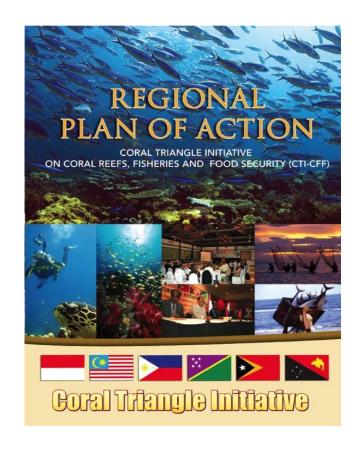


## **Outline**

- 1.CTI-CFF RPOA Goals
- 2. RPOA Goals, Targets and Indicators
- 3. General M&E Operational Workflow
- 4. RPOA 2.0
- 5.CT Atlas
- 6. Way forward



# **CTI-CFF** Regional Plan of Action



Set for 10 years to 2020; 5 goals













Goal I: Priority seascapes designated and effectively

managed

Target 1: "Priority seascapes" designated with investment plans completed and sequenced

1.1.1 Number of priority seascapes designated with investment plans

Target 2: Marine and coastal resources within all "Priority Seascapes" are being sustainably managed

1.2.1 Number of priority seascapes under continuous improved management

Goal 2: Ecosystem approach to management of fisheries (EAFM) and other marine resources fully applied

Target 2.1: Strong legislative, policy and regulatory frameworks in place for achieving an ecosystem approach to fisheries management (EAFM)

- 2.1.1 Number of policies and regulations promoting EAFM at regional and national levels with regulatory framework and budget allocated for their operationalization
- 2.1.2 Number of projects and programs implementing EAFM and components thereof

Target 2.2: Improved income, livelihoods and food security in increasingly significant numbers of coastal communities across the region through a new sustainable coastal fisheries and poverty reduction initiative (COASTFISH)

- 2.2.1 Average income (fishing and non-fishing) of coastal households by profession compared to baseline
- 2.2.2 Percent contribution of fish to protein requirements



# Target 2.3: Effective measures in place to help ensure exploitation of shared tuna stocks is sustainable, with tuna spawning areas and juvenile growth stages adequately protected

- 2.3.1 Number of policies and agreements by CT6 countries for management of tuna
- 2.3.2 Change in conservation status of tuna
- 2.3.3 Number of countries adhering to markets or certification standards of tuna fisheries agreed upon by CT6 countries

### Target 2.4: A more effective management and more sustainable trade in live reef fish and reefbased ornamentals achieved

- 2.4.1 Number of policies and agreements on live reef fish trade among CT6 to decrease level of destructive fishing practices linked to the trade
- 2.4.2 Number and area (km²) of locally managed areas for live reef fish trade
- 2.4.3 Number of countries adhering to markets/certification (live reef fish and ornamental fisheries) agreed by CT6
- 2.4.4 Change in conservation status of live reef fish species (to be decided by CTI as a body or by a forum designated by the CT6 according to IUCN-red list criteria assessment or other criteria to be determined by CTI)



### Goal 3: Marine protected areas (MPAs) established and effectively managed

### Target 3.1. Region-wide Coral Triangle MPA System (CTMPAS) in place and fully functional

- 3.1.1 CTMPAS Framework developed and adopted by CT6
- 3.1.2 Percent or area of total marine habitat in CT region in marine protected or managed areas
- 3.1.3 Percent of each major marine and coastal habitat type in strictly protected "no-take replenishment zones"
- 3.1.4 Percent or area (km²) of marine protected areas under "effective" management
- 3.1.5 Percent or area of marine protected/ managed areas included in CTMPAS

### Goal 4: Climate change adaptation (CCA) measures achieved

# Target 4.1: Region-wide Early Action Plan for Climate Change Adaptation for the near-shore marine and coastal environment and small island ecosystems developed and implemented

