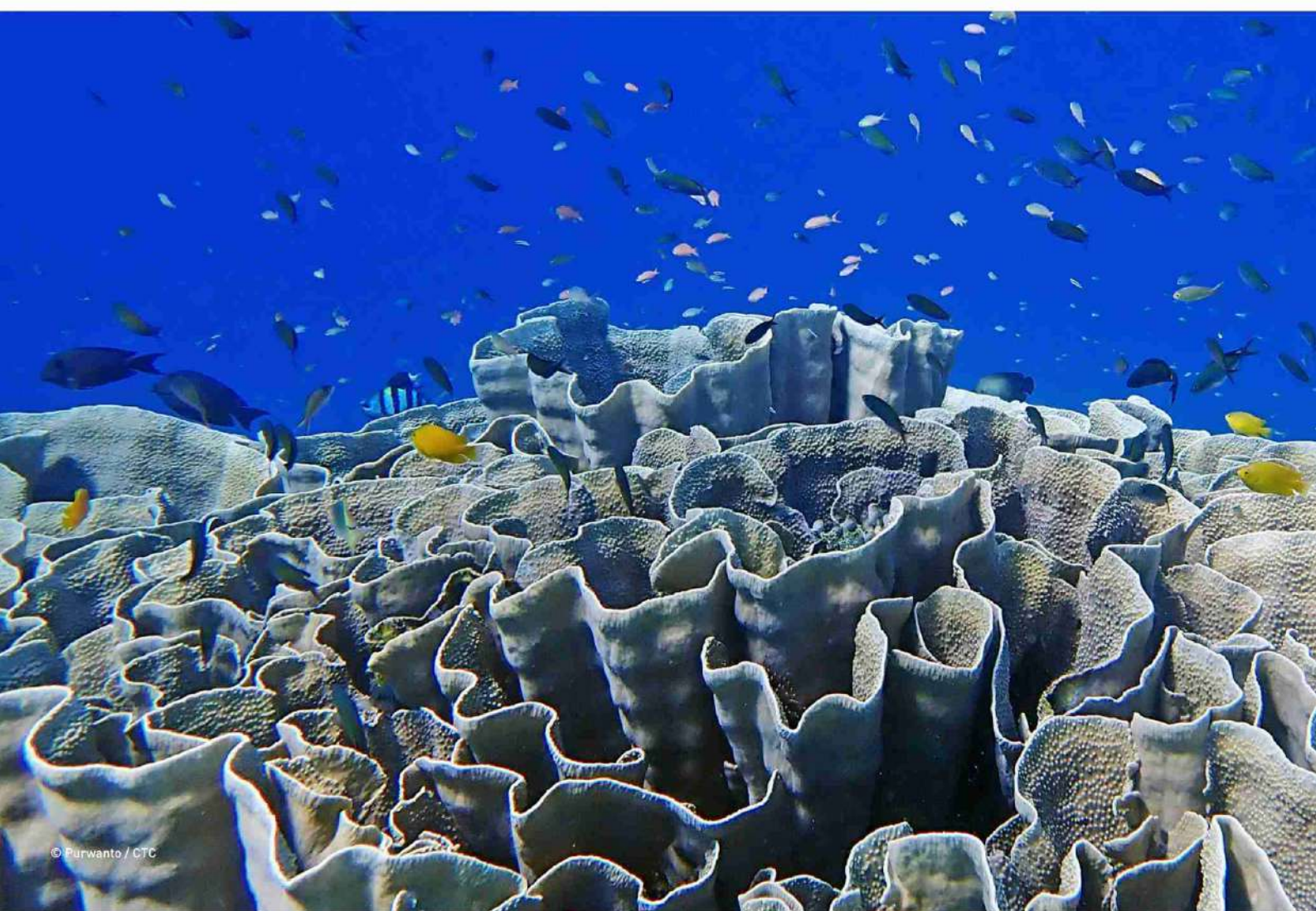




FIRST QUARTER 2020 REPORT

CORAL TRIANGLE CENTER



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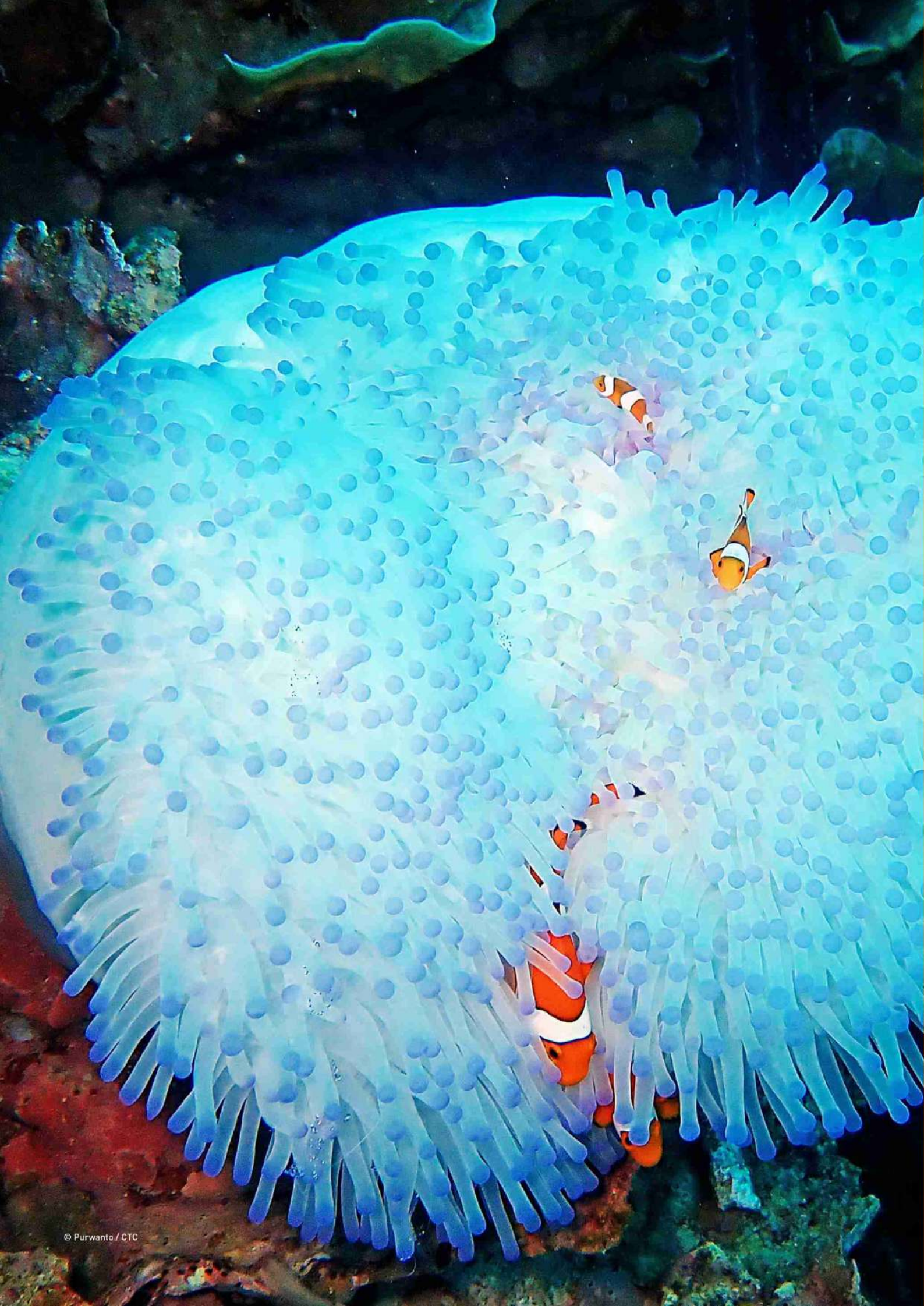


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ABOUT US

CORAL TRIANGLE CENTER

A center of excellence in tropical marine resource management:
Building local leadership for long-term conservation in the Coral Triangle



Inspiring People Saving Oceans

VISION

Healthy seas that enrich people and nature.

