field trip, participants reconvened in the main workshop venue for *Session 3.2*. In this session, Mr. Jatulan and Mr. Atkinson reminded participants about the worksheets they were requested to fill out, which they said would be compiled by the MPA Resource Team along with the other outputs from this week's workshop to develop the CTMPAS framework. Mr. Jatulan also informed participants that there would be an adjustment in this afternoon's agenda, and that in addition to the scheduled sessions, each country would spend time to review the outputs from *Session 2.6: CTMPAS Framework #1: Principles, Objectives and Benefits for CTMPAS (Regional and National Systems)*.

SESSION 3.3.CASE STUDY: SUB-NATIONAL MPA NETWORKS (BALI MPA)

This session included one plenary presentation followed by an open plenary forum.

A Network of Marine Protected Areas in Bali –by Putu Liza Kusuma Mustika, Tiene Gunawan, I Made Jaya Ratha (Conservation International)

Presentation –Ms.Mustika

A network of MPAs is currently being developed in the province of Bali, Indonesia, as a joint effort of CI, the Bali marine fisheries agency and other stakeholders. The development process involves 8

general steps described in *National and Regional Networks of Marine Protected Areas: A Review of Progress* (UNEP/WCMC, 2008), as follows: (1) Identify and involve stakeholders; (2) identify goals and objectives; (3) compile data; (4) establish conservation targets and design principles; (5) review existing protected areas; (6) select new protected areas; (7) implement the network; and (8) maintain and monitor the network. CI and its partners have begun identifying and involving stakeholders and compiling data. Marine rapid assessments were conducted in Nusa Penida in 2008 and across the network in April-May 2011. Several network meetings are scheduled in the coming months to identify the goals and objectives and formulate the network “blueprint.”

In addition to its being a high-biodiversity area, Bali was selected to be the site of the network for two reasons: First, as a tourism economy, Bali needs to preserve its rich cultural and natural heritage, the main attraction that has drawn visitors to the island since the first tourists arrived there by steamboats from Batavia in the 1930s. In 1991, Ida Bagus Oka, the former governor of Bali, said, “Believe me, Bali will not change. Bali will always be Bali. In the past, a hundred years ago, today, and even a hundred years from now, Bali has never sold itself to tourism. The Balinese people are determined that it is tourism that must submit to Bali. Tourism is for Bali, not Bali for tourism.” And yet, today, people acknowledge that island’s natural environment is under serious threat from some unsustainable elements of tourism, the very industry it supports.

The second reason for choosing Bali for the MPA network is that the province has a spatial plan (*Perda*) that provides a legal basis for an integrated management framework covering the entire province. Adopted in 2009, the *Perda* embodies indigenous concepts of resource management, including:

- 1) *Nyegara-gunung* (sea-mountain) – traditional ridge-to-reef management
- 2) *Tri hita kana*-- traditional sustainability framework based on the connection between human, nature and the divine
- 3) *Sad kertih* -- six strategies or elements to achieve prosperity, namely, *atma* (soul), *jana* (human), *wana* (forest and its diversity), *danu* (freshwater bodies and their diversity), *segarsamudra* (the sea and its diversity), and *jagat* (the universe and connectivity)

According to the *Perda*, the sea connects with *wana* (forests) and *danu* (lakes and rivers) and symbolizes connectivity (*jagat*, connectivity), and the management of the sea needs the involvement of all enlightened (~*atma*) stakeholders (*jana*). Clause 94, 6c of the plan is to cluster coastal zones and small islands into general usage zone, conservation zone and marine traffic. The Bali government is now developing the island-wide coastal and small islands strategic plan that includes MPAs as an integrated marine resource management tool, and covers strategies to conserve species and habitats outside MPAs as well.

A working definition for the Bali MPA network has been drafted and will be presented to stakeholders at an upcoming network meeting. Emphasizing the sustainable economic benefits of resource protection, it describes the network as “ecologically connected MPAs in Bali that are well-managed to improve the resilience and environmental services, such that it can sustain economic benefits for the communities.” Along with this definition, the following goal and target statements will also be presented at the network meeting:

Goal: The coastal and marine resources of Bali are managed effectively to preserve their ecological, social and economic functions for the residents and the government of Bali

Target: To build an effectively managed network for Bali which supports the government’s vision of ‘One Island, One management’ and the ‘Bali Green Province’

A key milestone in the development of the Bali MPA Network occurred 2 years ago (June 2010) when about 70 stakeholders met to identify 25 priority sites to be included in the network. From the 25 sites, experts shortlisted 7 priority conservation areas, namely, (1) Pulaki Pemuteran; (2) Lovina; (3) Les Village; (4) Tulamben Amed; (5) Nusa Penida; (6) Bukit Uluwatu Peninsula; and

(7) Prancak Beach. This was followed shortly by an assessment, which came up with several findings, including:

- 1) There are four main coral clusters in the area, one of which is divided into two sub-clusters, based on major differences in exposure, substrate type and other environmental variables.
- 2) Each coral community is characterized by a distinctive suite of species and benthic attributes.
- 3) The corals in Nusa Penida are connected to the corals near Tulamben Amed.
- 4) The corals in the southern part of Nusa Penida are also connected to the corals in Nusa Dua and Gilimanuk Bay.
- 5) There are at least 4 clusters of fish – fish at the north coast make up one group, those in the Secret Bay comprise the second group, Lombok Strait fish are the third group, and Nusa Penida make up another group. These groups are all connected.

No primary data collection was done for megafauna, but a review of secondary data showed a wide range of megafauna occurring in Bali, including sea turtles, marine mammals, sharks (including whale shark), manta rays and *mola mola*. The cetaceans in Lovina appear to be connected to those in Tejakula. The whale sharks in Nusa Penida, Tejakula and Lovina have not been studied, but there may be some connectivity there as well that makes for a good area of research.

The proposed island-wide Bali MPA network is expected to cover about 73,000 ha and will include the following MPAs:

- 1) Three declared MPAs covering 14,040.83 ha in Buleleng, namely (a) KKP Buleleng Barat at Pemuteran, (b) KKP Buleleng Tengah at Lovina, and (c) KKP Buleleng Timor at Tejakula.
- 2) Two suggested MPAs in Karangasem covering 6,600 ha (Amed-Tulamben and Padang Bai-Candi Dasa)
- 3) One declared MPA in Nusa Penida (Klungkung) covering 20,057 ha
- 4) One proposed MPA for Badung (Bukit Peninsula) covering 29,000 ha
- 5) One proposed MPA for Jembrana (Perancak) covering about 600 ha
- 6) The waters of Bali Barat National Park, an old national park in the western tip of Bali covering 3,415 ha (Bagian Laut)

Most of these sites have special natural features that need to be protected. For example, Lovina is known for dolphin watching, while Amed-Tulamben is mostly famous for wreck diving. A new coral species was discovered at Padang Bai-Candi Dasa, and there's a nesting site for the Olive ridley sea turtle in Perancak. The Buleleng district in general is one of the world's key exporters of ornamental fish, so one of the MPA sites there (Buleleng Timor in Tejakula) was designed with sustainable fisheries for ornamental fish as the main objective. Bukit Peninsula is being considered as a surf reserve, surf being a glue or umbrella element that can be used as an amplification for conservation (good surfing requires, among other things, clean waters and a good surf break, e.g. healthy coral reefs).

Proponents of the MPA network would also like to identify the aggregation site for thresher sharks in the area, which may be around Nusa Penida or offshore that could be protected, if not under the jurisdiction of Klungkung then under the province. Sharks are listed as threatened species in Indonesia, but there has been considerable fishing of sharks in Bali that indicates the need for some level of protection. In addition, it may be possible to identify spawning aggregation sites for sardines in the area.

The Marine Rapid Assessment Program has put forward the following recommendations for the government of Bali:

- 1) Develop the Bali MPA Network.
- 2) Implement effective management of the Bali MPA Network. This requires:
 - Strong governmental commitment
 - Significant governmental funding

- Serious and effective enforcement of regulations, including on destructive fishing and waste management
- Involvement/collaboration with the marine tourism industry and coastal communities to encourage ownership of the Bali MPA Network
- Sustainable financing for all MPAs within the network (CI and partners are looking at doing a willingness-to-pay survey not only for MPA Network but also for other environmental and heritage initiatives in Bali.)
- Establish Bali-wide shark sanctuary (requires socioeconomic study).

There are five big meetings being planned between April and December 2012 toward completing the establishment of the Bali MPA Network. The plan is to launch the network “blueprint” in December, when the network’s 5-year management plan, structure and sustainable financing concept are expected to have been developed. An MPA Network Task Force will officially be created and designated in April to coordinate the process.

Discussion

Mr. Barreto– How do you plan to establish the network task force?

Ms. Mustika – We will invite to the first meeting (April) about 70 stakeholders (50 from the government and the rest from NGOs and community), and from there we hope to be able to nominate names to the task force. The task force will include representatives from key government agencies, particularly the MMAF, environment ministry, tourism ministry and the provincial planning board, as well as key stakeholders from the community and NGO sector. The task force will then be constituted by decree of the Governor of Bali. It will be responsible for creating the MPA Network management body and coordinating the development of a 5-year plan and sustainable financing concept for the network. It will operate at the provincial level, working alongside other task forces at the district and other levels of government, such as those at Nusa Penida. We are also going to invite the Marine Sports Association. They are important partners as well, especially for the sustainable financing aspect.

Ms. Abdul Hamid – In Malaysia, we have a National Marine Parks Council that approves the designation of MPA sites. The approval process involves several stakeholder meetings, and then the Council will decide. What’s the setup like in Indonesia?

Dr. Gunawan – There are different types of MPA in Indonesia. We have a number of national MPAs, such as Savu Sea and Anambas Marine Park, as well as more than 40 MPAs at the regency level and several others at that are community-based. There is no central authority for MPAs in Indonesia. At the regency and community-level, the regent can declare MPAs, which are then assigned by decree of the MMAF. The Bali MPA Network is an initiative of the provincial government of Bali.

Ms. Mustika– The community did not initiate the MPA network, but the community is very much involved in its development. The process is very much anchored on community participation.

Dr. Gunawan – The regency can have its own task force that includes some community representatives, and at the community level, there are strong community task forces as well, such as those in Nusa Penida and Buleleng. If you’re asking whether or not this idea came directly from the community, the answer is no, it did not, but the community is very much involved in the process.

Mr. Kereseke – It is the opposite for us in the Solomon Islands. Our process of establishing MPAs always starts at the community level and never with people at the top developing the MPA design. It’s always the people that will initiate it first, and then the design can follow later. It will

never work if the people are not aware of the MPA or are not willing to support it, because in the Solomon Islands, it is the people who own the land and sea.

Dr. Gunawan – That’s a good approach. In Indonesia, we have three layers of authority: the national government, which declares national parks; the regency, and the community. Or we have four layers, if you include the province, which has a coordinative function. In addition, at the national level, there are at least two agencies with responsibility over marine parks – the Ministry of Forestry and the MMAF. So it’s a challenge. Here in Bali at least, the provincial government has taken responsibility for trying to link all these layers, using the MPA network as an integrated management tool.

Mr. Handoko – It has been scientifically established that the entire Lesser Sunda, which includes Bali, is one ecoregion. So my question is why only Bali? Why not Lombok and the other sites as well?

Ms. Mustika – The decision to establish the Bali MPA Network was really a matter of practicality. Bali is one province that has a strong traditional resource management system and is easily integrated – albeit not without problems – into the administrative system. So the decision was based more on governance and practicality. But I do agree that eventually we will have to talk to Lombok and also maybe East Java and even Kalimantan.

Dr. White – Most of your sites are very close to the island so the reefs are rather contiguous with the beach and the development areas. To what extent is your program going to focus on managing coastal development, looking at setbacks, pollution control, etc.? In the long term there’s going to be major impacts on many of the reefs from the development activities that are happening along the coast.

Ms. Mustika – The network design is based on the ridge-to-reef approach, so it includes and highlights upper catchment activities. We are working closely with the regency of Buleleng in this area because north Bali has a very narrow strip of lowland, so the sea is very prone to upper catchment disturbance.

Mr. Welly – We are working at the district level in Indonesia and would like to offer a suggestion to those who are working at the provincial level. Under Indonesian law, it is either the national government, or the district, or the community that has the authority for MPAs, not the province, which has a minor coordinative function. I think it is important to emphasize that the management body you are creating at the provincial level has a purely coordinative function. Also please make sure to engage the districts in the process. There is some sensitivity with regard to the separation of authority between the district and the province, so we must be careful not to create conflict between these two government levels.

Ms. Mustika – That is the intent. The management body’s function is really coordination. I didn’t realize that it would be interpreted otherwise. Perhaps we must change the name to coordination body to make that clear. We’ll put it out there during the meeting so the stakeholders can decide, but it is clear to us that the role of the province is coordination, and in terms of sustainable financing, to help the districts get some additional funding for their MPAs.

Mr. Welly – That’s good, but right now there is a draft provincial decree on integrated management in Bali that states in part that if the district would like to establish an MPA, it should get a recommendation from the province. This is a very sensitive issue.

SESSION 3.4a.CTMPAS FRAMEWORK #1: REVIEW OF PRINCIPLES, OBJECTIVES AND BENEFITS FOR CTMPAS (REGIONAL AND NATIONAL SYSTEMS)

In this session, participants broke into their country teams to review the principles, objectives and benefits that they developed in *Session 2.6*. They were given the following discussion guidelines:

- 1) Spend about 20-30 minutes reviewing the outputs from *Session 2.6* to make sure that they are in concert with or at least not contradictory to any of your efforts at the national level.
- 2) Agree among yourselves that it is a body of work that you want to move forward with at the regional level.
- 3) Remember that these are regional objectives – they should not contradict your national MPA objectives, but they need not be the same as your national objectives.
- 4) Take notes and report back to plenary.

The report-out was made in open plenary forum facilitated by Mr. Atkinson. To improve clarity, the proceedings are presented in two separate sections below under the headings of **Report out** and **Discussion**.

These outputs were further revised in later sessions (So these are not the “final” ones), and reviewed by the MPA Resource Team during and after the workshop. The final consolidated table is shown in Annex 12.

Report out

Indonesia

Presenter: Ahsanal Kasasiah

- 1) Under *Governance*, collapse the 7 design principles into 3, as follows:
 - a. Political will, leadership and authority
 - b. Institutional arrangement and coordination
 - i. Monitoring and enforcement
 - ii. Decision-making processes
 - iii. Conflict resolution mechanism
 - c. Integrated management framework
 - i. Clearly defined objectives
- 2) Under *Ecological*, collapse the 3 design principles into the ecosystem function and biodiversity.
- 3) Under *Social*, the design principles are not very clear and need to be elaborated. Also, “Community benefits” may be enough to reflect all 4 principles.
- 4) Consider adopting a single objective that covers all three categories of principles, such as “In 5 years, a nation-wide MPA system which is ecologically sustainable, socially responsible and effectively governed is established and operational.” The result or benefit would then be “effectively managed networks, sustainable production of coastal and marine resources, and food security or community prosperity.”

Timor-Leste

Presenters: Celestino de Cunha Barreto and Aleixo Leonito Amaral

- 1) Under *Governance*, add “coordination and communication among enforcement institutions in the CT6 well-managed to combat IUU fishing.”
- 2) Under *Ecological – maintain ecosystem and biodiversity*, add the objective “to develop a system of MPAs that can support ecosystem function and biodiversity.”
- 3) Under *Social*:

- a. *Communication – in 5 years, the CT6 would have built a mechanism to share data across the region, add “Documents provided in English and Indonesian.”*
- b. *Education – in 5 years, at least 50 percent of key stakeholders know and understand the benefits of education,” add “Target local communities.”*

Solomon Islands

Presenter: Jimmy Kereseke

- 1) Under *Ecological – Maintain ecosystem function – Support healthy and increasing fish populations, add “important invertebrates.”*
- 2) Under *Social – In 5 years, communities surrounding and within MPAs in the CT6 will have improved livelihood and social welfare, is there a standard measure or indicator that all the countries can use for improved livelihood and social welfare?*

Philippines

Presenter: Luz Teresa Baskinas

- 1) Check session outputs against RPOA.
- 2) Under *Governance*:
 - a. Insert “co-management schemes,” taking into consideration that the CTMPAS may not necessarily comprise just individual component MPAs but also networks of MPAs.
 - b. Add this objective, “In 5 years, after the adoption of the comprehensive action plan for the CTMPAS, there is functional implementation of joint activities, e.g. shared financing, enforcement, education and communication.”
- 3) Under *Ecological– Conserve coral reefs and associated habitats...*, add “Critical coastal and marine biodiversity and resources.”
- 4) Under *Social*, emphasize fisheries. (The group was not sure about where fisheries would fit but decided the social category would be the best fit.)
- 5) Add “Link CTMPAS to other international platforms, such as the ASEAN (Association of Southeast Asian Nations) Heritage Site, Ramsar, etc.” (The group was not sure where this objective would fit.)

Malaysia

Presenter: Shahima Abdul Hamid

- 1) Under *Governance – Monitoring and enforcement*, change “enforcement” to “evaluation.” Enforcement should be under institutional arrangement or integrated management framework.
- 2) Fisheries should be a priority. (The group could not decide whether fisheries should be in the ecological or social category.)

Discussion

Mr. Atkinson – Do the countries all agree that fisheries should be added as a priority?

Dr. Abd. Ghani – Like the Philippines, we were not sure where to put it – should it be under social or ecological?

Mr. Abdul Hamid – Perhaps we should put it under ecological, say “fisheries and coral reefs.” Or maybe under food security, but we don’t know how to explain that.

Mr. Atkinson – Are we suggesting that the CTMPAS should include MPAs that have a fisheries benefit, a social benefit, which could then be a guiding principle or an objective? If so, then that could be defined in terms of MPA activities or attributes that promote fisheries, which suggests a whole host of activities that we may not have had previously.

Mr. Peterson – At the end of the session yesterday, someone made the point that we need to make fisheries stand out as a stronger component going forward because we need to emphasize fisheries more than we had, so if that's the case here, then that works out.

Ms. Mustika – As someone who has a marine tourism background I wonder how marine tourism fits into these objectives. Bali is very tourism based and most of our MPAs are tourism rather than fisheries-based. These objectives address fisheries, but not the sustainability of other uses. I hope we can flesh it out somewhere.

Ms. Walton – Tourism should fit under the economic objective.

Mr. Atkinson -- Four countries suggested additional elements to flesh out some of the objectives and principles, while Indonesia's suggestion is to lump everything under one objective. So what does the group think?

Ms. Walton – Just one thing to let you know what's going to happen from here, since this is considerable consolidation. We're going to have somebody wordsmith these into objectives, to make them SMART objectives. This will be done outside of this workshop this week. We will go back and clean up this session's outputs, incorporate your comments and have a draft final version of the objectives that will go back to all of you. If you collapse these objectives, it would be hard to make them SMART. This is why we are capturing all your comments. We want to make sure that there's nothing here that contradicts your efforts at the national level.

Mr. Atkinson -- If the group decides they want a more consolidated objective and a fewer number of objectives, one option to consider would be to create milestones for that objective, and some of the things that we already have here could be logical milestones.

Mr. Abdul Hamid – We have no objections from Malaysia, as long as the results have the elements of conservation, food security and sustainable utilization (because we cannot just conserve resources, we have to use them for the benefit of the community). These are the three results we require under our NPOA.

Ms. Kasasiah – We realize we have to define measurable objectives and that we have to define a timeline for achieving that objective. We just thought that for the regional CTMPAS, a single objective can cover all of the principles.

Dr. Tighe – We can use the one in the RPOA, but it is awkwardly worded so we need to improve that a bit.

Dr. White – The RPOA goal is fine, but it doesn't negate the need for having objectives.

Ms. Kasasiah – I agree with you, this should be a goal and yes, we need to define the objectives. But I think the issue is at what level we want to discuss this. We were thinking that we should be working at the macro level, given the limited time we have here. That's why we suggested we should lump the objectives together.

Mr. Atkinson – So the suggestion is to adopt the RPOA CTMPAS objective statement, with some refinement, as an overarching five-year goal.

Ms. Baskinas – This is the RPOA target for the CTMPAS: “A comprehensive, ecologically representative and well-managed region-wide *Coral Triangle MPA System*(CTMPAS) in place -- composed of prioritized individual MPAs and networks of MPAs that are connected, resilient, and sustainably financed, and designed in ways that (i) generate significant income, livelihoods, and food security benefits for coastal communities; and (ii) conserve the region’s rich biological diversity.”

Mr. Atkinson -- The resource team can commit to having these additions incorporated into the list that we already have.

SESSION 3.4b. CTMPAS FRAMEWORK #2: PRIORITIES, CRITERIA (ECOLOGICAL, SOCIAL, GOVERNANCE) AND CATEGORIES OF MPAS FOR CTMPAS FOR CTMPAS (AND NATIONAL SYSTEMS)

A primary objective of this workshop was to develop the CTMPAS framework, and up to this point, two sessions (Session 2.6 and Session 3.4a) focused on identifying the principles (foundation), objectives (what is to be achieved) and benefits (results of having met objectives) that would form part of the framework. In this session, participants broke into three mixed-country groups to work on another element of the framework: the criteria for selecting networks that would go into the CTMPAS.

Before the breakout discussions, Dr. White and Ms. Walton provided some background information on developing site selection criteria.

In the context of the CTMPAS, site selection involves identifying MPA *networks* to include in the regional MPA system, Dr. White said. The criteria will determine the types of sites or places that will contribute to meeting the network objectives, taking into account the following considerations:

- 1) A network can include MPAs of different sizes and critical habitats (or portions thereof), interconnected by movement of living marine resources.
- 2) They must be appropriately placed, sized and spaced to function collectively as an ecological network.
- 3) A network implies that it is a coordinated system of MPAs, linked biologically *and* administratively.
- 4) A network reflects a consistent approach to design, finance, management and monitoring.

There will be different selection criteria for each of the three broad categories of network objectives (ecological, social and governance). Generally it is easier to develop the criteria from the biophysical or ecological perspective using the objectives as the point of reference, Ms. Walton pointed out. For example:

Principle: Ecologically *representative* network

Objective: Areas important for vulnerable life stages of *fisheries resources*

Benefits: Increase in population of fisheries resources; increase in protein source; increase in income opportunities

Site criteria: *Replication/redundancy* (spawning aggregation sites, nursery sites [mangroves, seagrass], areas of larval dispersal [currents])

But there are several criteria that can be used for selecting sites from the social or governance viewpoint as well, Ms. Walton added. If the objective, for example, is to increase livelihood opportunities, one must assume that (1) there are communities that are associated with the MPAs and (2) the MPAs are not very isolated. Dr. White suggested, “Another consideration might be integration to accomplish multiple objectives.”

Ms. Walton explained that the breakout discussions would focus on prioritizing the site selection criteria under the three categories (ecological, social and governance), and that each group would be assigned a category to work on.

Discussions would be further guided by the following guidelines:

- 1) Use the worksheet provided that contains a list of the various site selection criteria under each category, but don't be confined by these examples – you can develop other criteria, for example, criteria related to management effectiveness (under governance).
- 2) Write down the objectives for your category in the space provided and discuss among your group what criteria would meet those objectives.
- 3) Elaborate the criteria that you choose. For example, if you choose representation, be very clear about what that means. Representative habitats? If so, what habitats?

In preparation for the next day's sessions, Dr. Tighe also distributed some documents on MPA network frameworks and requested the participants to "please browse through them, even if only the table of contents because tomorrow we are going to refer to them when we build our CTMPAS framework."

The workshop was adjourned at 6:20p.m. Because of time overrun, the presentation of this session's outputs, as well as Session 3.5 that was originally scheduled for the day, was rescheduled for Day 4.

Day4, 29 March 2012

Day 4 started at 8:40am with a review of Day 3 and the (rescheduled) presentation of the results of the small group discussions in *Session 3.4 CTMPAS Framework #2: Priorities, Criteria (Ecological, Social, Governance) and Categories of MPAs for CTMPAS (and National Systems)*. Except for one expert presentation, today's sessions were all group discussions on further developing the CTMPAS framework.

Today's sessions would input into *Section 3, Section 4, Section 5 and Section 6* of the revised draft outline of the CTMPAS framework (Annex 13).

SESSION 4.1 REVIEW OF DAY 3 AND OVERVIEW OF DAY 4

This session was largely focused on the presentation of the selection criteria for the CTMPAS developed in *Session 3.4* by the country delegates working in small mixed country groups. Before the presentation, Mr. Jatulan, who facilitated the session, very briefly summarized the outputs of Day 3, highlighting in particular the principles and objectives of the CTMPAS that the countries had put together in Day 2 and reviewed and generally agreed to during yesterday's afternoon session. He told participants that the consolidated list of objectives and principles was being revised to incorporate the changes they had suggested and they would each be provided with a copy of the revised list.

In addition, on request from the Monitoring & Evaluation TWG, Ms. Baskinas asked the countries to "help the M&E TWG review" a proposed set of indicators previously submitted by the MPA TWG to the CTI-CFF Senior Officials. The indicators were presented by Dr. White in *Session 1.2a Context and Summary of Status of MPA Networks/Systems in the CT*. "We'd like to request your assistance to review not only the indicators but also the description for each indicator," she told the body.

Mr. Kenilorea, representing the group that put together the governance principles and objectives of the CTMPAS, also took the floor to present a revised version of his group's outputs (Table 4.1.1). "We thought we had (too many) principles that were very similar, so we decided to collapse them into three principles," he explained. (See also **Annex 12** for the final consolidated table of CTMPAS principles and objectives).

Table 4.1.1. Revised set of Governance Principles and Objectives for CTMPAS (revised Session 2.6 outputs)

PRINCIPLES	OBJECTIVES
a. Integrated management framework for ecosystem based management	CTMPAS uses integrated ecosystem approach which includes, e.g., human activities, climate change adaptation and fisheries
b. Political will, leadership and authority (which includes decision making processes)	CTMPAS is supported at the highest political level and led by the six countries with the authorities for all to contribute and achieve its goals
c. Institutional arrangement and coordination (which includes clearly defined objectives, monitoring and surveillance and conflict resolution mechanism)	CTMPAS coordination and institutional arrangements are collaboratively developed in place and adopted:
	Early CTMPAS action plan drafted prior to the High Level Financial Round Table and completed by Dec 2013
	Coordination mechanism and implementation arrangement established by July 2013
	Coordination mechanism and action plan of the CTMPAS adopted by CT-6 by 2014
	In five years after the adoption of the action plan, functional implementation of joint-activities, e.g., shared financing, surveillance, research, education and training

Dr. Tighe added, “Whatever outputs you produce in this workshop are going to make up the first draft of the framework, which will be your proposed framework, not the final framework. The writing team will edit your draft, and the CT6 through the TWG will review it.”

