



VOICES FROM THE CORAL TRIANGLE

REFLECTING ON 15 YEARS

OF COMMITMENT AND COLLECTIVE ACTION



WWF is an independent conservation organization, with over 30 million followers and a global network active through local leadership in nearly 100 countries. Our mission is to stop the degradation of the planet's natural environment and to build a future in which people live in harmony with nature, by conserving the world's biological diversity, ensuring that the use of renewable natural resources is sustainable, and promoting the reduction of pollution and wasteful consumption. Find out more at www.panda.org.

Design: Catalyze Communications
Printed by NPE Print Communications

© Text 2023 WWF. All rights reserved

Suggested Citation: WWF Coral Triangle Programme. 2023. *Voices from the Coral Triangle: Reflecting on 15 Years of Commitment and Collective Action*, 56 pp.

The designation of geographical entities in this report, and the presentation of the material, do not imply the expression of any opinion whatsoever on the part of WWF concerning the legal status of any country, territory, or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Published in March 2023 by WWF – World Wide Fund For Nature (Formerly World Wildlife Fund), Gland, Switzerland. Any reproduction in full or in part must mention the title, the lead author, and credit the above-mentioned publisher as the copyright owner.

GLOSSARY

ANBATAR	Taritipan Youth Club
ADB	Asian Development Bank
ASC	Aquaculture Stewardship Council
CBFM	community-based fisheries management
CI	Conservation International
CT6	Six countries of the Coral Triangle region
CTC	Coral Triangle Center
CTI-CFF	Coral Triangle Initiative on Coral Reefs, Fisheries & Food Security
CTSP	Coral Triangle Support Partnership
CTP	WWF's Coral Triangle Programme
FORKANI	Forum Kahedupa Toudani
GEF	Global Environment Facility
GDST	Global Dialogue on Seafood Traceability
GSLC	Group Savings and Loan Councils (Philippines)
IUU	illegal, unregulated and unreported fishing
MMAF	Ministry of Marine Affairs and Fisheries (Indonesia)
MPA	Marine Protected Areas
MSC	Marine Stewardship Council
OECM	Other Effective area-based Conservation Measures
PCA	Priority Conservation Area
PEUMP	Pacific European Union Partnership
PNG	Papua New Guinea
PSC	Plastic Smart Cities
SPREP	South Pacific Regional Environment Programme
SSF	small-scale fishers


 Diver swimming above a gorgonian fan coral during a wall dive in Wakatobi, South Sulawesi, Indonesia © Jürgen Freund / WWF

TABLE OF CONTENTS

<u>Foreword</u>	3
<u>Towards a Restored, Rebounding, Resilient Coral Triangle</u>	5
<u>Map: Coral Triangle</u>	9
<u>Snapshots of Progress: 15 Years of WWF in the Coral Triangle</u>	11
<u>Stories from the Coral Triangle</u>	13
• <u>Well-managed Marine Protected Areas/Other Effective area-based Conservation Measures: Unlocking Protection for Wakatobi, Indonesia</u>	15
• <u>Sustainable Tuna: Small-scale Fishers Leading the Way</u>	21
• <u>Towards Gender Equity: Empowering Women in Melanesia</u>	27
• <u>Youth and Partnerships: Local Heroes Taking a Stand</u>	35
• <u>Back From the Brink: Saving Marine Turtles in Malaysia</u>	43
• <u>It Takes a Village: Overcoming the Plastic Crisis</u>	49
<u>Repair, Restore and Build Resilience: Together Possible</u>	55

FOREWORD

The mission of WWF's Coral Triangle Programme (WWF CTP) is to support a healthy and thriving Coral Triangle, underpinned by food security, social inclusion and gender equity. After 15 years of work on this programme, we felt it was important to look back at how far we have come, while also acknowledging those who have shared this journey with us, reaffirmed our purpose and helped us achieve our goals.

In this report, the Coral Triangle story is told through the experiences of people who have given their valuable time, talent and resources to bring solutions to challenges that, in one way or another, touched them personally. Through six stories centred on human endeavour and collective action, we hope to share with you the sense of awe, inspiration and hope that we've gained from working with our colleagues and partners – notably the indigenous peoples and local communities of the Coral Triangle – to whom this report is dedicated.

