CTI-CFF — Toward the SDGs in the Coral Triangle

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he Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF) is a partnership between six countries in Southeast Asia and the Pacific that aims to promote the conservation and sustainable management of coral reefs and associated ecosystems of the coral triangle.

The CTI-CFF recognizes the importance of these ecosystems in supporting the livelihood of millions of people and toward achieving the Sustainable Development Goals (SDGs) related to Gender Equality, Climate Action, Life Below Water, and Partnerships for Sustainable Development. With the launch of the CTI-CFF Regional Plan of Action 2.0 (RPOA 2.0), the initiative has laid out its plan for 2020–2030.

This article provides an overview of the key initiatives within the plan, portraying the CTI-CFF's programmes related to SDGs 5, 13, 14, and 17. It will also highlight some inspiring work by the CTI-CFF on marine protected areas (MPAs), seascapes, conservation of threatened species and the Women Leaders' Forum. Additionally, we discuss the establishment of the Coral Triangle Conservation Fund in supporting the implementation of RPOA 2.0 and the challenges faced by

member countries in implementing the plan at both national and regional levels.

The inspiring work of CTI-CFF

CTI-CFF is working to promote the establishment of new MPAs and the effective management of existing ones. In the first decade of CTI-CFF's existence, it developed the Coral Triangle MPA System (CTMPAS) for the assessment of the management effectiveness of MPAs. The measures placed MPAs in categories from 1 to 4, with 4 the most effective. To date, CTI-CFF has achieved the placement of a total area of 2.8 million ha of MPAs in category 4.

In Indonesia, the Wakatobi National Park and Raja Ampat District Protected Area represent a total of 2.4 million ha. Malaysia has Pulau Tioman and Turtle Islands State Park covering an area of 26,855 ha. In the Philippines, the Tubbataha Reef National Park, Turtle Islands Wildlife Sanctuary, and Apo Reef Marine Reserve, cover 367,466 ha.

The seascapes strategy is used to achieve at least two objectives: establishing connectivity between protected areas to strengthen its effective management as CTI-CFF contribution



Small scale fisherman at Atauro Island, a marine protected area , Timor-Leste

to the 30x30 target, providing protection to species such as turtles and marine mammals.

CTI-CFF is supporting large-scale, multi-use marine areas that are providing a range of benefits, including conservation, sustainable use, and tourism, with work focused on three priority seascapes:

Sulu-Sulawesi Seascape spans three countries, Indonesia, Malaysia and the Philippines and covers 900,000 km² of marine and coastal habitats. Sulu-Sulawesi seas serve as migratory pathways for cetaceans and sea turtles, connecting ecologically important turtle habitats of nesting, feeding and mating grounds. The partnership among the three countries includes monitoring of habitats, protection of nesting beaches, data exchange and various studies of turtle including genetic studies.

Lesser Sunda Seascape covers 358,020 km² of Indonesia and Timor-Leste, between Bali, Nusa Tenggara, Southwest Moluccas, and Timor island. These areas are important for the migration of marine megafauna. They connect the southern and northern hemisphere through its narrow and deep straits which are rich in nutrients due to the strong current and upwelling. This strait is also the migration route for whales. CTI-CFF is also strengthening the seascape approach toward sustainable fisheries practices in ensuring the protection of marine megafauna.

Bismarck-Solomon Seas Ecoregion spans 2 million km² along the northern part of Papua, from Raja Ampat in Indonesia to Papua New Guinea and the Solomon Islands, connecting habitats of rare leatherback turtles and whale sharks. In this area, CTI-CFF is supporting to strengthen the partnership of the three countries in establishing a network of MPAs, including Locally Managed Marine Areas (LMMA) and Other Effective Area-based Conservation Measures (OECM) to ensure the survival of the turtles and whale sharks.

On the threatened species conservation effort, the CTI-CFF's sharks and rays conservation initiative is crucial in maintaining the roles of the Elasmobranch in keeping healthy marine ecosystems despite being highly vulnerable to overfishing and habitat loss. CTI-CFF has been working with its member countries and partners to run various studies on the sharks, such as monitoring migration with Radio Frequency Identification (RFID) in Bali and Bintuni-West Papua, monitoring shark bycatch incidents through an onboard observer programme, and the monitoring of sharks landing and consumption with volunteer enumerators.

The whale sharks conservation programme focuses on learning more about this enigmatic species. Little is known of its behaviour, population distribution and important habitats, but increasingly more whale sharks are being found stranded in shallow waters such as in the Java Sea and the southern part of the Philippines. CTI-CFF is also supporting a whale shark satellite monitoring programme — it is found that they are migrating as far as the Solomon Islands and the Philippines from the Bird's Head area of Papua. Indirectly, these studies are also strengthening collaboration among member countries that are sharing the same resources.