At the end of Mr. Kenilorea’s presentation, Mr. Jatulan called on the first group to present their Session 3.4 outputs.

Outputs from Session 3.4 breakout discussions: Selection criteria for CTMPAS

The results from the small group discussions in Session 3.4 are shown by category in tabular form below (governance, social and ecological). Comments generated during this session (Session 4.1) corresponding to a particular category of criteria are included in the table for that category; comments that apply generally to all three categories are shown at the end of this section.

These outputs will form part of Section 4 of the CTMPAS framework. (See also consolidated table in Annex 14.)

Governance criteria

Presenter: Lynette Laroya

Table 4.1.2. Proposed governance criteria for CTMPAS

Objective	Criteria	How site criteria will contribute to meeting network objectives
Integrated management framework for ecosystem based management	Integrated management Institutional and governance considerations Type of management measures Training M&E On-site research	EBM that includes fish, research sites and conservation sites and involves many agencies
Political will, leadership and authority (which includes decision making processes)	Political will and leadership Institutional and governance considerations Decision-making structure	Easy access, high value sites (e.g. World Heritage sites), transboundary site, involvement of both CT6 and partners
Institutional arrangement and coordination (which includes clearly defined objectives, monitoring and surveillance and conflict resolution mechanism)	Integrated management Political will and leadership Institutional and governance considerations Decision-making structure Type of management measures Training Surveillance Conflict resolution Monitoring and evaluation On-site research	Timeline and milestones, for example in the preparation of action plans Identification of government agencies, protocols and activities to support CTMPAS, including research involving partners
<p><i>Comments:</i></p> <ol style="list-style-type: none"> 1) Ms. Walton remarked that while she understood the importance of conflict management, she was not sure how it could be used as a criterion to evaluate sites. “In your discussion, did you identify a mechanism to evaluate sites against conflict resolution?” 2) Dr. Tighe said the today’s session would not have the time to fully discuss any of the criteria, but “there are times and places where stakeholders or resource users are in conflict, or where there are peace parks or special trans-boundary management agreements between countries, or a coordination group using a particular area as a conflict resolution site.” There is potential for those actions. 3) Ms Laroya added, “We didn’t come up with a clear conclusion on how to apply this criterion, but we decided that it should be considered.” 		

Social criteria

Presenter: Luz Teresa Baskinas

Table 4.1.3. Proposed Social Criteria for CTMPAS

Objectives	Criteria
Education	<ul style="list-style-type: none"> □ Economic considerations (low-cost) □ Social considerations (easy to understand; simple) □ Cultural considerations (relevant and sensitive to local context) □ Shared learning opportunities (sites with easy access for learning/demonstrating opportunities) □ Others: Potential future conservation practitioners/leaders within sites (building human resources through education objective)
Communication	<ul style="list-style-type: none"> □ Economic considerations (low cost; access) □ Social considerations (appeal to users for sharing information, e.g. Facebook, other social media) □ Cultural considerations (access to the communication, including language and use of appropriate terminology, e.g. radio for some areas; locally appropriate content) □ Shared learning and opportunities (accessibility to disseminate information as well as accessibility to various means to collect/exchange information; opportunities to share/give input) □ Other – Use of maps (maps, e.g. CT Atlas, are very effective tools for communication, so the site must offer opportunity for map data to be prepared and shared)
Cultural values	<ul style="list-style-type: none"> □ Economic considerations (not expensive to plan and implement activities) □ Social considerations (willingness to incorporate local wisdom on planning and implementation) □ Cultural considerations (willingness to incorporate local wisdom in planning and implementation) □ Shared learning and opportunities (site with traditional management; cultural and traditional system is embedded in the MPA management processes already) □ Other <ul style="list-style-type: none"> - Sites with fully community-led MPAs - Sites established for cultural other values (sites that have been established primarily for their cultural value should be prioritized)
Sustainability (livelihood and social welfare)	<ul style="list-style-type: none"> □ Economic considerations (some initial system in place to ensure financial sustainability; potential to establish financial sustainability, or at least the presence of strategy for sustainable financing) □ Social considerations (demonstration of economic benefits of MPAs to local communities, i.e. sites to be included in the CTMPAS should show visible economic benefits) □ Shared learning and opportunities demonstration of economic benefit of MPAs to local communities (sites to be included in the CTMPAS should show visible and documented economic benefits) □ Other – Opportunities for and demonstration of public private partnerships; effective co-management in place
<p>Comments:</p> <ol style="list-style-type: none"> 1) Dr. Tighe noted that the language issue appears to be a particularly important concern for the social component, especially because community outreach is a crucial component of MPA work. She asked, “Would you like to consider language-specific materials or programs as a criterion under the social component?” 2) The Philippines (Ms. Baskinas) said the answer to Dr. Tighe’s question (1) would be “a definite yes,” although that kind of discussion would be “really site level.” She added, “From a more regional perspective, there are existing MPA databases and profiles that the countries or the NCC can study and draw information from on some of the social considerations. There would be information gaps, but it would be something to start with.” 	

Ecological criteria

Presenter: Fazrullah Rizally Abdul Razak

Table 4.1.4. Proposed Ecological criteria for CTMPAS

Objectives	Criteria	Duration
Conserve coral reefs and associated habitats that are resilient to climate change (and other threats)	Representation (e.g. includes wide range of coral reefs from fringing to atolls to nearshore reefs) Replication/redundancy (risk spreading) Connectivity (corridor for facilitating connectivity, e.g. larval dispersal, settlement, etc.) Resilience (resilient sites, e.g. mangroves) Unique/critical habitats (areas of high endemism) Source populations (speciation areas) MPA size (to consider life history range, status of resource) Other (spacing based on source-sink/oceanographic processes, e.g. consider upwelling)	Long-term/permanent?
Support healthy and increasing fish populations	Representation (covers life cycle) Connectivity (covers life cycle including source and sink) Unique/critical habitats (cover life history of species) Source populations (spawning sites, larval dispersal areas/range) MPA size (covers life cycle, including survivorship) MPA shape (based on the purpose of protection, e.g. maximize spillover) Adequacy/viability/permanence (spawning aggregation sites showing high site fidelity/permanence)	Long-term and short-term (seasonal)?
Maintain or recover populations of threatened species for intrinsic value, education and scientific value and human heritage value	Replication/redundancy (critical habitats) Connectivity (migration corridors) Resilience (expansion of sites, e.g. turtle nesting sites) Unique/critical habitats (depending on the species to be protected, may be pristine nesting/foraging sites, migratory corridors, "sacred" species such as mola mola, manta aggregations) Source populations (nesting habitats, calving area) Foraging or breeding grounds MPA size (core area, buffer zone, general use zone) Adequacy/viability/permanence (areas with viable populations) Other <ul style="list-style-type: none"> ▫ Select areas under minimal threat ▫ Accessibility for education and science 	Seasonal?
<p><i>Comments:</i></p> <ol style="list-style-type: none"> 1) ?in the third column means "Do you want to think about this later?" 2) Responding to a question from Timor-Leste on whether or not upwelling should be considered at the regional level in relation to primary production and currents (rather than climate resilient coral reefs), and where the upwelling areas might be that have regional significance and could be linked to the CTMPAS, Dr. Aliño said, "On the Pacific side where the Mindanao throughflow is experienced, the upwelling system influences Indonesia, PNG and the Solomon Islands, so it is crucial to nearshore fisheries in these countries. In the Sulu Sea, there are upwelling conditions of both the oceanic and internal wave types that influence the productivity of the area and relate to movement of fish and other organisms in that area. This is relevant also because upwelling is affected by the ENSO, which then translates to climate change effects." 3) Dr. Green said upwelling can be an important criterion for all three objectives, i.e., not only climate resilient coral reefs and healthy fish populations, but biodiversity conservation as well. "There are MPAs that focus on areas where there are manta rays, or mola mola and all this cluster of biodiversity targets that on their own might be a target of protection." 4) Dr. Aliño suggested that the countries might also want to consider as an ecological criteria the presence of important regional endemics in certain areas like ecoregions. 		

General comments

1. Ms. Walton observed that many of the criteria “are very precise but at a very micro level.” She asked, “From the practical standpoint looking at the evaluation of all MPA sites within the whole CT, can you imagine being able to put together a survey or assessment to extract this level of information?”
2. Malaysia (Ms. Abdul Hamid) said that it would be “very easy” for them to get inputs from local communities that are involved in MPA management, because these communities are organized and have a management council composed of community members that can provide the information.
3. Mr. Atkinson suggested that meeting all the criteria should not be the condition for entry into the CTMPAS, but “the CTMPAS needs to make sure that there are at least some examples of MPAs that meet certain criteria so we could learn from them.”
4. Ms. Walton wanted to know if everyone agreed with Mr. Atkinson that the intention of the CTMPAS was to include a wide representation of MPAs meeting the different criteria rather than only those MPAs that meet a certain minimum set of criteria.
5. Timor-Leste (Mr. Amaral) recalled that the countries agreed during the REX1 in Phuket to designate one site to be a demonstration site or site for future learning or sharing experience (in each country).
6. The Philippines (Dr. Aliño) said the regional system may want to consider “incremental benefits that can be derived” from including an MPA. “At the regional level, there might be important criteria that we would need to consider in order that we can generate incremental benefits or added value, and we might need to look at more considerations of convergence between the social, ecological and governance concerns,” they explained. “If we don’t have criteria, then everything can be included.”
7. Malaysia (Ms. Abdul Hamid) said if convergence was the main consideration, Malaysia could nominate Tioman Island, “which has social, ecological and governance systems and where we have everything there.”
8. The Solomon Islands (Mr. Kereseka) said that whether the intention is to have a wide representation of MPAs for learning or to have MPAs that meet a set of overall regional criteria, they have sites that they could nominate. “The important thing is that we decide what the criteria are about,” they pointed out.
9. Indonesia (Ms. Kasasiah) said they have always considered all three categories of criteria in selecting sites for MPAs, although “it is true that the socioeconomic criteria are often more dominant than the other criteria.”
10. Ms. Walton noted that with respect to the ecological criteria, “it is pretty clear that the distribution or placement of MPAs would be a very important consideration if we want to capture all the processes and life cycles that we consider crucial to achieving our CTMPAS objectives.” She asked, “Is placement and spatial explicitness as important for the social and governance criteria as they are for the ecological criteria? Do you want equal distribution for the social, governance and ecological MPAs? Or do you want some representation of these within each of the countries? These are some things you need to think about when you apply these criteria, because it will help you decide which sites should be included.”
11. Dr. Green said it might also be useful to consider whether some of the objectives have some spatial components, like fisheries and tourism.
12. Mr. Atkinson asked, “Should the regional system look at processes or places that operate or are unique or are benefiting the region overall and encourage those countries where those processes or places exist to participate in the regional network? That’s a question that the countries and TWG will have to grapple with. I look at the selection criteria in some ways as more than a bar for entry. I do agree with the Philippines (Dr. Aliño) that not everything can be included, but I also consider the selection process as a way to look for things that are not already in the system but should be included.”

13. The Philippines (Dr. Aliño) said the question may be whether or not to give some criteria bigger weights compared to the other criteria. “But that’s a process question that we can decide on later,” they added.
14. Dr. White observed, “It seems to me that the framework is supposed to trigger us to apply these criteria both nationally and regionally. I doubt that we are going to differentiate between national and regional in the long term. We’re trying to encourage countries to consider these criteria when they select their MPA sites, but we’re also going to use them for our regional system so that in the end we may move toward a common set of MPAs that addresses our CTMPAS objectives.” He agreed with Dr. Aliño, saying, “It also seems that we’re getting a bit into the weeds here. There are a lot of very specific things which are relevant for particular MPAs that we won’t be able to apply to our regional system initially. Our outputs from this workshop are supposed to guide us, and as we move forward we will sort these out to see how they fit into the bigger framework that we’re developing.”
15. Dr. Tighe explained, “What we’re really doing in one way is that we’re categorizing the MPAs so that we can put them in a spreadsheet and sort them because we want to know, for example, where the turtle sites are so that we can improve the management of turtles in the CTI thru the CTMPAS. Don’t be too worried about it because as the TWG and science advisory team develop the framework, these criteria are going to evolve.”

SESSION 4.2. NATIONAL BIODIVERSITY ASSESSMENT, GAP ANALYSIS AND CRITERIA USED IN INDONESIA

This session included one expert presentation and an open forum on a prioritization process used to identify sites for Indonesia’s marine biodiversity conservation program. The purpose of the session was to provide one case study or example of a national process to prioritize sites for action.

Presentation: Defining geographic priorities for marine biodiversity conservation in Indonesia – Tiene Gunawan, Mark Erdmann and Crissy Huffard

Presenter: Tiene Gunawan

The need to prioritize regions for conservation investment is a basic tenet of conservation planning. In Indonesia, prioritization has been an ongoing process since 1984, when Salim and Halim (IUCN/WWF Marine Conservation Data Atlas for PHPA [Directorate-General of Forest Protection and Nature Conservation]) first identified 179 marine sites in the country based on the 1st to 4th order of prioritization to form the basis of a national system of MPAs. The following criteria were used at that time:

- 1) To safeguard critical habitats of commercial species
- 2) To safeguard critical habitats of threatened species and rebuild stocks of those that are depleted
- 3) To preserve the value of at least one marine site near each major urban center and at least one marine site in each province for tourism
- 4) To preserve the biotic diversity of Indonesia’s marine resource heritage
- 5) To protect sites with high value for research and education

This prioritization has largely served as the basis for marine conservation planning in Indonesia for the past 3 decades. It resulted in the designation of national parks and other smaller parks, with the Sunda Shelf/Java Sea area as the main priority. In 1989, Ms. Rili Djohani shortlisted 17 sites focused on helping the government meet its goal of 10 million ha of MPAs by 1993. The list included the following:

- 1st Priority: Togian Islands (Sulawesi), Aru Islands, Teluk Cendrawasih (Papua), Wakatobi/Tukang Besi
- 2nd Priority: Taka Bone Rate (Sulawesi), Bunaken (Sulawesi), Kei Islands, Raja Ampat, Komodo, Karimunjawa

3rd Priority: Riau, Karimata, Halmahera (Pulau Widi), Pulau Pombo/Kassa/Banda, Teluk Maumere, Pulau Seribu, Bali Barat

Indonesia had about 13 million hectares of MPAs in 2009. To guide MPA development toward its target of 20 million ha for 2020, a prioritization exercise was conducted in 2009, where USAID requested CTSP and other CTI partners to conduct a brief and low-cost, desk-top but scientifically defensible geographic identification of priority sites using a two-step process:

- 1) Quantitative ranking exercise using inputs of independent, national and international marine taxonomic experts (based largely on biodiversity parameters); and
- 2) Refinement of prioritization using inputs from government officials and conservation practitioners based on considerations of vulnerability and conservation opportunities and constraints.

A key requirement was to apply standardized geographical delineation, optimally focused on a scale at which ecologically-connected networks of MPAs will be defined and implemented. Using Spalding's Marine Ecoregions of the World as reference, 12 marine ecoregions were defined within Indonesian territory. The quantitative ranking exercise would be done based on secondary data. To ensure scientific defensibility, the experts chosen to contribute to the study were those that:

- 1) Have conducted extensive field observations/taxonomic research that spans the entire Indonesian Archipelago (i.e., ideally from Sumatra to Papua, Bali to North Sulawesi);
- 2) Would be able to complete the ecoregion ranking questionnaire based upon their own observations and datasets, and reference those datasets as necessary within the questionnaire; and
- 3) Are recognized internationally as experts on a specific component of Indonesian marine biodiversity and have a strong publication record in this regard.

Sixteen experts completed the ecoregion ranking questionnaire, which resulted in the following overall ranking: (1) Papua, (2) Banda Sea, (3) Lesser Sunda, (4) Sulawesi Sea Marine Ecoregion/Makassar, (5) Halmahera, (6) North Borneo, (7) Western Sumatra, (8) SE Sulawesi/Tomini Bay, (9) Sunda Shelf/Java Sea, (10) Arafura Sea, (11) S Java, and (12) Malacca Strait. The experts' inputs, along with interviews with other experts and a review of various databases, further guided the prioritization review, which came up with the following findings and recommendations:

- 1) The criteria of irreplaceability and representativeness criteria strongly underscore the importance of focusing on marine biodiversity conservation efforts in Papua, Lesser Sundas, the Banda Sea, and Western Sumatra, including strengthening and building upon current MPA networks. However, the ecoregion ranking alone does not capture all the rich detail and habitat diversity of Indonesia's marine heritage; there are many individual sites within lower-ranked ecoregions that stand out as regionally or even globally important and these also need to be prioritized in a national strategy/system of MPAs. These areas include: Natuna/Anambas in Sunda Shelf, Alas Purwo and Segara Anakan in Southern Java (for turtles), Aru in Arafura Sea (marine mammals), and Togeans in Teluk Tomini (cardinalfish).
- 2) Given the overwhelmingly top prioritization of Papua, the Government of Indonesia should direct urgently needed and significant resources (human, financial, policy) to this ecoregion. Given the high vulnerability of this region due to immediate threats from coastal mining and logging, ill-conceived transmigration projects, and poorly-planned coastal development, a focus on proper and strictly-enforced spatial planning is imperative.
- 3) The prioritization exercise has highlighted important gaps in MPA coverage in Indonesia, and that areas of critical biodiversity importance are already covered but not effectively protected by MPAs. Strengthening the management of current high priority MPAs is as important as designating new ones in gap areas. Areas which show important gaps in MPA coverage and should be considered top priority for new MPA coverage include: (a) Western Sumatra; (b) Lesser Sundas (Alor/Solor, Nusa Penida, Savu Sea); (c) Sulawesi Sea/Makassar Strait (particularly western coast of Sulawesi "connectivity corridor", Sangihe-Talaud, Postiljons/Sabalana); (d) Banda Sea (particularly outer island arcs, Lucipara, Watubela, Seram,

- Banggai, Tanimbar); (e) Papua (particularly FakFak, Kokas, outer Cendrawasih Bay); (f) Arafura Sea; and (g) Halmahera.
- 4) The maintenance of not only species diversity but also genetic diversity within species is critically important as a bet-hedging strategy for adaptation to global change, climate and otherwise. Indonesia's national marine conservation and MPA strategy must include a focus on maintaining genetic diversity. Besides protecting genetic diversity in the eastern and western sectors of the country, a "connectivity corridor" focused along the western coastline of Sulawesi (a major mixing zone with the longest contiguous reef-fringed coastline in Indonesia) should be a top priority for establishment
 - 5) Several ecoregions/sites stand out for lack of biodiversity survey data, and are considered a top priority to better understand Indonesia's biodiversity distribution and how to manage it. These include: (a) Western Sumatra; (b) Natuna/Anambas Islands; (c) Halmahera (particularly southern sector); and (c) Banda Sea (especially inner and outer Banda Arcs). Also important but not well-surveyed are (a) Alor-Wetar-Savu, (b) Teluk Cendrawasih, and (c) Arafura Sea.

After 2009, CTSP had several meetings with the government, which requested more information on the following:

- 1) Socio-economic considerations to link biodiversity conservation priorities with the government's socio-economic objectives
- 2) Governance considerations, such as geo-politic and economic development concerns
- 3) Scale – There is a need to reduce the area for prioritization from marine ecoregion (about 400,000 km²) to a more manageable scale, so another prioritization exercise may have to be done within each priority marine ecoregion based on the experts' recommendations.

At the end of Ms. Gunawan's presentation, Dr. Green offered one more comment: "It is useful to think about representation not only in terms of how much area is protected within each country but also in terms of how much is protected within each ecoregion. The MEOWs were defined primarily based on endemic fish species and thus represent biological diversity and variety at a large scale, so you would want to see that there is adequate representation of protected habitats and species in each ecoregion."

SESSION 4.3. CTMPAS FRAMEWORK #4: BUILDING THE CTMPAS (OR NATIONAL) SYSTEM

This session consisted of small mixed-country group discussions focused on refining a draft outline (Version 0) for the CTMPAS framework (Annex 8) to Version 1 based on the discussions and various session outputs of this workshop. Participants were divided into three groups corresponding to the following three key sections of the CTMPAS framework Version 0 outline: (1) Strategic Approach; (2) Defining and Building CTMPAS; and (3) Implementing CTMPAS.

Dr. Tighe facilitated the session. She pointed out that the outline was "only a starting point" drawn from other frameworks, and encouraged participants to add topics that they felt should be included in the framework.

To guide the discussions, Dr. Tighe described the different sections as follows:

- 1) Strategic Approach – the general theoretical basis and rationale for developing the CTMPAS and a general description of what the CTMPAS is envisioned to be and how it will be developed and implemented, "almost an executive summary" or a policy brief.
- 2) Define and Build CTMPAS – description of the CTMPAS, including its purpose, goal, objectives, criteria and MPA structure and categorization, and the process of building the CTMPAS, including, nomination process, criteria and review.
- 3) Implementing CTMPAS – description of the implementation and operational aspects of the CTMPAS

Report-out and discussion

Note: These outputs on the CTMPAS Framework's Outline were further revised and clarified by the MPA Resource Team immediately after the REX based on these discussion notes. The Revised Draft (REX Version I.0) Outline for CTMPAS Framework with annotations from the workshop sessions is included in Annex I3 and will be used as the starting document, along with this REX Report, for the CTMPAS Writing Team that will draft the full Framework document for CT6 and SOM review.

Strategic approach section of outline

Presenter: Datin Shahima Abdul Hamid

The group simplified the outline by eliminating redundant sections. The revised outline is shown below with actions listed to include in the work or strategy description:

A. Define the CTMPAS

- i. REX3: Define objectives from RPOA: adopt the RPOA; refine and adopt overall goal proposed by Indonesia; adopt structure of ecological/social/governance objectives; refine actual objectives
- ii. REX3: Define system structure of MPAs and systems on ecological/social/governance – adopt structure based upon ecological, social and governance criteria
- iii. TWG: Develop steering and coordination mechanism for CTMPAS – build upon governance objectives and criteria:
 - a. Develop TOR for TWG, including CTMPAS
 - b. TWG will be steering committee for CTMPAS at regional scale
 - c. NCC (and sub TWGs) will provide coordination mechanism at national scale; slight differences between countries are expected

B. Build the CTMPAS

- i. Encourage system development – see A)iii
- ii. Encourage CT6 to nominate systems – in the first year, each NCC will nominate at least one and up to 5 systems (from anywhere in EEZ)
- iii. Review nominations – TWG with support from CT Atlas etc. will review against regional criteria; if, the nomination does not satisfy criteria, TWG will not accept nomination but will request additional nominations to fill gaps; nomination will be accepted when the criteria are met.
- iv. Conduct gap analysis – Full regional gap analysis will come at a later stage (after more MPAs are included in CTMPAS); make use of national gap analyses

C. Implement/operate CTMPAS

- i. National stewards manage and report (SCTR)
- ii. See b)ii and iii
- iii. Monitoring and surveillance/enforcement coordinated and implemented – national monitoring and surveillance/enforcement would be a national issue, while transboundary monitoring and surveillance/enforcement would be bilateral or multilateral concern. All information will be collated in CTAtlas
- iv. Promote CTMPAS (yes!)

Defining and Building CTMPAS Sections Outline

Presenter: Awang Noor Abd. Ghani

Defining CTMPAS

- a. Goal and Purpose – include also vision and mission statement
- b. Ecological, socioeconomic and governance principles, objectives and benefits of CTMPAS
- c. Ecological, social and governance criteria and indicators for CTMPAS

- d. Combined structure, function and responsibility, and categorization of MPAS and systems in CTMPAS

Building CTMPAS

- a. Authorize and establish CTMPAS institutional arrangement and operations with advisory group
- b. Identify shared data system
- c. Establish regional forums for consultation
- d. Developing strategies, coordination and sustainable financing mechanisms with support
- e. Nomination process for MPAs/systems
- f. Selection and listing of MPAs/systems
- g. Promote and advocate CTMPAS in CTI and globally
- h. Build constituency for CTMPAS
- i. Advise scientific review
- j. Identify gaps of initial CTMPAS
- k. Develop recruitment strategy and process for new MPAs/networks to join CTMPAS
- l. Establish and implement monitoring, reporting and adjustment processes
- m. Develop CTMPAS action plan through 2020

Implementing CTMPAS

Presenter: Sangeeta Mangubhai

The group rearranged the topics and categorized them into five broad topics and added some details under each topic. The five topics are as follows: (1) Operation of advisory/steering committee; (2) Enhancing regional cooperation and collaboration; (3) developing and promoting best practices, tools, database and knowledge, (4) management systems and (5) monitoring and evaluation. In their presentation, the group explained that monitoring and evaluation would be the “central piece that interacts with all the different components.”

Implementing/Operating CTMPAS

- A. Enhancing regional coordination and collaboration
 - a. Partnerships (public/private)
 - b. Communications
 - i. External/internal
 - ii. Publications/papers
 - iii. Press release
 - c. Financing mechanism for M&E
- B. Develop and promote best practices
 - a. Role of MPA learning network
 - b. Award/certification program
 - c. Capacity development
- C. Tools, Database and other KM system
 - a. Capacity development
 - b. Toolkits
 - c. Role of CT Atlas
 - d. Role of MPA Learning Network
- D. Operation of advisory/steering committee
 - a. Standard operation procedures
 - b. Award/certification program
 - i. Who is setting standard
 - ii. Who is evaluating
 - iii. Who is reporting
- E. Monitoring & evaluating effectiveness
 - a. Tracking and reporting

- b. Adaptive management
- c. Communications (publications, releases, etc.)
- d. Standardization

Discussion

Dr. Tighe— What you have just developed is your framework’s “framework”, which is our table of contents. This will be given to the writing team that will be tasked to develop the actual framework document, which will be circulated to your MPA focal teams for further development.