- 4.1.1 Number of regional agreements/frameworks/plans (e.g. REAP) developed
- 4.1.2 Number of national policies (including national CCA plans and frameworks) laws and regulations
- 4.1.3 Proportion of local governments that have integrated climate adaptation into local governance (plans and actions)
- 4.1.4 Area of Mangroves (hectares)

# Target 4.2: Networked national centers of excellence on climate change adaptation for marine and coastal environments are established and in full operation

4.2.1 A national institution within CT6 designated and networked to address climate change adaptation coordinated with national government support



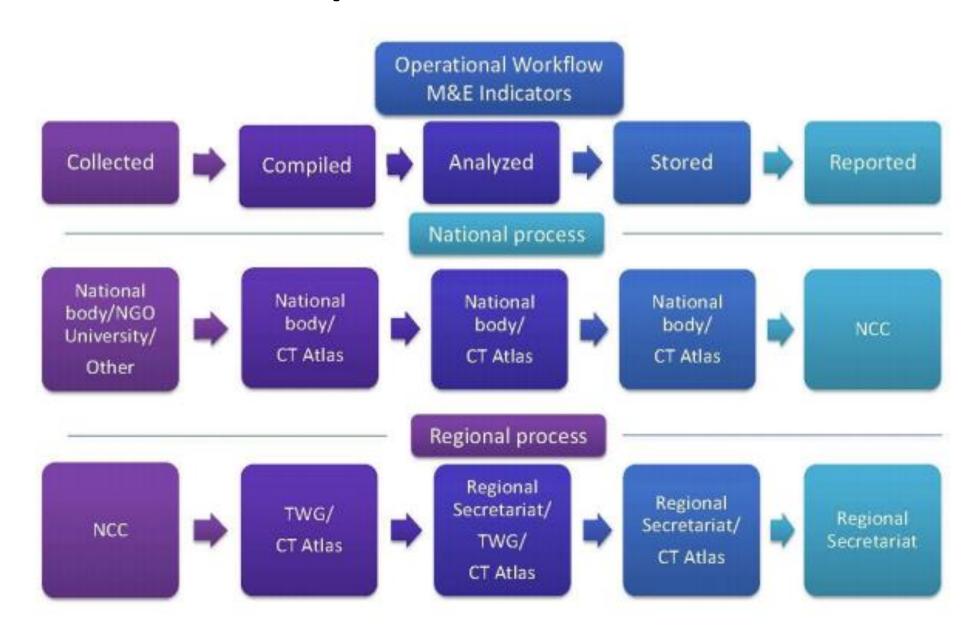
### Goal 5: Threatened species status improved

Target 5.1: Improved status of sharks, sea turtles, seabirds, marine mammals, corals, seagrass, mangroves and other identified threatened species

- 5.1.1 Number of new policies or agreements adopted at the regional, national and local levels that are in compliance with the international agreements on threatened species
- 5.1.2 Area (km2) of protected marine habitat that contributes to conservation of threatened and endangered species protected
- 5.1.3 Number of threatened species with improved status (to be decided by CTI as a body or by a forum designated by the CT6 according to IUCN-red list criteria assessment or other criteria to be determined by CTI)



## **General M&E Operational Workflow**





## A. DEVELOPMENT OF THE REGIONAL PLAN OF ACTION 2.0

## **PURPOSE OF RPOA 2.0**

to focus and align regional collaboration in support of outcomes that will be considered beneficiary by the country leadership in the next five years for 2020 to 2025

to allow for tangible, measurable and achievable impacts



# **Logic and Premise**

## **RPOA 2.0 2025 GOAL**

• **By 2025,** coastal communities and coastal and marine ecosystems **are enabled to cope** with impacts of climate change in the CT region due to measurable increased regional collaboration between the CT6 and their partners for implementation of the RPOA 2.0—facilitated through the CTI-CFF.

## **RPOA 2.0 2030 GOAL**

• <u>By 2030</u>, coastal communities and coastal and marine ecosystems in the CT region are **more resilient/able** to adapt to impacts of climate change as measured through improvements in food security, sustainable fisheries and coastal livelihoods due to regional collaboration of governments through the CTI-CFF compared to the 2020 baseline.