Stock replenishment for the zebra shark (Stegostoma tigrinum) is carried out in Raja Ampat, an area dedicated as shark and manta ray sanctuaries, through an international collaboration on shark nurseries. This initiative aims to contribute to the improvement of the global population of threatened shark species.



Fishermen with their catch on arrival at Manado Fish Market, Indonesia

Turtle conservation is the biggest portfolio in species conservation of the CTI-CFF member countries. CTI-CFF regularly supported an international turtle symposium, an opportunity to continue exchanging data and strengthening further collaboration among the countries. A strong campaign to stop poaching and consumption of turtle eggs and meat was one of the messages highlighted in the Coral Triangle Day, celebrated each year on June 9.

CTI-CFF promotes innovation on fishing gear in the effort to reduce bycatch of sea turtles and sharks in the industrial pelagic fishing practices. The use of modified hooks for longline fishery is proven to effectively reduce turtles' bycatch to almost zero, while also increasing the number of commercial fish catches. Thus, the uses of LED lamps and light sticks on gillnet is effective in preventing the bycatch of turtles. CTI-CFF continues to support the smart gear competition carried out to invite more inventions of sustainable fishing methods.

In the implementation of the electronic Catch and Documentation System (e-CDTS) for Tuna Fisheries from 2017 to 2019 under the Strengthening Organisational and Administrative Capacity for Improved Fisheries Management (SOACAP-IFM), CTI-CFF collaborated with the US Department of Interior and the USAID Oceans and Fisheries Partnership. The e-CDTS is software developed by the USAID Oceans and Fisheries Partnership that will record, among other things, the fishing ground location and size of tuna catch. This will be useful data to be used in combating Illegal, Unregulated and Unreported (IUU) fishing in the three priority seascapes.



Land based activity runoff can be detrimental to corals as shown here. Effective coastal management can help minimize or remove such threats

CTI-CFF and the Sustainable Development Goals

The CTI-CFF's programme is closely aligned with SDGs 5, 13, 14, and 17. SDG 13 calls for urgent action to combat climate change and its impacts. Coral reefs are highly vulnerable to the effects of climate change, including ocean warming and acidification. CTI-CFF is working to reduce the impact of climate change on coral reefs by promoting the use of sustainable fishing practices and the establishment of MPAs that protect coral reefs from overfishing and other harmful activities.

SDG 14 focuses on the conservation and sustainable use of the oceans, seas, and marine resources. The CTI-CFF's programme is designed to promote the conservation and sustainable use of coral reefs and associated ecosystems, including seagrass beds, mangroves, and other coastal habitats. The CTI-CFF is also promoting the establishment of MPAs and seascapes, and ensuring a network of those MPAs and seascapes are established for the effectiveness of marine resources conservation.

SDG 17 calls for partnerships for sustainable development. The CTI-CFF is a partnership between six countries in Southeast Asia and the Pacific, and the programme is designed to promote collaboration and cooperation between these countries. CTI-CFF is also working with a range of partners, including NGOs, private sector organizations, and academic institutions, to promote the conservation and sustainable use of coral reef areas and associated ecosystems.

SDG 5 calls for gender equality and the empowerment of women and girls, and the CTI-CFF recognizes the important role that women can play in the sustainable management of

marine resources. The Women Leaders' Forum, established in 2009, provides a platform for women from different sectors and countries to share their experiences and ideas on how to promote gender equality in the CTI-CFF's activities.

Implementation of the Regional Plan of Action

CTI-CFF has set ambitious goals indicated in the RPOA 2.0: that, firstly, by 2025, coastal communities and coastal and marine ecosystems are enabled to cope with the impacts of climate change, natural and anthropogenic threats, in the Coral Triangle region; secondly, by 2030, coastal communities and coastal and marine ecosystems in the CT region are more resilient/able to adapt to impacts of climate change and natural and anthropogenic threats, by improving food security, sustainable fisheries and coastal livelihoods. At the national level, the member countries are developing the National Plan of Actions (NPOA) for the implementation of their national priority actions, to contribute to the achievement of the regional goals.

Strengthening governance and management

One of the key focus areas of RPOA 2.0 is strengthening governance and management of the marine resources in the Coral Triangle. This involves improving the capacity of local governments and communities to manage their marine resources effectively. To achieve this, the CTI-CFF envisions establishing a regional centre of excellence for marine governance and management. The centre will provide training and technical assistance to local governments and communities on best practices for marine

resource management. CTI-CFF will build the capacity of CT6 member countries to strengthen the governance and regional policy framework for effective and efficient implementation of regional transboundary and national policies on sustainable management of marine and fisheries resources.

The centre of excellence will serve as a data source for the CT6 governments in developing sustainable policies in marine and fisheries management. At present, the Coral Triangle Atlas (CT Atlas) serves as a knowledge management system for regional sources of information/data for tracking the implementation of RPOA 2.0.

