



CORAL TRIANGLE INITIATIVE

ON CORAL REEFS, FISHERIES AND FOOD SECURITY

Progress Towards the Development of the Six Country Coral Triangle Marine Protected Area System (CTMPAS)

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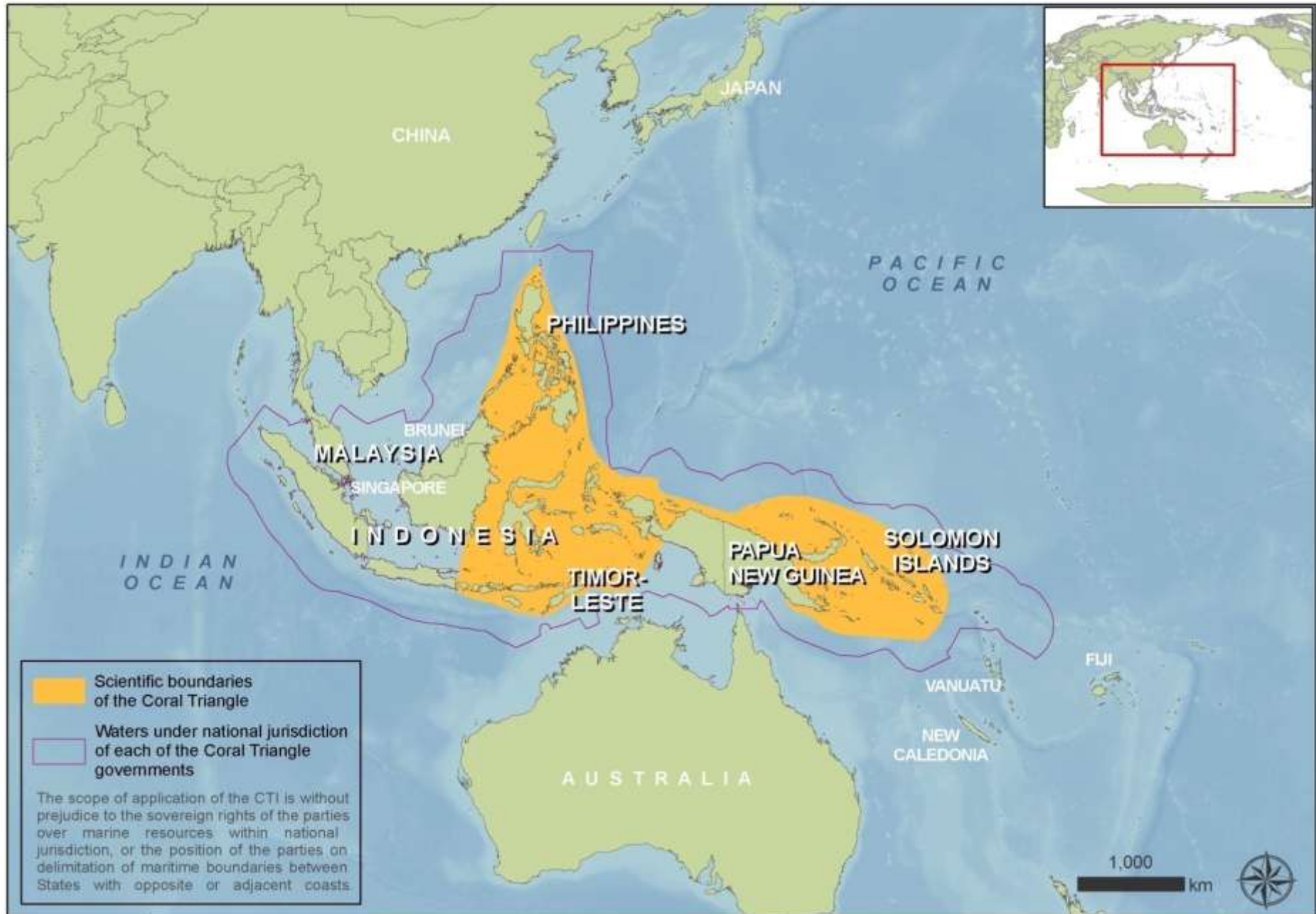