MISSION

To inspire and train generations to care for coastal and marine ecosystems.

VALUES

Excellence

In the quality of our teaching. In the performance and integrity of our staff.
In our commitment to being a world-class center of tropical resources management.

Local Stewardship

Based in the heart of the Coral Triangle, we maintain strong roots in the field and close ties to stakeholders at all levels. We value traditional knowledge and practices, and promote local ownership of our projects.

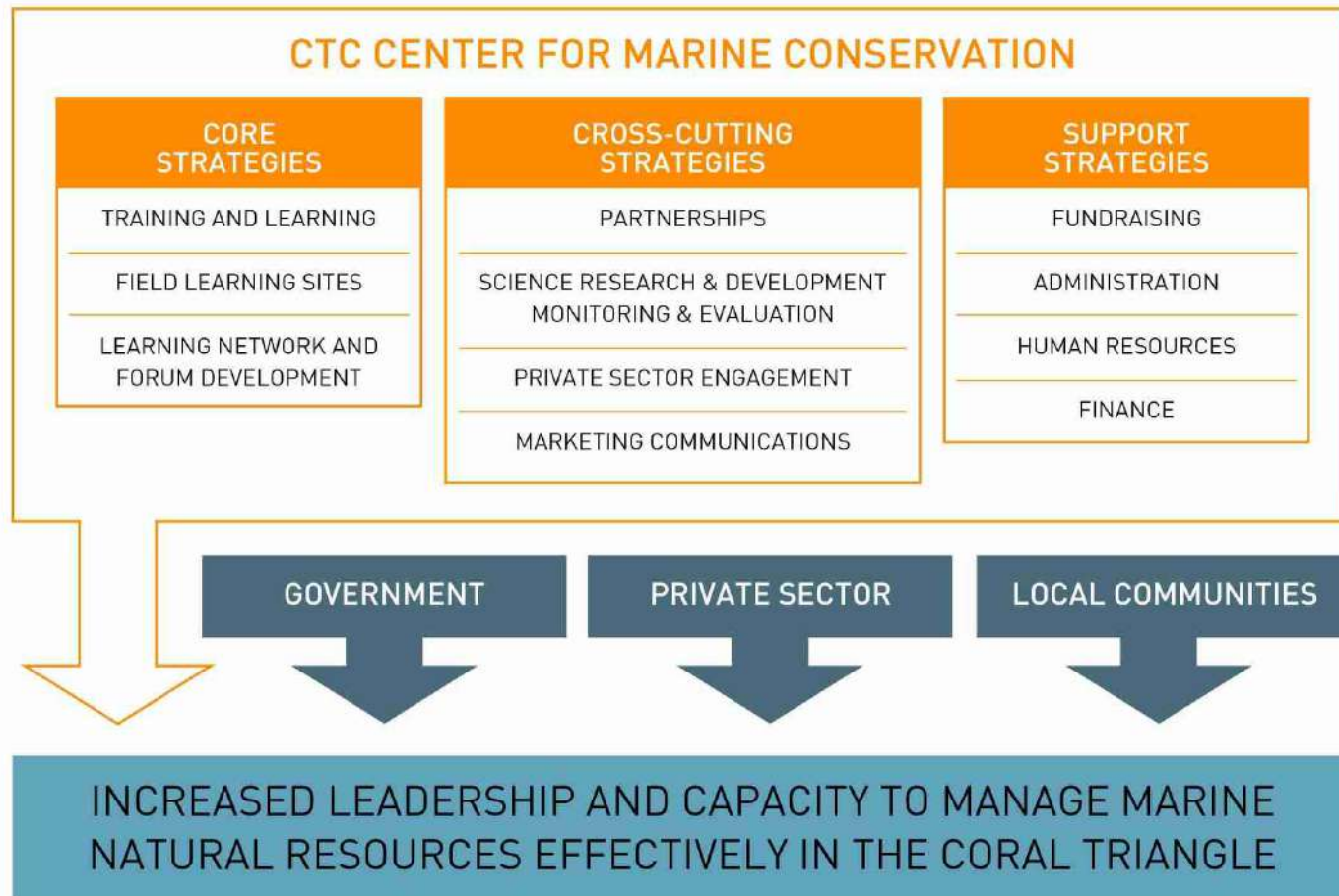
Collaboration

We build partnerships among leaders in government, communities, NGOs, education, and the private sector because only by engaging all constituencies can solutions be effective.

Result

We provide trusted information, are transparent in our actions, and hold ourselves accountable for the quality of our programs, changing our strategies as necessary and measuring our impact over time.

CORAL TRIANGLE CENTER STRATEGIES



CTC is an official development partner of the Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF) - a government-led initiative of the six countries of the Coral Triangle region namely Indonesia, Malaysia, Papua New Guinea, Philippines, Solomon Islands and Timor-Leste. CTC supports the CTI-CFF in cross-cutting activities such as capacity building, women empowerment, local government leadership, sustainable tourism and private sector engagement. CTC is also a member of the International World Conservation Union (IUCN) and the International Coral Reef Initiative (ICRI)

FOREWORD

The ongoing global economic and geopolitical volatility and the most recent global healthy emergency continue to challenge us to adapt, learn and stay ahead of the curve.

In our new branding definition model for CTC we chose *Agile, Courageous, Engaging and Resilient* as our personality traits for the organization. These traits are relevant more than ever to address and adapt to the ongoing dynamics around us to achieve our goals and mission.

Our team has proven to be adaptive in the field responding to ever changing field dynamics. We are agile in forming new partnerships to scale up our work with more funding to work in new territories, deliver more training and engage more customers.

In this new defining decade, we want to be bold and abate more threats! Raise awareness on plastic pollution and climate change, and convene people to take action and care for the oceans. We have a growing support base at all levels in Bali, Indonesia, in the region and globally.

In dealing with emerging threats, acute stress factors and constraints in marine conservation, it remains pivotal to be strongly rooted locally with communities, partners and customers who can continue to engage in our work despite global calamities.