Marine Protected Areas

In the RPOA 2.0, CTI-CFF aims to improve the governance of MPAs in the effort to achieve effective management to the level of categories in accordance with IUCN standards by 2030. There are a total of 1,268 MPAs and among these, 24 are considered CTMPAS category 3 and 4 (7 are in category 4 and 17 in category 3). In terms of hectarage, the current MPAs cover an area of around 21 million ha, with categories 3 and 4 covering an area of approximately 7.8 million ha.

OECM is being considered by CTI Member countries as one of the factors taken into account in fulfilling the Convention of Biological Diversity (CBD) Aichi Target 11 obligations, and the 30x30 target. The Regional Secretariat assists the CT6 in identifying and nominating CTMPAS in prioritizing individual MPAs and networks of MPAs that are connected, resilient and sustainably financed and designed in ways that generate significant income, livelihood and food security and that are benefiting the coastal communities in conserving the region's rich biological diversity.

The Regional Secretariat is supporting the exchange of data and knowledge among MPA managers to strengthen the networking and related capacity building programmes. The exchange of knowledge also includes stakeholders outside of the CT region such as the Mediterranean and Atlantic MPA managers.

Sustainable fisheries

The Coral Triangle region is home to marine mega biodiversity and 130 million people who are living along the coastlines and are dependent on marine resources for their survival. Sustainable fisheries is another key area of focus under RPOA 2.0. The CTI-CFF continues to implement measures to reduce overfishing and promote sustainable fishing practices for artisanal and industrial fisheries. These include implementing a traceability system for seafood products, promoting alternative livelihoods for fishing communities, and establishing a regional network of fishery observers to monitor fishing activities.

In partnership with USAID RDMA, CTI-CFF envisions building the capacity of the CT6 member countries to combat IUU Fishing including establishing a robust data centre for decision makers as a source of credible information to develop efficient and effective policies to reduce IUU Fishing.

Climate change adaptation

CTI-CFF continues to support the implementation of the Region-wide Early Action Plan (REAP) and Local Early Action Plan (LEAP) for climate change adaptation and mitigation solutions in support of efforts to protect key coastal and marine ecosystems done at the country level. CTI-CFF is collaborating with Allen Coral Atlas to capture the coral bleaching incidents within the region as a precautionary approach for adaptation actions taken by the government.

Climate change is a major threat to the marine ecosystems in the Coral Triangle. RPOA 2.0 recognizes this and includes plans to implement measures to help communities adapt to the impacts of change. The CTI-CFF also plans to conduct research on the impacts of climate change on the marine ecosystem and develop adaptation strategies accordingly. Further, CTI-CFF commits to improve strategies and policies of the CT6 member countries to govern and formulate integrated marine and fishery resource management with climate adaptation policies. In facing the severe climate change impact, CTI-CFF will also focus on building the capacity of women and youth leaders across the CT6 to increase knowledge and their capacity to participate in coastal and marine conservation as well as entrepreneurship for climate resilience.

Partnership and collaboration are essential to the success of RPOA 2.0. The CTI-CFF will continue to work closely with various stakeholders including governments, civil society organizations, and the private sector to achieve its goals. The initiative also plans to establish a regional knowledge management system to share best practices and lessons learned with other countries and regions facing similar challenges. Further, the CTI-CFF is actively seeking to engage more countries as well as partners to join the organization.

CTI-CFF recognizes that regional cooperation and collaboration are critical to the success of its initiatives and programmes. CTI-CFF is working closely with USAID RDMA through the Sustainable Fish Asia (SUFIA) Project, and some other development agencies, NGO partners and regional initiatives. Through collaborative efforts, CTI-CFF is bringing together governments, non-governmental organizations, research institutions, and local communities, fostering a multidisciplinary approach to address the complex challenges facing the region.

Coral Triangle Conservation Fund

The Regional Secretariat of the CTI-CFF is now in the process of establishing the Coral Triangle Conservation Fund (CTCF). Learning from the successful trust fund initiatives such as the Caribbean and Mediterranean, this Fund is dedicated to providing an independent and transparent source of funding to help achieve the targets laid down in the RPOA 2.0.

The CTCF is designed to support components of CTI-CFF's Regional Plan of Action 2.0. The proposed mission of the CTCF is to support sustainable and effective management of a regional network of Marine Protected and Conserved Areas benefiting nature and communities in the Coral Triangle. It will seek to complement existing national public, multilateral, bilateral and private sources of financing and to ensure sufficient institutional capacity and human capital to protect the coastal and marine waters in the Coral Triangle region.

The development of CTCF is being assisted by KfW Germany, Wildlife Conservation Society (WCS), Conservation Finance Alliance (CFA) and USAID. The CTCF is expected to be in operation by Q1 of 2024.