Mr. Atkinson – Do you see overlaps that we need to address?

Dr. Tighe – There will be some, but it’s hard to see them right now. If we have time we can quickly look at that and make a few small edits. Otherwise, I think we have compiled the pieces that we need, and we can let the writing team work it out.

Dr. Mangubhai – There are things like the CT Atlas, which might be used for implementation as well as for decision-making, you may want to consider duplicating it or splitting it up because you know it’s useful at two different levels.

Dr. Tighe – That may be something where the Strategic Approach mentions the CT Atlas in general terms as a tool that will be used throughout the program, and the specific sections will describe how it’s going to be used.

SESSION 4.4. CTMPAS FRAMEWORK #5: DEFINING MANAGEMENT/COORDINATION OF IMPLEMENTATION

Immediately following the discussion on the CTMPAS framework outline, this session was designed to get participant feedback on the coordination mechanism and institutional arrangements for the CTMPAS. Participants were again divided into three groups, with each group assigned one of three topics:

- Group 1:* Institutional home of CTMPAS coordination
- Group 2:* Role of TWG in the CTMPAS
- Group 3:* Data sharing system (CT Atlas) home and support

The discussions were guided by the following questions:

Group 1:

- 1) Where is the institutional home of CTMPAS coordination?
- 2) What is the role of the national programs and coordination?
- 3) Who is responsible for defining the needed resources and budget, and working on proposals on the management of regional moneys or grants?

Group 2:

- 1) What is the role of the TWG in the CTMPAS?
- 2) Do we need a scientific advisory group and what is their TOR going to be in terms of helping the process?

Group 3

- 1) Where is the data-sharing system home and support? There will be national data centers, but will there be one regionally? Will there be more than one? Should it also be the CT Atlas home?
- 2) Define support to access data.

The group reports are shown below as they were presented during this session, and pertinent participant comments generated during the open forum are shown under a separate heading in each report which recommended amendments. **In general, for purposes of developing the CTMPAS framework, the Group report and Participant comments sections should be considered together to ensure that the final perspectives, suggestions and remaining uncertainties are all points of view are considered.** For your reference, a small notation is placed next to terms or report out bullets that were discussed to be changed below in the open forum.

Group 1: Institutional home of CTMPAS coordination

Group report

Presenter: Lynette Laroya

The group reported that they struggled to answer the questions assigned to them, so instead of providing specific answers, they listed some options and, under each option, identified key issues or additional questions that need to be addressed.

What/Where is the institutional home of CTMPAS coordination?

- a. Chair of MPA TWG?
 - i. The chair is rotated every two years; rotational home might not work.
 - ii. Financing might be an issue.
- b. CTI Secretariat?
 - i. Interim status is a concern; Secretariat is not yet fully functional
 - ii. Interim home may also be needed until the CTI Secretariat becomes fully functional.
- c. Regional private organizations, e.g. WorldFish, CTC, ACB (ASEAN Centre for Biodiversity)?
 - i. Already established and can function as interim institutional home of CTMPAS coordination but will need financial support to coordinate CTMPAS; need to develop TOR
 - ii. Who will provide financial support?

Participant comments

Dr. Darmawan – As you know, I represent the interim Regional Secretariat, so I cannot claim to speak for the permanent Secretariat. What I can tell you is that under the CTI mandate, the the Regional Secretariat represents the CT6 at the regional level. Three or four years ago, the CT6 debated whether or not CTI really needed a permanent secretariat, and they decided that yes, they wanted one at the regional level, and last year, they agreed on a USD2 million annual budget for the CTI Regional Secretariat. So the question is do you need another organization to coordinate the CTMPAS?

Dr. Tighe – This is going to be decided at another level. We just need to suggest some options.

Malaysia (Ms. Abdul Hamid) –I quite agree with Dr. Darmawan, knowing that each country has already agreed to contribute to the Regional Secretariat.

Timor-Leste (Mr. Amaral) – Perhaps we can let the Chair of the MPA TWG take care of the coordination until the Regional Secretariat is ready to take over.

Dr. Tighe –These are the hard questions that will not be answered by us, but by the decision-makers.

Group 2: Role of TWG and scientific advisory group in the CTMPAS

Group report

Presenter: Stacey Tighe

What is the role of the TWG in the CTMPAS?

The MPA TWG, composed of implementing agency focal points from each country is not responsible for the coordination (decision-making^[1]) on the implementation of CTMPAS although the TWG is the group to make recommendations and analysis of options, etc. Decision-making is the SOM's responsibility to delegate to and to guide the Regional Secretariat/ CTMPAS Coordinator. The TWG is mainly responsible for the following:

- a. Providing technical guidance for operational activities of CTMPAS, e.g. defining criteria for choosing MPAs
- b. Attending SOM and other high level meetings (this is primarily a responsibility of the TWG Chair)
- c. Facilitating planning for completion of CTMPAS action plan
- d. Coordination^[2] of operational activities on the ground
- e. Coordination^[3] of monitoring and evaluation of the CTMPAS
- f. Coordination of research and development for CTMPAS
- g. Prioritization of CTMPAS actions in action plan and recommendations to SOM
- h. Solicitation of scientific guidance as needed
- i. Annual work and financial plans

Do we need scientific advisory group and what is their TOR going to be in terms of helping the process?

The group's suggestion was to create a scientific advisory group, but more time was needed to develop its TOR in relation to the TWG and CTMPAS. In general, having an advisory group provides the following benefits:

- a. Neutral advice
- b. Leveraging of resources
- c. Research and development
- d. Advice on strategic directions.

Participant comments

Dr. Tighe^{[2][3]}– What do you mean by “coordination”? In the last session we talked about having an “institutional home” for the CTMPAS coordination, and it appears there was general agreement that that would be an office within the Regional Secretariat. So is that the one that's going to coordinate the operational activities of the CTMPAS or is it the TWG?

Dr. Aliño^{[2][3]}– By “coordination” we mean the technical aspects of operating the CTMPAS, such as providing advice in relation to the monitoring of biophysical activities, not the higher level coordination, which is the responsibility of the SOM.

Dr. Tighe^[2]– Perhaps we should say “Providing guidance on operational activities”?

Dr. Weeks^{[2][3]}– I guess it might depend on how we interpret coordination. What I understand from what Perry (Aliño) is saying is that the TWG is responsible for the technical aspects of the CTMPAS operations, for example, if we're talking about monitoring and evaluation you would need the TWG to be determining such programs because they're the ones who have

the technical expertise. But if we're talking about coordination in terms of organizing meetings and logistics, then that wouldn't be a TWG function.

Dr. Tighe^[3] – So maybe we should use the word “design,” because coordinate has a different context. But I seem to be the only one that has any question about this, so let's just annotate this report and let the writing team work out the bugs.

Mr. Atkinson^[1] – The top level paragraph really refers to the SOM, and I think “decisionmaking on the CTMPAS” would be the more accurate way of saying it.

Group 3: Data sharing system (CT Atlas) home and support

Group report

Presenter: Ari Soemodinoto

What is the datasharing system home and support? There will be national data centers, but will there be one regionally? Will there be more than one? Should it also be the CT Atlas home? Define support to access data.

The group said they found it difficult to decide on what would be the best “home” for the datasharing system of the CTMPAS, so they ^[4] looked at the different options, including:

- 1) International: WorldFish, WCMC/UNEP, WDPA/IUCN, GEF-IWLearn, FAO, CBD Clearinghouse
- 2) Regional: ASEAN Center for Biodiversity, PEMSEA, CT Atlas, CTC
- 3) National: MOSTI or the Malaysia Geographic Data Center⁵; ATSEF or Arafura and Timor SeasExpert Forum; KKP(Indonesia); MSN (Philippines)

The group recommended that:

- 1) If the CT6 want the database to have a regional home, that home should be neutral in the sense that all CT6 all agree, accept and use it.
- 2) If the CT6 decides to use several data centers, the databases should be connected by an interface that will make the data comparable because even within one country there are many different data collection standards and methods used.
- 3) If WorldFish is selected to serve as the home for the database, it can also serve as interface.
- 4) It maybe better that the individual countries maintain their own databases rather than put everything in one place.
- 5) There should be technical support to access data, including mechanismsto help users from different countries at different levels to: (a) gather data; (b) make data available; (c) use data in management; and (d) produce reports.
- 6) If the CT6 should opt for one big database, it should be built on what already exists, for example, WorldFish and database systems being maintained by individual governments.
- 7) A structure should be established to coordinate SCTR.
- 8) The CT6should agree on some parameters for data accessibility and sharing.
- 9) An incentive system to encouraging data sharing may be needed.

(The group eventually decided that the data should reside within each of the countries, but a neutral body such as WorldFish will be needed to act as interface and facilitate data access across the various national databases.^[4] It is assumed that the Regional Secretariat will coordinate the required contractual arrangements and perform other functions necessary to make this happen.^[6])

Participant comments

Ms Walton^[4] – The list is not where data should go or come from. We were just doing an inventory of where possibly the databases could reside. ***But a decision was made in the end that the data should reside within each of the countries, although we needed a sort of neutral body or entity such as WorldFish to act as an interface and allow access to data from all the different sources, but that neutral body is not necessarily where the data would reside.***

Ms Gunawan^[6] – Couldn't the Regional Secretariat be one of the options?

Dr. Tighe^[6] – It absolutely could, there's no reason why it couldn't, it just needs to be designed and factored in. Whenever you create a database you need the supporting hardware and software, so there are cost implications. The alternative is to use existing databases – including the national databases – and link them through an interface, like the WorldFish, which would probably be less costly.

Dr. Mangubhai^[6] – About USD2.5 million is needed to set up and run the database system, and since there are global organizations that have been managing databases for years, it would be less costly to simply commission them to host CTI's database. We just thought that it would be more cost-effective to use all these organizations that countries already interact with and can handle all your data hosting requirements and also be neutral.

Ms Gunawan^[6] – Certainly, but I was wondering what that would mean to the Regional Secretariat's function.

Dr. Tighe^[6] – Clearly, the premise is that anything that's CTI branded and comes from the CT6 is going to be linked to the Regional Secretariat. The Regional Secretariat's primary role here may be to coordinate data management and sharing, and depending on how task-heavy the job is, the Regional Secretariat may decide to either do the coordination themselves, or contract another organization to do it.

Dr. Darmawan^[6] – We need to understand and accept that there were only two entities that were established for the CTI-CFF: (1) the Regional Secretariat and (2) the TWG. We have to focus on these two institutions, because they are the only ones that truly carry the brand name of the CTI-CFF. On the one hand, it is true that the permanent secretariat has not been established, that the interim secretariat does not have the capacity to do all this, and that perhaps it is going to be more cost-effective to let other institutions handle the CT6's database needs. On the other hand, we must always remember that all those other institutions will not make the CTI-CFF brand. So we need to think in terms of ownership. How do we devise a strategy that will ensure that CTI-CFF retains ownership of this process? When you make your recommendations to the SOM, I hope you remember that if you do not clearly state that you need the Regional Secretariat to become fully functional to do this task for you, the SOM will not think of giving the task to the Secretariat.

Dr. Tighe^[6] – If you're talking about the CTMPAS coordination mechanism, it will necessarily reside in the Regional Secretariat. We're only saying that depending on how big the job gets, it may also be implemented by the Regional Secretariat in partnership with one of these other organizations.

Ms. Abdul Hamid^[4] – If I may clarify also, for Malaysia, while MOSTI is intent on having an ocean database, at present we already have the Malaysia Geographical Data Information Center to serve our datasharing needs. The Center used to be under the Office of the Prime Minister,

but it is now under our ministry, the Ministry of Natural Resources and Environment, so I think it would be better if we use it (instead of MOSTI).

SESSION 4.5. CTMPAS FRAMEWORK #6: REGIONAL ACTION PLAN

In this session, participants again broke into their small mixed country groups to each prepare a regional action plan for one of the following broad CTMPAS tasks:

Group 1: Strategic planning

Group 2: Defining and building CTMPAS

Group 3: Implementing CTMPAS/Monitoring and evaluation

The groups were instructed to include in their plans the following details:

- 1) Actions/tasks
- 2) List of activities (national or regional) under each task
- 3) Time and support needed to accomplish task

This session's outputs would be presented during the first session of Day 5.

SESSION 4.6.MPA LEARNING NETWORK: REVIEW AND DISCUSSION

Hosted by CTC at their headquarters, this session included a presentation on CTC's role in the development of the CTI MPA Learning Network and its potential as a partner to supporting the CTMPAS and other CTI activities, and small group discussions designed to generate participant recommendations about what activities the CTI MPA Learning Network should prioritize in the next 6-12 months. A stand-alone report as part of the first set of CTI MPA Learning Network Activities was produced which summarizes the outputs below, and is available from the CTI-CFF web site (www.coraltriangleinitiative.org) and CTC's website (www.coraltrianglecenter.org) as well.

CTC as resource organization for CTI MPA Learning Network and CTMPAS

Presentation – Rili Djohani (CTC)

The Coral Triangle Center (CTC) is a foundation based in Indonesia that trains marine resource managers and educates all groups that interact with coastlines and reefs within the CT. Developed as the regional training arm of TNC, CTC became an independent organization in 2011 and has since conducted more than 100 training sessions attended by some 2,000 participants. CTC provides training and learning programs; supports MPAs; coordinates an LN for MPA practitioners; and connects the public and private sector on coastal issues.

CTC employs five broad strategies:

- 1) Training and learning to develop local and regional capacity to manage marine resources
- 2) Development of learning sites, where effective marine management practices can be field-tested and shared
- 3) Development of LNsto promote regional learning and collective action
- 4) Public-Private Partnerships to harness stakeholder participation in addressing pressing threats to local and regional marine heritage
- 5) Development of a regional hub for marine conservation to inspire regional stakeholders to conserve marine resources

CTC's training program is designed to meet the human resource needs of marine conservation in the CT region. In Indonesia alone, it is projected that about 500 high level MPA managers and policy makers will be needed by 2020, as well as thousands of marine enforcers and support staff. The

Center's current training portfolio includes (1) site-based trainings; (2) trainings for MPA managers and practitioners; (3) training of trainers; and (4) the School for Marine Resources Conservation and Management (SMRCM), a collaborative effort with MMAF. It has developed the following MPA and fisheries management training and learning modules, which can be customized for different groups:

- 1) Principles of MPA
- 2) Management training for teachers on marine conservation
- 3) Marine conservation action planning
- 4) MPA design
- 5) MPA management effectiveness
- 6) Perception monitoring
- 7) Dive training and introduction to marine biological monitoring
- 8) Reef health monitoring
- 9) Marine resource use monitoring
- 10) Spawning aggregation sites monitoring
- 11) Training on marine biological survey/observation
- 12) Facilitation techniques for MPA public consultation

In February 2012, CTC also started to offer on-line training courses on:

- 1) Principles of MPA
- 2) MPA design
- 3) MPAME

The following training and learning activities are programmed for this year:

- 1) 4 field-based and 3 classroom trainings in Indonesia
- 2) Train marine conservation training and learning specialists in PNG and the Solomon Islands with support from CTSP
- 3) Training of trainers program in PNG and SI with TNC and CTI Alliance with support from the Australian Government
- 4) 6-day training for 20 government officials from Malaysia

There are two learning sites that are currently under development: (1) Nusa Penida and (2) Banda Islands. In Nusa Penida, where the development of an MPA network is well underway, the primary learning mode used is learning by doing. The Banda Islands learning site is still in its early stages of development, but it is targeted to come online this year. The plan is to develop new learning sites in the next two years not only in Indonesia but regionally as well.

CTC has also been tasked to design and develop the CTI LN. The current focus is the CTI MPA LN, which is envisioned to provide opportunities for and catalyze learning exchange between and among the CT6 through learning activities at CTI events, field exchanges, training, coordination with other networks, documentation of best practices, information dissemination, training needs assessment, training, development of expert directory and online library; and identification of scholarship opportunities that the countries can access in support of the CTMPAS.

In addition to the CTI LN, the Center is also involved in several activities that support CTI at both the regional and national (Indonesia) level. Among the CTI regional activities that CTC has participated in are the Regional Business Forum, MPA REX, and SOM and ministerial meetings.

The Center also promotes public-private partnerships (PPPs) by facilitating regional forums and policy dialogs and by facilitating and documenting field-based PPPs. Over the longer term (5 years), it aims to serve as a regional hub for marine conservation training and outreach by through the Center of Excellence in Tropical Marine Conservation that it is now developing with GEF support. It also hopes to support the development of the CTMPAS, in particular by addressing the specific applied and strategic science needs of the CTMPAS and by facilitating the transfer of knowledge between countries through communication at the local level; documentation of the ecological, social and

economic benefits of MPAs; and development and dissemination of outreach materials where they are needed.

Small group discussion results

The small group discussions were guided by the following questions:

- 1) What kind of best practices do you want to be developed and documented?
- 2) What kind of learning activities should CTC organize?
- 3) What field exchange and training would you like to see happening?

Four parallel reports were generated from the small group discussions and are shown below in the order that they were presented:

Report 1

Best practices that should be developed, replicated or documented:

- 1) Co-management in the Solomon Islands and projects in other countries such as the Coastal Resource Management Project which demonstrated that community-based conservation efforts are often needs-based and must generate benefits for the community to be sustainable.
- 2) Two-track or 2-pronged approach to management, i.e., local initiatives are critical but must be supported by enabling policies and laws emanating from the top. Examples: Apo Island, Negros Oriental, Philippines and Lampung Bay, Indonesia.
- 3) User fee systems and sustainable financing. Examples: In Malaysia, entrance fees are required for MPAs; in the Solomon Islands, visitors are encouraged to make voluntary donations; and in the Philippines, many LGUs have installed user fee systems that support the maintenance of their MPAs.
- 4) COREMAP, adult education programs, and pilot schools that target the younger generation as the next generation of conservationists.
- 5) PPPs that worked well.

Learning activities that CTC should focus on:

- 1) Mayors Roundtable
- 2) Executive Course on EAFM (LMP)
- 3) CCA training (LEAP-VA and its local variations)
- 4) Indonesia Coastal University Network
- 5) Documentation of best practices in the region should be the focus of learning activities
- 6) Training of trainers and teachers
- 7) Peer-to-peer learning
- 8) Generation and sharing of knowledge through various events, for example, MPA REX3 participants could constitute a critical prospective network.
- 9) Engaging media as a champion and as part of learning activities
- 10) Training of politicians, especially in the executive and legislative branches

Report 2

Best practices that should be documented:

- 1) Sustainable finance models (high priority)
- 2) Network management coordination (site visits, bring managers from successful networks to talk at event)
- 3) Best practices/standards for functional MPA networks (MSN awards)
- 4) Government involvement/leadership (Mayors Roundtable) – may best be achieved through cross visits
- 5) Communication tools for countries

Learning activities/opportunities that CTC should focus on:

- 1) Management planning (Indonesia)
- 2) Community educators training
- 3) Integrated management training for LGUs (incorporating MPAs, EAFM and CCA)
- 4) Site visits/field exchanges – for example, explore opportunity for the CT6 to participate in a planning workshop on inter-operable network management in the Philippines (this aims to bring together MPA network managers to try to standardize the MPA network management practices in the Philippines)

Report 3

Best practices that can be shared at the regional level by each country:

- 1) Solomon Islands -- coordination, partnerships and co-management among multiple stakeholders and groups. Practical learning and examples of success, especially considering how to support livelihoods.
- 2) Malaysia – horizontal and vertical integration of multiple stakeholders; integrated management planning. For example, in the TMP, different working groups are involved in developing one integrated management plan to ensure that a wide range of concerns (biodiversity, fisheries, zoning, socioeconomic issues, awareness and education, governance, etc.) are considered.
- 3) Philippines – MPA management effectiveness assessment experience (this can be shared at the planned REX4 in 2013).
- 4) Timor-Leste – participatory, community-led (government-facilitated) process to establish the NKSNP, which is now almost self-sustaining.

Training/Learning needs by country:

- 1) Solomon Islands – how to apply MPA network design and management principles at the national level (need access to examples that fit local context)
- 2) Malaysia -- management effectiveness assessment training based on Indonesian and Philippine models (there may be a need to create a coordinating group for management effectiveness assessment)
- 3) Philippines – documentation of 130 new MPAs developed in 2011; how to improve management effectiveness tracking tool and database and how to use it as a management tool (the database includes more than 1,500 locally managed MPAs)
- 4) Timor-Leste – how to address language barrier/improve communication where different communities speak different languages

Report 4

Best practices that can be shared at the regional level by each country:

- 1) Community involvement in decision processes, e.g. Nusa Penida, Nino Konis Santana, Raja Ampat and Suva Sea Marine NP
- 2) Site integration based on similar issues and common government setup

Learning activities/opportunities that the MPA Learning Network should focus on:

- 1) Specific field exchanges/training (e.g. between Bali MPA network stakeholders and Raja Ampat MPA network management authority; Savu Sea MPA and Wakatobi Marine National Park; Timor Leste and Raja Ampat)
- 2) Roundtable discussions on marine conservation in CT during ICRS (through Bob Pressey from JCU)
- 3) MPA REX4 field visit (2013)
- 4) Biophysical monitoring training for local governments in Timor-Leste

This last session of Day 4 ended at 8:40p.m.

SESSION 5.1.OVERVIEW OF DAY 5

The last day of the workshop started at 8:41 a.m. Mr. Jatulan briefly described the day's tasks, which essentially focused on (1) finalizing the regional action plans for the three broad tasks under the CTMPAS framework, (2) identifying priority actions for the MPA TWG relative to the development of the CTMPAS, and (3) developing a draft TOR for MPA REX4 on management effectiveness that is scheduled for early 2013. Except for one presentation, all of today's sessions were open discussions either in plenary or small breakout groups.

A formal meeting of the MPA TWG was also scheduled for this afternoon, shortly after the closing of the workshop. This was only the 2nd formal meeting of the MPA TWG since it was constituted in October 2011 during a sidebar event at SOM7 and 3rd Ministerial Meeting in Jakarta, Indonesia.

SESSION 5.2.CTMPAS #7: FINALIZE ACTION PLANS

The outputs from *Session 4.5. CTMPAS#6: Define Regional Action Plan* were presented and discussed in open plenary in this session. The group reports are shown below in the order that they were presented during this session, and pertinent participant comments generated during the open forum are shown under a separate heading in each report. **In general, for purposes of developing the CTMPAS framework, the *Group report* and *Participant comments* sections should be taken together to ensure that all important discussion points are considered.** Suggested changes are added as parenthetical words and phrases and marked for easy referencing against similarly marked text under the ***Participant comments*** heading for each report.

Note:The consolidated draft action plans from the day's inputs are also shown in tabular form in Annex 15A; and an integrated time line for all three themes of activities is presented in Annex 15B after minor editing from the Resource Team.

Group 1: Strategic Planning

Group report

Presenter: Handoko Adi Susanto

This group's discussion was focused on the institutional structure for coordination of the TWG. The group prepared a 6-month action plan that included the following activities:

1. Finalize TOR for TWG -- This task would be completed during the 2nd formal MPA TWG meeting shortly after the workshop.
2. Review financial resources strategy -- This task was included in the agenda of today's 2nd formal MPA TWG meeting.
3. Create writing team for CTMPAS
4. Circulate workshop report from MPA REX3 to participants to review
5. Organize write shop to finalize strategic plan
6. Write TOR on responsibilities of interim home institution of CTMPAS – This will be done by the writing team using the outputs from Session 4.4 as reference.
7. Plan MPA REX4 : MPAME
8. Officially nominate sites to CTMPAS -- initially, up to 5 sites per country.
9. MPA REX3 participants report back to NCCs
10. Define national mechanisms for contributing data to CT Atlas

Participant comments

Dr. Tighe – Just a point of clarification with respect to the “home institution” of the CTMPAS data and how it relates to the Regional Secretariat: The Regional Secretariat will always be hub – they have overall responsibility for coordinating regional programs and activities, whether or not they are the direct implementors. So obviously the “home institution” will also be the Regional Secretariat’s responsibility, and even if it is another organization that will directly perform this function, that organization will be accountable and will have to report to the Regional Secretariat. We still need to develop the TOR for coordination, but the Regional Secretariat will always be involved as the core organization.

Group 2: Defining and Building CTMPAS

Group report

Presenter: Jimmy Kereseka

Activities under “Defining CTMPAS”

- 1) Assign a writing group consisting of TWG representatives at REX3 or commission a writer/writing group, end of next week for first draft framework
- 2) Circulate to NCCs to get feedback from each country, 2 weeks after first draft
- 3) Refine and prepare for ADB HLFR
- 4) Present at Manila meeting, 1st week of May
- 5) Raise profile of CTMPAS action plan at ICRS, July 2012; get input
- 6) Complete action plan, including CTMPAS definition, criteria, etc., by August 2012

Activities under “Building CTMPAS” were clustered into two tasks:

- 1) Institutional arrangements
 - a) Draft institutional arrangement, by December 2012
 - a. Consultation with NCC
 - b. Agree on information sharing, consultation forums and sustainable financing
 - c. Getting input and prepare proposal by October/November 2012 -- TWG will commission the development of the proposal (set of recommendations to the SOM on what the institutional arrangements are^[1])
 - b) Final institutional arrangements approved by SOM by the first quarter of 2013 (end of March)
- 2) CTMPAS Content Development
 - a. Socialize criteria and ask countries to nominate (1-5 sites), October 2012 (This action data assumes that the criteria for the first sites are developed and completed by August 2012^[2])
 - b. Report gap analysis to identify if any key MPA types are missing, by January 2013
 - c. Recruit and promote to fill gaps, by June 2013

Participant comments

Mr. Atkinson – The first draft referred to under *Defining CTMPAS* above would be the output from this REX, a brief report that outlines just the structure, objectives, initial criteria, and these initial actions. That’s why we gave it such a short timeframe.

Dr. Tighe – There was another group that had an action date and timeline for completing the action plan/framework -- we’ll have to check if they match up with this timeline. Under *Building CTMPAS*, what does “proposal” mean? Is this a proposal for the institutional arrangement? Or is this a proposal for funding the CTMPAS?

Mr. Atkinson^[1]– It’s not a funding proposal but a set of recommendations to the SOM on what the institutional arrangements are.