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Coral Triangle Region

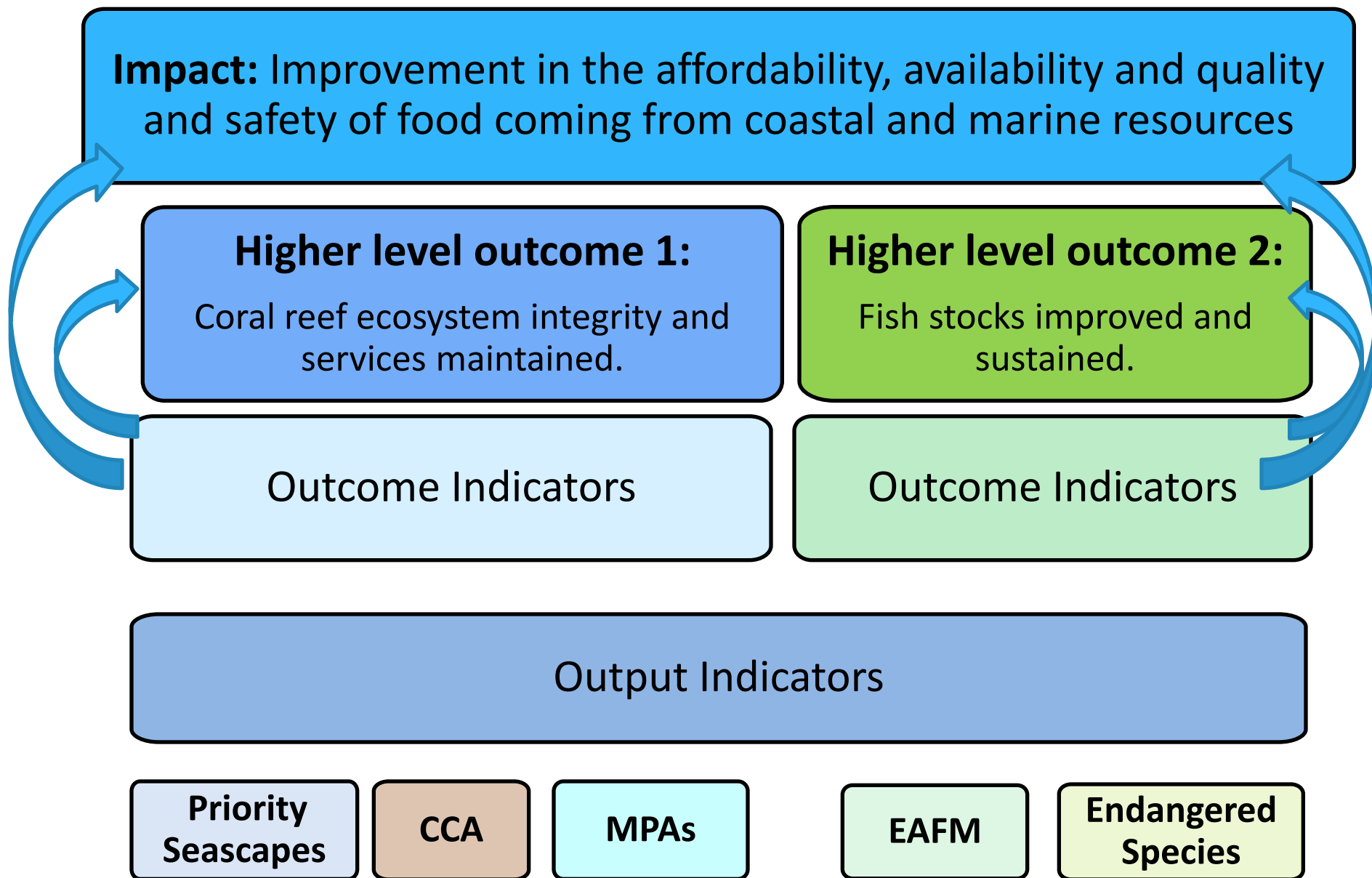


May 15, 2009

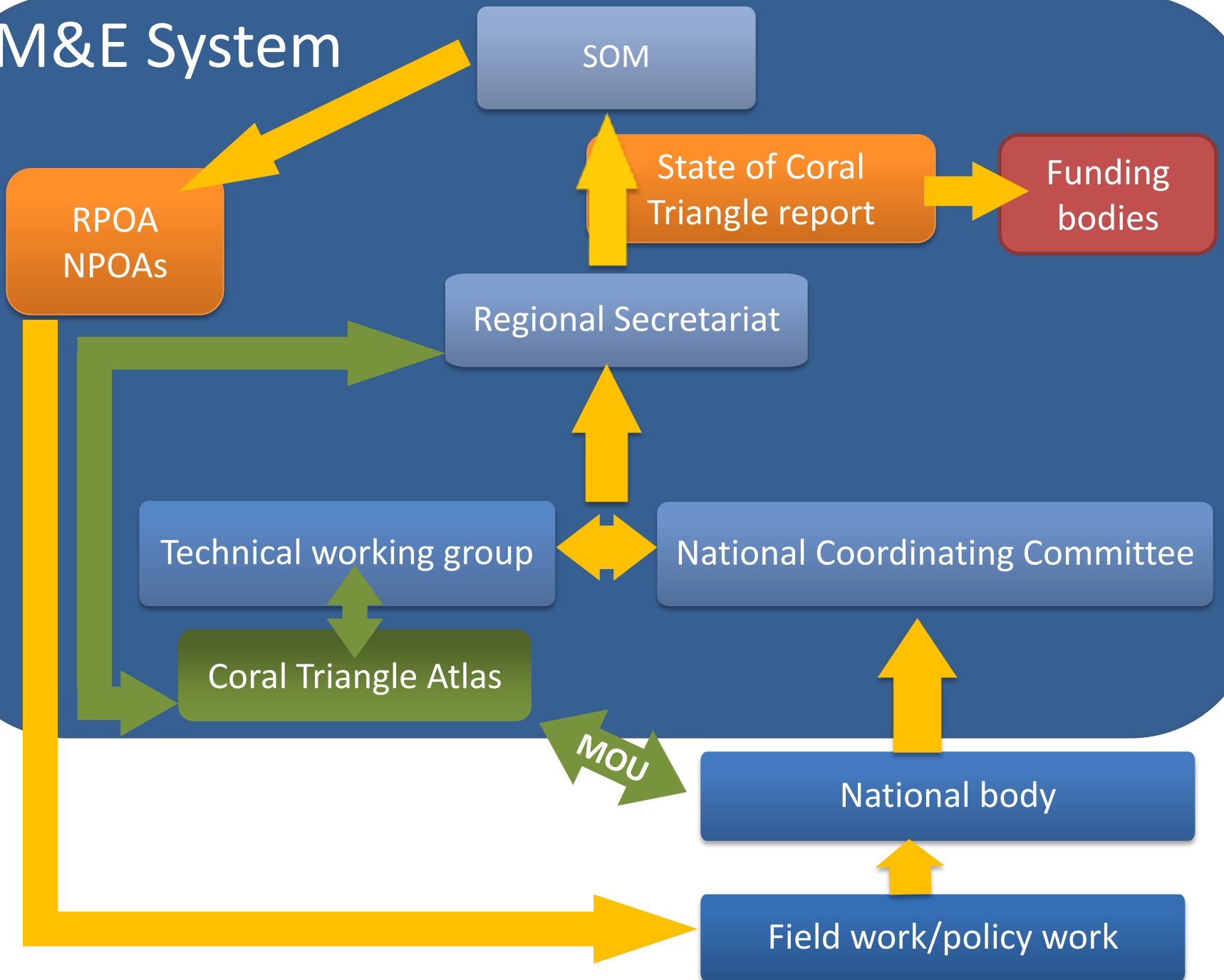
Coral Triangle Heads of State Launch the Initiative!