Global and regional partnerships are pivotal to address long term and new threats keeping us up to date with the latest science and allowing us to work at scale with a diversified funding portfolio and work force.

Last but not least, we need to further strengthen CTC's resilience in our work force, funding and programs so we can weather the storms and bounce back every time with new ideas and energy.

This year, we start to implement our 3rd five-year strategic plan for 2020-2024 provides a comprehensive framework with an emphasis to continue to develop an unique learning organization of excellence in marine conservation with a strong culture and brand with a resilient team that can achieve its goals in an ever-changing environment!



Rili Djohani
Executive Director

CONSERVATION ON THE GROUND: MULTI-STAKEHOLDER APPROACH TO MPA MANAGEMENT

Engaging Local Communities to Protect Nusa Penida's Marine Biodiversity



© Brooke Pyke

Data collected by CTC and the Nusa Penida MPA Management showed there were 14 acts of MPA violations recorded by the surveillance team of Nusa Penida MPA. The Bali MPA Management Unit in Nusa Penida, together with partners including CTC, conduct monthly monitoring to ensure that marine activities in the MPA follow the Nusa Penida MPA zoning system. The violations were mostly found in the core zone, traditional fisheries zone, and marine tourism zone, highlighting the need to build the knowledge of local operators on the MPA zoning system. In order to address this, CTC collaborated with the Bali MPA Management Unit, to conduct socialization on the Nusa Penida zoning system on February 5. The team also spoke about the protection of marine animals, especially sharks and manta rays.

The socialization was conducted in Banjar Pidada Karang Sari, Suana Village. The 63 fishermen of Karang Sari were excited to explore these important topics. CTC's partner in the field, Wayan Suwarbawa,

led the discussion on the Nusa Penida MPA zoning system. He explained the boundaries of each zone and went through which activities are allowed or forbidden in each zone so the community can build their knowledge of the zoning system and follow the implementation correctly.

As the habitat of many charismatic marine animals, the protection of the Nusa Penida MPA through its specified zoning system is vital. CTC's Field Officer in Nusa Penida, Revani Utami, shared about manta rays that inhabit the waters of Nusa Penida, as well as the Indonesian Government's policy which now fully protects manta rays. Reva also inspired the locals to help protect these marine megafauna by talking about the role of manta rays in the ocean, and the benefit of protecting manta rays for the local community in Nusa Penida. One member of the Bali MPA Management Unit, I Dewa Yogi Palguna, also talked about different kinds of sharks that are protected by the Indonesian government.



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Supporting Sasi Revitalization in Lease Islands



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On February 10-12, CTC supported the opening of the Sasi activities in the Lease Islands. CTC supported one of the island's local champions or Pejuang Laut in conducting an outreach activity that successfully reached 102 participants from two community groups in Negeri Noloth, Saparua Island and Negeri Aboru, Haruku Island, Lease Islands MPA. The outreach activity focused on the socialization of the proposed Lease Islands MPA zoning map as well as disseminating knowledge and information about marine resource conservation.

Enhancing Pejuang Laut' Knowledge to Advocate for Actions in Protecting the Sea



© CTC

CTC provides fundamental support for Local Champions, called Pejuang Laut, to build their skills and knowledge to become influential leaders in their community. Pejuang Laut are engaged through the USAID SEA Project, and are key to the establishment of MPAs in Maluku and North Maluku Province. They play a significant role in promoting sustainable fisheries and protecting endangered, threatened and protected marine species.

Seven high performing Pejuang Laut from CTC's sites, namely Sarna Sibela and Nurhasni Yoisingadji from the Sula Islands, Merfiana Aponno and Yunus Siahay from the Lease Islands, and Megi Pesirahu, Reni Nusaaly and Musa Mahelatu from Buano Island, were selected to attend the 2020 Champion Training in Ambon, Maluku, from January 27-30.

For this training, CTC encouraged more women to participate and build their capacity to advocate for the protection of the sea from illegal fishing practices and other threats, and support gender equality in marine conservation projects. Megi Pesirahu, a member of Pejuang Laut, shared her inspiring story advocating for the establishment of an MPA around her home island, Buano, in Maluku Province. "I wanted to protect the island that has been providing for the people in Buano. The island has an abundance of fish, coral and mangroves that support livelihoods there" said Megi. She began working with CTC as one of the Pejuang Laut after she showed her concern and steadfast efforts to influence her community in South Buano Village to change their behavior and protect marine resources.

Another interesting story also came up from Sarna Sibela, a newly engaged Pejuang Laut from the Sula Islands. She said that she used to have no idea about ETP marine species and why they need to be protected. "I am a fisheries extension officer, but I did not have any knowledge of ETP marine species nor marine protected areas. CTC is helping me to build my knowledge through several training sessions on MPA establishment and ETP marine species" explained Sarna, who participated in the Champions Training for the first time. After participating in the four-days training and being formally announced as a Pejuang Laut, she feels that now she has a responsibility to take on a significant role in marine conservation. "I have to share the knowledge of the importance of MPA establishment to protect the marine ecosystems for sustainable fisheries, and why we need to protect the ETP marine species, with the community, specifically the fishermen whom I used to meet in my daily work" Sarna said.

Supporting the Establishment of MPAs in Timor-Leste

CTC's Marine Conservation Adviser traveled to Dili in February 2020 to meet with Timor-Leste government officials as well as community leaders in Atauro Island. CTC has been working in collaboration with the Timor Leste Government (Ministry Agriculture and Fisheries), local NGO and local community in the process of facilitating establishment of two MPAs in Timor Leste. The MPAs are Atauro Island (in the North of Dili) and Liquica MPA (in the West of Dili). The MPA of Atauro Island, with a total area of 13,650 hectares already has a final outer boundary, zoning system, management plan and management unit structure. These were all developed based on scientific and stakeholders inputs as well as existing agreements. At the end of 2019, the draft of the Ministerial Decree on Atauro Island MPA was submitted to the Minister of Agriculture and Fisheries to be signed and announced to the public. With this Ministerial Decree all establishment processes of Atauro Island MPA will be completed and the management plan implementation will be ready to start. Meanwhile, Liquica MPA with a total area of about 7,500 hectares, is in the process of finalizing its management plan document and management unit structure. The Liquica MPA already has an outer boundary and final zoning system based on scientific inputs and stakeholders input and agreement.



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SCIENCE-BASED APPROACH IN DECISION MAKING

Coral Watch: Bleaching Observed in Lease Islands



In first quarter this year, Professor Terry Hughes of James Cook University announced that the Great Barrier Reef (GBR) was experiencing its third coral bleaching event in five years. For the first time, bleaching was affecting all three regions of the GBR in Australia.

At about the same time that Professor Hughes was conducting the aerial surveys that led to this conclusion, CTC's scientific team were observing bleached corals some 2,000 kilometers away. In the Lease Islands, Maluku, a reef health monitoring (RHM) survey revealed that 2-15% of hard coral cover was fully or partially bleached with an average of 7% across all monitoring sites. Soft corals and anemones were also affected.