Dr. Tighe – Under *Building CTMPAS*, we said we would need to define the criteria for nomination. Perhaps that should be specified as another step under this action item?

Mr. Atkinson^[2]–We raised that too but we realized that those criteria would be in the action plan. But we probably have to note that, because that’s quite a job to synthesize down and you might want a sub-working group to do that.

Dr. Tighe – We’ll note it. The first sites may be strategic ones, including, for example, one integrated site, one cultural/customary management site, one transboundary site, etc. So that might be the first strategy and later, after the gap analysis, another strategy may have to be developed for the next tier of sites that have to be brought in. The gap analysis will help identify any key MPA types that are missing in the system.

On the action plan that will be submitted to the Manila Roundtable in May: We might want to include there some longer term activities so we don’t look for funding just for small workshops that will get us through this year, but also for some of the bigger programs or activities that we need to implement at the regional level, such as M&E and gap analysis.

Group 3: Implementing/Operating CTMPAS

Group report

Presenter: Luz Teresa Baskinas

- 1) Monitoring and evaluation
 - a. Design the M&E framework based on existing and emerging country approaches, including standardization, tracking and reporting, and adaptive management – to be considered by TWG with support to come from the Philippines and Indonesia and advised by other in-country approaches.
- 2) Operation of advisory/steering committee
 - a. TWG to formulate design and structure of M&E framework that is adaptable and complementary to existing M&E program – The group looked at the short term, which means the TWG incorporating in their workplan that they need to make decisions on the design and structure of the M&E framework.
- 3) Enhancing regional coordination and collaboration:
 - a. Partnership development
 - i. Scope out types of partnership needs at both country and regional levels – this is a long-term ongoing process of identifying needs and partners
 - ii. NCCs to start identification and link to NPOAs, then coordinate between countries.
 - iii. Present CTMPAS partnership recommendations at Business Summit (October 2012) – this is a very important forum for exploring PPPs.
- 4) Communication: Develop regional CTI-wide communication plan that includes (a) branding of CTI-CFF; (b) consolidating various existing communication pieces, e.g., multiple websites; and (c) a communication plan specifically for M&E results – This is a long-term priority as well as an ongoing need.
- 5) Financing mechanisms for M&E program: This links directly to the scope of the M&E program or system, so the design of the M&E program needs to be determined before the following activities can take place:
 - a. Determine financial requirements at the regional and national level
 - b. Identify funding sources
- 6) Developing and promoting best practices (this can be a task for the CTC)
 - a. Decide on framework for Learning Network

- b. Consider development of award/certification program, which can serve two purposes: (1) to benchmark management effectiveness of MPAs and MPA networks in the CTMPAS; and (2) to promote CTMPAS best practices
 - c. Conduct gap analysis of best management practices/tools
 - d. Take inventory of capacity building opportunities
 - e. Conduct needs assessment to determine capacity building priorities
- 7) Tools, database and other information and Knowledge Management systems, the group recommended that the TWG should consider the following:
- a. In the short term, inventory or taking stock of KM systems that deal with MPAs and MPA networks related to CTMPAS.
 - b. Review, adapt, translate and circulate the tools that the CT6 agree on – There may be a need to integrate the tools, or use the integration tool that was presented in this workshop.
 - c. Identify training needs in relation to the application of the tool – This involves ongoing analysis of need for specific information and KM systems.
 - d. Based on the above analysis, make determination on long-term application and role of CT Atlas, learning network, capacity building, tools and support services.

SESSION 5.3.FINALIZE PRIORITY ACTIONS FOR MPA TWG LEAD

In this session, participants worked in their small mixed country groups to identify priority activities for 2012-13 based on the outputs from Session 5.2 Action Planning. The groups were requested to edit their action statements for clarity and mark each activity as short, medium or long-term, and restructure their action plans in a time-task-activity format, highlighting in particular the activities that the TWG needed to decide on during their formal meeting later in the day.

The results, as presented in plenary by Dr. Tighe, are shown in tabular form below and color-coded according to level of priority as follows: Short-term; Medium-term; Long-term. “Short-term” means before the HFR in early May 2012. These action/activity plans were further reviewed, consolidated and refined by the MPA Resource Team (Annex 15).

Group I. Strategic Planning: Institutional structure for coordination of the TWG

Task	Timeframe
Finalize TOR for TWG	Draft completed; finalize end April 2012; Sign at high-level financial round table meeting May 3rd.
Review financial resources strategy	This week, finalize CT6 inputs by mid April.
Create writing team for CTMPAS (one from each country)	This week, finalized by NCC by mid April.
MPA REX3 participants report back to NCCs	Mid-April.
Workshop report from MPA REX 3 written; circulated; and reviewed by participants	Mid-April. End April.
Writeshop to finalize strategic plan/framework (writing team)	July 2012.
Write TOR for responsibilities of interim home institution of CTMPAS (writing team)	July 2012 (at writeshop)
Workshop to support development of MPA M&E system in PNG & Solomon Islands (in roadmap from REX2)	By September 2012 (Solomon Islands)
Develop project proposals to fund implementation of specific CTMPAS priority activities	September 2012.
Plan MPA REX 4: MPAME	Start planning this week (to be held Feb 2013)
Site nomination to CTMPAS (officially)	Feb 2013 (at REX4)
Workshop to support national mechanisms for contributing data to CT Atlas	2012 (Philippines, Indonesia, Malaysia) and 2013 (Timor Leste, PNG, Solomon Islands)

Group 2. Defining and Building CTMPAS

Task	Action date	Lead	Remarks
Task 1: Develop Institutional Arrangements a. Charge the CTMPAS Support Group	30-Mar-12	TWG	The CTMPAS Support Group is an ad hoc (not formal) group that will provide technical inputs and assistance to the TWG
Complete and Disseminate the Action Plan a. Assign a Writing group	Today	TWG	TWG may need to commission a writer or writing group.
Complete and Disseminate the Action Plan b. Complete draft from MPA REX	6-Apr	TWG	
Complete and Disseminate the Action Plan c. Circulate to the NCC to get their input	Input is due April 20	TWG	
Complete and Disseminate the Action Plan d. Refine Draft and present Manila High Level Financial Round Table (HLFRT)	3-May	TWG	
Complete and Disseminate the Action Plan. e. Form Promotion team to make plan to Raise Profile of CTMPAS at ICRS	First week of May 2012	TWG	Perry, Pak Awang, Jimmy, and Celestino and others will assist TWG
Complete and Disseminate the Action Plan f. Charge a small group to finalize criteria	30-May	TWG	With support of CTMPAS Support Group
Complete and Disseminate the Action Plan g. Final rounds of consultations and input on Action Plan	31-Jul	TWG	
Task 1: Develop Institutional Arrangements b. Institutional Arrangements	1 Nov 2012	TWG	
Task 1: Develop Institutional Arrangements c. Draft Proposal for the Institutional Arrangements	October-November 2012	TWG	TWG will commission a writer or writing group to work on this. This will include proposal on coordination mechanisms, information sharing, consultation mechanisms, and sustainable financing
Task 1: Develop Institutional Arrangements d. Consults with the NCCS and get their input	Jan-13		
Task 1: Develop Institutional Arrangements e. Final Institutional Arrangements Approved by SOM	By first quarter of 2013 (end of March)		
Task 2: CTMPAS Component Development a. Socialize Criteria with the Countries	Sep-12	TWG	Criteria will developed by August of 2012 as part of the action plan.
Task 2: CTMPAS Component Development b. Nominate Sites (1 to 5 by each country)	Nov-12	TWG	
Task 2: CTMPAS Component Development c. Rapid Gap Analysis by January 2013	Jan-13	TWG	
Task 2: CTMPAS Component Development d. Recruit to fill the Gaps by June 2013.	Jun-13	TWG	

Group 3. Implementing/Operating CTMPAS

Task	Timeframe	Lead	Remarks
<i>Operation of Advisory/Steering Committee</i> a. Short term working group to formulate design and structure of M&E framework that is adaptable and complementary to existing M&E programs	Short Term	TWG	Working group to be appointed by TWG
<i>M&E Program Development</i> a. Design M&E framework based on existing and emerging country approaches including standardization, tracking & reporting, and adaptive management	Short Term	TWG	To be considered by TWG with support from the Philippines and Indonesia and advised by other in-country approaches
<i>Enhancing Regional Coordination and Collaboration</i> a. Partnership development - Present CTMPAS partnership recommendations at Business Summit (Oct 2012)	Short term	TWG	
<i>Tools, Database and Other Information/Knowledge Management Systems</i> a. Inventory (library) of knowledge management systems	Short term	TWG	
<i>Enhancing Regional Coordination and Collaboration</i> a. Partnership development - Scope out types of partnership needs (both country and regional level needs) - NCCs to start to ID and link to NPA, then coordinate between countries	<u>Medium- to long-term</u> : on-going process of identifying needs and partners	TWG/ NCCs	
<i>Tools, Database and Other Information/Knowledge Management Systems</i> a. Review, adapt, translate and circulate tools b. Identify training needs in relationship to the tools c. Based on above analysis, determine long term application and role of CT Atlas, Learning Network, capacity building, tools and support services	<u>Medium- to long-term</u> : on-going analysis of training needs	TWG	
<i>Develop and Promote Best Practices</i> a. Decision need to be made on framework for Learning Network b. Development of award/certification program c. Gap analysis of BMPs/tools d. Inventory of capacity building opportunities e. Needs assessment for capacity building priorities		CTC?	Could be a task for the CTC
<i>Financing mechanism for M&E program</i> a. Financing requirements directly link to scope of M&E program b. Determination of financial requirements at the regional and national levels c. Finding sources to be identified		TWG	Design of M&E program needs to be determined before this activity can take place
<i>Communication</i> a. Develop regional CTI-wide communication plan - branding of CTI - consolidate various existing communication pieces (e.g., multiple web sites) - communication plan specifically for results of M&E results	This is a long term priority as well as an on-going need	TWG	

Discussion

After the presentation of the prioritized action plans, the body spent some time discussing opportunities for promoting the CTMPAS at the Cairn ICRS in July 2012. Below are some key points that came up during the discussion:

- 1) Dr. Darmawan reported that the Regional Secretariat, CTSP and PI were planning a booth at the ICRS that was intended primarily to disseminate the SCTR but could also provide opportunities for each country to “create some kind of a marketplace” for data, information and research.
- 2) Dr. Jamal Jompa (COREMAP/NCC-Indonesia/Regional Secretariat) will have a plenary session at the ICRS that would focus on CTI. Dr. Aliño related that Dr. Jompa had asked for contributions on “CTI scientific activities” that he could use for his presentation.
- 3) Dr. Mangubhai revealed that WWF is going to fund reporters from the region to cover the event, “so there may be an opportunity there to get some media promotion for CTI.”
- 4) Dr. Tighe said the MPA TWG would need to work together or at least coordinate with CCA and EAFM TWGs on their messages.
- 5) Ms Laroya noted that she and Dr. Darmawan, along with “some members of the CT6” had a meeting with Ms Abbie Trinidad (ADB) later in the day, “so maybe we can have a little discussion on that.”

SESSION 5.4.DRAFT TOR FOR MPA REX4: MANAGEMENT EFFECTIVENESS IN EARLY 2013

As the last workshop session of this REX, this session was by design a forward-looking exercise focused primarily on developing the TOR for the next REX (REX4). Planned for early 2013, REX4 would be about MPA management effectiveness. It would be the second CTI REX to tackle the subject after REX2, which was held in Batangas, Philippines in 2011.

The first part of this session was a presentation that briefly described the country roadmaps to MPA management effectiveness that came out of REX2. The rest of the session consisted of an open plenary discussion designed to generate participant feedback on how the countries followed through with the implementation of their respective roadmaps, and to develop topic ideas for REX4.

Results of MPA REX2 on MPA management effectiveness and Development of TOR for MPA REX4

Presentation – Dr. Alan White (TNC/CTSP)

REX2 on MPAs was designed to assist the CT6 in planning for the establishment or strengthening of national and regional MPA management effectiveness systems that adhere to international standards, and provide input for planning and training that would transfer a consistent set of core tools on improving management effectiveness to on-site managers of MPAs and networks. Among its key outputs were roadmaps that the country teams developed to guide actions in their respective countries and at the regional scale on MPA management effectiveness. These roadmaps are described briefly below.

Indonesia had already developed and to some extent adopted a set of guidelines for MPA management effectiveness, so they planned to take this forward this year and into 2013, and apply the guidelines in more sites throughout the country.

Malaysia indicated that they wanted to put together a team to start working on management effectiveness at a national scale and defined a timeline for developing the protocol for implementing the tool.

PNG had a lot of LMMAs but did not have a way to evaluate the effectiveness of those sites. They proposed a national workshop to begin to look at what system would best meet their needs.

The Philippines was quite far along in having a management effectiveness system. There were two tools being used, one at the national level and another for local government MPAs (MEAT). They wanted to look at how those two can be integrated and do some more capacity development for implementation at the provincial level.

The Solomon Islands did not have a management effectiveness system and planned to conduct a national workshop this year (2012).

Timor-Lestewas at a stage where it was beginning to implement its primary MPA and having a management effectiveness tool would be useful for planning. There was talk about moving that forward in response to the needs of the NKSNP.

There are three important steps that the countries need to consider to build their MPA management effectiveness systems:

- 1) Build standardization into roadmaps so that the management effectiveness models can be integrated at a national scale
- 2) Field test models to get feedback on the process and how it is working to see what works best for each country. Get the management effectiveness process in the budget cycle as early as possible -- ideally for some countries supported by CTSP, the proposals must be ready by the end of May of each year to be considered for funding the following year.
- 3) Keep respective NCCs informed of the process to gain more national support for management effectiveness.

Discussion: Country progress reports and topic ideas for REX4

Country progress reports

Indonesia

Mr. Handoko— As far as I know, we have been field testing the World Bank tools through COREMAP, LIPI and TNC, and we found that we needed to adapt them to the regulations in our country. We have almost completed developing the step-by-step process and the manual on how to do it. Next week we will continue our discussion with the NGOs assisting this process and then we will once again field test the modified tool. After that we will conduct a bigger workshop to get input from the wider stakeholder community, revise again if necessary and possibly this year we can begin the process of having a ministerial decree for the tool approved by the MMAF. The system is based on the WB scorecard, the MPAME Guide and WWF. We tried to combine all methods but added more questions based on our regulations, for example, how to gazette the MPA.

Mr. Soemodinoto – There are two different systems: one at the micro level and the second at the macro-level. We're now still working on the micro-level, which is based on Indonesia's MPAME. Maybe we can have a system similar to what the Philippines has, in which the national government can decide about the overall, more strategic planning, while at the site level the managers can do the planning and at the same time the profiling, which is then reported back to the national government.

Dr. White – Do you have any idea about what technical assistance would be useful through the MPA REX?

Mr. Soemodinoto – Maybe something for a national workshop, because we already have quite a lot of organizations helping at the local level, e.g. LIPI, TNC and other NGOs, as well as universities and other institutions. We had some discussion about how to develop an interface between the countries because right now we're using different approaches at the MPA level. We're looking at having some compatibility in the future between what we have in Indonesia and the Philippines and other countries.

Ms. Walton – You said that in testing the methodology you're making some modifications. Are you making parallel modifications from one site to the next or are you finding that you need to customize it for each site? What happens when you change scales? Are you able to use pretty much the same model or are there variations? I'm trying to understand to what degree you can standardize.

Mr. Soemodinoto – We have not tried the MPAME in the field. We plan to roll out these guidelines maybe next month.

Malaysia

Mr. Abdul Razak – We have used the scorecard method before to assess management effectiveness for MPAs in Sabah but so far we don't have any complete report on what we have done. The roadmap that we made in the last workshop in the Philippines was based on Sabah Parks data and did not include the MPAs in peninsular Malaysia. So far, we have not made any progress in implementing it. We were supposed to send a proposal to the Board of Trustees of Sabah Parks to bring it forward but we needed technical assistance on using the tools, and we had no specific budget to do it. We are thinking about a more advanced method of M&E to determine the management effectiveness of MPAs. There are 20 officers from Marine Parks Malaysia that will come to Bali to attend a course at CTC on designing MPAs and M&E. So hopefully we will have something to report on in the next REX. Also, we might have a discussion between the federal and state governments to establish a mechanism for an extended M&E method that we can use.

Ms. Abdul Hamid – The problem with our setup in Malaysia is that Sabah Parks is under the state government and directly under the Ministry of Tourism-Sabah, while the Department of Marine Parks where I am working now is under the federal government, so we have access only to the islands on the peninsula. Two years ago, with the help of UNDP, we developed an MPA management effectiveness system and tested the design on five islands in peninsular Malaysia. Also, in May, we are going to expose the MPA managers on the islands to learning networks and MPA network design. For peninsular Malaysia, we have a rolling plan every five years and we can ask for a budget for that. We have completed the SCTR report together with WWF and we're going to present it at the ICRS.

Dr. White – It would also be useful if the CTI MPA LN through CTC is able to feed into the development of your management effectiveness tool. And with your interest in this you could play an important role in the next MPA REX, sharing some of these and taking it forward in Malaysia.

Timor-Leste

Mr. Barreto – We really don't have much to report, because Timor-Leste has just started its MPA program. We have already established technical groups for conservation at the community level, but we don't know how to go about establishing an MPA management effectiveness system.

Mr. Amaral– For the future getting technical assistance is a key requirement. We need to train our personnel at all levels of government in using these management effectiveness tools. I think we can learn from Indonesia, which is quite similar to Timor-Leste in terms of the local community situation. Or we can learn from the Philippines because there are many good examples there.

Dr. White – We recognize that Timor-Leste has just really started developing the management plans and activities for their MPAs, but you might consider setting up your management effectiveness early because it is a useful tool as well for guiding the management process.

Philippines

Dr. Aliño– The tools that are being used in the Philippines are initially intended for learning among managers on site, and at the same time to track our progress in achieving our effectiveness goals relative to our commitments under the CBD (Convention on Biological Diversity) and CTI. We are trying to advance our network level effectiveness assessment and also to communicate to managers how they can use the tools to identify gaps in the implementation process. And we are trying to organize an inter-operability inter-calibration exercise that we can link to the reporting process for the State of the Coast, and we have initially agreed that the MSNAwards would serve as an incentive for the sites to contribute to the benchmarking process of the CTI. For now, it is not necessary for everybody to use MEAT, but we will try to meet in May and see if we can compare the basic fundamental effectiveness criteria, at least for enforcement, financing and the benefits derived from achieving the MPA objectives, whether they are social, governance or ecological. We're also trying to promote through this mechanism learning exchange and the use of the tools at various levels of governance.

Dr. White – I think we all know that the Philippines has gone quite far in developing their management effectiveness system. You might have also heard that they have a national awards system where the various local governments compete for having the best managed MPA based on a prescribed protocol. It's actually a cash award for the community, which is quite powerful in motivating MPA managers to join the system and elevate the effectiveness of their individual MPAs. How about the Solomon Islands?

Solomon Islands

Mr. Kenilorea – We haven't done much about this roadmap, except that for our first consultation workshop this April, we included it in our timeline. We're going to ask for a consultant to help us with the workshop, maybe from the CTI or other organizations.

Dr. Weeks – The LMMA Network is currently developing a management effectiveness scorecard in Fiji. Perhaps SILMMA might consider that as a starting point. It may be more suitable to their needs than some of the tools being used in the Philippines or Indonesia. Or they might look at all of those tools.

Dr. White – We need to make sure that the LMMA Network is represented in the upcoming workshop in the Solomon Islands. Maybe we can write down the contact and how to link that.

Topic ideas for REX4

Ms. Baskinas – One of the things that the group may want to consider is to request the CT Atlas to prepare maps showing overlays of MPAs and habitat types in the CTI so that we can have an initial measure of how much of the region's habitats are now under some protection. If that can be done in time for REX4, we can link it directly to the proposed indicators for the CTI MPA goal.

Dr. White – That’s being done now, in time for the ICRS. And that’s one other reason why we need the data inputs, so that we can do a more accurate analysis.

Ms. Walton – For those countries that need technical assistance, there are some funds available to help you so please let us know what kind of technical assistance you need. This is part of what this discussion is about: We need to know what it is going to take to get you moving forward because by the time we have the next REX, we really want to focus on regionalization, and before we can do that we have to have some progress at the national level.

Dr. White –Following on what Luz (Baskinas) said, we’re trying to do a region-wide analysis on what we’re doing with our MPA system in terms of MPA coverage and how much we’re protecting in terms of habitat types and percentage cover. We can do that kind of analysis in our CT Atlas, assuming that the data are there. But as suggested, we could bring that forward in the next MPA REX and link it to our CTMPAS monitoring. So we have a couple of questions related to that:

(1) To assist in the development of a set of Coral Triangle wide indicators for MPA management effectiveness—what actions are needed?

(2) What are the key ingredients that the MPA REX4 should focus on to assist both your country and the development of a regional MPAME system?

Dr. Tighe – At last night’s CTC presentation, there were a number of best practices that people wanted to have developed first for MPA under the CTI. (See Session 4.6)

Mr. Atkinson – I wonder if it’s worth having two workstreams, one that’s more appropriate for Melanesia and possibly Timor-Leste where MPAs are more community-based, and the other for those with stronger governments that practice co-management. The basic categories are the same but some of the criteria would be different. The categorization is not necessarily based on regional or geographic considerations, because many different types of MPA exist within each country and there are a lot of community-based MPAs even in Indonesia and the Philippines, but more on the involvement of higher levels of government. It’s almost like having two sets of management effectiveness systems to address the needs of the different management approaches.

Ms. Baskinas – Related to what Scott (Atkinson) was saying, we should be able to link our MPA network objectives to whatever tools or system we’re using to measure management effectiveness. Management effectiveness is not only about management or governance per se but also the impact indicators, both social and ecological. Given the current sets of tools that are being used by countries even at the regional and international levels, we need to see which tools will be able to respond best to our social, governance and ecological objectives.

Dr. White – The tools that are being used are evolving in that direction. The one we have for Indonesia covers all three categories -- governance, social and ecological – although the governance and social indicators are perhaps more developed.

Ms. Walton –There’s no cookie-cutter approach to this by any means, but one of the values of establishing some regional standards is that it will allow us to create common criteria and provide us with guidelines and key messages about the kind of changes taking place across the region as a whole. It does not mean of course that the specific indicators and the evaluation process itself cannot be customized. I think this is a really good topic for further discussion in the next REX. It’s something that the workshop could spend time on, so then the different countries can customize a process that’s suitable to them.

Dr. Aliño – I was wondering if the MPA REX might want to also consider some incentives or recognition or award system to motivate regional entries into the CTMPAS.

Ms. Walton – That’s also a recommendation that came out of this week’s discussion, that it would be a good idea to raise it to the regional level.

Dr. Tighe – One opportunity for an incentive would be to offer an innovation grant to some community leaders who want to try something new to solve a problem. They would be given six months to a year to implement their solution, and if it worked, they would get a follow up grant to showcase their work.

Mr. Amaral – Is there some way to involve our people who are specifically tasked with LMMA work to be involved in the LMMA trainings through the LMMA Network in Melanesia?

Mr. Atkinson – It hasn’t been linked to management effectiveness assessment, but PNG is forming a learning and training network that’s conducting six workshops around the country hosted by the government under their NCC and funded by the Australian CTI program. The workshops will try to identify the most successful LMMA approaches and best LMMA practices at the community level. If the information can be synthesized, that could form a really strong foundation for developing a framework for measuring management effectiveness. Maybe we can think about how to link it to the regional M&E process for PNG, but we need to make some connections in country first. The NCC and all the major NGOs are involved – CI, PNG LMMA Network, TNC and WCS – are involved. We just never made the connection between establishing a management effectiveness system and what they’re doing.

WRAP UP AND CLOSING

In the closing session, Mr. Jatulan led participants through a quick review of their expectations at the start of the workshop. The general consensus was that the objectives of this REX3 were generally achieved, and that overall, most of the participants’ expectations were met. The country teams congratulated and commended the organizers and resource team for their work. The Philippines (Ms. Laroya) also informed the body that they had requested the CT Atlas (Mr. Peterson) to review the new boundaries of the CT based on the EEZ, because they do not reflect the Philippines’ claim over parts of the ‘West Philippine Sea’ that include the Kalayaan (Spratly) Group of Islands and Scarborough Shoal (Panatag Shoal) off Palawan and Zambales.

The workshop portion of REX3 was officially closed by Mr. Eko Rudianto on behalf of MMAF. In his closing statement, Mr. Rudianto congratulated all participants “for having completed this five-day workshop with very substantive outputs,” adding, “This would not have been possible without cooperation and collaboration between the NCCs of the CT6, the MPA TWG, the Interim Regional Secretariat and the CTI partners. This is the kind of collaboration needed to be able to meaningfully implement the CTMPAS that you hammered out in the past five days.” He vowed that the Indonesian government would continue to support their country team “to make significant contribution to the finalization of the strategy framework,” and urged the other countries to do the same so the framework can be completed by the MPA TWG and fully adopted by the SOM in the near future.

The workshop was officially closed at 2:30p.m. It was immediately followed by the 2nd formal MPA TWG meeting, which was convened to finalize their TOR, and review and adopt some of the primary outputs of this week’s activities. The meeting lasted more three hours and ended at 6:21p.m. The minutes are included in this report as Annex 7.