CTI-CFF Regional Plan of Action M&E Framework

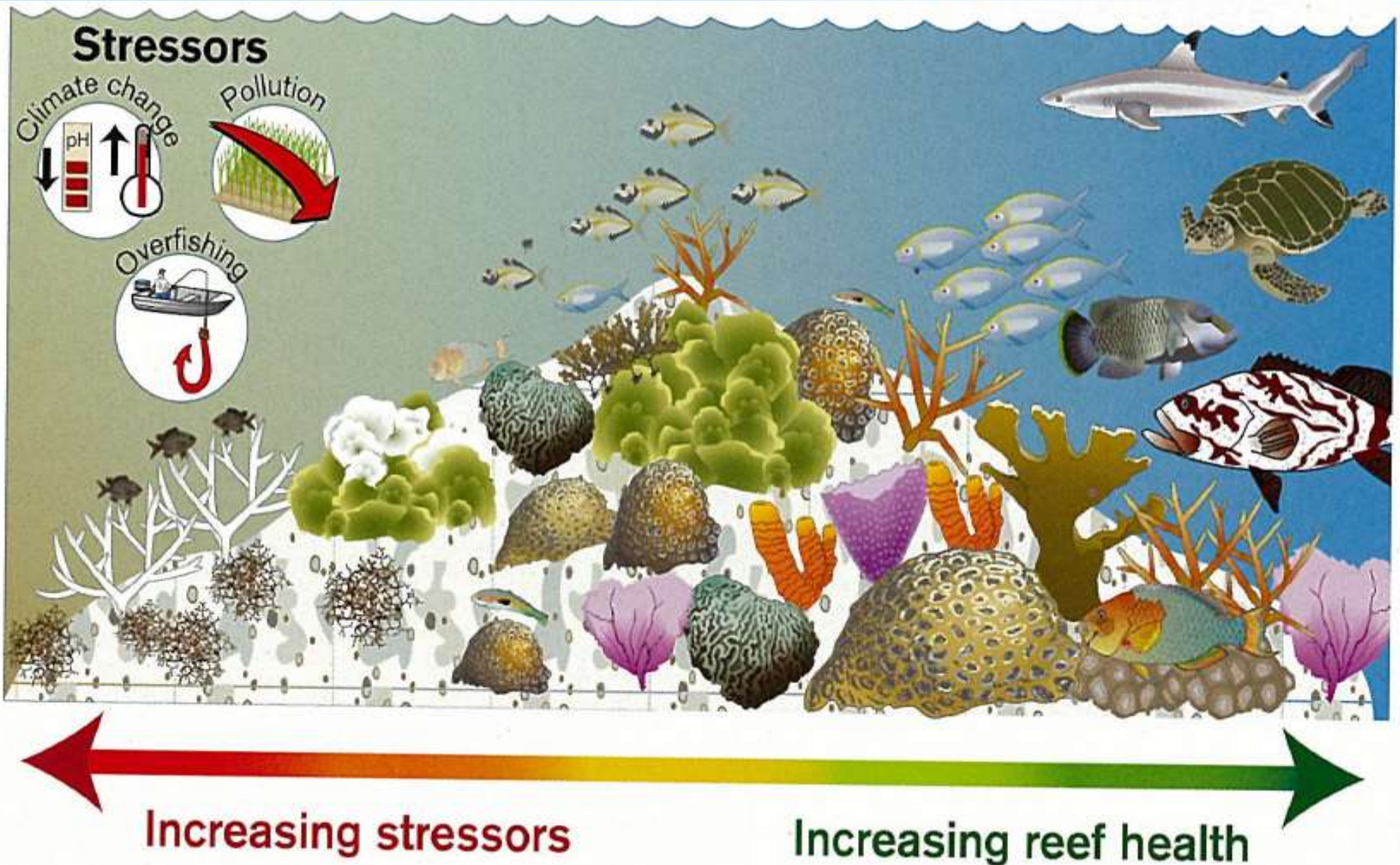


M&E System



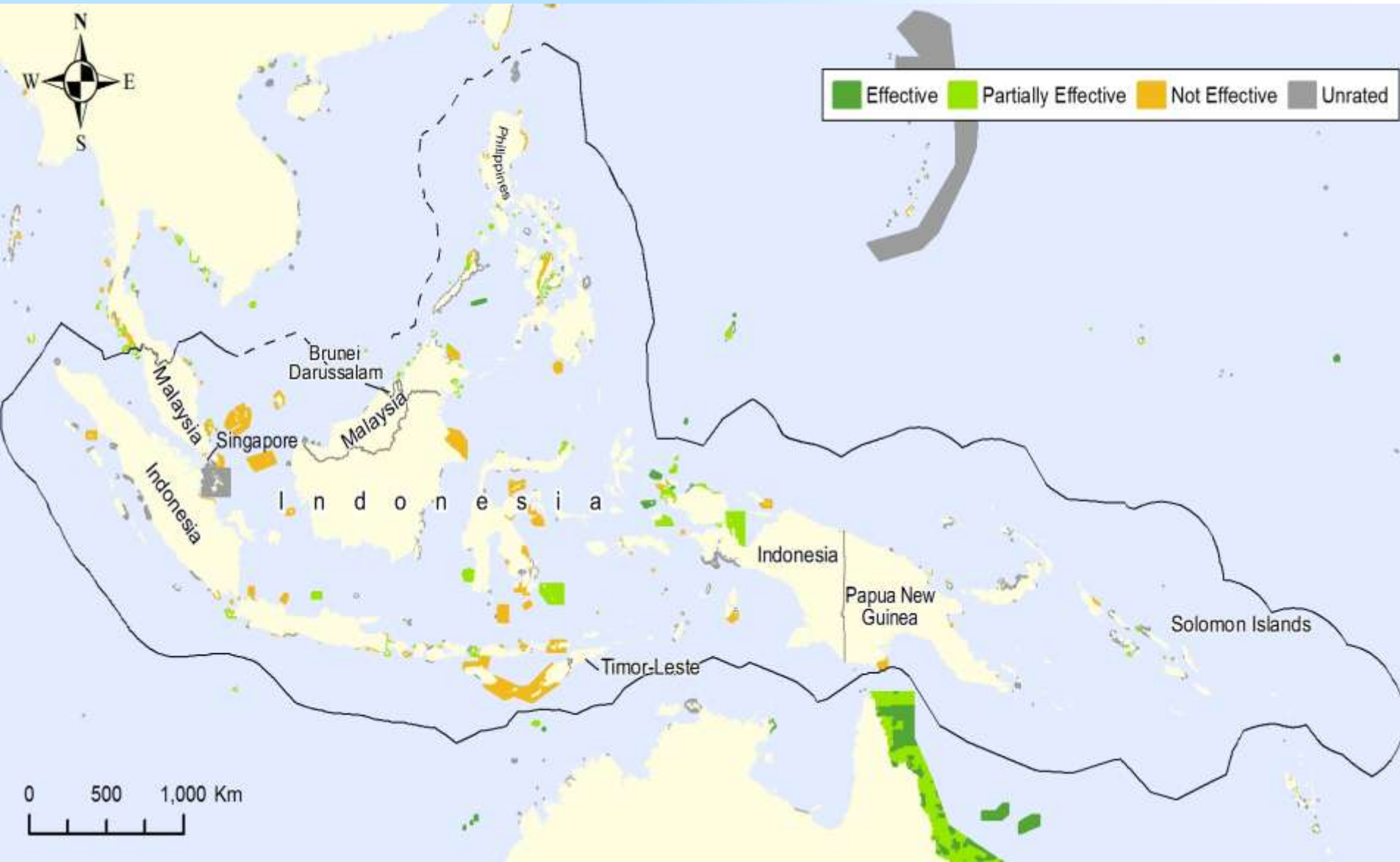
MPAs are critical to healthy oceans and reefs (fisheries, income, biodiversity, resilience)

Credit: Conservation International



Few “Effective” Coral Triangle MPAs

(WRI 2012 and CT Atlas)



CTI-CFF Regional Plan of Action MPA Goal 3

Target and Indicators...