## **CORE STRATEGIES**

- 1. Inform and support the development of conducive policy and regulations for the CTI-CFF goal/vision.
- Engage and motivate private sector into action for the CTI-CFF goal/vision.
- 3. Enhance and optimize partnerships (international, regional, national, and local) for capacity development, empowerment of key stakeholders, and other needs to accelerate progress on the CTI-CFF goal/vision.
- Identify and establish clear resource mobilization plan for the CTI-CFF goal/vision

### 2025 BIOPHYSICAL OBJECTIVE A:

Health of coastal and marine ecosystems (coral reefs, mangroves and seagrass beds, endangered species and fish stocks) enclosed in the "CT Marine Protected Areas system – CT MPAs" improves.

**Outcome A1:** By 2025, all coral reef areas in the CT Region is in healthy/good condition and the impacts of climate change on reefs (to be qualified) are less severe than in 2020.

Outcome A2: By 2030, all areas of mangrove and seagrass beds in the priority seascapes, as measured in 2020, are in healthy/good condition and there is a year-on-year increase in mangrove and seagrass bed aerial coverage in the CT MPAs in the priority seascapes.

Outcome A3: By 2030, threats (particularly marine debris) for the survival for all priority as identified by the CTI-CFF in the CT MPAs, as measured in 2020, are being addressed with a shared agenda across the CT6, resulting in a measurable reduction in cases of wildlife deaths by debris to 2020.

**Outcome A4**: By 2030 IUU fishing in the CT MPAs is reduced across all CT6.

#### LS, BSSE, SSS

#### **TARGET A1:CORAL REEFS**

Output A1: A clear resource mobilization plan for the CT Region provides substantial funding for different activities that are considered by scientists and practitioners to achieve effective management. Indicator A1: Health coral status in target areas in good condition.

#### TARGET A2: MANGROVE FORESTS AND SEAGRASS BEDS

**Output A2**: 30% seagrass beds and mangrove in the CT region is well managed (level 3 or 4) through/in MPA/LMMAs that are part of the CT MPAs.

**Indicator A2:** Health of seagrass and mangroves in target areas in good condition

#### **TARGET A3: THREATENED SPECIES**

**Output A3**: Policy regulations in CT6 are in place to address specifically marine debris threats to endangered species in the CT MPAs.

**Indicator A3**: Change in deaths of marine wild life through marine debris in the CT MPAs or changes in the level of threat caused by marine debris specifically to priority species in the CT MPAs.

#### **TARGET A4: FISH STOCKS**

**Output A4**: Shared action reports and policy regulations in the CT6 to address IUU in the CT MPAs together.

**Indicator A4**: Change in reported cases of IUU from the CT MPAs.

#### **2025 OBJECTIVE B**

- Socio economic conditions of coastal communities living in the priority seascapes and MPA networks, in particular food security and livelihoods, improves to cope with impacts of climate change from the 2020 baseline.

#### **TARGET B1: FOOD SECURITY**

Outcome B1: By 2030, the CTI-CFF reports a positive change (to be quantified) in the priority seascapes and MPA networks in food security that is directly attributed to improvement in ecosystem management, private sector action, new partnership and new financial resources.

## TARGET B2: COASTAL LIVELIHOODS

Outcome B2: By 2025, the CTI-CFF reports a positive change (to be quantified) in the aspects of productivity, skills, income, gender and social inclusions, youth involvement and sustainability of coastal livelihoods in priority seascapes and MPA networks. These changes are directly attributed to a policy change, a private sector action, a new partnership, and new financial resources including the strategy of the Women's Leaders Forum of the CTI-CFF.

CT region and global leaders

**Output B1:** Guidelines and private sector investments in the CT6 to ensure specifically food security from marine and coastal resources in the priority seascapes and MPA networks.

**Indicator B1:** Accessibility, availability and utilization of food from marine and coastal resources for coastal communities in the priority seascapes and MPA networks.