“
These diverse voices hint at the rich tapestry of backgrounds, languages and cultures that make up the social fabric of this region – much like the unparalleled diversity of marine life supported by the Coral Triangle itself.

A timeline of milestones sketches significant moments in the past decade and a half. While too brief to fully illustrate all the hard work and effort invested to date, we hope this presents a snapshot of achievements and progress; steps in the right direction, made possible by the leadership, courage, innovation and dedication of the teams of colleagues and partners that have supported and collaborated with the WWF CTP over the years.

After three years of living and working through a global pandemic, we see the need to halt and reverse nature loss as being more urgent now than ever before. Ensuring that the Coral Triangle – the world's global marine biodiversity hotspot – is restored, rebounding and resilient, will be necessary in global efforts to ensure we avert the twin planetary crises of climate change and biodiversity loss.

Writing this at the close of 2022, there are two significant events that spur us on. Firstly, the Regional Plan of Action 2.0 (2021 – 2030) was endorsed by the eighth Ministerial Meeting of the Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security, building on a dozen years of collaboration and commitment to strengthen marine and coastal resource management and food security in the region. Second, the Kunming-Montreal Agreement saw 196 countries under the UN Convention of Biological Diversity (UN CBD) agree to conserve at least 30 per cent of oceans, land and freshwater globally by 2030 – a landmark goal akin to the 1.5°C target for climate change.

Climate impacts in the Coral Triangle are becoming increasingly more commonplace. From rising sea levels and coral bleaching to extreme weather events and disruption to marine species' migratory patterns, action is needed now more than ever. Looking to the future, WWF CTP is ready to step up its ambitions in tackling cross-boundary threats and accelerating pathways to scale workable solutions. To this end, WWF CTP will work closely with WWF offices and our partners across the Coral Triangle and beyond to support ambitious targets set out by countries in this region.


Finally, we would like to thank all those who have been part of our journey thus far – especially our colleagues in the Coral Triangle country offices: Indonesia, Malaysia, Papua New Guinea, the Philippines, Solomon Islands and Fiji. Special thanks go to WWF-Netherlands for their guidance and support in helping to produce this publication, and to our WWF colleagues and partners who have shared their stories with us.



SOPHIA LIM
CEO of WWF-Malaysia and Chairperson
of the Coral Triangle Programme
Governance Team



KLAAS JAN TEULE
Leader of the
WWF Coral Triangle Programme
(2019 – Present)



Towards a **RESTORED, REBOUNDED, RESILIENT** Coral Triangle

2050 VISION

By 2050, the oceans and coasts of the Coral Triangle, the centre of the world's marine biodiversity, are vibrant and healthy within a changing climate, building resiliency of communities, food security and contributing to improved quality of life for generations to come.

The Coral Triangle is the beating heart of our planet's marine biodiversity, home to more coral species than anywhere else on Earth. Life proliferates here in such spectacular abundance, the region actually restocks neighbouring oceans and fishing grounds, while also fuelling economies and livelihoods for millions of people.

For the past 15 years, WWF has been working through the Coral Triangle Programme (WWF CTP) and offices in Indonesia, Malaysia, Philippines and the Pacific to protect and restore the Coral Triangle so it can continue to provide for people and nature.

A NURSERY FOR THE WORLD'S OCEANS

As a nexus between the Pacific and Indian oceans, the Coral Triangle covers an area of 6 million km², encompassing six countries: Indonesia, Malaysia, Papua New Guinea, the Philippines, the Solomon Islands and Timor-Leste.

While comprising only 1.6 per cent of our planet's oceans, this region is home to three quarters of the world's coral species and 37 per cent of all reef fishes. The Coral Triangle provides vital spawning and nursery grounds for six tuna species and is crisscrossed by the migratory patterns of six out of the world's seven marine turtle species. Its surface waters are breached by the blowholes of whales, dolphins and dugongs.

The Coral Triangle directly benefits people too. It provides food, shelter and livelihoods for over 130 million people living in coastal communities, while generating an estimated US\$6 billion each year through fisheries revenue. From protein to income, a healthy Coral Triangle provides.

But despite its economic value and its ecological importance, this marine treasure trove is under threat. Unsustainable fishing methods and non-selective fishing gear are decimating fish stocks faster than they can replenish themselves, while climate change, pollution and pressure from ever-expanding coastal populations are stretching marine resources to the limit.