According to NOAA's Coral Reef Watch, Maluku began to experience unusually high sea surface temperatures in late November. Temperatures peaked in December at about 31°C before subsiding somewhat, leveling out at values still above the maximum monthly average.



By the time of our survey in mid-March, corals had been experiencing heat stress for several months. However, conditions were improving, reflected by a falling value for degree heating weeks (DHW), a cumulative measure of the intensity and duration of heat stress. Between December and March, DHW exceeded the threshold where bleaching is likely, but avoided topping the threshold where severe, widespread coral bleaching and mortality are predicted. With luck, water temperatures will continue to fall as the southeast monsoon develops.



Corals can recover from bleaching if the intensity and duration of heat stress are not too extreme. Lease Islands reefs have proven resilient to stressors over hundreds or thousands of years, as suggested by the monumental size of some of its coral colonies. During our RHM survey, we found a diversity of corals that rivaled, and in some cases surpassed, that of the Banda Islands, no small ecological footnote. Reef sharks, trevally, Napoleon wrasse and hawksbill turtles all made appearances. We hope to return and find the signs of bleaching gone. With the climate changing at a pace ten times faster than any other in the last 65 million years, however, it may be only a short time before bleaching returns.

Management Effectiveness of Ay and Rhun Islands Marine Protected Area Based on Reef Fish and Live Coral Cover in the Banda Islands, Maluku



As a response to the question "How is your MPA doing?", CTC's Marine Conservation Advisor, Marthen Welly, conducted research on the management effectiveness of the Ay and Rhun Islands MPA as part of Marthen's masters degree at IPB University. The coral reef ecosystems were chosen as an indicator to show the MPA management effectiveness as one of the key MPA conservation targets. The study hypothesised that the management of the Ay and Rhun Islands MPA will have an impact on improvements in the quality of the coral reef ecosystems.

This study aimed to evaluate the spatial and temporal trends of the coral reef ecosystems status before and after the establishment of the Ay and Rhun Islands MPA; calculate the economic value of coral reef ecosystems in the MPA based on reef fish stocks; and evaluate the management effectiveness of the MPA based on the quality of coral reef ecosystems before and after MPA establishment. The research was conducted from August to November 2018 at four observation stations within the MPA. The study also used secondary data from the Coral Triangle Center's surveys and monitoring. The primary data was collected when the study was conducted.

The results of the analysis showed that the percentage of live coral cover had decreased before 2016, and then increased to 68,79% (high category) in 2018 after the establishment of the Ay and Rhun Islands MPA. The coral mortality index at Ay and Rhun Islands MPA is relatively low, below 0.10 (close to zero) both before and after the MPA establishment. The results of reef fish abundance and biomass analysis show fluctuation before and after MPA establishment, but consistently within the high and abundant category. Tropic status and size composition of reef fish changed before and after Ay and Rhun Islands MPA establishment, but returned to be dominated by carnivore groups and big fish in 2018. The conclusion of the study shows that there has been a positive trend for coral and reef fish conditions spatially and temporally, as well as fisheries resources productivity. The positive change is an indicator that the Ay and Rhun Islands MPA has been effectively managed at certain levels, and has the potential to improve even more.



Socio-economic Survey Conducted in Lease Islands



CTC conducted a socio-economic survey in early March in the Lease Islands, in parallel with Reef Health Monitoring (RHM) and prior to government-imposed travel restrictions related to the Covid-19 pandemic. The team successfully collected data from Ameth, Leinitu, Ameth, Haria, and Saporua subdistrict.

Pejuang Laut such as Raja Ameth's Wempy Dirk Parinusa played a significant role in the data collection and facilitation of the interviewees and respondents.

During the data collection, the socio-economic team also distributed communication materials for villagers to have a better understanding of Marine Protected Area (MPA) establishment and Endangered, Threatened, and Protected (ETP) marine animals. Posters with information about ETP marine animals and the benefits of MPA establishment handed to respondents as a gift to appreciate their time for being interviewed. Some of the respondents even asked for more posters for them to display on their walls. Respondents are also willing to learn more about MPA establishment and promoting sustainable fisheries in their area.

CAPACITY DEVELOPMENT AND TRAINING FOR MARINE PROFESSIONALS

Certification Program Materials for Marine Tourism, Outreach and Monitoring



As an official center for competency assessment (Tempat Uji Kompetensi - TUK), CTC and affiliates from the Marine Professional Certification Institute (Lembaga Sertifikasi Kelautan - LSPK) conducted a workshop from January 7-10, 2020 at Balai Pelatihan dan Penyuluhan Perikanan (BPPP) in Tegal, central Java, to develop certification schemes and assessment materials. This workshop was supported by the USAID SEA Project and Margaret A. Cargill Philanthropies.

By the end of the workshop, 11 priority certification schemes for SKKNI marine tourism, outreach and monitoring had been finalized, including plans for junior dive guides, outreach officers and senior data collectors for the monitoring and evaluation of coral and coral reef fish. LSPK will submit these documents to the National Bureau for Professional Standardization, who are expected to legalize the documents by the end of February 2020, with the plan of initial competency assessments conducted by LSPK and TUK in March.



Ecosystem Approach to Fisheries Management



To build local capacity to manage fisheries through an ecosystem based approach, the CTC team conducted an Ecosystem Approach to Fisheries Management (EAFM) Training for Widyaiswara and Instructors in fisheries management areas (FMAs) 715, 714 and 712 in early December. The training was conducted at the CTI-CFF Regional Secretariat office in Manado, North Sulawesi. With this training, it is hoped that EAFM concepts and the ability to develop ecosystem-based fisheries management plans can be transmitted to various parties, bearing in mind the main role of Widyaiswara - government agents tasked with building government capacity - and local instructors is to train both civil servants (Aparatus Sipil Negara) and the community.

The training sessions covered topics such as fisheries management approaches; an introduction to EAFM including processes, implementation in Indonesia and determination of the scope of fisheries management units; identification of challenges and setting priorities; and developing EAFM plans and setting goals. On the third day of the training the participants visited Bitung, North Sulawesi, where they visited Poklasar Kartika - Mawali, a community group in Lembeh Islands who are engaged in tuna processing as well as PT Perikanan Nusantara (PTPN) in Bitung. At Poklasar participants saw first hand tuna processing and heard from the community about overcoming problems and developing businesses, while at PTPN participants saw the manufacturing process for tuna loin and learned about sourcing tuna.



LEARNING NETWORKS AND PARTNERSHIPS

Helping the Government of Indonesia Achieve its MPA Goal by 2030

CTC, in collaboration with WWF and the Ministry of Marine Affairs and Fisheries (MMAF) Indonesia, organized a series of workshops in January and February to further support the development of Indonesia's vision to expand its marine protected area (MPA) coverage by 30 million hectares in 2030. The workshop is part of a project wherein non-government organizations (NGOs) collaborate to support the effective management of MPAs in Indonesia and boost the government's effort to achieve its target under the Convention on Biological Biodiversity to declare 10% marine territory as MPA.