By 2020: “Region-wide Coral Triangle-MPA-System (CTMPAS) in place and fully functional”

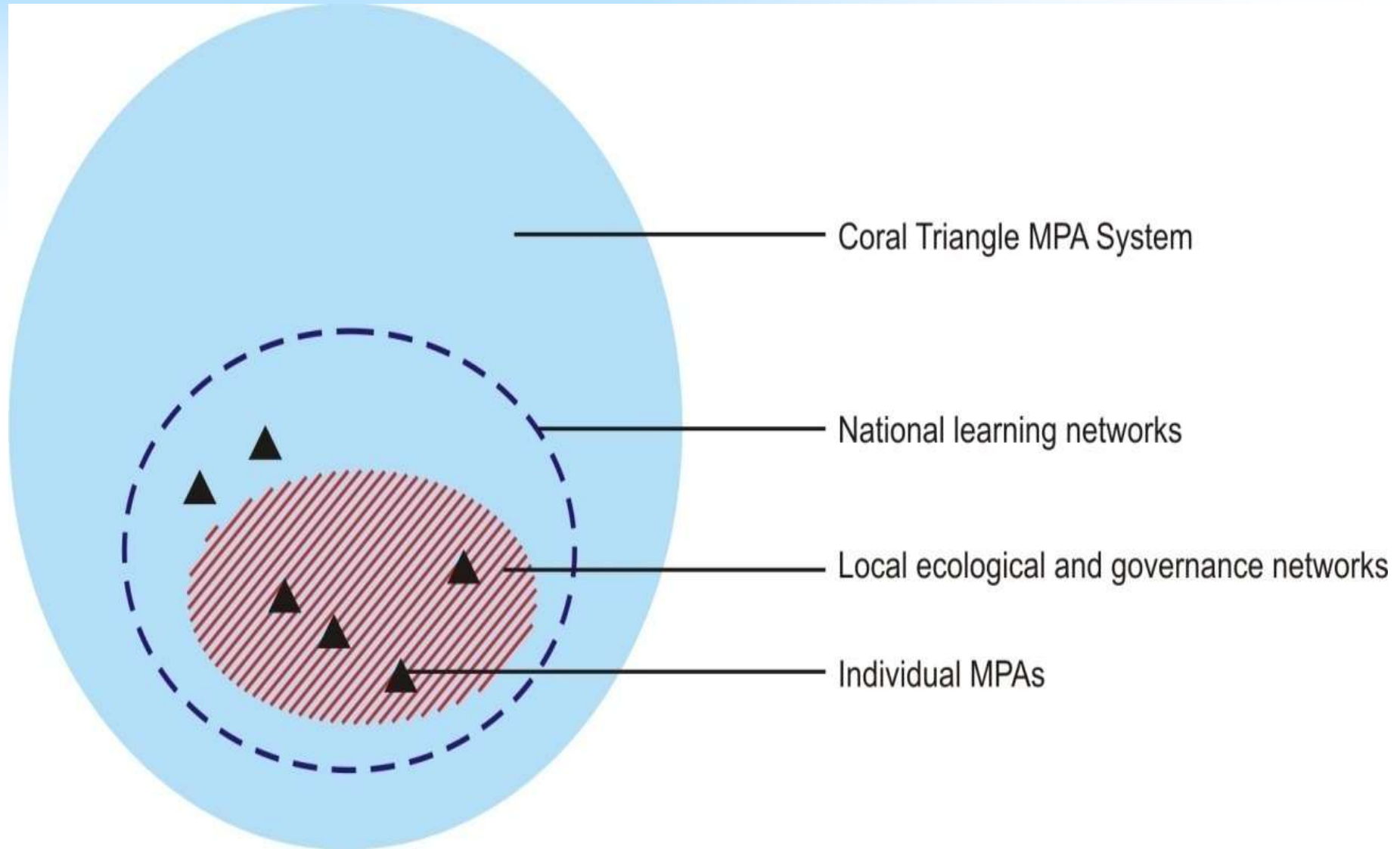
1. **CTMPAS Framework** developed and adopted by CT6
2. Percent/area of total **marine habitat** area in CT region in marine protected or managed areas
3. Percent/area of each major marine and coastal habitat type in protected **“no-take replenishment zones”**
4. Percent/Area of MPAs under **“effective”** management
5. Percent/Area of **MPAs included in CTMPAS**

MPA Technical Working Group (TWG) Events...Leading to CTMPAS Framework and Action Plan

4 Regional Exchanges, 1 write-shop and TWG meetings:

- **2010-REX-Phuket: Define MPA networks and purpose of CTMPAS**
- **2011-REX-Batangas: Develop MPA management effectiveness standards and systems**
- **2012-REX-Sanur: Develop CTMPAS Framework; TWG Meeting**
- **2012-Manila: Draft Full CTMPAS Framework; TWG Meeting**
- **2013-REX-Honiara: Finalize CTMPAS Framework and Action Plan; TWG Meeting**

Coral Triangle MPA System Basic Design



Strategies in Developing Coral Triangle MPA System Framework and Action Plan

“The CTMPAS should include most critical resources and the full range of use categories.” CTI-CFF Regional Plan of Action, 2009

Strategy 1: Use and strengthen existing regional mechanisms, partners, programs, in developing and operating the CTMPAS

Strategy 2: Prioritize activities that develop effective MPAs and networks/sites that can immediately contribute strength or effectiveness to a regional network or system

Strategy 3: Start and learn with “flagship” MPA sites that are already established, managed and of high conservation value. Phase-in other prioritized sites that fill regional conservation and management gaps....