Regional secretariat, NCCs and development partner

Output B2.1: Guidelines and private sector investments in the CT6 to ensure all-inclusive participation of all sectors and stakeholders including the role of women and youth in coastal livelihoods in the priority seascapes and MPA networks.

Output B2.2: The WLF evidences increased support by women for the CTI RPOA targets throughout the region from improved competencies of its members. Output B2.3: The Sustainable Business Forum and the Sustainable Tourism Task Force support private sector action to achieve the CTI RPOA targets Indicator B2: Number of activities to support productivity, skills, income, gender social inclusions, youth involvement and sustainability of coastal livelihoods in priority seascapes and MPA networks.

## OBJECTIVE C RPOA 2.0 IMPLEMENTED EFFECTIVELY

Overall Strategy: Overall facilitation and management of the CTI-CFF and RPOA (e.g., development of work-plans, budgets, monitoring & evaluation and communication tools, and oversight by the governance mechanism)

**Overall Outcome:** The CT6 and partners are effectively facilitating the implementation of the RPOA 2.0 in support of the overall goals. The CT6 implement their NPOAs with links to regional priority actions. Where needed, adjustments are made to reflect the changing policy landscape. Tools such as the CT Atlas are being utilized by all, helping to align their strategies and efforts. Blended finance opportunities are considered and pursued to support resourcing of the NPOA priorities and underpin long-term organizational effectiveness of country members as relevant.

#### RPOA 2.0 | Outcome C1:

Collaboration between the CT6 increases with at least 10% each year. Output C1: The RS effectively coordinates the key strategies of the RPOA 2.0 Indicator C1: multicountry activities

Regional Secretariat



The Coral Triangle Atlas 2.0

Shwu Jiau Teoh, Nurulhuda Ahmad Fatan, Stanley Tan

November 2019







# The Coral Triangle Atlas (CT Atlas)



Vision: To provide a common platform for all the countries in the Coral Triangle to share their data, and to create a growing, updated database for better marine resource management decisions and science.



http://ctatlas.reefbase.org/



# Roles & Responsibilities up to July 2020



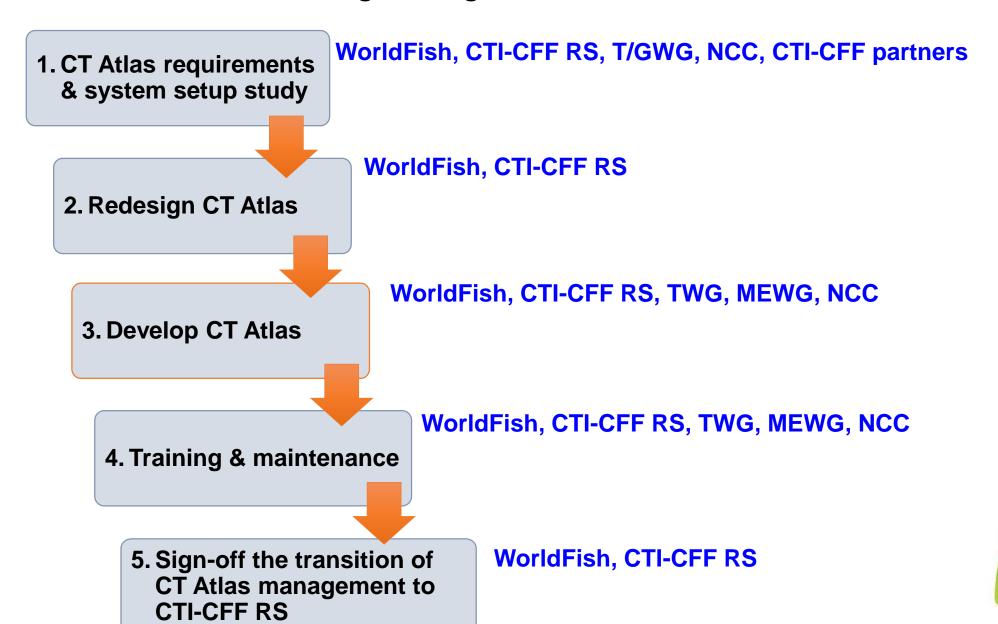
- Provide technical expertise to develop the newer version of CT Atlas.
- Redesign, coding, migrate existing data, collate new data.
- Provide training to relevant partners on updating the online data.
- Train the IT/GIS officer in Regional Secretariat on managing the new CT Atlas.