TURNING A CORNER

To address these issues and restore the region's biodiversity, WWF established the CTP in 2007. That year, The Nature Conservancy (TNC), Conservation International (CI) and WWF campaigned together for conservation in the Coral Triangle. This led to a ground-breaking declaration by six government leaders, culminating in the Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF).

In building this multilateral endeavour, WWF and other key conservation and development agencies became strategic partners in the CTI-CFF, committing themselves to support the six countries in their conservation efforts. Together, these partners have

been supporting CTI-CFF with advocacy, capacity building, conservation measures and fundraising – as well as raising awareness through events such as Coral Triangle Day, held on 9 June each year.

With special focus on marine protection, sustainable fisheries and food security, this includes strengthening the protection and management of marine and coastal habitats through capacity building in Marine Protected Areas (MPAs) and other effective area-based conservation measures (OECMs), fisheries management, gender equity, marine wildlife conservation, sustainable tourism and plastic waste management.

SHAPING THE FUTURE

In support of the CTI-CFF Regional Plan of Action 2.0 (2021-2030), we will actively develop coastal and marine habitat restoration programmes, facilitate solutions to plastic and other waste management in cities and coastal or island communities, and actively support Coral Triangle countries in eradicating the illegal marine wildlife trade, especially unsustainable poaching and trade in marine turtles.

Through a network of community learning and innovation hubs, WWF CTP will facilitate sharing of best practices amongst communities and local stakeholders. By increasing access to learning and knowledge, we will contribute to the scaling of

solutions so urgently needed by thousands of coastal communities. Ultimately, these communities will be key conservation partners; their contributions will be integral to achieving 30 x 30 – protecting 30 per cent of the world's marine habitats by 2030.

Join us as we look back on the past 15 years of conservation efforts in the Coral Triangle, with special focus on several positive developments currently underway. We will also look ahead to the next chapter in the Coral Triangle story. At every step, WWF CTP is working to ensure the Coral Triangle region continues to function, fascinate and provide for people and nature.

CORAL TRIANGLE IN NUMBERS

6 million km²
covering just
1.6% of the ocean

76%
of the world's
coral species

> 6,000
species of fish

130 million
coastal people reliant
on the seas for survival

6 out of 7
marine turtle species
in the world

US\$3 billion
estimated value of reef fish

15 million
small-scale fishers
supported by reef systems

Sources for US\$3B and 15M SSFs: europa.eu

Seafaring peoples known as the 'Bajau Laut', living in houses on stilts off the coast of Pulau Gaya in Sabah, Malaysia
© Jürgen Freund / WWF

THREATS & CHALLENGES



CLIMATE CHANGE & BIODIVERSITY LOSS

Widespread coral reef bleaching, rising sea levels and ocean acidification are destabilising marine ecosystems and biodiversity, threatening essential sources of food and income.



DESTRUCTIVE & OVERFISHING

To meet the needs of a growing population, fishers are removing stocks faster than they can replenish themselves. Dynamite, along with cyanide and other poisons, are decimating reefs and disrupting the delicate balance of marine habitats.



PLASTIC POLLUTION

Pollution from land and the fishing industry is a major problem in the Coral Triangle, with plastics infiltrating food chains, threatening marine life, human health and tourism industries.



TURTLE TRADE & USE

Coastal erosion and development have contributed to the loss of breeding sites, while illegal poaching, unsustainable harvest and bycatch continue to threaten dwindling marine turtle populations, pushing them to the brink of extinction.

OUR RESPONSE:

SCALING FOR IMPACT

PROTECTION & RESTORATION IN MPAS & OECMS

By building and scaling human capital in managing and restoring marine resources through a network of community learning and innovation hubs, we aim to support global targets to effectively protect 30 per cent of the world's marine and coastal areas by 2030.

SUSTAINING FISHERIES FOR FOOD SECURITY & OCEAN HEALTH

We advocate for sustainable fisheries for ocean health, climate resilience and socio-economic development. This includes calling for harvest strategies and control rules in the Western Central Pacific Ocean and for community-based coastal fisheries management planning.

TACKLING PLASTIC POLLUTION

Piloting local waste solutions from cities/coastal centres to remote islands, we are building case studies and sharing best practices to encourage replication and scaling of results. We will advocate for national and city-level policies and action plans to support the global plastic treaty process.