The project aims to develop a status report on MPAs in Indonesia; a shared MPA vision document and shared plan of action; and a communications and outreach platform to socialize the MPA vision and facilitate collaboration among partners towards shared goals. In 2009, the Government of Indonesia set a target to protect 20 million hectares of marine areas by 2020. At the 2018 Our Oceans Conference in Bali, the MMAF announced that Indonesia had reached this target and was setting a new one. The new target is two-part: (1) ensure the 20 million ha are effectively and equitably managed; and (2) expand area coverage to 30 million ha by 2030.



By 2030, Indonesia's MPA network will serve as a globally relevant example of collaboration leading to significant achievement in establishing and effectively managing MPAs, benefitting thousands of coastal communities. Following these discussions, we identified a need to improve and facilitate coordination and planning among NGOs and key government partners in order to develop this vision. We propose to support an intensive, one-year process to identify areas of collective and separate action, develop key products, and build communication and learning among partners - all of which will set the stage for long-term collaboration and improved outcomes for all organizations. The project is also supported by other NGOs such as Wildlife Conservation Society (WCS), Conservation International (CI), Rare Conservation Organization, and The Nature Conservancy (TNC).



Partnership with Seattle Aquarium

In February, we finalized and signed our Memorandum of Understanding with the Seattle Aquarium Society to collaborate on projects related to four areas: improving effectiveness of the Nusa Penida MPA, research and monitoring of the Nusa Penida MPA; outreach and engagement specifically in the training of naturalist guides; and developing CTC staff in visitor management and a volunteer program.



Developing a Citizen Science Network to Monitor Bali's Coral Reefs

On February 5, CTC convened a daylong workshop to explore the design of a citizen science program focused on Bali's coral reefs. In particular, the program would seek to characterize and monitor reefs with respect to their ecological resilience - the ability to resist a disturbance, or the rate of recovery following a disturbance. Twenty-three participants attended, representing around 13 organizations including universities, provincial and national government agencies, marine tourism businesses and nonprofits.

A keynote presentation was then delivered by Dr Rod Salm, senior adviser emeritus of The Nature Conservancy's Pacific Division Marine Program. In Bali, coral reef ecological monitoring efforts are already conducted by various groups. During the workshop participants were invited to briefly introduce themselves by indicating on a map locations where they currently operate and/or collect reef-related observations, plus locations where other groups are known to have projects.



A citizen science initiative should supplement - rather than duplicate - efforts already underway. This could be done by facilitating the process of sharing and compiling data that is already collected; identifying new types of data that would enhance our understanding of how Bali's reefs are responding to climate change; and extending the data collection reach in space and time.



When questioned whether a citizen science initiative would be useful for Bali Province, workshop participants responded positively: Combined with outreach, it could help local communities understand how some of the environmental changes they see - like coral bleaching - are related to climate change. Monitoring by volunteers could produce data that the government's budget could not cover, but would benefit the management authority. A citizen science initiative could contribute to several core aspects that Bali promotes: nature, marine environment and stewardship. Finally, citizen science could serve as an early warning network - by establishing a system now, before an environmental crisis, we will be well prepared to respond in a coordinated and timely fashion.



Green Fins Program Grows in Indonesia

In February 2020, Green Fins in Indonesia reached 32 active members and eight assessor. The Green Fins Code of Conduct is also currently being translated to Bahasa Indonesia. The active members of Green Fins Indonesia are covering Bali, Komodo (NTT) and Ambon (Maluku) with request to expand from dive centers in Raja Ampat (West Papua), Wakatobi (Southeast Sulawesi), Derawan (East Kalimantan), Togean and Banggai (Central Sulawesi), Gili Trawangan Lombok (NTB), Bintan (Riau Islands), and Sabang Island (Aceh). Although the Green Fins program is relatively new in Indonesia, one of its active members ranked #4 position on the global ranking of Green Fins members across six countries which was announced in February 2020. CTC has also been facilitating implementation of Green Fins code of conduct in Timor-Leste. To date, Timor Leste has two Green Fins active members.



OUTREACH AND EVENTS AT THE CENTER FOR MARINE CONSERVATION

Fun Learning Activities



To kick off a busy year ahead, CTC's Center for Marine Conservation hosted a series of workshops conducted by The Nature Conservancy. These workshops were held from January 13-17 and brought more than 50 local and internal participants to the Center for Marine Conservation. The workshops aimed at increasing the capacity of conservation scientists and practitioners, as well as introducing new tools and sharing ideas amongst marine conservation practitioners in Asia Pacific. The number of visitors to the CTC Center for Marine Conservation for 2020 shows a decrease of almost 32% from January to February. This might be due to many events that were canceled caused by the COVID 19 outbreak. The significant decrease can be seen in the number of divers who used our dive training pool and our training pavilion.



On January 19, we received a group from St Thomas University in Minnesota, USA, arranged by Bali Institute. We welcomed the guests with a Center tour, showing them the facilities and explaining the programs and mission of CTC. The aim of their visit to our center was to learn about marine conservation, and during their visit they joined two of our Fun Learning Activities - a Fun Learning Class and the Escape Room SOS From the Deep. During the class, the students were taught about basic marine conservation and marine protected areas.

The class was then concluded with an Aquatico board game, where they learned about different types of ecosystems and the animals that rely on them. The students were all enthusiastic to learn about marine life, and how they can help protect marine and coastal ecosystems. The CTC team hopes the students will take their new knowledge back to the US, and spread the word on protecting coral reefs and the oceans!



On January 15 we hosted 21 students from the Faculty of Fisheries and Marine Science at Bogor Agriculture University (IPB) who visited our Center as part of their annual study program. Their main purpose was to learn more about marine conservation efforts across the Coral Triangle region.

During their visit, the CTC team gave them a tour around our Center and our team led by our Science Coordinator gave a presentation on our marine conservation programs, conservation in the field learning sites, building local capacity to maintain marine resources, and establishing marine protected areas (MPAs). Their visit was concluded with a fun board game.



CTI-CFF Regional Secretariat Executive Director Visit

We also hosted a visit by Dr Mohd Kushairi Mohd Rajuddin, the new Executive Director of the Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF) in early January to discuss strategic partnership with the inter-governmental initiative. Dr Kushairi had the chance to meet the local Nusa Penida MPA Management Unit, and toured the mangrove forests and seaweed farms in Nusa Lembongan, which are managed by the local community. He also enjoyed diving to see the beautiful reefs of the Nusa Penida MPA for himself. The CTC team shared stories from the field and lessons learned from local marine conservation efforts. CTC continues to work closely with CTI-CFF, building up capacity across the region, and supporting programs such as the Women Leaders Forum, which encourages women to take on leadership roles within marine and coastal conservation across the Coral Triangle.



Talking Underwater Public Lecture Series



We held two "Talking Underwater" events at the Center for Marine Conservation that gathered more than 100 participants from all over Bali. Launched in 2019, Talking Underwater is a series of hour-long public talks focused on highly interesting and engaging marine conservation issues held in the early evening in conjunction with short or feature length film screenings or workshops. These public talks are aimed at Bali-based audiences who do not have a wide knowledge of marine biology, and can be for both adults and older children. It aims to strengthen awareness of marine conservation issues in general, expand CTC brand awareness across Bali, and at the same time increase the number of people visiting the Center for Marine Conservation and availing of its paid services/products.