- Provide strategic vision for the new CT Atlas development
- Hire an IT/GIS officer to interact with WorldFish team for technical setup, operate and maintain the newer CT Atlas web site hosted by Regional Secretariat cloud server

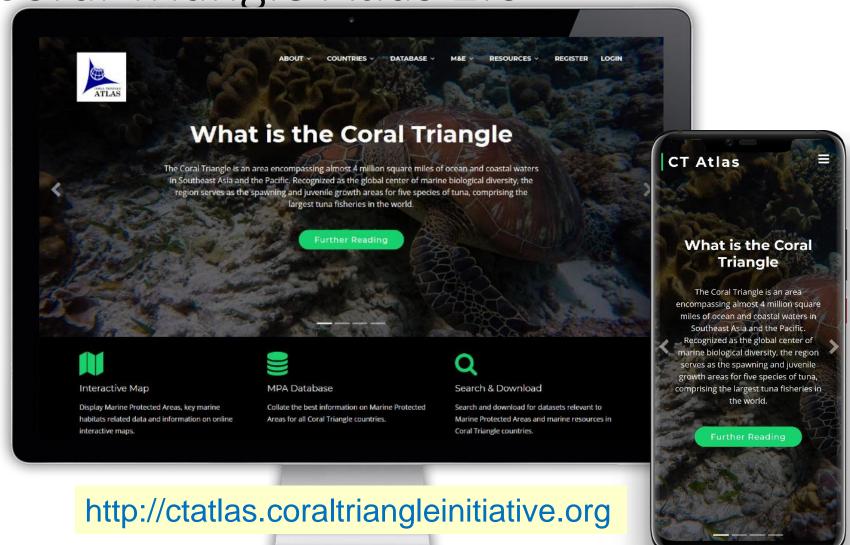


## CT Atlas Redesign & Migration (2019 APRIL-2020 JULY)





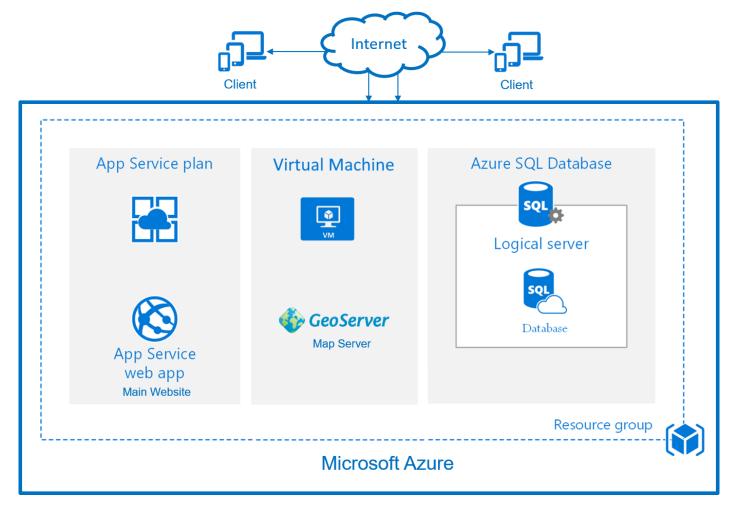
The Coral Triangle Atlas 2.0





## The CT Atlas 2.0 Hosting Architecture

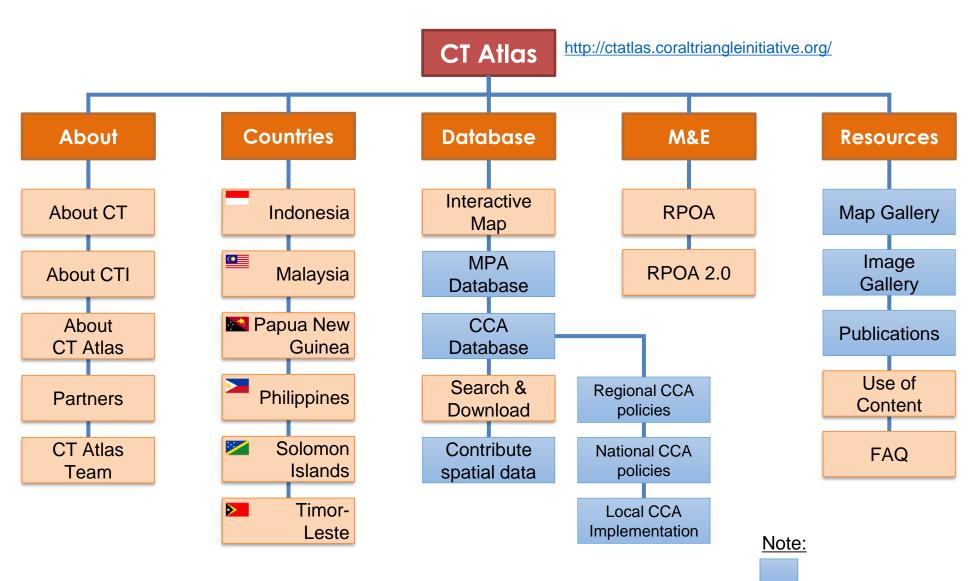




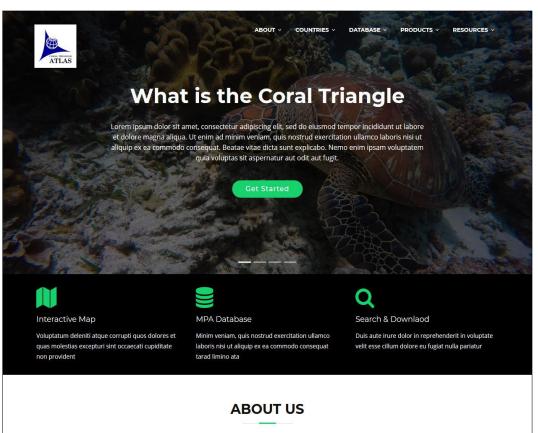
 The subscription cost of new Microsoft Azure services is estimated around USD1,620 per year, which save nearly 48% of the original hosting cost (USD3,369) in ReefBase's Amazon Elastic Compute Cloud (Amazon EC2)

## The CT Atlas: Contents





# Home Page



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#### **Coral Triangle**

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#### **Coral Triangle Initiative**

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#### **Coral Triangle Atlas**

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# Countries



Marine Protected Areas are not a new concept for Malaysia. With a high concentration of biodiversity and islands supporting 1,687 square kilometers of reefs, Malaysia depends on the economic activity provided by fisheries. In the 1980s, areas around 22 islands were declared prohibited areas and later declared by law as marine parks.

Today, Malaysia's marine protected areas are spread over both Peninsular Malaysia and Malaysian Borneo, which comprises the states of Sabah and Sarawak. Depending on their location, these MPAs fall under different jurisdictions;

- In Peninsular Malaysia, the 42 marine parks are managed by the Marine Park Department of the Ministry of Natural Resources and Environment,
   These are mostly islands declared as marine parks and comprise both terrestrial and marine components.
- In Sabah, the five marine parks are under the Sabah Parks Enactment. The first marine park was established in 1974. Other marine protected area is Sugud Islands Marine Conservation Area(SIMCA). This is the first private managed marine conservation area area in Malaysia managed by Reef Guardian, SIMCA was officially established in 2001 as a category it conservation area under the IUCAP Protected Area. The US CTI Support Program is also supporting the establishment of the proposed one million-hectare Tun Mustapha Park which home to endangered marine animals, such as green sea turtles and dugongs making it a strategic area for sustainable ecotourism. It is also source of livelihood for 80,000 coastal inhabitants of diverse ethnic groups.
- . In Sarawak, three marine parks are gazetted under the National Park and Reserve Ordinance.