ANNEXES

AI. AGENDA(as published, does not reflect changes during actual workshop)

Day I: 26 March 2012, Inna Grand Hotel		Sanur, Indonesia
08:30-09:15	Session I.1. Opening & Introductions <ul style="list-style-type: none"> Opening statement – Dr. Sukoyono Suseno (CTI Interim Regional Secretariat) Welcome remarks – Mr. Prasmadji Narmoko (NCC-Indonesia) Statement – Mr. Alan White (TNC/CTSP) Statement – Ms Lynette Laroya (NCC-Philippines/MPA TWG Chair) 	<i>Facilitators:</i> NCC-Indonesia, Mr. William Jatulan (PI)
09:15-10:00	Session I.2a: Context and Summary of status of MPA networks/systems in the Coral Triangle <ul style="list-style-type: none"> Global context of MPA networks/systems -- Ms Anne Walton (NOAA) Overview of status of MPAs and networks/systems in the Coral Triangle and key findings of scoping report on technical assistance needed to improve MPA networks and move toward CTMPAS – Dr. Alan White (TNC/CTSP) 	<i>Facilitator:</i> Ms. Anne Walton (NOAA) and Dr. Alan White (TNC)
10:00-10:30	BREAK	
10:30-11:00	Session I.2b: Review of objectives and principles as agreed in MPA REXI <ul style="list-style-type: none"> Presentation – Mr. Scott Atkinson (CI/CTSP) and Ms. Anne Walton (NOAA) Plenary discussion 	<i>Facilitator:</i> Mr.Scott Atkinson (CI/CTSP), Ms. Anne Walton (NOAA)
11:00-12:00	Session I.3: Country status reports on system/network development <ul style="list-style-type: none"> Country presentations 	<i>Facilitator:</i> Ms. Anne Walton (NOAA)
12:00-13:00	LUNCH	
13:00-14:00	Session I.3: Country status reports on system/network development (continued) <ul style="list-style-type: none"> Country presentations 	<i>Facilitator:</i> Ms. Anne Walton (NOAA)
14:00-14:45	Session I.4: Forum on country status reports on MPAs/networks <ul style="list-style-type: none"> Compile successes and challenges and other parking lot topics 	<i>Facilitator:</i> Mr. William Jatulan (PI)

Day 1: 26 March 2012, Inna Grand Hotel		Sanur, Indonesia
14:45-15:15	Session 1.5: Overview of MPA network frameworks <ul style="list-style-type: none"> Comparative review of other MPA frameworks and discussion on topics to be included in CTMPAS framework – Dr. Stacey Tighe (CTC/PI) 	<i>Facilitator:</i> Mr. William Jatulan (PI)
15:15-15:45	BREAK	
15:45-17:15	Session 1.6: Successes and challenges in network/systems in the CT with implication for CTMPAS <ul style="list-style-type: none"> Breakout and gallery walk report out Forum wrap up dialog 	<i>Facilitators:</i> Dr. Alison Green (TNC/CTSP), Dr. Rebecca Weeks (JCU)
17:15-17:30	Wrap out: Workshop team and MPA TWG (MPA TWG/Resource Team)	

Day 2: 27 March 2012, Inna Grand Hotel		Sanur, Indonesia
08:30-08:45	Session 2.1. Overview of Days 1 and 2 <ul style="list-style-type: none"> Day 1 review Day 2 plan Update wall charts on progress Explain worksheet to be used during sessions 	<i>Facilitator:</i> Mr. William Jatulan (PI) and MPA TWG
08:45-10:00	Session 2.2: Defining ecological and science-based guidance into MPA networks Presentation: Science principles for MPA network/system design update and FAO guidelines for integration of MPAs and fisheries objectives – Dr. Alison Green (TNC/CTSP) and Dr. Rudi Hermes (FAO) <ul style="list-style-type: none"> Forum or breakout groups to generate key criteria and principles to bring to CTMPAS framework Summarize and agree on key inputs to framework 	<i>Facilitator:</i> Dr. Alan White (TNC/CTSP)
10:00-10:30	BREAK	
10:30-11:45	Session 2.3: TOOLS (Part 1): Ways of integrating themes in CTMPAS <ul style="list-style-type: none"> Seascape report, integration toolkit (MPA management effectiveness, LEAP, etc.) – Mr. Scott Atkinson Forum or breakout groups to generate key criteria and conclusions with discussion guided by template/questions 	<i>Facilitator:</i> Mr. Scott Atkinson (CI/CTSP)

Day 2: 27March 2012, Inna Grand Hotel		Sanur, Indonesia
11:45-12:00	WRAP-UP OF MORNING PROGRESS	<i>Facilitator:</i> Mr. William Jatulan and recorders
12:00-13:00	LUNCH	
13:00-14:40	<p>Session 2.4: TOOLS (Part 2): Role of CT Atlas in CTMPAS</p> <p>Presentation: Overview of CT Atlas, purpose, function, and how it interfaces with CT6 for decisionmaking related to CTMPAS – Mr. Nate Peterson (TNC/CTSP)</p> <ul style="list-style-type: none"> • 3 breakout groups to discuss: (1) role of CT Atlas in CTMPAS design & implementation and how CTMPAS can guide CT Atlas; (2) what tools aer missing or needed for CTMPAS; (3) Report out and summary 	<i>Facilitator:</i> Dr. Alan White
14:40-15:00	<p>Session 2.5: TOOLS (Part 3): Role of MPA Learning Network in CTMPAS</p> <ul style="list-style-type: none"> • Short presentation – Ms. Rili Djohani (CTC) and Mr. Aaman Sulchan (CTC) • Clarifying questions (discussion in Thursday evening session) 	<i>Facilitator:</i> Dr. Stacey Tighe (CTC/PI)
15:00-15:30	COFFEE BREAK	
15:30-17:15	<p>Session 2.6: CTMPAS framework #1 – Principles, objectives and benefits for CTMPAS (regional and national systems)</p> <p>Based on objectives from MPA REXI and from each country experience and on desired benefits for MPA networks</p> <ul style="list-style-type: none"> • Presentation – Dr. Alison Green (TNC/CTSP) and Mr. Scott Atkinson (CI/CTSP) • Breakouts • Report back 	<i>Facilitators:</i> Dr. Alison Green (TNC/CTSP), Mr. Scott Atkinson (CI/CTSP)
17:15-17:30	<p>Wrap up – Workshop team and MPA TWG Briefing for field trip on Day 3 – Mr. Marthen Welly (CTC)</p>	

Day 3: 28March 2012, Nusa Penida/Inna Grand Hotel		Klungkung/Sanur, Indonesia
06:30-11:00	<p>Session 3.1. CASE STUDY: Local MPA Network (Field trip to Nusa Penida MPA)</p> <ul style="list-style-type: none"> • Share local best practices • Demonstrate the role of this MPA network in local, national and regional initiatives • Promote as a learning site and understand value as learning destination 	<i>Facilitator:</i> CTC – Ms Rili Djohani and Mr. Marthen Welly
11:00-12:00	LUNCH on island with debriefing session	

Day 3: 28March 2012, Nusa Penida/Inna Grand Hotel		Klungkung/Sanur, Indonesia
13:15-13:30	Session 3.2. Overview of Day 3 <ul style="list-style-type: none"> Day 2 review Day 3 plan Update wall charts on progress 	<i>Facilitator:</i> Mr. William Jatulan (PI) <i>Presenters:</i> MPA TWG
13:30-14:15	Session 3.3: CASE STUDY – Subnational MPA networks (Bali MPA) Presentation on the design of Bali MPA network in relation to national priorities and local level work <ul style="list-style-type: none"> Presentation– Ms. Icha Mustika (TNC) and Ms. Tiene Gunawan (TNC) Open forum to discuss and list integration elements of Bali MPA network and what elements contribute to a national or regional MPA system 	<i>Facilitator:</i> Mr. William Jatulan (PI)
14:15-15:30	Session 3.4: CTMPAS framework #2 – Priorities, criteria (ecological, social, governance) and categories of MPAs for CTMPAS (and national systems) <ul style="list-style-type: none"> Presentation to explain the criteria and categories of MPAs – Dr. Alan White (TNC/CTSP), Dr. Alison Green (TNC/CTSP), Dr. Anne Walton (NOAA) 3 breakout groups prioritize criteria for ecological, social and governance 	<i>Facilitator:</i> Dr. Alan White (TNC/CTSP), Dr. Alison Green (TNC/CTSP), Dr. Anne Walton (NOAA)
15:30-16:00	BREAK	
16:00-17:15	Session 3.5: CTMPAS Framework #3 – Finalize design of the MPA structure of the system Complete discussion and report out and agree on structural system Section I of framework for selecting MPAs/networks	<i>Facilitators:</i> Dr. Stacey Tighe (CTC/PI) and others
17:15-17:30	Wrap up -- Workshop team and MPA TWG	<i>Facilitator:</i> Mr. William Jatulan (PI)

Day 4: 29March 2012, Inna Grand Hotel/CTC		Sanur, Indonesia
08:30-08:45	Session 4.1. Overview of Days 3 and 4 <ul style="list-style-type: none"> Day 3 review Day 4 plan Update wall charts on progress 	<i>Facilitator:</i> Mr. William Jatulan (PI) and MPA TWG
08:45-09:30	Session 4.2: National biodiversity conservation assessment, gap analysis and criteria used in Indonesia <ul style="list-style-type: none"> Presentation – Mr. Scott Atkinson (CI/CTSP) Question and answer 	<i>Facilitator:</i> Mr. Scott Atkinson (CI/CTSP)

Day 4: 29 March 2012, Inna Grand Hotel/CTC		Sanur, Indonesia
09:30-10:15	Session 4.3: CTMPAS #4: Building the CTMPAS (or national system) – Site nomination, selection, identifying system gaps <ul style="list-style-type: none"> • Short presentation – Dr. Stacey Tighe (CTC/PI), Mr. Scott Atkinson (CI/CTSP) • Breakout with worksheets • Report back 	<i>Facilitator:</i> Mr. William Jatulan (PI)
10:15-10:30	BREAK	
10:30-12:00	Session 4.3 (continued)	<i>Facilitator:</i> Mr. William Jatulan (PI)
12:00-13:00	LUNCH	
13:00-15:15	Session 4.4: CTMPAS framework #4 – Defining management/coordination of implementation <ul style="list-style-type: none"> • Presentation – Dr. Stacey Tighe (CTC/PI) • Breakouts with worksheets • Report back 	<i>Facilitator:</i> Mr. William Jatulan (PI)
15:15-15:45	COFFEE BREAK	
15:45-17:15	Session 4.5: CTMPAS framework #6 – Define regional action plan <ul style="list-style-type: none"> • Presentation – Dr. Stacey Tighe (CTC/PI) • Breakouts with worksheets • Report back 	<i>Facilitators:</i> Dr. Stacey Tighe (CTC/PI) with MPA TWG Chair
17:15-17:30	Wrap up – Workshop team and MPA TWG	
18:30-19:30	DINNER at Coral Triangle Center	
19:30-21:00	Session 4.6. MPA learning network presentation, review and discussion <ul style="list-style-type: none"> • Presentation on CTC as resource organization for CTI MPA learning network and CTMPAS – Ms Rili Djohani (CTC) • Roundtable discussion on how to utilize MPA learning network in developing and supporting CTMPAS • Report back and conclusion 	<i>Facilitators:</i> Ms Rili Djohani (CTC) and Mr. Aaman Sulchan (CTC)

Day 5: 30 March 2012, Inna Grand Hotel		Sanur, Indonesia
08:30-08:45	Session 5.1. Overview of Days 4 and 5 and updates <ul style="list-style-type: none"> • Day 3 review • Day 4 plan 	<i>Facilitator:</i> Mr. William Jatulan (PI) <i>Presenter:</i> MPA TWG Chair
08:45-10:00	Session 5.2: CTMPAS #7 – Finalize action plans <ul style="list-style-type: none"> • Validations of outputs and recommendations 	<i>Facilitator:</i> Mr. William Jatulan (PI) and Dr. Alan White (TNC/CTSP)

Day 5: 30 March 2012, Inna Grand Hotel		Sanur, Indonesia
	<p>on framework, actions and action plan and specific proposals for regional priority setting workshop in mid-2012</p> <ul style="list-style-type: none"> • Presentation of results/outputs to-date – Dr. Stacey Tighe • Discussion and refinements recorded for incorporation 	
10:15-10:30	BREAK	
10:30-10:15	<p>Session 5.3: Finalize priority actions for MPA TWG lead</p> <ul style="list-style-type: none"> • Identify specific 2012-13 activities and define timelines • Roles and responsibilities (leads, locations) 	<p><i>Facilitator:</i> Mr. William Jatulan (PI) <i>Presenter:</i> MPA TWG Chair</p>
10:15-12:00	<p>Session 5.4: Draft TOR for MPA REX4 (Management effectiveness) in early 2013</p>	<p><i>Facilitator:</i> Mr. William Jatulan (PI) <i>Presenter:</i> MPA TWG Chair</p>
12:00-13:00	LUNCH	
13:00-14:30	<p>Session 5.5: Wrap up and review next steps, closing</p>	<p><i>Facilitators:</i> Core team</p>
14:30-15:15	<p><u>MPA TWG Meeting #2</u></p>	<p><i>Facilitator:</i> TWG Chair and members</p>
15:15-15:45	COFFEE BREAK	
15:45-17:15	<p><u>MPA TWG Meeting #2 (continued)</u></p>	<p><i>Facilitator:</i> TWG Chair and members</p>

2: LIST OF PARTICIPANTS AND RESOURCE PERSONS

INDONESIA

Alhanif, Rofi

Head of Section for Conservation Networks
Ministry of Marine Affairs and Fisheries
Mina Bahari III Building, 6th FL.,
Jl.Medan Merdeka Timur No.16
Jakarta Pusat 10110
Tel: +62 81310668833
Email: rofi_p3k@yahoo.com

Kasasiah, Ahsanal

Deputy Director for Data, Information and
Networks of Conservation,
Ministry of Marine Affairs and Fisheries
Mina Bahari III Building, 10th FL.,
Jl.Medan Merdeka Timur No.16
Jakarta Pusat 10110
Tel:+62 812814 4848
Email: akasasiah@yahoo.com

Suraji

Head of Area Protection and Preservation,
Ministry of Marine Affairs and Fisheries
Mina Bahari III Building, 10th Fl,
Jl.Medan Merdeka Timur No.10
Jakarta Pusat 10110
Tel: +62 8128238363
Email: Suraji78@gmail.com

MALAYSIA

ABD. Ghani, Awang Noor

Lecturer/Professor, Faculty of Forestry
Universiti Putra Malaysia
43400 UPM, Serdang Selangor
Tel: + 6019 3888018; Office: +603-89467197
Email: awang@forr.upm.edu.my /
awangnoor@gmail.com

Abdul Razak, Fazrullah Rizally

Head, Marine Parks Section, Division of Park
Management and Operation,
Board of Trustees of Sabah Parks
P.O. Box 10626, Kota Kinabalu, Sabah
Tel: +6088523500
Email: frizal@hotmail.com

Abdul Hamid, Datin Shahima

Director of Research and Resource Inventory
Department of Marine Parks Malaysia
Ministry of Natural Resources and Environment
Level 11, Wisma Sumber Asli No.25, Persiaran,
Perdana, Presint 4 62574 Putrajaya, Malaysia
Tel: +603 88861368, '+6017 2256933
Email:
shahima@nre.gov.my;shahima56@google.com

PHILIPPINES

Laroya, Lynette

Senior Ecosystem Management Specialist
Coastal and Marine Management Office
Ninoy Aquino Parks and Wildlife Rescue Center,
North Ave., Diliman, Quezon City
Tel: +632 925 8948
Email: lynette_laroya@yahoo.com

Meimban, Jacob F.

Executive Director,
Coastal and Marine Management Office
Ninoy Aquino Parks and Wildlife Rescue Center,
North Ave., Diliman, Quezon City
Tel: +632 925 89 48
Email: jakemeimban@yahoo.com

Porfirio, Alino (Dr.)

Marine Science Institute,
University of the Philippines Diliman
AA2-101 Hardin ng Rosas, UP Campus, Diliman,
Quezon City, Philippines
Tel: +632 4331806
Email: pmalino2002@yahoo.com /
pmalino@upmsi.ph

SOLOMON ISLANDS

Kenilorea, Peter

Senior Fisheries Officer (SILMMA Coordinator)
Ministry of Fisheries and Marine Resources
P.O. Box G13, Honiara , Solomon Island
Tel: +677 39143
Email: pkenilorea@fisheries.gov.sb

Kereseka, Jimmy

Environment Coordinator
The Nature Conservancy
P.O. Box 759, Honiara, SI
Tel: +677 20940, +677 7573626
Email: jkereska@tnc.org

TIMOR-LESTE

Barreto, Celestino da Cunha

Senior Staff
Fisheries Resources Management Department
National Directorate of Fisheries and Aquaculture
Ministry of Agriculture & Fisheries
Rua Presidente Nicolao Lobato Comoro,
Dili, Timor Leste
Tel: +670 7405885
Email: Celes_fish70@yahoo.com

De Jesus Martins, Lino

Senior Staff

Fisheries Resources Management Department,
National Directorate of Fisheries and
Aquaculture. Ministry of Agriculture & Fisheries
Rua Presidente Nicolao Lobato Comoro,
Dili, Timor Leste
Tel: +670 781 1651
Email: martinslino@yahoo.com

Leonito Amaral, Aleixo
CTI National Focal Point,
National Directorate of Fisheries and Aquaculture,
Ministry of Agriculture & Fisheries
Rua Presidente Nicolao Lobato Comoro,
Dili, Timor Leste
Tel: +670 7507658
Email: Aleixo_la@yahoo.com

REGIONAL SECRETARIAT

Darmawan (Dr.)
Coordinator
CTI Regional Secretariat, Directorate General of
Marine, Coast and Small Islands Affairs
Mina Bahari II Building, 7th floor
Ministry of Marine Affairs and Fisheries
Jl. Medan Merdeka Timur No.16
Jakarta Pusat, Indonesia 10110
Ph: 62 811 874482
Email: darmawan@indo.net.id

Rudianto, Matheus Eko
CTI Regional Secretariat, Directorate General of
Marine, Coast and Small Islands Affairs
Mina Bahari II Building, 7th floor
Ministry of Marine Affairs and Fisheries
Jl. Medan Merdeka Timur No.16
Jakarta Pusat, Indonesia 10110
Ph: 62 8118 0259 3
Email: mrudiant@yahoo.com

RESOURCE PERSONS

Atkinson, Scott
Technical Advisor CTI Program,
Conservation International,
P.O. Box 283255
Honolulu Hawaii 96828 USA
Tel: +62 361 237 245 +1 808 342 2335
Email: s.atkinson@conservation.org

Baskinas, Luz Teresa
Vice President for Project Development and
Grants, WWF-Philippines
4th Flr. JBD Building, 65 Mindanao Avenue,
Bagong Pag-asa, Quezon City, 1105, Philippines
Tel: +632-920-7923 Fax: +632-426-3927
E-mail: lbaskinas@wwf.org.ph

Budiastuti, Tri Iswari
Secretariat Coordinator

Indonesia NCC-CTI.
Tel:
Email: iswari2301@gmail.com

Djohani, Rili
Executive Director
Coral Triangle Center
Jl Danau Tamblingan no.78 Sanur
Bali 80228 , Indonesia
Tel: +62 361 289 338
Email: rdjohani@coraltrianglecenter.org

Green, Alison Lesley (Dr.)
Marine Scientist, Asia Pacific Conservation Region
The Nature Conservancy,
51 Edmondstone St., South Brisbane,
Queensland, Australia
Tel: +61408720493
Email: agreen@tnc.org

Gunawan, Tiene (Dr.)
CTI Senior Policy Specialist
Conservation International
Jalan Pejaten Barat 16 A Kemang
Jakarta 12550 Indonesia
Tel: +62 21 7883 2564 +62 21 7883 8624
+62 811 110 914
Email: tgunawan@conservation.org

Herdiana, Yudi
Project Leader
Wildlife Conservation Society
Jl. Atletik No.8
Tanah Sareal Bogor 16161,
Jawa Barat Indonesia
Tel: + 62 081 111 90479
Email: y.herdiana@wcsip.org

Hermes, Rudolf (Dr.)
Chief Technical Advisor
Bay of Bengal Large Marine Ecosystem Project
Food and Agricultural Organization (FAO)
Sakdidet Rd., Phuket,
Thailand
Tel: +66 844 329209
Email: rudolf.hermes@boblme.org

Amin, Imran
Marine Policy Manager,
The Nature Conservancy
Indonesia Program
Graha Iskandarsyah 3rd Fl.,
Jl. Iskandarsyah Raya No. 66C.,
Kebayoran Baru, Jakarta 12160, Indonesia
Ph: 62 21 7279 2043
Email: mamin@tnc.org

Mangubhai, Sangeeta
Bird's Head Senior Technical Advisor
The Nature Conservancy

Jl. Pengembak 3
Sanur, Bali 80228 Indonesia
Tel: +62 361 287 272
Email: smangubhai@tnc.org

Muljadi, Andreas

Conservation Coordinator Nusa Penida
Coral Triangle Center
Jl Danau Tamblingan No.78
Sanur, Bali 80228 Indonesia
Tel: +62 361 289 338/ +62 812 4836411
Email: amuljadi@coraltrianglecenter.org

Mustika, Putu Liza Kusuma

Bali MPA Network Mgr.
Conservation International
Jl. Dr Muwardi 17 Renon
Denpasar, Bali ,Indonesia
Tel: +628 214 755 2611
Email: p.mustika@conservation.org

Peterson, Nate

GIS and Conservation Information Manager
The Nature Conservancy
51 Edmondstone St.
South Brisbane QLD 4010 Australia
Email: npeterson@tnc.org

Prasmadji, Narmoko

Executive Secretary, NCC-Indonesia
Ministry of Marine Affairs and Fisheries
Jl. Medan Merdeka Timur No.16
Jakarta Pusat, Indonesia 10110
Ph: 62-21 3522517
Email: n_prasmadji@yahoo.com

Reza, Faisal

Secretariat, NCC-Indonesia
Email: resha_becks@yahoo.com

Ruchimat, Toni (Dr.)

Director of Aquatic Conservation Areas and Fish
Species, Indonesia MPA Focal Point NCC
Ministry of Marine Affairs and Fisheries
Mina Bahari III Building, 10th FL.,
Jl.Medan Merdeka Timur No.16
Jakarta Pusat 10110
Tel: +62 811145206
Email: truchimat@yahoo.com

Sanjaya, Wira (Jaya)

Community Outreach Officer Nusa Penida,
Coral Triangle Center
Jl Danau Tamblingan no.78 Sanur
Bali 80228 Indonesia
Tel: +62 361 289 338/ +62 812 381 5109
Email: wsanjaya@coraltrianglecenter.org

Soemodinoto, Ari

Measures and Monitoring & Evaluation Manager
Indonesia Marine Program,

The Nature Conservancy
Jl. Pengembak 2 , Sanur, Bali 80228 Indonesia
Tel: +62 818 0202 9592
Email: asoemodinoto@tnc.org

Sulchan, Aaman

CTI Learning Network Program Support,
Coral Triangle Center
Jl Danau Tamblingan no.78
Sanur Bali 80228 Indonesia
Tel: +62 361 289 338/ +62 812 381 5288
Email: asulchan@coraltrianglecenter.org

Susanto, Handoko Adi

Conservation Coordinator
MPA Governance Program
Jl. Wolter Monginsidi, No. 63B Jakarta
Tel: +62 858 5710 6705
Email: handoko.susanto@cbn.net.id,
handoko.susanto@uscti.org

Tighe, Stacey (Dr.)

Marine Science & Policy Specialist
350 Ward Ave# 106-380
Honolulu, Hawaii 96814 USA
Tel: +1 808 554 3657 / +62 811 99 376
Email: stacey.tighe@gmail.com

Walton, Anne

National Marine Sanctuary Program Pacific Region
Program Coordinator, International MPA Capacity
Building Program
NOAA,
2436 NW Westover Road
Portland OR 97210, USA
Tel: +1 415 561 6622, +662 263 7499
Email: Anne.Walton@noaa.gov

Weeks, Rebecca (Dr.)

ARC Center of Excellence for Coral Reef Studies
James Cook University
Townsville, Queensland 4811, Australia.
Tel: +61 7 47816134
Email: Rebecca.Weeks@jcu.edu.au

Welly, Marthen

MPA Learning Sites Manager
Coral Triangle Center
Jl Danau Tamblingan no.78
Sanur, Bali 80228 Indonesia
Tel: +62 361 289 338/ +62 812 387 7089
Email: mwelly@coraltrianglecenter.org

Wen, Wen

Data Node & GIS Coordinator
The Nature Conservancy,
JL. Pengembak No.2

Sanur, Bali 80228 Indonesia
Tel: +62361 287272
Email: wwen@tnc.org

White, Alan (Dr.)

Strategic Technical Support
The Nature Conservancy
923 Nu-uanu Avenue
Honolulu HI, USA
Tel: 1-808 687 6218
E-mail: alan_white@tnc.org

Widodo, Hesti

Partnership & Outreach Manager
Coral Triangle Center
Jl Danau Tamblingan no.78
Sanur ,Bali 80228 Indonesia
Tel: +62 361 289 338/ +62 811 380 2616
Email: hwidodo@coraltrianglecenter.org

Yesaya, Mau

Head of Technical Office/Director
Technical Office for National Marine Conservation
Kupang, MMAF,
Jl. Yos Sudarso Jurusan Bolok, Kec. Alak Kota
Kupang, Nusa Tenggara Timur 85223 Indonesia
Tel: +628 124 689 640
Email: bkkpn_kupang@yahoo.co.id

USAID

Acosta, Renerio

Regional Environmental Program Specialist (CTI)
Regional Environment Office
USAID Regional Development Mission Asia
Athenee Tower, 25th Floor, 63 Wireless Road
Lumpini, Patumwan Bangkok Thailand
Tel: 66-2-257-3285 Fax: 662-257-3099
Tel: + 668 190 21850
E-mail: racosta@usaid.gov, racosta95@yahoo.com

Neill, Juniper

Deputy Director,
Regional Environment Office
Athenee Tower, 25th FL. 63 Wireless Road,
Lumpini Pathumwan Bangkok, 10330
Tel: +66 089 816 2667
Email: jneill@usaid.gov

O'Mealy, Mikell

Environment Officer
Regional Environment Office
Athenee Tower, 25th FL. 63 Wireless Road
Lumpini Pathumwan Bangkok, 10330
Tel: +66 089 824 8392
Email: momealy@usaid.gov

McGonagle, Ryan

Email: rmcgonagle@usaid.gov

Cruz, Virgilio

Email: vcruz@usaid.gov

**US CTI SUPPORT PROGRAM
INTEGRATOR**

Jatulan, William

Senior Regional Coordinator
16-A Edison St., Lahug
Cebu City, 6000, Philippines
Tel: +63 917 321 7492
Email: wjatulan@uscti.org

Mattich, Nives

Deputy Chief of Party
US CTI Support Program Integrator
Chartered Square Building 29th Floor, Unit 2902
152 North Sathorn Road, Bangrak,
Bangkok 10500 , Thailand
Tel: 662-637-8517/18/19 Fax: 662-637-8520
Email: nmattich@uscti.org

Pakzad, Amin

Finance Manager,
US CTI Support Program Integrator
Chartered Square Building 29th Floor, Unit 2902
152 North Sathorn Road, Bangrak,
Bangkok 10500 , Thailand
Tel: 662-637-8517/18/19 Fax: 662-637-8520
Email: amin.pakzad@tetrattech.com

Sia, Asuncion

Documenter
Cebu City Philippines
Tel: + 6332 2321821 M:+63917 3248703
Email: overseas@oneocean.org

A3. MPA REGIONAL EXCHANGE PARTNERS

Coral Triangle Center (CTC)

Established in 2000 and based in Bali, the Coral Triangle Center (CTC) was originally set up as the hub for The Nature Conservancy's (TNC) marine conservation program in support of MPA networks in Indonesia and the CT region. Since then, CTC has established itself as an independent regional training and learning center for marine conservation. It develops local and regional capacity for marine conservation through training and education, field testing and leveraging management practices, promoting learning networks and collective action, and developing public and private partnerships to address marine conservation issues. The CTC supported the planning and implementation MPA Learning Network activities and supported the Regional Exchange secretariat with logistics and technical assistance as they are Sanur-based.