The first "Talking Underwater" session for this year was held on February 5 and was entitled "Coral Reef Resilience to Climate Change in Indonesia," delivered by Dr. Rod Salm. The event was booked out, as people from the dive industry, marine conservation, fisheries management, and the Sanur community joined in. Dr Salm addressed the potential of Indonesia, sitting at the heart of the Coral Triangle, to protect and manage its coral reefs for climate change resilience.



The second Talking Underwater session was held on March 4 and was entitled "Dive Into the Unknown: Exploring Mesophotic Coral Ecosystems in Bali." It was delivered by Alexis Chapuis, a French marine biologist and National Geographic Explorer. Alexis discussed his pioneering research project on unexplored reef habitats off the northeast coast of Bali, the threats they face, and their importance for shallow-water reefs, as well as for species such as the bump-head sunfish, and *Mola alexandrini*. The talk focused on mesophotic, or low-light, coral ecosystems, which grow deeper than recreational diving limits of 30-40 meters. The talk was again booked out with an audience composed of students, scuba divers, partners, and experts in Bali.

Kedai Kopi Hilly Anniversary: Sustainable Sustainable Seafood and Wine Pairing Night

Since its launch in February 2019, Kedai Kopi Hilly has become a place where families and friends get together and enjoy drink and delicious food from Hilly's homemade recipes. This green cafe is located at CTC's Center for Marine Conservation in Sanur.

A year has passed, and to commemorate the establishment of this café, CTC held a sustainable seafood and wine-pairing event on March 6, 2020. The event started with a cooking demonstration led by Balinese chef Ketut Suaryana. Thirty enthusiastic participants joined the cooking demonstration featuring local seaweed salad and fish curry.

Following the demonstration, Nur Ahyani from WWF Indonesia gave a talk on sustainable seafood principles and how consumers can identify and access sustainable seafood in Bali. This was followed by a wine pairing experience under the guidance of Ni Nyoman Kertawidawati, president of the Indonesia Sommelier Association, Bali chapter. Sponsored by Hatten Wines, the wine pairing portion focused on teaching participants how to pair food dishes with wine to enhance their dining experience. The event concluded with a fine dining experience featuring sustainable seafood dishes, free flowing wine, and Kedai Kopi Hilly's signature Klappertart dessert. Guests certainly enjoyed the evening's gastronomic delights and went home with a special edition apron featuring the quote "food is the ingredient that binds us together."



Fun Day With Young Painters Of "Studio Gelombang"



Twenty young painters from Studio Gelombang (Waves Studio) in Gianyar visited our Center for Marine Conservation on March 8, 2020 and brought their enthusiasm to learn new things in marine conservation.

Before coming to our center, these kids have been active in creating artwork, including marine-theme paintings, under the supervision of Balinese artist I Made Griyawan. The day at the center was fun! It started with exploring the Coral Triangle region, and students were amazed by the art installation Semesta Terumbu Karang or Coral Universe. It gave them insight on how coral reefs look underwater as home to the fish that they draw. Walking through the Wayang Hall, they were excited to see various kinds of marine animals with unique details.

In the classroom, the facilitators shared basic information on marine conservation through a short presentation, videos, quizzes, and fun games. The kids were introduced to marine and coastal ecosystems such as mangroves, seagrass and coral reefs. Through a fun game, we also engaged them to think about sustainability by using marine resource wisely. We hope that this session will give them the young artists inspiration to create meaningful and impactful artwork in the near future.

Workshop On Marine Conservation With Bali-based Tour Guides

A group of tour guides from Bali Nature and Experience Tours, also known as Oji Bali, visited CTC's Center for Marine Conservation on March 13, 2020. As a tour operator that offers snorkeling and island tours in Nusa Penida and Nusa Lembongan, Oji Bali's guides wanted to understand the importance of protecting nature, learn more about marine conservation, and how to promote sustainable tourism. During the half-day workshop, our facilitators and Marine Conservation Advisor presented about coastal ecosystems, marine life, marine protected areas, and sustainable tourism. One of the participants mentioned that through the workshop, they were able to learn more about nature and it has helped them to broaden their knowledge of marine conservation and implement sustainable tourism. The knowledge gained from this workshop will help all the tour guides to spread the word of conservation to their clients and partners.



Outreach Activities in Bali

In February, we attended the Dyatmika Science Fair to create brand awareness, promote our work and programs, and highlight the activities at our CTC's Center for Marine Conservation. CTC's booth was very popular amongst the students who enjoyed our fun learning activities and board games.



We also collaborated with organizations in Bali to hold outreach activities across the island. On February 15, we joined Bye Bye Plastic Bag's annual event "Bali's Biggest Clean Up" for the fourth straight year. In collaboration with the Body Shop Indonesia, Sustainable Suzy, Segara Seaside Bar and Restaurant, and local schools in Sanur, we all worked together to clean up the Segara Ayu Beach. After only 30 minutes, we had collected 4,457 cigarette butts, 890 food wrappings, hundreds of plastic cups and straws, as well as countless plastic bags. The trash, especially cigarette butts, can be camouflaged in the sand, and lots of plastic cups and bags were hidden behind rocks, or around the jetty, which is one of the best spots to enjoy the beautiful scenery of Sanur's beaches. After the clean up, CTC engaged with the students to perform a traditional Balinese dance that has been modified to tell the story of ocean conservation. They were excited while performing the Kecak dance and Wayang Samudra, or ocean shadow puppets, and we hope that the students will now spread the message of ocean conservation to their friends and families.

CTC also collaborated with The Body Shop Indonesia, to co-host a film screening of the Indonesian documentary "Semesta" on March 1, 2020. The screening was attended by more than 100 representatives of schools and environmental NGOs across Bali. Changes in our environment are happening right now, in front of our eyes. The film Semesta (Islands of Faith) shows these changes through the perspectives of different religions and beliefs.



It uses the voices of seven communities taking a stance and making a change in seven provinces across Indonesia. Prior to the screening, CTC Marine Conservation Adviser Marthen Welly spoke about the impact of climate change to Bali and how each individual can contribute to its solution.

The film begins in Bali, featuring how the Balinese address environmental issues using their traditional and culture such as "Nyepi." The film explains how this one-day rest not only realigns humans with nature, but also cuts daily emissions in the popular tourism island by a third, contributing to the mitigation of climate change. The journey continues on to Sungai Utik, West Kalimantan; Manggarai in East Nusa Tenggara; in Raja Ampat in West Papua; in Pameu, Aceh; in Yogyakarta, Java and finally to the capital, Jakarta. Each location highlights different solutions to environmental problems all linked to climate change and drives the message that each community can do their own part to address this global issue.



INSTITUTIONAL DEVELOPMENT

Building Capacity of Internal Staff



From January to February 2020, CTC staff attended several internal and external development and capacity building training sessions to prepare and further improve our work for the coming year and beyond.