These marine parks are not necessarily established just for fisheries conservation; many also target the conservation of biodiversity, such as sea turtles or other vulnerable species.

One of Malaysia's most famous parks is Sipadan, located in Sabah. It is the country's only oceanic island, and it formed over millennia as corals slowly covered an extinct volcano\_located in the Celebes Sea, it marks one of the world's richest spots for marine diversity.

STATISTICS

198,200 3,856 50 4,675

Marine Area [km2) MPA Area [km2) Number of MPA Coastline (km)

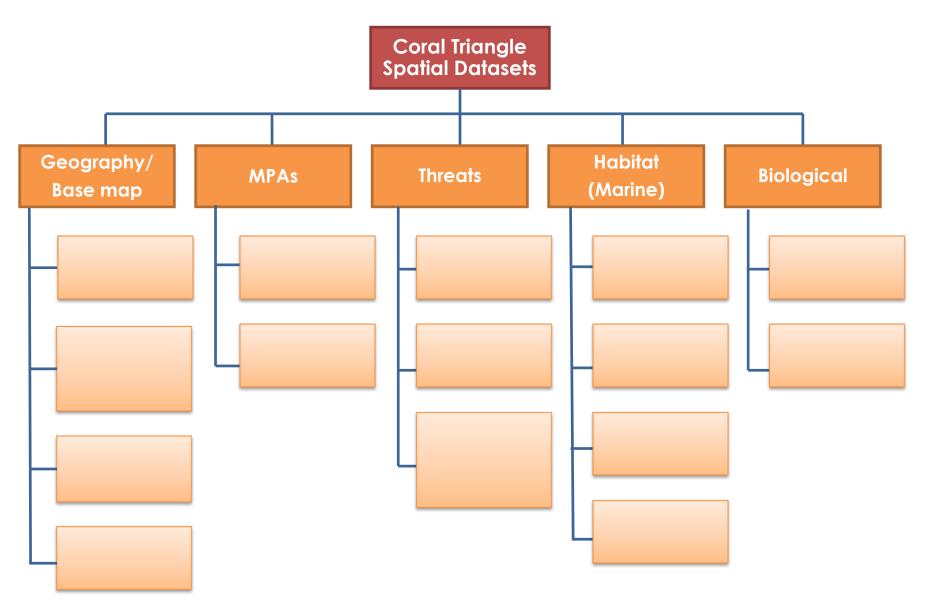
1,687 7,041 0 0

Coral Reef Area (km2) Mangrove Area (km2) Publication Photo



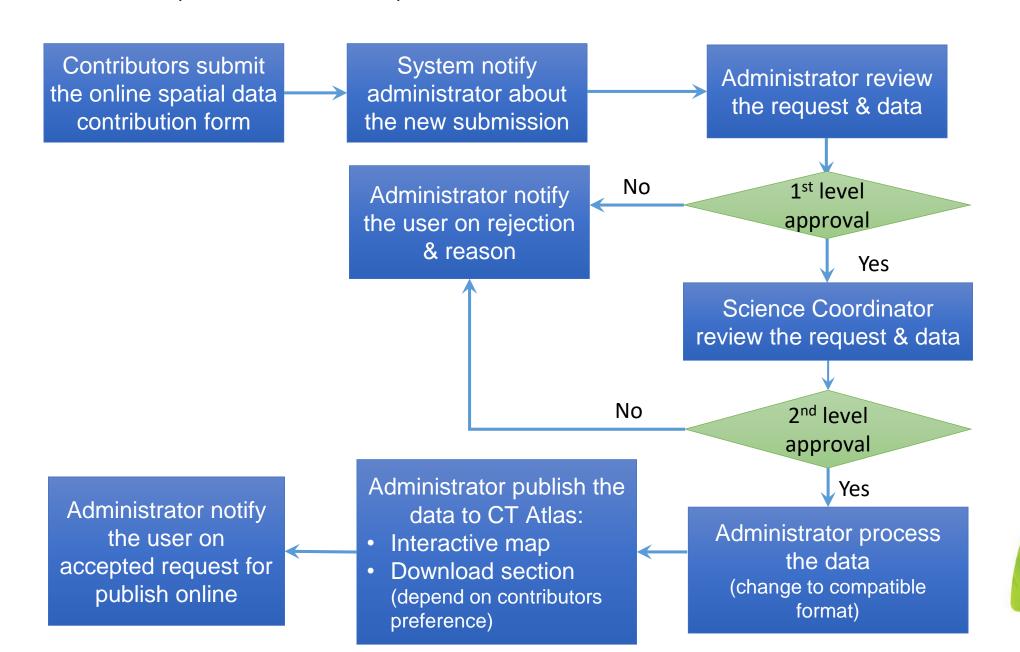
## The CT Atlas : Spatial Datasets







## Proposed CT Atlas Spatial Data Contribution Mechanism



Search & Download Chatial Data ABOUT ~ COUNTRIES V DATABASE v REGISTER LOGIN ATLAS **SEARCH & DOWNLOAD SPATIAL DATA** List of datasets relevant to Marine Protected Areas and marine resources in Coral Triangle countries. Search Latest 9 new maps Marine Ecoregions Regional Coral Triangle Atlas Geography/boundary Download Marine Ecoregions Seascapes Regional Coral Triangle Atlas Geography/boundary

Download

Seascapes



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 <sup>1</sup>
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 <sup>2</sup>
Designation Type*	Local   National   International
Domain*	Marine   Marine-Terrestrial <sup>3</sup>
Status*	Designated   Proposed   Draft   Voluntary
Date Established*	Date/Year of the MPA established legally/formally
Reported area (ha <sup>4</sup> )*	Total size of protected area in ha <sup>4</sup> based on legal/formal status/declaration
Total marine area (ha4)*	Total size of marine area in ha <sup>4</sup> within protected area
Management Plan*	Yes   No   Unknown   Drafted
CTMPAS Category*	Category 1   Category 2   Category 4   Not CTMPAS