Strategy 4: Define and recognize four Categories of Sites in the CTMPAS

Strategy 5: Direct governance and socioeconomics to protect ecosystem functions



CTMPAS Design Principles & Objectives & Criteria

Ecological—
ecosystem
function,
fisheries, CCA,
biodiversity,
threatened
species

Governance—
regional, national
local, information,
M&E

Society—
communications,
learning networks,
livelihood,
resource use

CT
MPAS

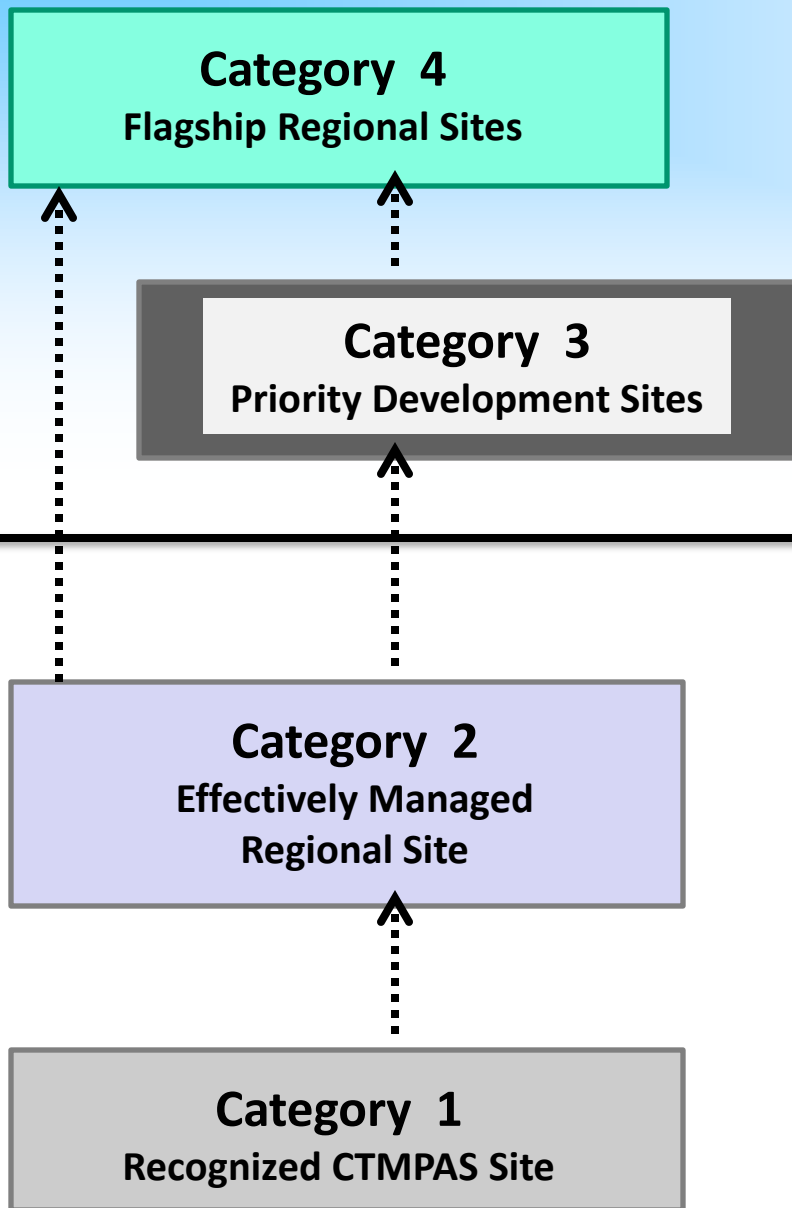


Framework: Principles

1. All programs and activities adhere to the principles stated in the CTI-CFF *Regional Plan of Action*.
2. **Be inclusive.** Include a wide spectrum of partners and stakeholders to encourage commitment and appropriate design/approaches; all sites in CT Atlas in the CTMPAS
3. **Integrate** seascapes, fisheries, climate change adaptation, as well as threatened species in all aspects of MPA selection, networks and management
4. **Aim for social equity** in all interactions, as well as sharing of costs and benefits among stakeholders, and in respecting culture and indigenous heritage of stakeholders
5. **Acknowledge and respect national processes** of each country in recruiting sites and networks, actions, or reporting

Framework: Structure & Criteria

- **4 Flagship Regional Sites:** Sites of exceptional regional importance in terms of ecology, governance or socioeconomics that are effectively managed
- **3 Priority Development Sites:** Sites identified as having high regional importance but require further development to ensure they fulfil their potential
- **2 Effectively Managed Regional Sites:** Sites recognized as effectively managed & contribute towards CTMPAS objectives at national scales
- **1 Recognized CTMPAS Sites:** Sites that contribute towards CTMPAS objectives at local scales



Nominations for Categories 3 and 4 must go through a regional-level process conducted with a Regional Advisory Group. The Regional MPA TWG has the final decision on which sites will be accepted into CTMPAS under Categories 3 and 4.

REGIONAL-LEVEL REVIEW AND SELECTION

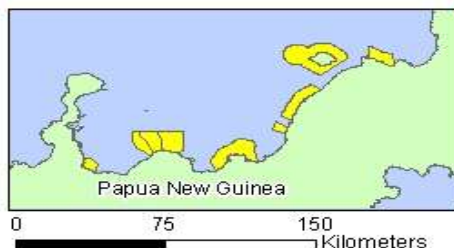
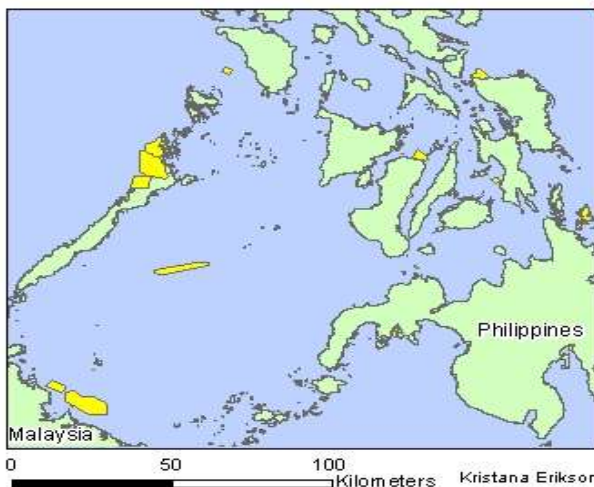
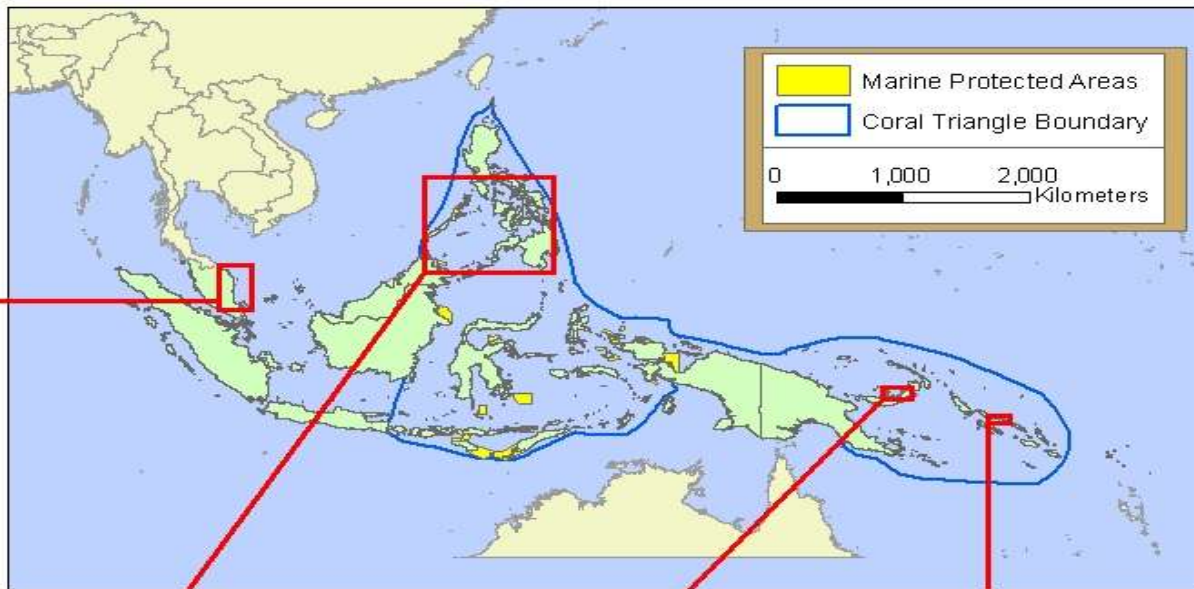
COUNTRY-LEVEL REVIEW AND SELECTION