CTC's Program Team attended a training from January 18-20 in Tegal, Java to help them better analyze scientific data using a new software called "R." The training was led by Agustin Capriati, our USAID SEA Project Training, Learning Network & Program Support Specialist who previously trained in the software. The training is expected to expand the team's capacity to quickly analyze and process data and prepare them for the biophysical monitoring and/or perception monitoring in the coming year, as well as synergizing the process and analyzing data from our learning sites. 'R' is an open source program, which can analyze statistics at a rapid pace. 'R' gives more direct access to data and analysis and can communicate with many other applications, such as Geographic Information System. This training was made possible with funding from Margaret A. Cargill Philanthropies.



In January, CTC staff joined a series of international and national workshops held at our Center for Marine Conservation organized by The Nature Conservancy. These workshops were aimed at increasing the capacity of conservation scientists and practitioners, as well as introducing new tools and sharing ideas. From January 13-17, a Science Writing Workshop was led by TNC lead scientist, Professor Hugh Possingham. This workshop was aimed at preparing impactful scientific manuscripts. One member of the CTC team, Purwanto, joined the workshop, utilizing the training to develop a draft manuscript on the Ecological Status of Bird's Head Seascape, in Papua, Indonesia. The week-long workshop allowed participants to revise and develop their manuscripts, completing a finalized draft by the end of the week, along with a follow up plan to finalize their scientific papers and submit them to a scientific journal.





The second workshop on Decision Science for Conservation and Spatial Action Mapping was held the following week. This workshop focused on quantitative problem formulation and problem solving, with a special focus on spatial prioritization with the decision support tool, Marxan. This workshop was again led by Professor Poshingham, along with Dr Jennifer McGowan, TNC's Spatial Planning Technical Coordinator. The workshop guided participants to address needs in prioritization and planning for ongoing conservation projects. Four CTC team members attended (Wira Sanjaya, Nyoman Suardana, Kitty Currier, Marthen Welly), to build our organizational capacity to implement new projects, address complex issues, and effectively maintain existing conservation efforts.



In February, Dr. Rod Salm, the Senior Adviser Emeritus for The Nature Conservancy's Pacific Division Marine Program, spent time with CTC team in our learning site, the Nusa Penida MPA, to help the team with the assessment of the new coral restoration site and to support our team with nature interpretation training to boost CTC's guiding for learning excursions. He gave the team specific inputs on how to interpret data/conditions on the ground to field learning site visitors. It was a great time to learn about coral reef ecosystems from one of the world's experts on this topic.



On February 21-22, the Science Coordinator and Nusa Penida MPA field officer attended a two-day learning trip to Amed in North Bali to learn about coral reef restoration best practices from Coral Gardener - a Bali-based group focused on coral propagation. Lessons learned from the visit are expected to inform CTC's own coral reef restoration projects in the Nusa Penida MPA.

In February and March, 20 Bali-based staff members from Finance, Communications, Operations, Center for Marine Conservation attended a training on Marine Protected Area 101 (MPA 101). Two batches of one-day training sessions were conducted by CTC's Training and Learning team and which customized for our staff members to enable them to understand the basic principles of MPAs, sustainable fisheries, sustainable tourism and how they can apply this to their daily work.



CTC Completes Development of 3rd Strategic Plan



In this quarter, we completed our 3rd 5-year strategic plan with support from the David and Lucille Packard Foundation's Organizational Effectiveness program. The strategic plan, implemented from 2020-2024, has a strong purpose with immersive and holistic approaches, integrating training and learning with our MPA field sites and the innovative learning experiences at the Center for Marine Conservation. Through this plan, we aim to remain agile and relevant in our field, setting us apart from other marine conservation organizations. The strategic plan includes a program strategy for the next five years, a theory of change, a brand strategy, human resources & organization alignment, as well as a business plan for the Center for Marine Conservation. The strategic plan was presented to the CTC Board members in March 2020, which was led by CTC's new chair of the Board of Trustees Mrs. Yuli Ismartono.

University Students Contribute to Marine Conservation in the Coral Triangle



CTC periodically hosts interns from all over the world, providing students opportunities to gain valuable experience in the on-the-ground work of marine conservation. Through this program, interns are able to develop networks, acquire and share knowledge and skills while at the same time contributing to the work of the organization. CTC's internship program not only caters to the intern's pre-existing capabilities, but also to their potential.

In January, 2020, two students from Timor-Leste studying Marine Sciences at Udayana University in Bali joined CTC for a one-month internship to learn about marine resource management at the front lines. Third year students Dominica P. Jeronimo Guterres and Paula Marques Alves aimed to gain firsthand knowledge on how marine conservation is applied on the ground and how local communities are involved in marine protected area (MPA) management.

During the internship, Dominica and Paula assisted CTC's Nusa Penida MPA Learning Site team in conducting a Resource Use Monitoring (RUM) survey. By doing this, they were able to find out how communities and other stakeholders utilize the MPA's resources and whether the MPA zoning system is being followed. Both students also had the chance to participate in the joint patrol, conducted by the Nusa Penida MPA Management Unit under the Bali Provincial Government in collaboration with the marine police and Navy. The joint patrols help ensure that stakeholders follow the Nusa Penida MPA zoning plan.

Both students said they learned a lot during their one-month internship and took away valuable lessons that they can apply in managing the marine resources in their home country once they finish their studies.

Hanna Nuur Tsaniya, a student from Tokyo International University, started her internship at the Coral Triangle Center (CTC) in January this year. She did not expect to learn so much from her three-month experience that she would consider coming back again the following year to continue what she started.

Hanna, who studies International Relations, signed up for an internship at CTC to learn more about how non-governmental organizations work. She was also interested in applying her knowledge to support CTC's Center for Marine Conservation. As the weeks went by, her internship exceeded her expectations and she did not only get to apply her skills to the fullest but it also sparked her interest in caring for our oceans and marine life.

"I learned the importance of education for the future, as the activities that CTC provides in the Center for Marine Conservation are mainly related to educating the masses regarding corals and the importance of the marine ecosystem for the future," she said. "I was very much inspired to learn more about the different aspects of reaching more people to care for our oceans and marine life."



New Staff Member



I Putu Nicho Nopriadi, IT Management Specialist

Putu graduated from Udayana University, Bali majoring in Electrical Engineering in February 2014. Putu is responsible for day to day IT operations at CTC, to lead the system needs assessment, conceptualization and development of CTC's integrated information system, support the data migration and integration process into MIS and CTC's website, develop manual guideline for the Content Management System and deliver training to the user and to support Computer hardware and network management (security and audit), troubleshoot and internet problem. Before joining CTC, Putu worked at Citadines Kuta Beach Bali, under Ascott Limited Hotel Management as Assistant I Manager from 2015 to January 2020, reporting directly to General Manager and Financial Controller. He was responsible for day to day IT operations; guest internet, Property Management Systems (PMS), Point of Sales (POS), TV channels and telephone system and also dealing with hardware and software problems (troubleshooting).