Coral Triangle Support Partnership (CTSP)

The Coral Triangle Support Partnership (CTSP) is a five-year project of the US CTI Support Program executed through a cooperative agreement with USAID to the [World Wildlife Fund \(WWF\)](#). This includes a consortium of WWF, [Conservation International \(CI\)](#), and [The Nature Conservancy](#). The CTSP works with government, private sector, and local partners to catalyze transformational change by assisting governments with enabling policy support, strengthening capacity building and institutions, building constituencies, and building decision-support capacity. CTSP has local teams working regionally and in all of the six countries with local counterparts on these issues; it also provided resources persons to the planning and implementation teams for this regional exchange.

CTI Interim Regional Secretariat

The CTI Interim Regional Secretariat is hosted by the Government of Indonesia and resides in Jakarta. The Interim and eventual Permanent Secretariat provide long-term, wide-ranging support to the CTI governments and partners for implementation of the CTI Regional Plan of Action, particularly through direct support for the various coordination mechanisms. The CTI Regional Secretariat provides coordination, technical, and communications support for CTI-related activities such as the ministerial and senior official meetings, the technical working groups, partners, and the national coordination committees. The CTI Regional Secretariat facilitates the liaison between regional activities such as this Regional Exchange and the other CTI organizations and partners, and can inform the CT6 and TWG and partners on what is feasible or what is mandated by the CTI Roadmap, etc.

NCC-Indonesia

NCC-Indonesia, headed by officials from the MMAF, oversees and coordinates the integration and implementation of the Indonesian CTI NPOA including the CTI RPOA. It acts as the national coordination body for Indonesia regarding CTI regional processes and represents the Indonesian government in meetings, conferences, fora, and workshops pertaining to the CTI. It is also tasked to review and endorse policy and project proposals related to NPOA implementation. The NCC served as host of this Regional Exchange and provided support for the country and Sanur based preparations and secretariat of the exchange.

US CTI Support Program Integrator (PI)

The US CTI Support Program Integrator (PI) provides overarching coordination support to the USG for the implementation of US CTI Support Program. The PI is responsible for coordinating inputs from various US Government (USG) agencies and partners, and for facilitating a unified USG response to the

CTI. Activities include the following: facilitate networking and cooperation; promote information exchange; provide administrative support to USAID's Regional Development Mission for Asia (RDMA); support communications and alliance building among USAID, USG, and other donors to harmonize assistance to the CTI; and provide technical support to the CTI mechanisms to facilitate implementation of the CTI Regional and National Plans of Action. The USCTI PI was the principal sponsor and provided much of the technical support for this Regional Exchange.

US National Oceanic and Atmospheric Administration (NOAA) is a federal scientific agency within the Department of Commerce focused on the conditions of the oceans and the atmosphere. It is an important partner in the CTI, providing technical support and capacity building for fisheries management, environmental law enforcement, CCA, and MPA networks. NOAA provided a key resource person for this Regional Exchange as well as other planning and technical content.

A4: PARTICIPANTS BREAKDOWN BY GENDER AND ORGANIZATION

A.4.1. Gender

Country Delegates		
Male	11	79 percent
Female	3	21 percent
TOTAL	14	100 percent
Partners/Resource Persons		
Male	25	64 percent
Female	14	36 percent
TOTAL	39	100 percent
OVERALL TOTAL		
Male	36	68 percent
Female	17	32 percent
TOTAL	53	100 percent

A4.2. Country Delegates' Institutions

Government	11	79 percent
Academe, NGOs and CBOs	3	21 percent
TOTAL	14	100 percent

A5: LIST OF PRESENTATIONS AND OTHER WORKSHOP MATERIALS

Presentations from the 3rd MPA Regional Exchange can be viewed electronically at the US CTI Support Program Integration Portal at www.uscti.org under the Workspaces Section. Photos from the Exchange can also be viewed at the Document Library Section under the Photo Gallery folder and Events sub-folder. To access the portal log in through username: **coral** and password: **triangle** (non-case sensitive).

- 1) Global progress in scaling up to networks of MPAs
Ms. Anne Walton, Program Director, International MPA Capacity Building Program, NOAA
- 2) Overview of the status of MPAs and networks/systems in the Coral Triangle and key findings of a scoping report on the technical assistance required to improve MPA networks in the Coral Triangle and move toward a CTMPAS
Dr. Alan White, Lead for MPA Regional Theme for USCTI, TNC
- 3) Principles, objectives and benefits of the CTMPAS as agreed to by the CT6 at the MPA REXI in Phuket, Thailand (2010)
Mr. Scott Atkinson, TNC, and Ms. Anne Walton, Program Director, International MPA Capacity Building Program, NOAA
- 4) Country status reports
 - Indonesia – *Ms. Ahsanal Kasasiah, Deputy Director for Data, Information and Networks of Conservation, Ministry of Marine Affairs and Fisheries*
 - Philippines -- *Ms. Lynette Laroya, Senior Ecosystems Management Specialist, Biodiversity Management Division, DENR-PAWB*
 - Malaysia – *Mr. Fazrullah Rizally Abdul Razak, Park Manager, Board of Trustees of Sabah Parks*
 - Solomon Islands – *Mr. Peter Kenilorea, Senior Fisheries Officer/SILMMA Coordinator, Ministry of Agriculture and Fisheries*
 - Timor-Leste – *Mr. Aleixio Leonito-Amaral, CTI National Focal Point, Ministry of Agriculture and Fisheries*
- 5) Overview of MPA network frameworks
Dr. Stacey Tighe, Marine Science & Policy Specialist
- 6) Integrating fisheries, biodiversity and climate change objectives into resilient MPA network design in the Coral Triangle
Dr. Alison Green, Marine Scientist, Asia Pacific Conservation Region, TNC
- 7) Overview on FAO Technical Guidelines for Responsible Fisheries: MPAs and fisheries
Dr. Rudolf Hermes, Chief Technical Advisor, Bay of Bengal Large Marine Ecosystem Project, FAO
- 8) USCTI Climate Change Adaptation Toolkit and Integrating marine and coastal management approaches in the Coral Triangle
Mr. Scott Atkinson, Regional Manager, CI
- 9) Coral Triangle Atlas
Mr. Nate Peterson, GIS and Conservation Information Manager, TNC
- 10) Role of MPA Learning Network in CTMPAS
Ms Ril Djohani, Executive Director, CTC
- 11) Case Study: Nusa Penida MPA

Mr. Marthen Welly, MPA Learning Site Manager, CTC

12) A network of MPAs in Bali

M.s Putu Liza Kusuma Mustika, Dr. Tiene Gunawan, and Ms. I Made Jaya Ratha, CI

13) Defining geographic priorities for marine biodiversity conservation in Indonesia

Dr. Tiene Guanawan, Dr. Mark Erdmann, and Ms. Crissy Huffard, CI

14) CTC as a resource organization for CTI MPA Learning Network and CTMPAS

Ms. Rili Djohani, Executive Director, CTC

A6: Minutes of the 1st Formal MPA TWG Meeting

Minutes TWG MPA Meeting Sari Pan Pacific Hotel, Jakarta 27/10/2011

Chair: Dr. Mundita Lim, Philippines, vice-chair: Dr. Toni Ruchimat, Indonesia

Focal partners: Dr. Alan White, TNC; Network partner: CTC

Participants: Prof. Nor Aieni, Ms. Kay Kalim, Ms. Agnetha Vave-Karamui, Mr. Aleixo Amaral

I. 2nd Regional Exchange on CT MPA System (CTMPAs)

- As follow up of 1st Regional Exchange on CTMPASystem, June 2010
- Proposed date and location: 19-23 March 2012, Indonesia, Denpasar, Bali
- Participants: average 4 from each country (24 CT) + resource persons
 - CTI Focal points: Indonesia - Dr. Toni Ruchimat; Malaysia - Dr. Sukarno Wagiman + Mr. Paul Basintal; Papua New Guinea - Ms. Kay Kalim; Philippines - Dr. Mundita Lim; Solomon Islands - Mr. Peter Konilorea; Timor-Leste - Pedro Pinto.
 - Field representatives from each site: site based experts, MPA policy experts, scientists
 - Representatives EAFM + M&E WG
- Financial Support: USCTI PI for traveling and accommodation of participants
- Scope of agenda
 - Integrated sites: Each country suggests a better managed and integrated site as best practice
 - Set criteria for a well managed integration site
 - Transboundary MPAs could be a subject
 - CT Atlas updated
 - Document towards integration of fisheries, CCA, MPA, Threatened Species, and send out draft documents about this.
 - Link to M&E TWG (member to be invited), EAFM, TOR counterpart from each TWG > Alan circulates structure proposed for the MPA WG > December
 - Preparation REx MPA ME Protocol, September 2012

Actions for Preparation

- Review the report from the first workshop, towards official actions
- Send out a scope of agenda to members TWG > **December**
> Anne Walton (NOAA) / Alan White (TNC) / CTC > Chair and Vice Chair > members
- Identify proposed candidates > **mid-January**
- Confirmed agenda and list of participants > **end January**
- Use workspace for the preparation and document sharing > CTC sets up and invites members
> **asap**

II. 2nd REx MPA ME

- As follow up of 1st Regional Exchange on MPA ME, May 2011
- Proposed date: September 2012, location: tbd
- Countries to progress on roadmaps developed at 1st Regional Exchange on MPA ME, Batangas, May 2011
- Come up with regional set of indicators coming from national roadmaps

Minutes of CTI MPA TWG Meeting

Inna Grand Bali Beach Hotel, Sanur, Bali, Indonesia

30 March 2012

TWG members and partners present:

Rofi Alhanif (Indonesia)	Lino De Jesus Martins (Timor-Leste)
Handoko Adi Susanto (Indonesia)	Luz Teresa Baskinas (CTI M&E TWG)
Suraji (Indonesia)	Renerio Acosta (USAID RDMA)
Fazrulla Rizally Abdul Razal (Malaysia)	Alan White (TNC/CTSP)
Jacob F. Meimban (Philippines/Chair)	Darmawan (CTI Regional Secretariat)
Lynette Laroya (Philippines)	Stacey Tighe (CTC)
Porfirio Aliño (Philippines)	Ann Walton (NOAA)
Peter Kenilorea (Solomon Islands)	Nives Mattich (PI)
Aleixo Leonito Amaral (Timor-Leste)	William Jatulan (PI)
Celestino da Cunha Barreto (Timor-Leste)	

Proceedings:

The meeting was called to order at 3:20pm, with Mr. Jacob Meimban (Philippines) presiding. Mr. Meimban represented the Philippines' focal point to the MPA TWG, Dr. Mundita Lim. This was the second formal meeting of the MPA TWG. It was the main sidebar event at the *CTI Regional Exchange on Designing and Supporting National and Regional MPA Systems in the Coral Triangle (REX3)* held on 26-30 March 2012 in Inna Grand Bali Beach Hotel, Sanur, Bali, Indonesia.

- 1) **Background.** The Chair opened the meeting with a short welcome statement, and requested those present to introduce themselves. He asked them to observe the following rules a) The head of delegation shall speak for their country; and b) All questions and statements shall be directed to the Chair. He then presented the meeting agenda, which was adopted by the body with no objection.

- a. **Agenda**

- **Minutes of 1st CTI MPA TWG Meeting.** The first order of business was to review and approve the minutes of the 1st MPA TWG meeting. The first meeting was held on 27 October 2011 as a sidebar event at the 7th CTI Senior Officials Meeting (25-26 October 2011) and 3rd CTI Ministerial Meeting (28 October 2011) in Sari Pan Pacific Hotel, Jakarta, Indonesia. (See Annex 6 of this report)
- **Terms of Reference of the CTI MPA TWG (TOR).** One of the major outputs of this meeting would be the adoption of a draft TOR for the CTI MPA TWG. The draft TOR was prepared over a series of informal small group meetings involving some members of the TWG held during the week beginning 26 March 2012.
- **Next Steps toward the Adoption of CTMPAS Strategy.** This task involved the review and adoption of the timeline, responsible persons and next steps toward drafting, finalizing, and adopting the CTMPAS Strategy that was developed at this week's REX3.

- **Priority MPA Regional Activities for Presentation to the High-Level Financial Roundtable.** This was primarily to review and endorse a list of priority MPA regional activities for presentation to the High Level Financial Roundtable scheduled for 2-5 May 2012. The Roundtable is a venue for the CT6 to generate additional funding for the implementation of their National Plans of Action (NPOA), the Regional Plan of Action (RPOA) and the Regional Secretariat, and for the donors to communicate their funding priorities.
- **MPA Monitoring and Evaluation Indicators and Reporting System.** These indicators and reporting system were prepared by the CTI M&E TWG. It would be formally presented for the first time to the CTI MPA TWG for them to deliberate on and endorse.
- **CT Atlas and information sharing.** The TWG would also discuss concerns and other outstanding matters related to the CT Atlas and sharing of information among the CT6 and partners.
- **Scope and objectives of the next MPA Regional Exchange on Management Effectiveness.** Also up for consideration by the TWG at this meeting was the scope and objectives of the REX4, which will tackle for the second time MPA management effectiveness. The REX4 is tentatively scheduled for February or March 2013. The first REX on MPA management effectiveness was held on 7-11 May 2011 in Batangas, Philippines.
- **Other Matters**

2) Discussion

- a. **Minutes of 1st CTI MPA TWG Meeting.** Changes were made to correct the spelling of the following names: Peter Kenilorea (Solomon Islands); Aleixo Leonito Amaral (Timor-Leste); and Dr. Toni Ruchimat (Indonesia). **With no further changes, the Philippines made the motion to accept the minutes as corrected. Solomon Islands seconded, and the minutes were approved with no objection.**
- b. **Terms of Reference of the CTI MPA TWG (TOR).** At the Chair's request, the Philippines (Ms. Lynette Laroya) presented a draft TOR prepared by a small group consisting of some members of the MPA TWG. She noted that the Philippines was designated in 2011 as Chair of the MPA TWG, with Indonesia as Vice Chair. If approved, the TOR would limit the terms of the Chair and Vice Chair to two years starting 01 January of the year following confirmation by the SOM (2012). She also stressed that **Section 1.0 Purpose and Tasks of the MPA TWG** was a general description of the TWG's role and functions as adopted by SOM6. Subsequently, the body focused their deliberation on the other sections of the draft TOR.
 - **Membership.** The Regional Secretariat Coordinator expressed reservation about the way the Membership clause was worded in the draft TOR, which appeared to exclude the CTI partners. He explained that "the TWG is the only place where the CTI partners can be represented" and inferred that their inclusion in the TWG would not amount to interference in national affairs because "the TWG is not tasked to make critical decisions, but mainly to bring its recommendations to the SOM for the countries to consider and decide on." The matter was discussed at length and the following revised clause was put forward by the Regional Secretariat:

2.1. Membership. The MPA TWG shall be composed of at least two representatives from each of the CT6 (Indonesia, Malaysia, Papua New Guinea, Philippines, Solomon Islands and Timor-Leste), a representative from the Regional Secretariat and CTI-CFF partners. The NCC of CT6 countries shall designate representatives to the MPA TWG meetings. However, decision-making shall be lodged with the CT6 members.

- **Staff Support.** Indonesia noted that the draft TOR was silent on the matter of staff support for the TWG and asked where such staff support would come from if needed. The Regional Secretariat explained that the TWG members represent their respective National Coordinating Committees (NCCs) and can therefore expect in-country staff support. In addition, it is the Regional Secretariat's role to help the TWG coordinate with the different countries on matters pertaining to regional activities. Noting that there was no clause in the TOR to explain this matter, the body agreed to insert a new section on *Administrative support to MPA TWG*. Consequently, the last section on *Financial Arrangement* was renumbered as section 5.0, as follows:

4.0. Administrative support to MPA TWG. The administrative support for the TWG shall be provided by the country chairing the TWG. Coordination with other CT6 countries pertaining to schedules of activities, collaboration with other countries and other related activities should be coordinated with the Regional Secretariat.

5.0. Financial arrangements ...

With no further changes put forward, Timor-Leste made the motion to adopt the revised TOR, the Solomon Islands seconded, and the revised TOR was adopted with no objection.

- c. **Next Steps toward the Adoption of CTMPAS Strategy.** At the Chair's request, CTI Technical Lead for MPA, Dr. Alan White (TNC/CTSP) presented the action plan for the adoption of CTMPAS strategy that came out of the 5-day workshop at the REX3. The Chair noted that the action plan had been deliberated upon by the countries and could be adopted as presented. **Solomon Islands made the motion to adopt the action plan, the Philippines seconded, and the action plan was adopted with no objection.**
- d. **Priority MPA Regional Activities for Presentation to the HighLevel Financial Roundtable.** On the Chair's request, the Philippines (Ms Lynette Laroya) provided each TWG member with a copy of a draft list of activities that will be submitted to the High Level Financial Roundtable scheduled for May 2012 in the Philippines. She stressed that the MPA TWG's primary concern would be the activities related to the MPA and CTMPAS, and Dr. White (TNC/CTSP) explained that the list was preliminary and may be edited by a writing group assigned by the MPA TWG Chair. Several members noted that the list needed to be aligned with the action plan that the TWG just adopted (c), and Indonesia suggested that Dr. Toni Ruchimat (truchimat@yahoo.com) should be included in email communications on this list. After a clarifying question from Malaysia was addressed, **the Chair suggested that the body should agree "on what we have now, and then discuss the issues further."** Indonesia made the motion, and the Philippines seconded. On Timor-Leste's suggestion, the **TWG also agreed to meet again through teleconferencing or other means to align the list with the timeline and activities outlined in the action plan.**
- e. **MPA Monitoring and Evaluation Indicators and Reporting System.** The CTI M&E TWG (Ms. Baskinas) presented the indicators and reporting system prepared by

the CTI M&E TWG. There are three indicators at the top level, namely: 1) Percent/area of total marine habitat in CT region in some form of protected status; 2) Percent/area of each major marine and coastal habitat type in strictly protected “no-take replenishment zones” to ensure long-term sustainable fisheries; and 3) Percent/area (in square km) of MPAs under “effective” management. The Regional Secretariat (Dr. Darmawan) expressed concern that the indicators do not include social welfare and food security. Ms. Baskinas explained that the indicators are hierarchical and there is a second-level set of indicators to specifically address socioeconomic issues. Dr. Darmawan said that while the habitats are important, CTI is also a political cause, so “we need to put the social indicators up front.” The Chair agreed, saying the indicators should be about “people first, and all else will follow.” Ms. Baskinas said she would refer the matter to the M&E TWG so that they can craft “people-centered indicators.” Dr. White informed the body about an upcoming workshop on M&E in Manila, which will review and approve the indicators. “There’s really no direct way to measure the social indicators, so if I may suggest, let’s wait for the results of the M&E workshop before we review this,” he suggested. **The body agreed to endorse the set of indicators presented at this MPA TWG meeting on condition that Dr. Darmawan’s suggestion to include social indicators (people’s welfare) would be addressed during the Manila M&E workshop.**

- f. **CT Atlas and information sharing.** Dr. White told the body that the inclusion of this item in the agenda was mainly to encourage the NCCs to prioritize data sharing protocols with the WorldFish Center with respect to the CT Atlas. “We’re in the process of developing protocols in each country for accessing and sharing data through the CT Atlas,” he said. “This is to remind everybody at the NCC level that some support might be needed to bring this forward.” Timor-Leste said they fully appreciated the value of the CT Atlas, but they had no indication yet from their national leaders which types of data could be shared and which ones were confidential. USAID RDMA (Mr. Acosta) stressed that the CT Atlas belongs to the CT6 and that the countries are simply being encouraged to submit information that may be useful for each country and the region. He also said that at some point the CT Atlas will probably be managed by the Regional Secretariat so there will be no question that the information belongs to the CT6. The Chair noted that the CT Atlas does indeed belong to the CT6 and that it is up to the CT6 to decide which information to share. Dr. Darmawan wanted to know what was expected from the Regional Secretariat with respect to the CT Atlas. Dr. White said the CT Atlas is still being developed but “will ultimately be lodged with and administered by the Regional Secretariat.” Dr. Tighe (CTC) suggested that an interim provision could be added in the CT Atlas that says that while the countries recognize the CT Atlas as an official source of data for generating maps it is not legally binding. Dr. Darmawan said that while the Regional Secretariat has no capability at the moment to manage the CT Atlas, “it has to be clear from the beginning what the role of WorldFish is in managing this,” so that there will be no questions in the future about the ownership of the CT Atlas. Dr. Tighe and Dr. White suggested an MOU or some kind of agreement between the CTI and WorldFish Center to establish ownership of the CT Atlas. Dr. White further noted that while individually the CT6 countries had an existing agreement with WorldFish Center, there was no agreement yet between CTI and WorldFish to clarify the relationship between CTI and the Regional Secretariat. **Dr. Darmawan said there may be an issue with the current status of the Regional Secretariat as an interim body but that they were willing to work with TNC and WorldFish to come up with a suitable agreement on the CT Atlas. The Chair asked the body if they agreed, and there being no objection, Dr. Darmawan’s suggestion was carried.**

- g. **Scope and objectives of the next MPA Regional Exchange on Management Effectiveness.** Dr. White announced that REX4, which will tackle MPA management effectiveness for the second time as well as consider nominations of MPAs for inclusion in the CTMPAs, would be held in early 2013. He invited the countries to suggest

topics for REX4, and asked if any country would like to host the workshop. Dr. Tighe said there was a suggestion for the hosting of the REX to be rotated between the CTI member countries, so the next host should not be the Philippines or Indonesia, which have already hosted an MPA REX. **Timor-Leste was put forward as the next possible host but said they would need to consult with their government.** “We are now in the middle of transition to a new government, but we will get the message to our leaders. We don’t know yet when we can confirm but as soon as we know if it’s a green light or red light, we will inform the Regional Secretariat,” they said. **The body accepted Timor-Leste’s offer with no objection.**[After closing the meeting, Malaysia also indicated informally to explore the possibility of hosting the MPA REX#4.]

h. Other Matters

- At Dr. White’s request, the Chair asked the countries to nominate their representatives to the **writing team that will develop the CTMPAS Framework based on the outline that came out during this week’s REX3.** The following names were submitted:
 - Indonesia: Ahsanal Kasasiah (lead), Mr. Suraji (support)
 - Malaysia: Datin Shahima Abdul Hamid (lead)
 - Philippines: Dr. Porfirio Aliño, Ms. Luz Tereas Baskinas, Ms Lynette Laroya
 - Solomon Islands: Mr. Peter Kenilorea (In addition, Mr. Kenilorea will submit another name to the TWG Chair.)
 - Timor-Leste: Mr. Lino De Jesus Martins
 - Regional Secretariat: Dr. Darmawan
- **The TWG agreed to set up a virtual meeting to discuss any outstanding matters, particularly how to go about further developing the CTMPAS Framework.** The USCTI PI (Ms. Mattich) said they would be delighted to facilitate the process. Timor-Leste said the best way to communicate with them would be by mobile phone because they had no reliable Internet access. The body agreed that the meeting will be via telephone conference call to be facilitated and paid for by the PI. **To start off the discussion, Dr. White will send emails to the writing team through the country Chair (Philippines) or administrative support group and the writing team will set the date of the conference call. The Regional Secretariat will help coordinate with the countries if needed.**

Adjournment. There being no other business, the meeting was adjourned at 6:21 pm.