Nominations for Categories 1 and 2 are reviewed solely in-country by the NCC of its designated body, using the MPA management effectiveness assessment tool already in place in the country. The NCC will decide if a site meets National and Regional criteria for Category 1 or 2, and the CTMPAS TWG will respect/recognize the NCC evaluation and accept the recommendation.

CT Atlas Online GIS map: //ctatlas.reefbase.org supports regional MPA analysis...



Marine Protected Areas: Coral Triangle Region



Country/Area	# of MPAs	Area of MPAs (ha)	Area of coral reef (ha)
Indonesia	78	17239312	942717
Malaysia	44	388955	295229
Philippines	985	1494300	88400
East Timor	1	125698	1095
Papua New Guinea	42	142094	7161
Solomon Islds	13	19191	1468

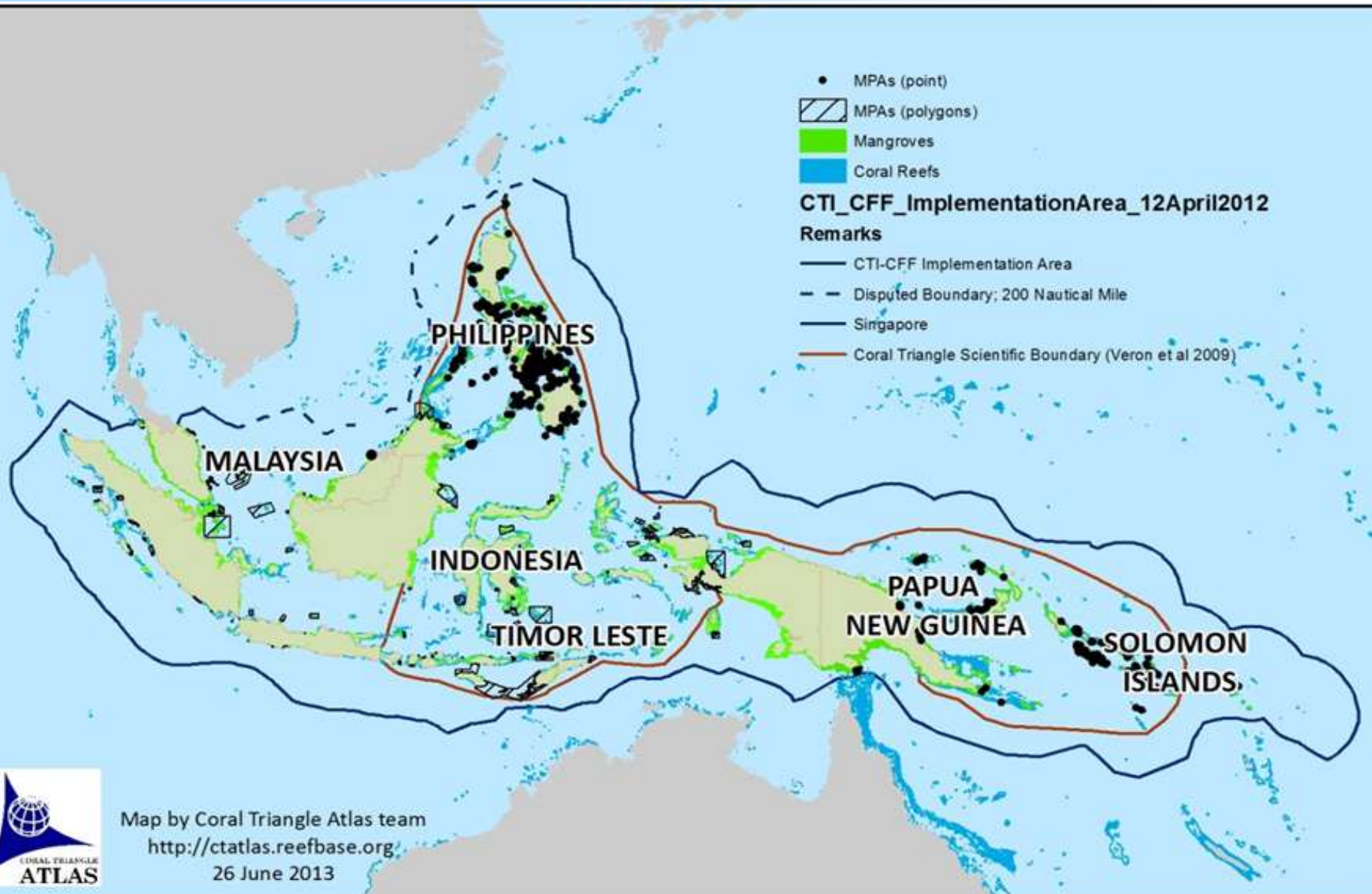
Coordinate System: World Cylindrical Equal Area
 Projection: Cylindrical Equal Area
 Datum: WGS 1984

Kristana Erikson
 June 14, 2011



Coral Triangle Atlas database

2013--MPAs in the Coral Triangle (>1900)



FOR CTMPAS CATEGORY 1 SITES

Attributes	Explanatory notes
Country*	Indonesia Malaysia Papua New Guinea Philippines Solomon Islands Timor-Leste
Longitude*	Longitudinal coordinates
Latitude*	Latitudinal coordinates
Name*	The official name of the protected area ¹
Designation*	The type of protected area as legally/officially established/recognized (e.g. national park, world heritage site)
Legal/Formal Instrument	Legal Code/Number based on country systems ²
Designation Type*	Local National International
Domain*	Marine Marine-Terrestrial ³
Status*	Designated Proposed
Date Established*	Date/Year of the MPA established legally/formally
Reported area (ha ⁴)*	Total size of protected area in ha ⁴ based on legal/formal status/declaration
Total marine area (ha ⁴)*	Total size of marine area in ha ⁴ within protected area
Management Plan*	Yes No Unknown Drafted
IUCN Management Category	Classification under IUCN (Ia, Ib, II, III, IV, V or VI)
International Convention	Designation of MPA by an international convention/program
Administrative unit level-1	Government level that administers or holds jurisdiction over MPA (e.g. in Malaysia, an MPA may be administered by either the federal government or state government; in the Philippines, MPAs are typically administered either by the national government (NIPAS) or the municipal/local government.
Zonation	Yes No Unknown
No Take	All Part Seasonal None Unknown
Reported No Take Area (ha ⁴)	Total area of no take zones in hectares ⁴
Management Effectiveness Model	Model used (eg. MEAT/ E-MPA) to assess management effectiveness
Management Effectiveness Rating	ME rating based on MPA ME system used
Source	Source/provider of the data
Validated	Yes No Unknown. If Yes, name of person/organization who validated the MPA