PROTECTING MARINE TURTLES

We will focus on transboundary protection with research, conservation and support for law enforcement. Through training, reporting and sharing of new platforms such as ShellBank, the world's first marine turtle traceability toolkit, we can help dismantle the illegal trade.

CORAL TRIANGLE

GLOBAL CENTRE OF MARINE BIODIVERSITY

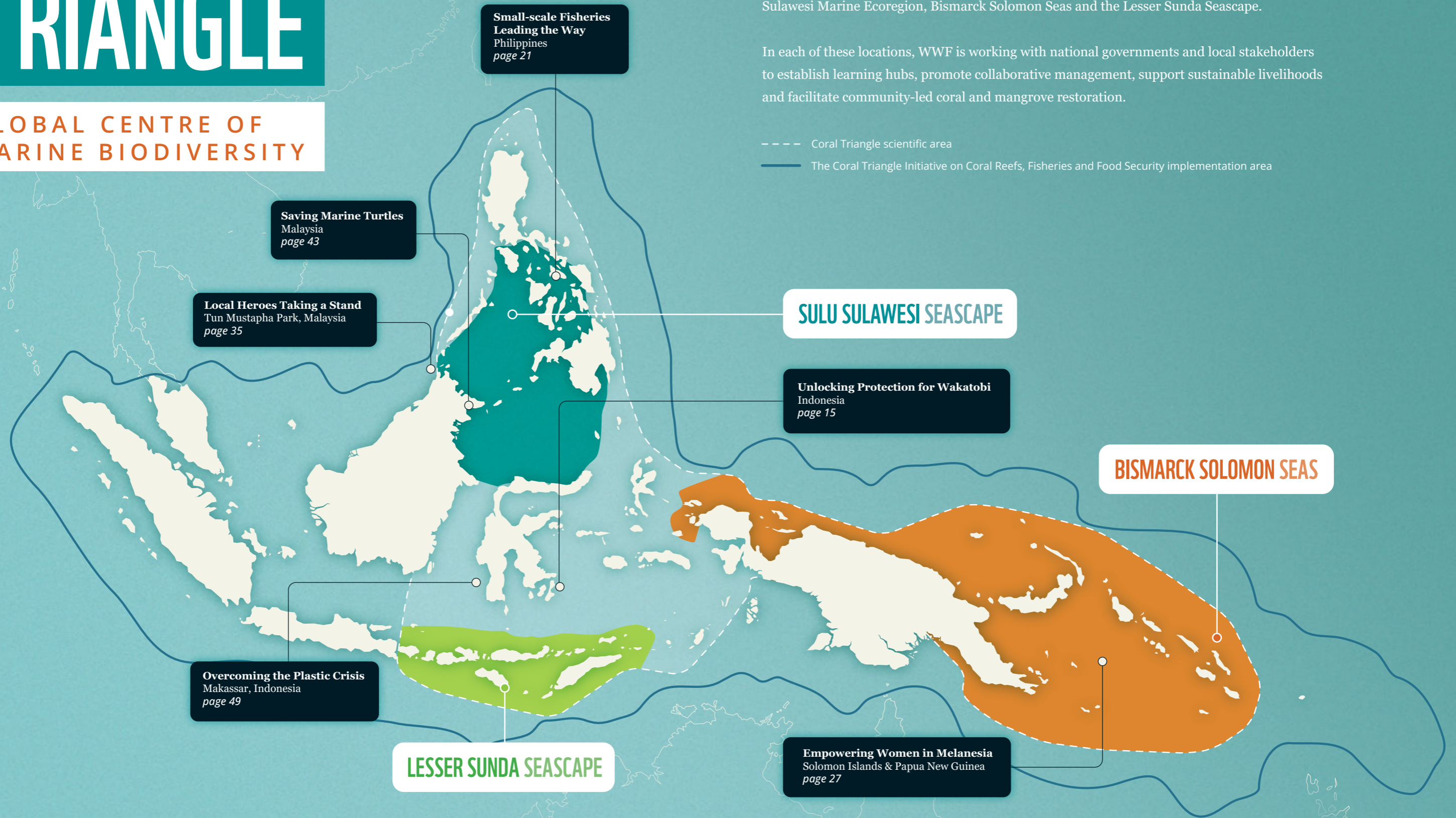
The Coral Triangle is a global hotspot of marine biodiversity. It provides for over 130 million coastal people, while also supporting globally important fish stocks such as tuna.