A8: DRAFT OUTLINE (VERSION 0) FOR CTMPAS FRAMEWORK

- A. BACKGROUND
- B. CT6 NATIONAL PROGRAMS and MANDATE FOR CTMPAS
- C. STRATEGIC APPROACH
 - a. DEFINE THE CTMPAS
 - i. REX3: Define objectives from RPOA Goal and Regional Context
 - ii. REX3: Define system structure of MPAs and systems on ecological/social/governance parameters
 - iii. TWG: Develop steering and coordination mechanism for CTMPAS
 - b. BUILD THE CTMPAS
 - i. Encourage national MPA/system development with ongoing dialog
 - ii. Encourage CT6 to nominate key MPAs/systems that address priority criteria defined (TWG and Coordinator Team)
 - iii. Review nominations and accept into CTMPAS: Steering Committee and Coordinator Team
 - iv. Conduct gap analysis of initial system and recommend priority new MPA additions to network/recruit
 - c. IMPLEMENT/OPERATE CTMPAS
 - i. National stewards manage and report their own MPAs/systems
 - ii. CT6 and regional teams develop and nominate MPAs to achieve goals
 - iii. Monitoring and enforcement coordinated and implemented
 - iv. Promote CTMPAS internally in CTI and regionally and globally.
- D. DEFINING CTMPAS
 - a. Purpose and Goal
 - b. Ecological, Social and Governance Principles, and Objectives of CTMPAS
 - c. Ecological, Social and Governance Criteria for CTMPAS
 - d. Combined structure and categorization of MPAs and Systems in CTMPAS
- E. BUILDING CTMPAS
 - a. Authorize and establish CTMPAS institutional arrangement and operations with Advisory Group
 - b. Identify shared data system, regional forums for consultation
 - c. Developing strategic and sustainable financing mechanisms with support
 - d. Nomination process for MPAs/Systems
 - e. Selection and listing of MPAs/Systems
 - f. Promotion of CTMPAS in CTI and globally
 - g. Scientific review and Identification of gaps of initial CTMPAS
 - h. Strategy and process to recruit new MPAs/systems to CTMPAS
 - i. Establish reporting process
 - j. Develop CTMPAS action plan through 2020
- F. IMPLEMENTING CTMPAS (MANAGEMENT EFFECTIVENESS)
 - a. Enhancing regional coordination and collaboration
 - b. Evaluating effectiveness, develop and promote best practices
 - c. Tracking and reporting
 - d. Operation of advisory/steering committee
 - e. Role of CT Atlas
 - f. Role of Integration Toolkit
 - g. Role of MPA Learning Network in implementing CTMPAS

A9: WORKSHEET 1.1. IDENTIFYING UNDERLYING PRINCIPLES AND OBJECTIVES USED IN THE DESIGN OF NATIONAL MPA NETWORKS (with country inputs)

NATIONAL MPA NETWORK	DESIGN PRINCIPLE (describe specific principle under one or more categories)			MPA NETWORK OBJECTIVE (describe purpose of the MPA Network)	RESULTS
	Ecological	Social	Governance		
Indonesia	Adequacy Representativeness Resilient Connectivity Replenishment	Management Communication Education Cultural value Sustainability	Management	In 5 years, regional MPA system which is ecologically sustainable, socially responsible and effectively governed is established and operational	Network effectively managed Sustainable production of coastal and marine resources Food security/community prosperity
Malaysia	Maintain ecosystem functions, biodiversity and connectivity	Communication Education and awareness, social economic values	Political will and integrated management framework for EBM Institutional arrangement – coordination Monitoring, control and surveillance, and Evaluation; State	By 2020, MPA will be large enough (20%) to be effectively managed for fish and food security. By 2020, at least 20% of Malaysian coasts will be gazetted in MPAs; Conservation priority site	Conservation Sustainable utilization Food security Support from government
Papua New Guinea					
Philippines	MPA in municipalities	Structure	Local enforcement	Restoring?	Some initiative, but need to upscale
Solomon Islands	MPA network Climate-integrated	Livelihood options		Food security Economic	More food; alternative livelihoods
Timor Leste					

A10: Index to Compilation of Sample MPA Network Frameworks

A compilation of sample frameworks were provided during the Regional Exchange to guide the countries in the preparation of the CTMPAS (as well as their in-country network frameworks). The sample frameworks can be downloaded as individual files from the US CTI Support Program Integration Portal at www.uscti.org under the Workspaces Section. To access the portal log in through username: **coral** and password: **triangle** (non-case sensitive). Refer to the table below to determine which networks use the particular sets of standards, elements/components, principles, objectives and criteria you think would apply best to the MPA network that you are developing, then download the corresponding file/s from the USCTI portal.

Elements or Components included in Example MPA System Framework Documents for Regional, National and Sub-National Systems: (Y=Yes, Component is included in Example. E, G, S refer to whether Ecological, Governance or Socio-economic elements were included)

Standard (TNC)	ELEMENT / COMPONENT	OSPAR	MEDNet	Belize	USA	Canada	Gulf of Mexico	Lesser Sunda
Clear, Strategic Purpose	1. Vision/Mission/Purpose	Y	Y	Y	Y	Y	Y	Y
	2. Goals and objectives -Ecological /Geologic -Social -Governance	E G	E		Y	Y	E G	E S G
Science-Based, Strategic Design of MPA System	3. Principles & Key Definitions	Y	Y	Y	Y	Y		Y
	4. Ecological Criteria for MPA Inclusion	Y	Y	Y	Y	Y		Y
	5. Social Criteria for MPA Inclusion	N	Y	Y	Y	Y		Y
BUILDING THE SYSTEM of MPAs and MANAGEMENT								
IMPLEMENTING/OPERATING THE SYSTEM of MPAs and MANAGEMENT								

Details in Key guiding Documents (UNEP/WCMC and CTSP) and Example MPA Systems from Above on Ecological Components (Row #4 above) included in the Framework/System Design

PRINCIPLE/GUIDELINE	Overhead OBJECTIVE	UNEP/WCMC 2008	CTSP 2012	OSPAR	MED Net	BELIZE	USA	CAN	Gulf of Mex	Lesser Sunda
ECOLOGICAL										
Representation	Risk Spreading	Y	Y	Y	Y	Y	Y	Y		Y
Replication/Redundancy	Risk Spreading		Y	Y	Y		Y	Y		Y
Connectivity	Risk Spreading	Y	Y	Y	Y		Y	Y		Y
Resilience	CC Adapt	Y	Y				Y		Y	Y
Unique/Critical Habitats	Critical Area		Y	i	Y	Y		Y		
SOCIO-ECONOMIC & CULTURAL GOVERNANCE/MANAGEMENT										

AI1: INTEGRATION CHECKLIST

Strategy	Corresponding management activities	Started (S)/ Completed (C)	Detail	Recommended tools
1) Establish management area in accordance with ecological boundaries, marine resource use patterns and governance jurisdictions 2) Manage fishery resources and exploitation for sustainable use	a. Establish legal boundaries and framework for the management area			Biophysical Principles Guide; COASTPLAN, MPAME Common Criteria, CT Atlas; EAFM indicators (ID), EAFnet, EBM Policy Brief, EAFM Executive Course, MPAME (ID), MSP Curriculum, MPA 101 Curriculum, MPA MP Curriculum, MEAT (PH), R2 Toolkit, Seascapes Guide EAFM benchmarks: EAFM indicators (ID), EAFnet, FishDA, EAFM Exec Course, R2 Toolkit
	b. Develop marine spatial plan that incorporates MPAs and fisheries management interventions			
	c. Ensure participation in decision-making by local government authorities and communities			
	d. Establish effective enforcement systems			
	e. Assess and address climate vulnerability in all components of the ecosystem (people and built environment and natural resources)			
	f. Prohibit destructive fishing practices within the management area			
	g. Develop and enforce fisheries regulations and restrictions with stakeholders			
	h. Reduce fishing bycatch by assessing and regulating gear			
	i. Assess vulnerability of fish stocks and fisheries-related infrastructure to climate change and incorporate adaptation measures to reduce vulnerability			
	j. Designate no-take zones inclusive of 25-35 percent of each type of marine habitat represented; nearshore no-take zones should be at least 30-100 hectare in size; a network of small no-take zones should be positioned no more than 10km from one other			
3. Protect, connect and manage representative and critical habitats essential for ecology, life history and survival of marine life	k. Designate replicate areas of habitat types for resilience			Biophysical Principles Guide; TURF; Resilient LMA Guide; NT Guide; EAFM Exec Course; EAFnet; MSP Curriculum; R2 Toolkit; Fish Info Sheets
	l. Permanent or temporary closures of at least 15 percent of the area that protect key reproduction areas such as spawning groups.			
	m. Protect coastal habitats potentially resistant/resilient to climate change impacts			
	n. Manage land-based sources of pollution for coastal habitat change considerations and incorporate resilient features (manage for change versus status quo)			
	p. Prohibit capture of the largest reproductive individuals through size limits and limit the catch of immature individuals through gear restrictions			
	q. Size and position no-take zones to maximize spillover of adults and larvae to safe and convenient fishing grounds			
	r. Conserve 30 percent of reproductive individuals in the population through catch limits and aggregation/no-take zones			
	s. Ensure and enforce adequate legal protection for species			
	t. Prohibit or control capture of endangered species			
	u. Protect critical life history habitat and manage food sources of the threatened or endangered species from human and climate-related impacts, particularly breeding, nursery grounds			
4. Conserve sufficient reproductive stock of each target species 5. Protect and restore threatened and endangered species	v. Manage food sources of endangered species so that food is not in decline or overfished			Biophysical Principles Guide; TURF; Resilient LMA Guide; NT Guide; EAFM Exec Course; EAFnet; MSP Curriculum; R2 Toolkit; 3D Relief Map; Fish Info Sheets Biophysical Principles Guide; MPAME Common Criteria; CT Atlas; EAFM Exec Course; MSP Curriculum; Seascapes Guide
	w. Enact and enforce fisheries bycatch laws related to species			

Strategy	Corresponding management activities	Started (\$)/ Completed (C)	Detail	Recommended tools
<p>6. Diversify livelihoods of coastal communities</p>	<p>x. Assess vulnerability of current livelihoods to climate change and incorporate adaptation measures to reduce vulnerability</p> <p>y. Provide environment-friendly alternative income generation opportunities to communities dependent on fisheries and other coastal resources</p> <p>z. Diversify livelihoods to industries that are resilient to climate change and not dependent on fishing</p>			<p>CCA Benchmarks; CCA Climate Info Brief; CCA VA-LEAP; ReefGame; Seascapes Guide</p>
<p>7. Manage coasts, watersheds and freshwater sources</p>	<p>aa. Promote coastal development that supports coastal community resilience</p> <p>bb. Assess vulnerability of watersheds and freshwater sources to climate change and incorporate adaptation measures to reduce vulnerability</p> <p>cc. Manage coastal land use, mining and forest areas to minimize erosion</p> <p>dd. Minimize nutrients and other pollutants from land-based activities</p> <p>ee. Manage freshwater sources and demand</p> <p>ff. Protect and manage coastal estuarine and other aquatic systems</p>			<p>CCA Benchmarks; CCA Climate Info Brief; CCA VA-LEAP; CCA Curriculum; CIVA</p>
<p>8. Protect coastal communities and infrastructure to natural and climate change-related hazards</p>	<p>gg. Assess vulnerability of infrastructure to climate change and incorporate adaptation measures to reduce vulnerability</p> <p>hh. Establish or strengthen early warning systems and emergency response services</p> <p>ii. Establish community-based disaster management programs</p> <p>jj. Establish coastal setbacks and other land use zones to locate coastal development outside of hazard-prone areas</p> <p>ll. Retrofit or relocate critical infrastructure to withstand hazard impacts</p>			<p>CCA Benchmarks; CCA Outreach; CCA Climate Info Brief; CCA VA-LEAP; CCA Guide; CCA Monitoring Guide; CCA Curriculum; COASTPLAN; CIVA; ICSEA-Change</p>

**A12: CTMPAS DESIGN PRINCIPLES AND OBJECTIVES
(CONSOLIDATED EDITED OUTPUT FROM SESSION 2.6)**

DESIGN PRINCIPLES	NETWORK OBJECTIVES
GOVERNANCE	
a. Operate the MPA system within an integrated management framework for ecosystem based management	CTMPAS uses integrated ecosystem approach which includes, e.g., human activities, climate change adaptation and fisheries
b. Operate the MPA system with clear political will, leadership and authority (which includes the decision making processes and leverage with existing regional and national organizations)	CTMPAS is supported at the highest political level and led by the six countries with the authority for all to contribute and achieve its goals; sites are available to demonstrate CTMPAS activities in each of the CT countries.
c. Operate the MPA system with clear, appropriate and effective institutional arrangements and coordination (which includes clearly defined objectives, monitoring and surveillance and a conflict resolution mechanism)	CTMPAS coordination and institutional arrangements are collaboratively developed in place and adopted:
	<ul style="list-style-type: none"> • Early CTMPAS action plan drafted prior to the High Level Financial Round Table and completed by Dec 2013
	<ul style="list-style-type: none"> • Coordination mechanism and implementation arrangement established by July 2013
	<ul style="list-style-type: none"> • Coordination mechanism and action plan of the CTMPAS adopted by CT-6 by 2014
	<ul style="list-style-type: none"> • In five years after the adoption of the action plan with functional implementation of joint-activities, e.g., shared financing, surveillance, research, M&E, education and training
ECOLOGICAL	
a. Maintain ecosystem function and biodiversity.	CTMPAS will develop into a system of MPAs that can:
	<ul style="list-style-type: none"> • Conserve coral reefs and associated habitats that are resilient to climate change (and other threats)
	<ul style="list-style-type: none"> • Support healthy and increasing fish populations; ecosystem function and biodiversity and important invertebrate populations, e.g. trochus, sea cucumber
	<ul style="list-style-type: none"> • Maintain or recover populations of threatened species for intrinsic value, education and scientific value and human heritage value
SOCIAL	
a. Regional platforms, education programs and communication mechanisms facilitate shared perspectives, support and capacity in MPA system management and coordination among CTMPAS stakeholders and sites.	In 5 years the CT6 will have built a mechanism to share knowledge and data across the region (Documents produced in English and Bahasa) In 5 years at least 50 percent of key stakeholders know and understand benefits of MPAs (Activities targeted at local communities)
b. Cultural values and traditional knowledge of communities are incorporated into local, national and regional management of CTMPAS sites.	In 5 years, the management and policies of MPAs will include traditional knowledge and values (local wisdom) in planning and its implementation In 3 years, the CTMPAS strategy will be linked and leveraged with other regional and global initiatives such as the UN Heritage and coral reef programs.
c. Governance and operation of the CTMPAS prioritizes sustainable livelihood and improved quality of life benefits for resident coastal communities through .	In 5 years, a region-wide MPA system which is ecologically sustainable, socially responsible and effectively governed is established and operational, prioritizing the values of the community and the flow of benefits to them, resulting in sustain improvements in livelihoods (fisheries, coastal tourism) and social welfare.

A13: REVISED DRAFT OUTLINE FOR CTMPAS FRAMEWORK

This version represents the output of the REX, with edits by the MPA Resource Team immediately after REX3 to harmonize and streamline Outline/ST/Version 1.1 compiled in the REX last Framework session. This is the Annotated or Long Version with notes from the REX as the *INPUT* outline for the CTMPAS Framework Writing Team to use.

1. BACKGROUND

2. CT6 NATIONAL PROGRAMS and MANDATE FOR CTMPAS

3. STRATEGIC APPROACH

3.1 ROLES OF PLAYERS:

- Regional Exchanges: Bring CT6 counterparts, experts together to discuss and propose technical and political approaches, draft elements of the CTMPAS and share experiences as CT nations apply the MPA systems nationally and regionally
- TWG could serve as steering committee for CTMPAS at regional scale, can adopt proposed design elements, develop steering and coordination mechanism for CTMPAS, build upon governance objectives and criteria; link to NCCs. TWG could appoint an Advisory Group to support CTMPAS efforts and recommendations.
- CTI-CFF Regional Secretariat can help coordinate activities through E-Mail list, news updates and events calendar; hosts MPA Joint Workspace for virtual efforts; and links CTMPAS and MPA TWG to other CTI sectors and activities for integration, synergies and efficiencies
- NCCs: Develop national systems (compatible with CTMPAS as feasible) and help design, populate and manage CTMPAS for regional and national goals through national liaisons/coordination; Represent their Local Sites in Regional System
- Partners: Adopt short (1 year), medium (2-5 year) and long term roles and tasks in support of the CTMPAS at Regional and National levels
 - CT Atlas: Develop a long term (5 yr?) relationship to house CTMPAS database and data operations.
 - MPA networks and organizations: Develop long term (5 year?) relations to existing networks (e.g., LMMA) and organizations (e.g., IUCN, Coral Triangle Center, Asian Center for Biodiversity) to have leadership (TWG or Advisory roles or CTMPAS host institution), coordination (liaison) or implementation roles that facilitate continuity in expertise and support to CTMPAS.

3.2 APPROACH:

- Define the CTMPAS Framework and Early Actions (this document)
 - Use regional exchanges and a writing team under the guidance of the MPA TWG and Advisory Group
 - Define principles, objectives, criteria, structure for multiple objectives: first for achieving specific RPOA ecological and socio-economic objectives and second for creating an ecologically coherent MPA system.
 - Define initial sites for CT6 country inclusion and outreach/learning objectives, and future priority sites after a joint review of the *State of the Coral Triangle Report* and a regional gap analysis based on RPOA and ecological objectives

- Build the CTMPAS in steps building capacity as it develops:
 - 2013: Identify a host institution for operations, and develop a TOR and MOU/partnership with CTI-CFF Regional Secretariat (coordination) and MPA TWG (Steering Committee) for initial launch
 - 2013: Start slow by nominating one to five key, “ready” MPAs from each Country that have ecological or outreach significance to join an initial CTMPAS “set”
 - 2013/14: Conduct a GAP ANALYSIS to identify priority sites desired for recruitment in 2nd and future rounds of site nominations
 - 2015-?: Continue CTMPAS recruitment of priority sites and management improvement based on review of Gap Analysis and CTMPAS management capacity

- Operate the CTMPAS :
 - CT6 nations manage and report their own sites,
 - Regional tools and Best Practices will be shared with national and regional management effectiveness of the sites/system as the operational objectives; includes adaptive management approaches
 - Outreach, monitoring and learning/sharing will be key regional actions

4. **DEFINING THE CTMPAS**

4.1 **Goal, Purpose, Vision and Mission (From REX3)**

4.2 **Ecological, Socio-economic, Governance Principles, Objectives and Benefits of CTMPAS (From REX 3-see attached document)**

4.3 **Ecological, Social and Governance Criteria and Indicators for CTMPAS (From REX 3)**

4.4 **Combined structure, function, and categorization of MPAs and Systems in CTMPAS with their operational framework (Writing team will develop)**

4.5 **Process and Actions to Define the CTMPAS Priority Sites and Purposes**

- 2012: Define the CTMPAS Framework and Early Actions (this document)
 - Use regional exchanges and a writing team under the guidance of the MPA TWG and Advisory Group
 - Define principles, objectives, criteria, structure for multiple objectives: first for achieving specific RPOA ecological and socio-economic objectives and second for creating an ecologically coherent MPA system.
- 2013: Define criteria for initial small “set” of sites to be nominated to CTMPAS
 - Encourage CT6 country inclusion, address outreach/learning objectives and enable learning-by-doing for regional system.
 - Invite each country to nominate a few (1 to 5) key existing MPAs with recognized management authority/structure for first “set” in CTMPAS,
 - Request one larger MPA with good ecological properties per country as first key site
 - Define/Recruit a few outreach and learning sites (VIP sites near capital cities, learning sites?) for early sharing, promotion
- 2014: Define additional priority CTMPAS sites/criteria to be recruited
 - Conduct a regional MPA gap analysis based on CTMPAS objectives to fill in *State of the Coral Triangle* data gaps starting with existing national gap analyses (with CT Atlas and its GIS layers/metadata, partners)
 - Define priority gaps in CTMPAS initial “set” of sites to create a recruitment plan of additional purposes, locations, management practices needed to achieve CTMPAS objectives.

5. BUILDING THE CTMPAS

5.1 Identify a CTMPAS Operational Home Institution

- Initially could be CTI-CFF Regional Secretariat with regional organization; hold an open invitation process and workshop, with initial Terms of Reference based on CTMPAS Framework.
- Create an institutional agreement with CTMPAS Host organization (See details in “Section 6: Operating the CTMPAS”) with support to launch operational oversight

5.2 Encourage CTMPAS development (2012)

- Conduct an outreach and awareness targeted campaign to build political will with sites, national programs and regional organizations.
- Issue recruitment notice or invitation from MPA TWG to each CT6 to nominate at least one and up to 5 MPAs or systems (from anywhere in EEZ) for CTMPAS using a simple process
- Apply a Learn-by-doing environment to create initial regional management actions, procedures and reporting to institutional administrative processes to encourage discussion and flexibility in the management actions and expectations.

5.3 Review, Categorize and Accept Initial CTMPAS Sites (2013)

- Use the MPA REX#4: Management Effectiveness (Feb 2013) as forum for review of first round of CTMPAS nominations
 - TWG, with CT Atlas team, Advisory group and CTMPAS Home Institution will help define the CTMPAS parameters (e.g., size, habitat type) of each nominated site against Framework criteria to tabulate initial CTMPAS “set” of sites
 - Accept initial sites to launch CTMPAS operations (2013) with pilot approach in implementing administration and early activities

5.4 Use Gap Analysis to Recruit Additional Sets of CTMPAS Sites (2014)

- Review the gap analysis completed under the CTMPAS Defining Process (TWG with Advisors, CT Atlas team) to create a list of priority types or locations of sites for recruitment during the second round of CTMPAS site nomination (2014).
- Develop a living strategy or list to add MPA sites or systems to CTMPAS for the future. (2015 and beyond)

6. IMPLEMENTING THE CTMPAS

6.1 Administering CTMPAS

- Authorize and Establish CTMPAS institutional arrangement and operation through MPA TWG, Regional Secretariat, Host Institution (with Advisory group?)
 - Formalize that NCC serve as National stewards to manage and report (e.g., SCTR) progress and status of CTMPAS
 - Create annual work plan, budget, monitoring and reporting protocols
 - Develop Strategies, Coordination and Sustainable Financing Mechanisms for CTMPAS
 - Track Design and Build Process, and formalize/document Nomination process for MPAs/Systems; Selection and Listing of MPAs/Systems
 - Develop CTMPAS action plan through 2020

- Enhance regional coordination and collaboration
 - Establish Annual CTMPAS Sharing and reporting event (Symposium with Planning Workshop)
 - Develop Public/Private Partnerships at regional scale (and national if feasible)
 - Develop and Implement Communications Program
 - External/Internal
 - Publications/papers
 - Press releases, social media

6.2 Promoting and Building Awareness of CTMPAS

- Promote and advocate CTMPAS in CTI and Globally
- Build constituency for the CTMPAS

6.3 Technical and Stakeholder Inputs to CTMPAS

- Establish Regional Forums for consultation
- Establish a CTMPAS Advisory Group (Reps from MPA TWG, Home Institution, Regional Secretariat, CT6, Experts/partners) to review and prepare inputs to TWG decision-making process
- Establish CT Atlas as core data base (source and sink for CTMPAS GIS information)
- Establish standard operating procedures

6.4 Operational Activities under CTMPAS

- Update and review shared data system and analyses
- Identify of Gaps of Initial CTMPAS Set
- Revise recruitment strategy and process for new MPAs/networks to join CTMPAs
- Propose and implement adaptive management
- Develop and promote best practices (e.g., EAFM)
 - Role of MPA learning network
 - Award/certification program
 - Capacity development
- Build and Apply Tools, Database and other Knowledge Management system

6.5 Tracking and Reporting

- Monitor and Report from CT6 and Regional on CTMPAS Objectives, Status
- Indicators and Targets

7. CTMPAS SHORT, MEDIUM AND LONG TERM ACTION PLAN

(See Annex I5)

GLOSSARY

POLICIES

ANNEXES

Acronyms

Existing Programs, Efforts for Linking

Members of MPA TWG, Advisory Group, Focal Points

A14: PROPOSED SELECTION CRITERIA FOR CTMPAS FROM SESSION 3.4 (ANNOTATED)

Note: These outputs were presented in Session 4.1.

Governance criteria		
Objective	Criteria	How site criteria will contribute to meeting network objectives
Integrated management framework for ecosystem based management	Integrated management Institutional and governance considerations Type of management measures Training M&E On-site research	EBM that includes fish, research sites and conservation sites and involves many agencies
Political will, leadership and authority (which includes decision making processes)	Political will and leadership Institutional and governance considerations Decision-making structure	Easy access, high value sites (e.g. World Heritage sites), transboundary site, involvement of both CT6 and partners
Institutional arrangement and coordination (which includes clearly defined objectives, monitoring and surveillance and conflict resolution mechanism)	Integrated management Political will and leadership Institutional and governance considerations Decision-making structure Type of management measures Training Surveillance Conflict resolution Monitoring and evaluation On-site research	Timeline and milestones, for example in the preparation of action plans Identification of government agencies, protocols and activities to support CTMPAS, including research involving partners
Comments: On how “conflict resolution” can be used as a criterion for selecting MPAs for a CTMPAS: The group said they did not come up with “a clear conclusion” on how to apply the criterion, “but we decided it should be considered.”		