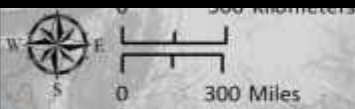
Number and area of MPAs in the Coral Triangle

CT Country	Total Number of MPAs	MPAs with Known Boundaries	Area (km ²) for Known Boundaries	Percent of EEZ	Percent of Territorial Waters (12 miles)
Indonesia	108	83	170,841 157,841*	2.7%	13.1%
Malaysia	51	50	13,653 15,661*	3.5%	12.7%
Papua New Guinea	59	35	4,558 4,558*	0.2%	1.3%
Philippines	1,653	348	17,164 20,940*	1.1%	4.2%
Solomon Islands	100	82	1,325 1.325*	0.1%	0.9%
Timor-Leste	1	1	557 556*	1.3%	3.4%
REGION	1,972	599	208,152 200,881*	1.6%	9.4%

Compiled by the Coral Triangle Atlas at WorldFish from sources including Reefbase, the World Areas (WDPA), national agencies and The Nature Conservancy, and validated with each country.

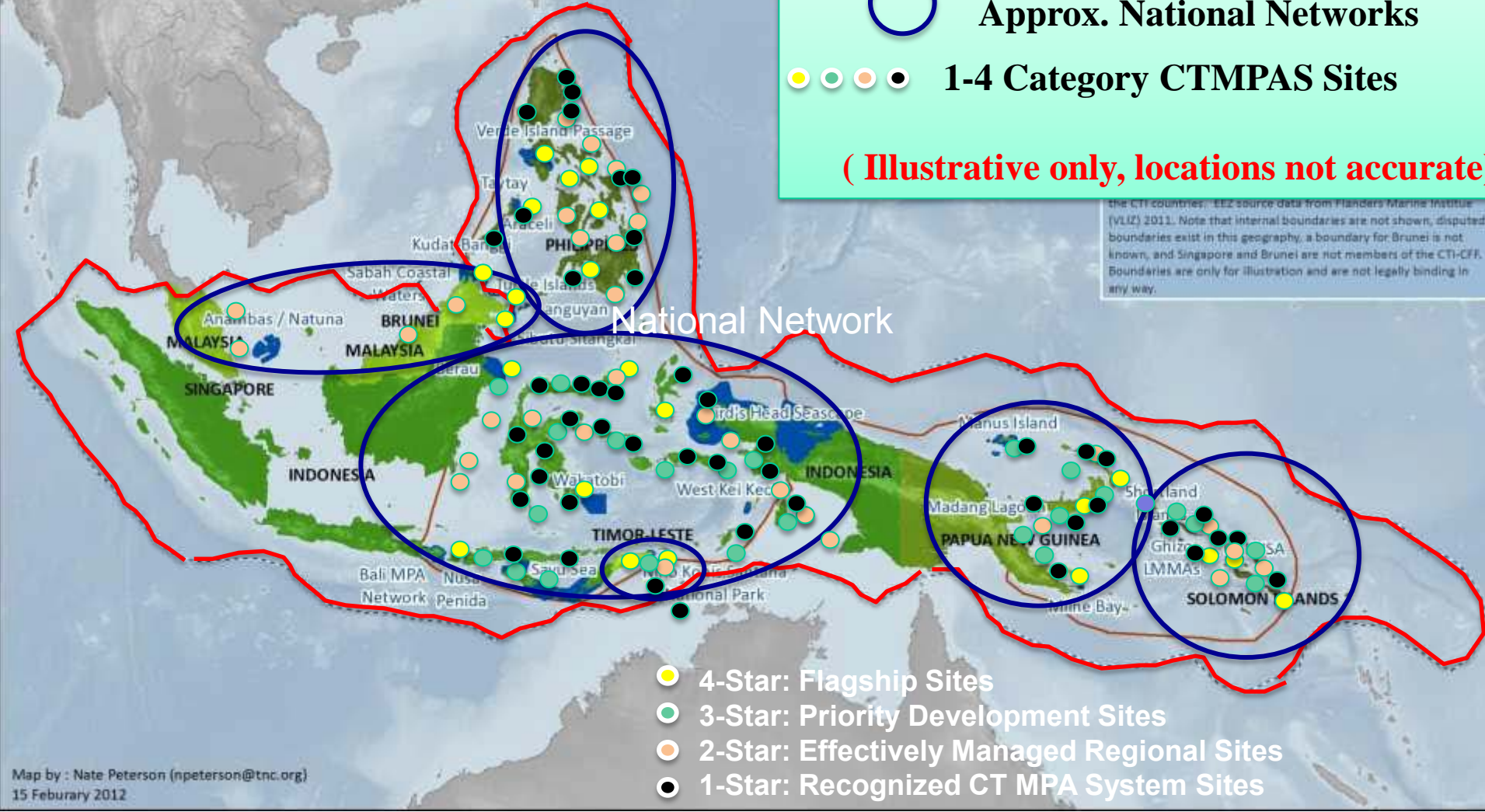
*Data as reported by governments and slightly different from the CT Atlas due to discrepancies from polygon data for a few MPAs.

Cartoon of Geographic Structure – of Local, National and CTMPAS networks and sites



— **Approx. CTMPAS Area**
○ **Approx. National Networks**
● ● ● ● **1-4 Category CTMPAS Sites**
(Illustrative only, locations not accurate)

the CTI countries. EEZ source data from Flanders Marine Institute (VLIZ) 2011. Note that internal boundaries are not shown, disputed boundaries exist in this geography, a boundary for Brunei is not known, and Singapore and Brunei are not members of the CTI-CFF. Boundaries are only for illustration and are not legally binding in any way.



● **1-5 Sites per CT6: “No Regret” Sites, Learning Sites, Important Sites, Big Sites**

Regional MPA ME Exchange, May 2011; CT6 participated, Philippines: Roadmap developed...