COLLABORATION

National Governments in the Asia Pacific Region

01. Coral Triangle Initiative for Coral Reefs, Fisheries and Food Security (CTI-CFF) Regional Secretariat and National Coordinating Committees
02. Ministry of Agriculture and Fisheries, Timor-Leste
03. Center for South China Studies of Ministry Foreign Affairs
04. Department of Marine Parks, Malaysia

Ministry of Marine Affairs and Fisheries (MMAF) of the Government of Indonesia

01. MMAF Human Resources & Community Development Agency (BPSDM-KP)
02. MMAF DG KP3K, Directorate KKJI
03. MMAF Directorate Marine Biodiversity Conservation Area (KKHL)*
04. MMAF Fisheries Training Center in Banyuwangi
05. MMAF Fisheries Training Center in Tegal
06. MMAF Fisheries Training Center in Ambon
07. MMAF BPSPL Denpasar
08. MMAF Balai Kawasan Konservasi Perairan Nasional (BKKN) Kupang
09. MMAF Pengawas Sumberdaya Kelautan Pos Banda

Provincial Governments and Agencies

01. Bali Provincial Government (Dinas Kelautan dan Perikanan)
02. NTT Provincial Government (Dewan Kawasan Konservasi Perairan Nasional - DKKPN)
03. Maluku Provincial Government (Bappeda and Dinas Kelautan dan Perikanan)
04. Klungkung District Government (Bupati, Bappeda, Dinas Peternakan- Perikanan dan Kelautan, Dinas Pariwisata)
05. Klungkung Regency Government (Pemerintah Klungkung)
06. Central Maluku District Government (District Planning and Marine-Fisheries Office)
07. Seram Timur District Government (Dinas Kelautan dan Perikanan)
08. Certification Institute for Marine Core Competencies - LSPK (Lembaga Sertifikasi Profesi Kelautan)
09. Pusat Pelatihan Mandiri Kelautan dan Perikanan (P2MKP)
10. Balai Teknologi Industri Kreatif Keramik (BBPT-BTIKK)
11. Balai Pengelolaan Hutan Mangrove Wilayah I

Non Government Organizations

01. International Coral Reef Initiative (ICRI)
02. Global Sustainable Tourism Council (GSTC)
03. International Union for Conservation of Nature (IUCN)
04. The Nature Conservancy (TNC)
05. World Wildlife Fund (WWF)
06. Conservation International (CI)
07. RARE Conservation
08. Conservation Strategic Fund (CSF)
09. Pusat Pendidikan Lingkungan Hidup (PPLH) Bali
10. Yayasan Bahtera Nusantara - Bali
11. Yayasan Nusa Wisata, Nusa Penida
12. Friends of National Park Foundation - Nusa Penida
13. Yayasan Warisan Budaya Banda Naira - Kepulauan Banda
14. Aquatic Alliance Foundation
15. Yayasan Masyarakat dan Perikanan Indonesia (MDPI)
16. Mission Blue
17. Plastic Pollution Coalition
18. Reef World Foundation
19. Environmental Defense Fund (EDF)
20. Starling Resources
21. Oceanic Society
22. Lembaga Partisipasi Pembangunan Masyarakat (LPPM)
23. eL SiL Kie Raha
24. Yayasan Baileo
25. Role Foundation
26. Australian Volunteers International (AVI)
27. Studio Gelombang

Academic Institutions

01. Australian Tropical Marine Alliance (ATMA)
02. Murdoch University - Australia
03. Georgia University - USA
04. Wageningen University - Netherlands
05. Western University of Australia
06. Victoria Shanghai Academy - Hongkong
07. Indonesian Institute for Science - LIPI
08. Institut Pertanian Bogor - IPB
09. Brawijaya University - UNIBRAW
10. Udayana University - UNUD
11. Hasanudin University - UNHAS
12. Diponegoro University - UNDIP
13. Pattimura University - UNPATTI
14. University Warmadewa in Bali
15. Sekolah Tinggi Perikanan - STP
16. Universitas Pendidikan Ganesha Singaraja - UNDIKSA
17. University of Khairun
18. Sekolah Tinggi Perikanan Hatta Syahrir
19. University of Darussalam

Private/Corporates/Agencies

01. World Ocean Council
02. Young Presidents Organization
03. National Geographic Society
04. Asian Geographic Magazines Pte Ltd
05. The Body Shop Indonesia
06. Jenggala
07. Grand Luley Resort
08. Kummara
09. GummyBox
10. OceanBellz
11. PADI
12. Hotels in Bali (Hard Rock Hotel Bali, Fairmont, Mercure, Sudamata, Prama, Sanur Paradise, Tandjung Sari)
13. Dive Operators Community Komodo (DOCK)
14. GAHAWISRI Bali
15. GAHAWISRI Maluku
16. Smailing Tours
17. Buffalo Tours
18. Tierra Mar
19. Sustainable Solutions
20. Studio JvG

Bali and Nusa Penida

01. Lembongan Marine Association
02. Nusa Lembongan World Diving
03. Lembongan Dive Center
04. Lembongan Dive Operator Association
05. Blue Corner Dive Center
06. Big Fish Dive Center
07. Two Fish Dive Center
08. Bali Hai Cruise
09. Crystal Dive Center
10. All4diving
11. Ena Dive Center Marine Adventures
12. LivingSeas
13. Bali Diving Academy
14. Ceningan Divers Resort
15. Reef Seen Resort

Maluku and North Maluku

01. Blue Motion Dive Center
02. Mahu Lodge
03. Pari Dive

Community Based Organizations (CBOs)

Bali & Nusa Penida

01. Satya Posana Nusa
02. Celagi Buana Putra
03. Majelis Alit
04. Forum Krama Muda
05. Mangrove Tour Jungut Batu
06. Forum Petani Rumpun Laut
07. Forum Nelayan
08. Karang Taruna Sanur Kajah
09. Yayasan Pembangunan Sanur

Banda

01. Kelompok Konservasi Masyarakat Pulau Ay
02. Kelompok Konservasi Masyarakat Pulau Rhun
03. Kelompok Konservasi Masyarakat Pulau Hatta
04. Kelompok Kreatif Anak Banda (KKAB)

Lease, Sula and Buano Islands

01. Moluccas Coastal Care (MCC)
02. Happy Green Islands (HGI)
03. Klasis Gereja Protestan Maluku
04. DPD Komite Nasional Pemuda Indonesia (KNPI)

Donors

01. SymAsia Foundation
02. Rainbow Foundation
03. David and Lucile Packard
04. Margaret A. Cargill Philanthropies
05. Walton Family Foundation
06. Critical Ecosystems Partnership Fund (CEPF)
07. Waterloo Foundation
08. National Geographic
09. Hard Rock Hotel Bali
10. USAID Sustainable Ecosystems Advanced (SEA) Project
11. USDOJ (United States Department of Interior)
12. Australian Government (Department of Environment & Energy)
13. AusAid (Australian Consulate-General Bali)
14. UN Environment Programme
15. Arafura and Timor Seas Ecosystem Approach (ATSEA)



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