IUCN Management Category	Classification under IUCN (Ia, Ib, II, III, IV, V or VI)
International Convention	Designation of MPA by an international convention/program (e.g. Ramsar site, World Heritage Site, Unknown)
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 (ha4)	Total area of no take zones in hectares <sup>4</sup>
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
Consent to display and share	Yes   No   Point only
Notes	Additional notes/remarks about the MPA

Notes: \* Core (minimum) attributes required for an MPA to be included as a recognized CTMPAS site. <sup>1</sup>The name of the MPA should include its location to avoid confusion over MPAs with similar names (e.g. Apo Island Protected Landscape/Seascape, Dauin, Negros Oriental; Apo Reef Natural Park, Occidental Mindoro). <sup>2</sup>This refers to the number or code used to identify the legal/formal instrument that established the MPA. The full title/name of the law or formal declaration may also be provided, and when available, the full text of the document should be provided as an attachment. <sup>3</sup> Where the protected area includes both terrestrial and marine components, the marine area should be disaggregated (countries will be responsible for providing data, e.g. size of marine area). <sup>4</sup> The default unit of measure is hectare, but area data expressed in square kilometers/square meters will also be included as parenthetical information. Note: Colors may be used to represent the CTMPAS Categories

# Way forward

- 1. Ensuring quality data sharing practices
- 2. Exchange of information, approaches, methodologies and tools for generation, management and dissemination of data
- 3. Collaboration with other national, regional, and global institutions for product development and dissemination using emerging technologies





Thank you
Terima kasih
Maraming salamat
Tagio tumas
Tank lu
Obrigado