Social criteria	
Objectives	Criteria
Education	<ul style="list-style-type: none"> □ Economic considerations (low-cost) □ Social considerations (easy to understand; simple) □ Cultural considerations (relevant and sensitive to local context) □ Shared learning opportunities (sites with easy access for learning/demonstrating opportunities) □ Others: Potential future conservation practitioners/leaders within sites (building human resources through education objective)
Communication	<ul style="list-style-type: none"> □ Economic considerations (low cost; access) □ Social considerations (appeal to users for sharing information, e.g. Facebook, other social media) □ Cultural considerations (access to the communication, including language and use of appropriate terminology, e.g. radio for some areas; locally appropriate content) □ Shared learning and opportunities (accessibility to disseminate information as well as accessibility to various means to collect/exchange information; opportunities to share/give input) □ Other – Use of maps (maps, e.g. CT Atlas, are very effective tools for communication, so the site must offer opportunity for map data to be prepared and shared)
Cultural values	<ul style="list-style-type: none"> □ Economic considerations (not expensive to plan and implement activities) □ Social considerations (willingness to incorporate local wisdom on planning and implementation) □ Cultural considerations (willingness to incorporate local wisdom in planning and implementation) □ Shared learning and opportunities (site with traditional management; cultural and traditional system is embedded in the MPA management processes already) □ Other <ul style="list-style-type: none"> - Sites with fully community-led MPAs - Sites established for cultural other values (sites that have been established primarily for their cultural value should be prioritized)
Sustainability (livelihood and social welfare)	<ul style="list-style-type: none"> □ Economic considerations (some initial system in place to ensure financial sustainability; potential to establish financial sustainability, or at least the presence of strategy for sustainable financing) □ Social considerations (demonstration of economic benefits of MPAs to local communities, i.e. sites to be included in the CTMPAS should show visible economic benefits) □ Shared learning and opportunities demonstration of economic benefit of MPAs to local communities (sites to be included in the CTMPAS should show visible and documented economic benefits) □ Other – Opportunities for and demonstration of public private partnerships; effective co-management in place
<p>Comments:</p> <p>Because the language issue appears to be an important concern for the social component and especially because community outreach is a crucial component of MPA work, it was suggested that use of language-specific materials or programs should be included as a criterion under the social component. The group said while they agreed that it would be useful, “that kind of discussion would be “really site level” and that “from a more regional perspective, there are existing MPA databases and profiles that the countries or the NCC can study and draw information from on some of the social considerations. There would be information gaps, but it would be something to start with.”</p>	

Ecological criteria		
Objectives	Criteria	Duration
Conserve coral reefs and associated habitats that are resilient to climate change (and other threats)	Representation (e.g. includes wide range of coral reefs from fringing to atolls to nearshore reefs) Replication/redundancy (risk spreading) Connectivity (corridor for facilitating connectivity, e.g. larval dispersal, settlement, etc.) Resilience (resilient sites, e.g. mangroves) Unique/critical habitats (areas of high endemism) Source populations (speciation areas) MPA size (to consider life history range, status of resource) Other (spacing based on source-sink/oceanographic processes, e.g. consider upwelling)	Long-term/permanent?
Support healthy and increasing fish populations	Representation (covers life cycle) Connectivity (covers life cycle including source and sink) Unique/critical habitats (cover life history of species) Source populations (spawning sites, larval dispersal areas/range) MPA size (covers life cycle, including survivorship) MPA shape (based on the purpose of protection, e.g. maximize spillover) Adequacy/viability/permanence (spawning aggregation sites showing high site fidelity/permanence)	Long-term and short-term (seasonal)?
Maintain or recover populations of threatened species for intrinsic value, education and scientific value and human heritage value	Replication/redundancy (critical habitats) Connectivity (migration corridors) Resilience (expansion of sites, e.g. turtle nesting sites) Unique/critical habitats (depending on the species to be protected, may be pristine nesting/foraging sites, migratory corridors, "sacred" species such as mola mola, manta aggregations) Source populations (nesting habitats, calving area) Foraging or breeding grounds MPA size (core area, buffer zone, general use zone) Adequacy/viability/permanence (areas with viable populations) Other <ul style="list-style-type: none"> ▫ Select areas under minimal threat ▫ Accessibility for education and science 	Seasonal?
<p><i>Comments:</i></p> <ol style="list-style-type: none"> 1) ?in the third column means "Do you want to think about this later?" 2) On whether or not upwelling should be considered at the regional level in relation to primary production and currents (rather than climate resilient coral reefs), and where the upwelling areas might be that have regional significance and could be linked to the CTMPAS: On the Pacific side where the Mindanao throughflow is experienced, the upwelling system influences Indonesia, PNG and the Solomon Islands, so it is crucial to nearshore fisheries in these countries. In the Sulu Sea, there are upwelling conditions of both the oceanic and internal wave types that influence the productivity of the area and relate to movement of fish and other organisms in that area. This is relevant also because upwelling is affected by the ENSO, which then translates to climate change effects. 3) Upwelling can be an important criterion for all three objectives, i.e., not only climate resilient coral reefs and healthy fish populations, but biodiversity conservation as well. There are MPAs that focus on areas where there are manta rays, or mola mola and all this cluster of biodiversity targets that on their own might be a target of protection. 4) The countries might also want to consider as an ecological criterion the presence of important regional endemics in certain areas like ecoregions. 		

General comments

1. Many of the criteria are very precise but at a very micro level, which may pose a challenge from the practical standpoint of extracting the level of information needed to evaluate all MPA sites within the whole Coral Triangle against such criteria.
2. Malaysia said that it would be “very easy” for them to get inputs from local communities that are involved in MPA management, because these communities are organized and have a management council composed of community members that can provide the information.
3. There was a question about whether or not the CTMPAS should include a wide representation of MPAs meeting the different criteria rather than only those MPAs that meet a certain minimum set of criteria.
4. Timor-Leste recalled that the countries agreed during the regional exchange in Phuket to designate one site (per country?) to be a demonstration site or site for future learning or sharing experience.
5. The Philippines said the regional system may want to consider “incremental benefits that can be derived” from including an MPA. “At the regional level, there might be important criteria that we would need to consider in order that we can generate incremental benefits or added value, and we might need to look at more considerations of convergence between the social, ecological and governance concerns,” they explained. “If we don’t have criteria, then everything can be included.”
6. Malaysia said if convergence was the main consideration, Malaysia could nominate Tioman Island, “which has social, ecological and governance systems and where we have everything there.”
7. The Solomon Islands said that whether the intention is to have a wide representation of MPAs for learning or to have MPAs that meet a set of overall regional criteria, they have sites that they could nominate. “The important thing is that we decide what the criteria are about,” they pointed out.
8. Indonesia said they have always considered all three categories of criteria in selecting sites for MPAs, although “it is true that the socioeconomic criteria are often more dominant than the other criteria.”
9. The resource team noted that with respect to the ecological criteria, “it is pretty clear that the distribution or placement of MPAs would be a very important consideration if we want to capture all the processes and life cycles that we consider crucial to achieving our CTMPAS objectives.” It might also be useful to consider whether some of the objectives have some spatial components, like fisheries and tourism.
10. The resource team asked whether “the regional system should look at processes or places that operate or are unique or are benefiting the region overall and encourage those countries where those processes or places exist to participate in the regional network?” Not everything can be included in the CTMPAS, but the selection process can also be used as a way to look for things that are not already in the system but should be included.
11. The Philippines said the question may be whether or not to give some criteria bigger weights compared to the other criteria. “But that’s a process question that we can decide on later,” they added.

A15A: DRAFT LIST OF ACTIONS AND ACTIVITIES FOR CTMPAS

Note: These outputs were presented in Session 5.2; Colors distinguish short, med or longer timelines

Strategic Planning				
Due Date	Task	Timeframe	Responsible Group	Notes
30-Mar-12	Finalize TOR for TWG	Draft completed; finalize end April 2012;		
3-May-12	Sign Final TOR for TWG at High Level Financial Round Table	Sign at high-level financial round table meeting May 3rd.		
1-Apr-12	Review financial resources strategy	This week		
1-Apr-12	Create writing team for CTMPAS (one from each country)	This week, finalized by NCC by mid April.		
15-Apr-12	Finalize CT6 inputs financial resources strategy	Mid April		
15-Apr-12	Writing team members finalized by NCC	Mid April		
15-Apr-12	MPA REX3 participants report back to NCCs	Mid-April.		
15-Apr-12	Workshop report from MPA REX 3 written; circulated;	Mid-April.		
15-Apr-12	Workshop report from MPA REX 3 reviewed by participants	End April.		
1-Jul-12	Writeshop to finalize strategic plan (writing team)	July 2012.		
1-Jul-12	Write TOR for responsibilities of interim home institution of CTMPAS (writing team)	July 2012 (at writeshop)		
1-Sep-12	Workshop to support development of MPA M&E system in PNG & Solomon Islands (in roadmap from REX2)	By September 2012 (Solomon Islands)		
1-Sep-12	Develop project proposals to fund implementation of specific CTMPAS priority activities	September 2012.		
Ongoing	Plan MPA REX 4: MPAME	Start planning this week (to be held Feb 2013)		
31-Dec-12	Workshop to support national mechanisms for contributing data to CT Atlas (Philippines, Indonesia, Malaysia)	2012 (Philippines, Indonesia, Malaysia) and 2013 (Timor Leste, PNG, Solomon Islands)		
1-Feb-13	Site nomination to CTMPAS (officially)	Feb 2013 (at REX4)		
31-Dec-13	Workshop to support national mechanisms for contributing data to CT Atlas (Timor Leste, PNG, Solomon Islands)	2012 (Philippines, Indonesia, Malaysia) and 2013 (Timor Leste, PNG, Solomon Islands)		

Define & Build				
Due Date	Task	Timeframe	Responsible Group	Notes
30-Mar-12	Task One: Develop Institutional Arrangements a. Charge the CTMPAS Support Group	30-Mar-12	TWG	This group will provide technical inputs and assistance to the TWG
31-Mar-12	Complete and Disseminate the Action Plan a. Assign a Writing group	Today	TWG	TWG may need to commission someone).
6-Apr-12	Complete and Disseminate the Action Plan b. Complete draft from MPA REX	6-Apr	TWG	
20-Apr-12	Complete and Disseminate the Action Plan c. Circulate to the NCC to get their input	Input is due April 20	TWG	
3-May-12	Complete and Disseminate the Action Plan d. Refine Draft and present Manila High Level Financing Round Table (HLFRT)	3-May	TWG	
1-May-12	Complete and Disseminate the Action Plan e. Form Promotion team to make plan to Raise Profile of CTMPAS at ICRS	First week of May 2012	TWG	Perry, Pak Awang, Jimmy, and Celestino and others will assist TWG
30-May-12	Complete and Disseminate the Action Plan f. Charge a small group to finalize criteria	30-May	TWG	With support of CTMPAS SG
31-Jul-12	Complete and Disseminate the Action Plan g. Final rounds of consultations and input on Action Plan	31-Jul	TWG	
1-Nov-12	Task One: Develop Institutional Arrangements b. Institutional Arrangements by November 2012.		TWG	
1-Nov-12	Task One: Develop Institutional Arrangements c. Draft Proposal for the Institutional Arrangements	October November	TWG	TWG will commission someone to work on this. This will include proposal on coordination mechanisms, information sharing, consultation mechanisms, and sustainable financing
1-Jan-13	Task One: Develop Institutional Arrangements d. Consults with the NCCS and get their input	Jan-13		
30-Mar-13	Task One: Develop Institutional Arrangements e. Final Institutional Arrangements Approved by SOM	By first quarter of 2013 (end of March)		
1-Sep-12	Task Two: CTMPAS Component Development a. Socialize Criteria with the Countries (note these criteria will developed by August of 2012 as part of the action plan).	Sep-12	TWG	
1-Nov-12	Task Two: CTMPAS Component Development b. Nominate Sites (1 to 5 by each country)	Nov-12	TWG	
1-Jan-13	Task Two: CTMPAS Component Development c. Rapid Gap Analysis by January 2013	Jan-13	TWG	
1-Jun-13	Task Two: CTMPAS Component Development d. Recruit to fill the Gaps by June 2013.	Jun-13	TWG	

Implementation / M&E				
Due Date	Task	Timeframe	Responsible Group	Notes
Short Term	1. Operation of Advisory/Steering Committee -- Short term working group to formulate design and structure of M&E framework that is adaptable and complementary to existing M&E programs			Working group to be appointed by TWIG
Short Term	2. M&E Program Development -- Design M&E framework based on existing and emerging country approaches already underway including: -standardization -tracking & reporting -adaptive management			To be considered by TWG with support to come from Philippines and Indonesia and advised by other in-country approaches
Mid Term	3. Enhancing Regional Coordination and Collaboration§ Partnership development -scope out types of partnership needs (both country and regional level needs)-NCCs to start to ID and link to NPA, then coordinate between countries-Present CTMPAS partnership recommendations at Business Summit (Oct 2012)	Short term: prepare recommendation for Summit <u>Long term</u> : on-going process of identifying needs and partners		
Mid Term	4. Tools, Database and Other Information/Knowledge Management Systems Inventory (library) of knowledge management systems (short term) - Tools then need to be reviewed, adapted, translated and circulated - Identify training needs in relationship to the tools - Based on above analysis, make determination on long term application and role of CT Atlas, Learning Network, capacity building, tools and support services (ongoing)	<u>Short term</u> : inventory <u>Long term</u> : ongoing analysis of need for specific information and knowledge management systems		
Long Term	5. Develop and Promote Best Practices - Decision need to be made on framework for Learning Network - Development of award/certification program - Gap analysis of BMPs/tools - Inventory of capacity building opportunities - Needs assessment for capacity building priorities		Could possibly be a task for the CTC	
Long Term	6. Financing mechanism for M&E program -Financing requirements directly link to scope of M&E program - Determination of needs to be made on financial requirements at the regional and national levels - Funding sources to be identified		Design of M&E program needs to be determined before this activity can take place	
Long Term	7. Communication - Develop regional CTI-wide communication plan - Branding of CTI - Consolidate various existing communication pieces (e.g., multiple web sites) - Communication plan specifically for results of M&E results		This is a long term priority as well as an on-going need	

A15-2: REVISED CONSOLIDATED ACTION PLAN FOR CTMPAS (2012-13)

DATE/ Target	ACTION	STRATEGY	DESIGN/ BUILD	GOV/ OPERATE	NOTES
On going	PLAN REX#4: CT6 Share Mgt Effectivness Pilots/Lessons Learned (for Feb 2013)	X		X	
30-Apr-2012	Review Financial Resources Strategy: CT6 prepare national recommendations for Strategy prior to High Level Round Table	X			
30-Apr-2012	Finalize CTMPAS Writing Team: CT6 send name to L. Laroya and A. White mid April	X			
30-Apr-2012	DRAFT and FINALIZE REX REPORT: REX Draft Report sent to CT6 for review and Country Reporting mid April; Finalized by end of April for High Level RT	X			
30-Apr-2012	Consolidate and Disseminate 1 Yr Action Plan, Draft Criteria: USCTI sends to Writing Team/TWG				
April to July 2012	Establish Advisory/Steering Team to input Specifically on Monitoring and Evaluation framework and indicators: CT6, MEWG and Write team ID advisors, and request input to consider adaptable M&E component of Framework compatible with existing systems			X	
3-May-2012	HI LEVEL FINANCIAL ROUND TABLE: :1) Distribute 1 page CTMAPS STATUS : 2) Discuss Finance Strategy in Dialog : 3) Get Approval (TWG: Side chat?) on CTMPAS 1 yr Action Plan and TOR : 4) ID Team and Plan to Promote CTMPAS at ICRS	X	X		
30-Jun-2012	Revise CTMPAS Design and Criteria from REX for Outside Comment; PREP ICRS Poster/Request for Comment: Write team works virtually and consolidates REX outputs and preps 2-page Design Plan for CTMPAS		X		
6-Jul-2012	ICRS INPUTS on CTMPAS DESIGN at CTI Booth: CTI Booth is staffed by MPA folks to collect feedback, interest in adding info, etc.	X	X		
end of July/ Aug 2012	CTMPAS Write Shop in Manila (Ramadan) with CT6, Experts: ICRS inputs and final design, action plan, etc. reviewed in Workshop; TWG supports. Includes TOR for CTMPAS; home institution and M&E Program design/plan.	X	X		

DATE/ Target	ACTION	STRATEGY	DESIGN/ BUILD	GOV/ OPERATE	NOTES
end of July/ early Aug 2012	Develop M&E Program: Design M&E framework based for CTMPAS Framework on existing and emerging country approaches already underway including standardization, tracking & reporting, adaptive management			X	To be considered by TWG with support to come from Philippines and Indonesia and advised by other in-country approaches
1-Sep-2012	SMALL Workshop to support development of M&E Systems in PNG and Sol Is (in Sol Is): from REX 2 plan	X		X	
1-Sep-2012	Develop specific Priority Action proposals for CTMPAS activities to sponsors: TWG and support teams prepare.	X			
Oct 2012 (Bus Summit)	Enhancing Regional Coordination and Collaboration: Develop Partnerships: -scope out types of partnership needs (both country and regional level needs) -NCCs to start to ID and link to NPA, then coordinate between countries -Present CTMPAS partnership recommendations at Business Summit (Oct 2012)			X	
30-Nov-2012	Develop CTMPAS Institutional Home Arrangements: TWG and Write Team works with Reg Secretariat Sept-through Nov to draft. TWG will commission someone to work on this. This will include proposal on coordination mechanisms, information sharing, consultation mechanisms, and sustainable financing		X		
31-Dec-2012	Socialize CTMPAS in CT6, Region: TWG and NCCs socialize CTMPAS Status, Criteria, Purpose, Consultations towards site nominations				
31-Dec-2012	SOM 8: (Date TBC) Present CTMPAS to SOM for Endorsement and Approval to Operationalize CTMPAS.	X	X		
31-Dec-2012	Conduct Workshop to support national mechanisms for contributing data to CT Atlas (Indonesia, Malaysia, Philippines)	X	X		
Feb-2013	REX#4: Mgt Eff: Other Results: : 1) MPA TWG Meeting : 2) CT6 formally nominate sites to CTMPAS : 3) Institutional Arrangements Finalized/Approved by SOM	X	X		

DATE/ Target	ACTION	STRATEGY	DESIGN/ BUILD	GOV/ OPERATE	NOTES
Feb to Jun 2013	Prioritize next CTMPAS site nominations/request: TWG requests Gap analysis from 1st Nominated Set of sites, and Recruits Next round of sites from CT6		X		
Feb 2013 (Start At REX#4)	Define Tools, Database and Other Information/Knowledge Management Systems in CTMPAS Program : 1) Inventory (library) of knowledge management systems (short term) : 2) Tools then need to be reviewed, adapted, translated and circulated : 3) Identify training needs in relationship to the tools : 4) Based on above analysis, make determination on long term application and role of CT Atlas, Learning Network, capacity building, tools and support services (on-going)			X	TWG to define process, this is early stage of implementation; Short term: inventory Long term: on-going analysis of need for specific information and knowledge management systems
Feb -Dec 2013	Develop and Promote Best Practices : 1) Define Relevant approach for Learning Network : 2) Development of award/certification program : 3) Gap analysis of BMPs/tools : 4) Inventory of capacity building opportunities : 5) Needs assessment for capacity building priorities			X	Could possibly be a task for the CTC
Feb -Dec 2013	Financing mechanism for M&E program Financing requirements directly link to scope of M&E program; determination needs to be made on financial requirements at the regional and national levels ; and funding sources to be identified			X	Design of M&E program needs to be determined before this activity can take place
Feb -Dec 2013	Communication Develop regional CTI-wide communication plan: branding of CTI/CTMPAS, consolidate various existing communication pieces (e.g., multiple web sites); communication plan specifically for results of M&E results			X	This is a long term priority as well as an on-going need
31-Dec- 2013	Conduct Workshop to support national mechanisms for contributing data to CT Atlas (PNG, Sol Is, Timor-Leste)	X	X		

A16: DRAFT TERMS OF REFERENCE OF THE CTI MPA TWG (to be presented to SOM8 for approval)

CTI MPA Thematic Working Group: Structure and Operations

1.0 Purpose and Tasks of the MPA TWG

The RPOA has five Goals, and technical working groups are created to help facilitate progress on achieving these goals were approved at SOM5, along with a general Terms of Reference for all the TWGs.

The primary function of the MPA TWG, as provided by SOM6, is to provide technical inputs and recommendations to the Regional Secretariat and the National Coordinating Committees of the CT6 in achieving the over-arching goals that have been set forth in the RPOA. Generally as approved by the SOM6, the Working Groups shall:

- Convene Working Groups meetings and discussions by creating CT6 team and partners for each theme.
- Coordinate and assist identification, compilation, and consultation of thematic issues in CT6.
- Assist regional exchange and workshop as public consultation.
- Communicate with CT6 focal points, experts, partners, and other groups on specific theme.
- Prepare technical and communication material on WG matters to be distributed to Regional Secretariat and CT countries.

Specifically, the MPA TWG may also perform the following functions:

- Track and report on the progress on the implementation of the regional priority actions especially pertaining to the MPA goal and targets
- Guide and review progress on other actions in the RPOA as requested by SOM
- Collaborate with the CT Atlas in drawing the relevant map data layers as well as non-spatial attribute data
- Provide inputs and review of the regional State of the Coral Triangle Report especially the chapters relating to the MPA goal and targets
- Prepare and review the MPA TWG inputs to the CTI Annual Progress Report
- Link with Learning Networks for collaboration
- Assist in the organization and conduct of regional exchanges and workshop as public consultations
- Review and make inputs on funding proposals, reports and other related CTI activities.

2.0 Membership and Structure

2.1 Membership. The MPA TWG shall be composed of at least two representatives from each of the CT6 (Indonesia, Malaysia, Papua New Guinea, Philippines, Solomon Islands and Timor Leste), a representative from the Regional Secretariat and CTI-CFF partners. The NCC of CT6 countries shall designate representatives to the MPA TWG meetings. However, decision-making shall be lodged with the CT6 members.

2.2. Term of the Chair and Vice Chair.

The term of the Chair and Vice Chair is two years starting on 01 January of the year, following the confirmation of the SOM. The MPA TWG will decide the subsequent Chair and Vice Chair.

3.0 Program Planning and Coordination

3.1 Regular MPA TWG meetings. The MPA TWG shall conduct at least one meeting annually to prepare the annual report and submit to the SOM. The schedule of the meetings will take into consideration planned CTI regional events and SOM / MM meetings. In addition to the annual meeting, conference calls may be arranged among the MPA TWG focal points to keep the CT6 abreast with the developments on the MPA TWG work plans and progress towards the overall MPA target across the CT6. The Chair shall inform the TWG focal points of the CT6 at least two weeks prior to the date of the conference call and the agenda.

3.2 MPA TWG Annual Work Plan Preparation and Presentation to SOM. In coordination with and support from the CTI-CFF Regional Secretariat, the MPA TWG shall prepare an annual work plan showing directions and activities leading towards the successful completion of the priority actions set forth by SOM on MPA goal and targets. The MPA TWG shall encourage the support and participation of the CTI-CFF development partners and other TWGs in drawing the MPA TWG annual work plan.

Resource allocation needed to complete the activities presented in the annual work plan shall be integral in the work plan preparation. The funding sources from within the CT6 governments and development partner organizations will be identified and form part of the presentation of the work plan to SOM.

3.3 Collaboration with other TWGs. The MPA TWG shall coordinate and collaborate with other CTI TWGs and the Regional Secretariat in the planning and conduct of regional priority actions.

3.4 Collaboration with Technical Experts and Supporting Institutions and Organizations. The MPA TWG shall invite and duly recognize the technical experts and supporting institutions (e.g. academe and research organizations) as technical advisers to the TWG. The Regional Secretariat shall assist the MPA TWG in putting together a pool of technical advisors which will be called on for specific questions or issues. The specific functions of the technical advisors are:

- To provide technical support in the compilation, review and analysis of data/information and provide decision support regarding issues relating to RPOA MPA goal and targets
- To provide technical support in the preparation of communication messages including press releases, and other information and communication materials
- To guide the preparation and/ or review concept notes and or funding applications
- To guide the preparation of reports of CTI regional activities concerning MPAs

3.5 Monitoring and Reporting of Progress. The MPA TWG shall develop an M&E system and indicators to track and report on progress of the MPA TWG work plan implementation and the achievement of the MPA goal and targets. The MPA TWG shall review and provide inputs to the MPA Section of the State of the Coral Triangle Report (SCTR).

4.0 Administrative Support to the MPA TWG. The administrative support for the TWG shall be provided by the country chairing the TWG. Coordination with other CT6 countries pertaining to schedules of activities, collaboration with other countries and other related activities should be coordinated with the regional secretariat.

5.0 Financial Arrangements

The MPA TWG will extend assistance in mobilizing financial resources in support to the implementation of the annual work plan as well as in the operations of the TWG.

Approved, this 30th Day of March 2012 in Sanur, Bali, Indonesia.

A17: Participants Evaluation (1= low, 5 = high score)

Questions	Score from Participant # (n=10)										Ave.	Consolidated Comments
	1	2	3	4	5	6	7	8	9	10		
1. To what extent did this REX meet its objectives:												
a. share experiences and understand the status and context of progress on MPA networks/systems in each of the CT countries	5	4	5	4	3	4	3	4	4	4	4.0	Different levels of MPA networks/systems; good experience to benefit the countries; new to some CT6; provided new ideas on developing MPA networks/system
b. share the latest technical and scientific guidance on MPA network design and implementation and discuss strategies to apply this information in CTMPAS	4	4	5	5	4	4	4	5	3	4	4.2	Needs more discussions on the approach to bring down to local communities; some very useful ppt. on the design and implementation; experience from other countries provide inputs to national strategies
c. develop a CTMPAS Framework (goal, objectives, strategies and actions)	5	4	5	3	3	4	4	5	3	4	4.0	Catches all levels of expectations and aspirations especially at the community level; useful info and guide to countries; we are almost done, some more work to do; useful process for developing goal, objectives, strategies and activities
d. develop a roadmap to operationalize the framework and other recommendations to the MPA TWG	5	4	5	5	3	4		4	4	5	4.3	Ambitious; national MPA TWG can also develop a roadmap in line with the CTMPAS; done, now up to TWG to execute or carry them forward; very useful activities to provide plan for future work
e. conduct MPA Learning Network activities (site visit, dialog, increased understanding)	5	4	5	5	4	4	5	4	3	4	4.3	Very important to learn from each country; interactive - a good experience; an eye opener how the communities in different group/activities are united and their committed; very effective at all levels; obtain first hand info on activities carried out
f. conduct a MPA TWG meeting with associated outputs including recommendations to the SOM and the draft terms for the 4th Regional MPA Activity on MPA Effectiveness	5	4	5	3	4	4	5	4	4	4	4.2	Provides clear picture to move forward the CTMPAS; getting there and the TWG will do this after their meeting today
2. To what extent did the MPA REX meet your expectations, and why?		4	5		4	4	3		3		3.8	There are information and design of the MPAs which really help us to improve the design of existing ones;
3. How useful were the case study presentations? What would you want different?		4	5		3	4	4		3		3.8	The case study was useful nevertheless, rehabilitation programs carried out by local communities on corals need to be presented also
4. How useful was the field visit? What would you want different?		4	5		4	4	4		3		4.0	A good example of how the communities shows commitment and responsibility towards natural resources
5. How effective was the facilitation and management of the workshop? What would you want different?		4	4		4	4	3		3		3.7	
6. How appropriate was the length of the REX? - too long, too short or just right?		4	5		2	2	3		3		3.2	Just right but should provide time to relax; too long (2); many topics discussed;
7. How appropriate was the amount and relevance of information provided? (Binder, Presentations, E-files)		4	5		4	3	4		3		3.8	Better hardcopy and softcopy
8. Did we provide enough opportunity for participant discussion, questions and participation (use of time)?		4	5		4	4	4		3		4.0	
9. On a scale of 1-10 with 10 being the best, what is your rating of the REX?	9	8	9	10	8	8	7	5	6		7.8	Very informative and with rich discussions
10. Please provide an further comments, suggestions or ideas you may have	The representatives from CT6 should be consistent; this MPA REX is an opportunity to learn and share what we have with other countries and we will improve with lessons learned from other countries; need to focus on objectives and agenda of the workshop -2 ; length of the course would be better to be shortened-2 (max 3-4 days); agenda is too tight-2, need more to digest; need more discussions; include impact of climate change to MPAs; present case study which can be applied or replicated to other sites											