Covering an area of 6 million km², the fertile waters of the Coral Triangle flow from Malaysia and the Philippines in the west, through Indonesia and Timor-Leste all the way east to Papua New Guinea and the Solomon Islands. Along the way, they pass through three seascapes: Sulu Sulawesi Marine Ecoregion, Bismarck Solomon Seas and the Lesser Sunda Seascape.

In each of these locations, WWF is working with national governments and local stakeholders to establish learning hubs, promote collaborative management, support sustainable livelihoods and facilitate community-led coral and mangrove restoration.

--- Coral Triangle scientific area

— The Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security implementation area



15 YEARS OF WWF IN THE CORAL TRIANGLE

2007—2010 PROTECTION TAKING SHAPE IN THE CORAL TRIANGLE

After 2006, scientists delineated the Coral Triangle (CT) for its rich and unparalleled marine life. WWF together with The Nature Conservancy (TNC) and Conservation International (CI) started rallying the six governments (CT6) to recognise the region as one cohesive marine biodiversity hotspot. By 2009, the CT6 had established the Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF), whereby strategic partners (including the Asian Development Bank (ADB), Global Environment Facility (GEF), the US and Australian governments, CI, TNC and WWF) helped kick-start campaigns for MPA networks, ecosystem-based fisheries management, threatened species, climate change adaptation and seascapes management.

2007

WWF launches the Coral Triangle Programme to augment national programmes in five of six CT countries (including Fiji as a hub for WWF-Pacific) and mobilise resources across the WWF network

2008

- **Over US\$500 million committed** by governments and development partners for protection of the CT
- **USAID's Coral Triangle Support Project (CTSP) launches** with CI, TNC and WWF in a consortium to improve marine and coastal resources management

2009

CT Leaders Summit commits CT6 to a 10-year Regional Plan of Action (RPOA), establishing CTI-CFF for investment, regional policy and conservation actions focused on building coastal and marine resource resilience; Sulu Sulawesi Marine Ecoregion named the first priority seascape in the CTI RPOA

2010

- Regional fora engage policy makers, industry and business leaders, fisheries and climate experts
- **First Coral Triangle Regional Business Forum**

2015

- **CTI-CFF sets up Regional Secretariat** in Manado, Indonesia
- €1 million from the Segré Foundation funds a WWF project in Indonesia and the Philippines leading to two new MPAs covering over 1 million ha

2014

- **External financing in support of the CTI-CFF reaches US\$1.4 billion**
- CTI-CFF launches a framework on ecosystem approaches to fisheries management (EAFM)
- Supported by WWF, Indonesia announces a total ban on fishing manta ray
- Indonesia, Malaysia, the Philippines and Vietnam agree to curb the illegal marine turtle trade

2013

- **ASEAN & CT6 sign a resolution to promote sustainable fishing measures** in live reef fish trade at a forum convened by USAID & WWF
- Aquaculture Dialogue launched to [develop ASC standards for tropical marine finfish](#)
- WWF & TRAFFIC launch a campaign in China to tackle marine turtle poaching

2012

- **1st Coral Triangle Day celebrated on 9 June**
- **AUS\$8 million committed by the Australian government to the CTI-CFF** following the Rio+20 Summit
- **WWF establishes five-year tuna research programme**, with tuna tagging to inform policies on protecting tuna spawning areas

2011

- 'My Coral Triangle' - **WWF launches a digital crowdfunding campaign**, a first in the region
- [Coral Triangle Atlas](#) is established by CTI-CFF and the WorldFish Center
- WWF releases the [Coral Triangle Circle Hook policy brief](#)

2011—2015 COLLABORATION IS KEY

Unprecedented mass coral bleaching in 2011 forced dive sites to close across the Coral Triangle. As coastal habitats, economies and people suffered climate change impacts, the need for rapidly scalable solutions became increasingly more urgent. WWF made recommendations to reduce bycatch in longline tuna fisheries, while a large-scale research programme forged academic partnerships and helped WWF get to grips with the problem of unsustainable tuna fisheries.