Progress towards national MPA Management Effectiveness Systems

Regional: MPA management effectiveness standards agreed upon within CTMPAS Framework

Philippines: Refined MPA Mgt. Effectiveness Assessment Tool (MEAT) and provided model for other countries

Indonesia: Finalized Technical Guidelines Management Effectiveness for applications in all national MPAs

Malaysia: Conducted national survey on MPA ME using MPA- MEAT Tool, initiated development of national system

Solomon Islands: Held 2 national workshops to initiate a MPA ME system based on lessons from Indonesia and Phils

Papua New Guinea: Developed roadmap for MPA ME system

Timor Leste: Applied MPA ME system lessons in planning

CTI-CFF MPA Roadmap: Implement the CTMPAS Framework and Action Plan

- Formalize the CTMPAS Advisory Committee for reviewing site nominations and hold meeting in 2014
 - ✓ Nominate country Flagship sites and Priority Development sites for inclusion in the CTMPAS
 - ✓ Review site nominations to fully initiate CTMPAS
- Input all national MPA data (all recognized sites) into the CT Atlas for tracking national and regional progress
- Employ or appoint the MPA Coordinator to guide CTMPAS implementation and decide on home institution
 - ✓ Conduct periodic CTI MPA-TWG meetings and MPA Advisory Group meetings as required

Country Variations: MPA Goal and CTMPAS Implementation

- **Indonesia:** Largest area of MPA, major MPA projects contributing to CTMPAS, MPA ME still low
- **Malaysia:** Well developed system with relatively good MPA ME, is adopting CTMPAS nationally
- **Papua New Guinea:** LMMAs with no national MPA ME system yet in place
- **Philippines:** Largest number of mostly small MPAs/networks, well-established system for MPA ME
- **Solomon Islands:** LMMAs, draft national MPA ME system being developed following CTMPAS criteria
- **Timor Leste:** 1 large MPA, internal sites being developed through community-based no-take management

Cross-cutting themes and integration of CTMPAS with other CTI-CFF Goals

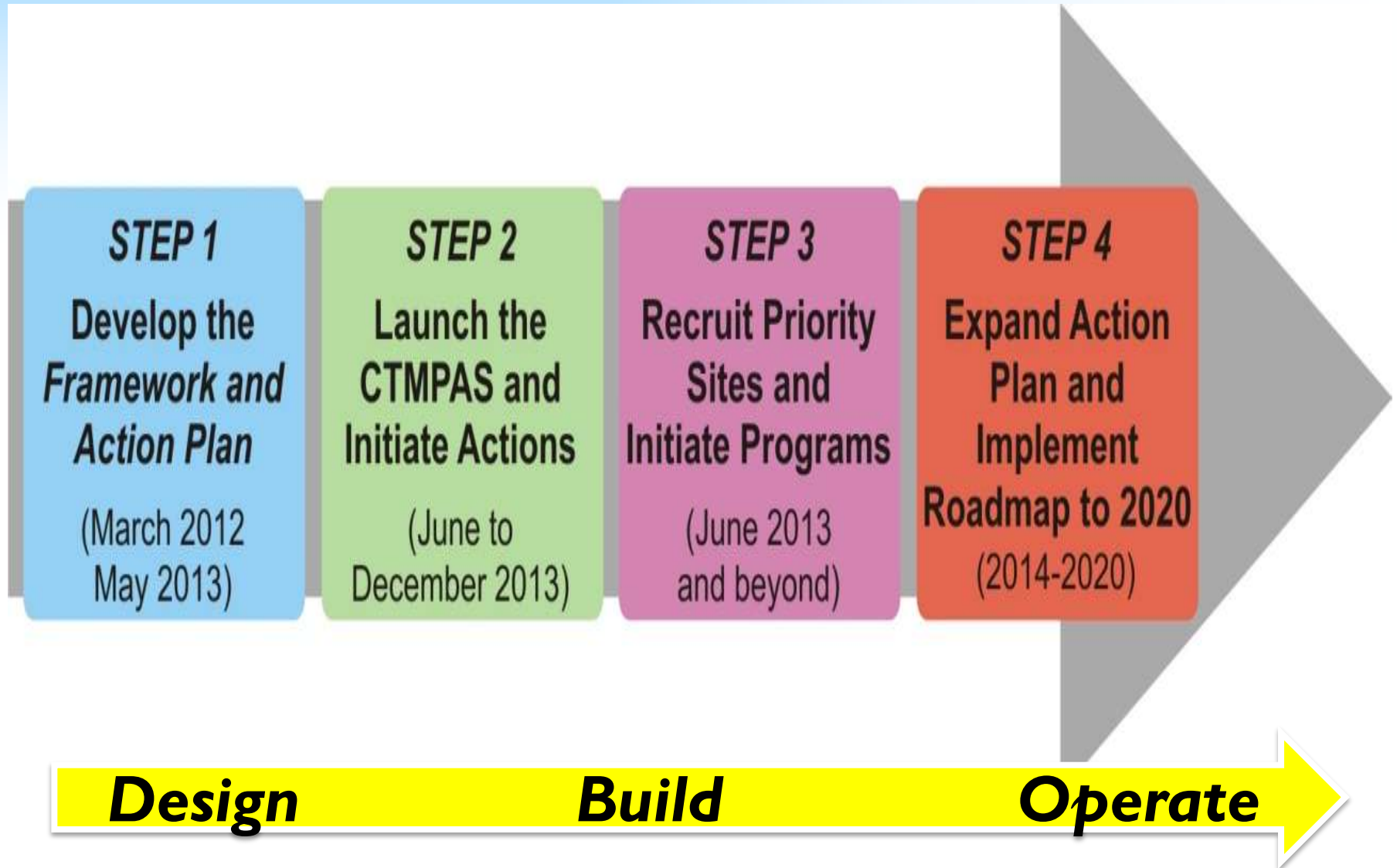
1. Integration of CTMPAS design with **fisheries and adaption to climate change** inherent in CTMPAS Framework and needs to be encouraged locally

2. Cross-cutting themes critical to CTMPAS:
 - a. **M&E System** and tracking of indicators
 - b. **CT Atlas** for spatial data and reports and maps
 - c. **CTI Secretariat/host institution** for Coordinator
 - d. **Financial Resources** to support MPA field work
 - e. **Adoption** of CTMPAS Framework by NCCs with focus on MPA management effectiveness

Lessons & Challenges: MPA Goal

- It takes time to get it right—e.g. the CTMPAS is in its first phase and will evolve during implementation...
- Building the CT Atlas database with data verification with the countries requires active country participation
- Indicators have been agreed on but require updates from countries to track through the M&E System
- National data quality from each country varies
- CT Atlas—spatially oriented database—must be permanent
- National/local capacity varies tremendously among CT6
- CTMPAS meets needs of each country but will need more regional exchanges to evolve at regional scale...

CTMPAS Steps to 2020





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For more on MPAs/networks in the Coral Triangle...

www.coraltriangleinitiative.org

www.uscti.org

www.oneocean.org

www.ctatlas.reefbase.org



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