2016—2019 ACCELERATING PROGRESS, DEEPENING IMPACTS

Collaborative networks and partnerships generated greater funding and expedited conservation progress throughout the Coral Triangle, as WWF worked with partners across sectors to gather data to inform decision-making processes and advocate for a sustainable blue economy approach with CT6 governments. By 2016, over 3 million ha of MPAs had been created, breaking previous records for scale. Meanwhile, great strides were also taken in sustainable fisheries and ecotourism and new initiatives began to tackle the problem of plastics pollution, while more support was given to social and gender equity in coastal resource management.

2016

- **Tun Mustapha Park established** - Covering 1 million ha, it is Malaysia's largest multiple-use MPA to date
- **Melanesia's ocean assets valued at US\$548 billion** by groundbreaking study entitled [Reviving Melanesia's Ocean Economy](#)
- WWF examines fishery impacts and helps develop best practices in [Low Footprint Seafood](#)

2017

- **More than 1,000 Pacific women empowered** through gender-focused projects in **Solomon Islands and PNG**
- [Coral Triangle Futures ThinkTank](#) led by WWF & MPA Action Agenda gathers conservationists to **accelerate collaboration on small-scale fisheries and marine managed areas**
- Funded by the Australian Government, a sustainable tourism framework is created with [destination plans calling for investment](#) in nature-based tourism in PNG, the Solomon Islands and Timor-Leste

2018

- CTI-CFF adopts Bismarck Solomon and Lesser Sunda as priority seascapes
- **WWF launches the No Plastic in Nature global initiative**

2019

- CTI-CFF joins the Global Dialogue on Seafood Traceability (GDST)
- Guidelines for Electronic Reporting and Monitoring for Pacific Tuna Long Line fisheries completed
- **WWF's Plastic Smart Cities kickstarts in Asia**
- [Homestay Best Practice and Lessons Learned](#) created by local communities in several CT6 countries in a WWF partnership with Blue Ventures.

2022

- **CTI-CFF's RPOA 2.0 is endorsed by Ministers**, providing a critical regional strategy and action path towards supporting the 30x30 global goals for people and nature
- WWF-PNG expands to three new provinces, while WWF-Solomon Islands begins scaling an integrated CBFM programme to a new province
- **Launch of ShellBank** - the world's first traceability toolkit and global DNA database for marine turtles

2021

- **OurFish OurFuture - a US\$15 million project begins**, in order to address Illegal, Unregulated and Unreported (IUU) fishing and support EAFM in coastal fisheries
- WWF South Pacific Regional Environment Programme (SREP) Turtle Use Project kicks off in Papua New Guinea, with support from Pacific European Union Partnership (PEUMP)
- TRIPOD project to combat wildlife trafficking - including marine turtles - agreed between Indonesia, Malaysia and the Philippines


2020

- WWF CTP launches a new five-year strategy towards 2025
- **EU-funded Ocean Governance Project kickstarts** with reef and mangrove restoration projects in Sulu Sulawesi, co-managed by local communities
- CTI-CFF partners design three initiatives on scaling capacity, conservation finance and profiling in international policy fora
- CTP initiates a stocktake report on the state of marine plastic pollution in the Coral Triangle

2020—2025 BUILDING RESILIENCE FOR THE FUTURE

On the cusp of a new decade and despite the global pandemic, WWF launched a new strategy to support the Coral Triangle in achieving its ambitious targets, including a renewed global biodiversity framework (30x30), a global plastic treaty and a global moratorium on all deep seabed mining activities. Through consortia, partnerships and multilateral projects, WWF continues to work collaboratively and with an intersectional approach that puts indigenous peoples and local communities at the heart of marine and coastal resource management.

Stories from THE CORAL TRIANGLE

 Over 130 million people in coastal communities are directly dependent on the food and resources provided by the Coral Triangle
© Jürgen Freund / WWF



WELL-MANAGED MPAs/OECMs

UNLOCKING PROTECTION for Wakatobi, Indonesia

In the early nineties, Rili Djohani was a young marine conservation officer on the WWF-Indonesia programme in Southeast Sulawesi, paddling a wooden canoe between the floating villages of the *Bajau Laut* community – a nomadic people who live almost entirely on the water. They rely on the ocean for food and resources, but their connection to the sea has more than just a practical importance; it is a deep, spiritual bond that spans the generations. Their wealth of traditional knowledge was what brought WWF and TNC to Wakatobi, in search of a plan for the region’s future.

“It was one of my most memorable field trips,” explains Djohani, who would stop at each settlement for chats with fishers and

their families. “I learned about their views, perspectives and their wisdom related to the sea – we were sharing our knowledge about the coastal and marine ecosystems, the threats and possible solutions.” These threats included destructive and unsustainable fishing practices by local people, including the use of dynamite and other explosives. Fisherfolk from the mainland would also come here and fish illegally, resulting in overfishing and degradation of habitats such as corals, coastal waters and mangroves. Wakatobi was in need of protection, regulation and law enforcement to help recover its fish stocks. The critical first step was education and support for local communities.

SUPPORTING THE ESTABLISHMENT OF WAKATOBI MPA

In 2002, WWF set up a joint programme with The Nature Conservancy (TNC), involving a combined team under one operational structure, with a single work plan and a shared budget. The team even worked in the same office together for the duration of the project, advocating for protection and building capacity for sustainable fisheries among local communities. Together, they supported Indonesia's Ministry of Environment and Forestry (KLHK) in strengthening the management effectiveness of Wakatobi National Park. First established in 1996, the park remains the third-largest marine park in Indonesia and a site that's steadily growing in popularity among divers.

Marthen Welly is a marine conservation advisor at the Coral Triangle Centre (CTC) who was part of the combined WWF and TNC team. He provided training for stakeholders and local communities, while also working closely with journalists to raise awareness of the benefits offered by MPA status. He believes that collaboration between WWF and TNC was vital to success, in a field where competition is often more common than cooperation.

“With this strategy, the collaboration was more effective and better coordinated,” he explains. “By sharing data, budget and risk, we were able to focus on a shared goal: supporting the Wakatobi MPA.” This sense of clarity, created by organisations acting in concert, meant that local stakeholders were supported and motivated to take action.



“By sharing data, budget and risk, we were able to focus on a shared goal: supporting the Wakatobi MPA.”

MARTHEN WELLY
Marine Conservation Advisor, Coral Triangle Center
Previously TNC Marine Programme

Coral reef drop off in Wakatobi, Indonesia
© Jürgen Freund / WWF

5 FACTS ABOUT THE WAKATOBI MPA

The third-largest marine park in Indonesia, covering

1.4 million hectares

Home to

942 fish species

750 types of coral

Includes the largest barrier reef in Indonesia

Made up of 143 islands

Only 7 of which are inhabited

Designated UNESCO Biosphere Reserve in 2012

Together, WWF and TNC supported alternative sources of income by implementing seaweed farming development projects and launching marine ecotourism activities, while also developing a conservation capacity-building programme for local people. This involved training, learning exchanges, coaching and mentoring supported by the Ministry of Marine Affairs and Fisheries (MMAF), who also helped to establish a marine conservation school on Wangi-Wangi island.

A long-term management plan was developed alongside government, communities and other stakeholders, which included a zoning plan to regulate the use of marine resources. Special focus was put on community outreach and alternative livelihoods such as seaweed farming, while enforcement was supported by the use of innovative floating ranger stations.

“Local leadership was pivotal for the early success of the establishment of Wakatobi National Park,” explains Rili Djohani,

who is now Executive Director of the CTC. Throughout her time at WWF and TNC, she maintained her belief that cooperation is the key to unlocking sustainable and long-lasting development. In her view as the former TNC coastal and marine programme director, “the joint WWF-TNC collaboration mobilised essential capacity, resources, political and international support, building up a strong support base for Wakatobi MPA.”



“Local leadership was pivotal for the early success of the establishment of Wakatobi national park.”

RILI DJOHANI
Co-founder and Executive Director Coral Triangle Center
Former TNC Marine Programme Director

CAPACITY BUILDING FOR LOCAL COMMUNITIES

One of many partners who was instrumental in this process was Nusi Mursiati, the programme manager at *Forum Kahedupa Toudani* (FORKANI); an organisation from Kaledupa Island in the Wakatobi region that was set up in 2002 with a goal of building capacity for local people – helping them manage natural resources sustainably, in harmony with their traditional beliefs. She insists that cooperation is a two-way street.

“Working with communities means learning together and learning from them,” she explains. “They are the experts. Our role is to record their knowledge and connect it with the latest science.” Together with WWF and TNC, FORKANI leveraged a wealth of local experience to design activities and interventions that were responsive to communities’ needs in Wakatobi.

“We put the indigenous people on the frontline of fisheries management,” she explains. Mursiati and her team supported local wisdom with in-depth fisheries data, engaging villagers in participatory fisheries monitoring activities and decision-making

processes, giving them responsibility for the sustainable management of resources and allowing their knowledge to drive development. “In the end, the communities were empowered to hold stewardship of the MPA, based on their local wisdom,” says Mursiati.

KEY RESULTS



Fish abundance and biomass have increased



Social conflict over resources has decreased



Hard coral cover has remained stable



“Working with communities means learning together and learning from them. They are the experts.”

NUSI MURSIATI
Programme Manager, FORKANI

A BLUEPRINT FOR CONSERVATION IN THE CORAL TRIANGLE

Coastal and marine ecosystems in the Wakatobi MPA continue to be threatened by fishing pressure, pollution and climate change. But biodiversity is bouncing back, thanks to a collaborative approach that includes indigenous communities, NGOs, national government and local law enforcement, all working together to share their knowledge and resources.

Looking ahead, strong enforcement of the zoning plan will be essential to address the threats facing Wakatobi, along with measures to improve waste management and climate adaptation. Alternative livelihood programmes remain pivotal to improving the welfare of local communities, while eco-tourism also has a role to play in bringing new sources of income into the region.

During the Covid-19 pandemic in 2021, Rili Djohani returned to Wakatobi on a dive trip to Moromaho; a small, uninhabited island at the easternmost edge of the Wakatobi MPA. It was late in the afternoon, and golden sunlight was streaking down onto shallow reefs, illuminating schools of colourful fish. “It was one of the most serene dives I’ve ever experienced,” recalls Djohani, who was reminded of her earliest experiences in a wooden canoe. “It also reminded me why we are doing this work and why it is all worth it,” she explains. She believes the Wakatobi MPA can be the catalyst for long-term development in the area, with the power to conserve ecosystems and deliver benefits to local people. Looking to the future, Djohani is optimistic. “I envision thriving coral

reefs, with abundant fish and prosperous communities living in harmony,” she says, adding that the Wakatobi MPA is “a special national park, where people can dive and see the most beautiful underwater life and learn about the *Bajau* culture and their sea cosmology.”



Wakatobi National Park rangers working with WWF-Indonesia to monitor and analyse data collected.

© Jürgen Freund / WWF



Marine Protected Area Management Training with marine park rangers and community leaders of Wangi-Wangi, Kaledupa, Tomia and Binongko Islands, organised by the WWF-TNC joint programme in 2004.

© TNC-WWF

EFFECTIVE MANAGEMENT: SCALING CAPACITY TOWARDS 30x30

Looking to the future, WWF is planning to scale up its positive influence in Wakatobi with a new Marine Centre of Excellence and a Community Learning & Innovation Hub, which are currently being developed in partnership with local community-based organisations. From planning all the way through to implementation and co-management, local leadership has been instrumental to success in the Wakatobi MPA, along with the government’s willingness to acknowledge and empower these communities. Positive developments have been guided by the wisdom and experience of the *Bajau* people; a group whose connection to the sea offers hope for its future and a blueprint for collaborative marine conservation.

SUSTAINABLE TUNA

SMALL-SCALE FISHERS

Leading the Way

“We could feel the impact of the explosion beneath the ocean. We felt the vibration in our vessel.” Back in 2012, Atenogenes Reaso was nearing the end of a long career at the Philippines Postal Service and enjoying a well-earned fishing vacation with his friends in the Gulf of Lagonoy. What he experienced that day would have a lasting impact. “After several seconds, we saw the water explode 5-10 metres above us, caused by dynamite fishing.”

The Philippines is Asia’s second-largest tuna producer, next to Indonesia. Yellowfin, skipjack and frigate tuna account for almost half of all the country’s seafood exports. But in the last decades, destructive fishing methods have devastated reef fisheries, while climate change, as well as illegal, unregulated and unreported (IUU) fishing - often with a significant juvenile catch - has caused an alarming decline in tuna stocks.

Reaso, more commonly known as Sir Gene is now chairman of the Gulf of Lagonoy Tuna Fishers Federation. He blames these problems on a lack of

One in every five tuna caught worldwide come from the Coral Triangle
© Jürgen Freund / WWF

knowledge, but also on financial hardship. “Lots of fishermen involved in illegal fishing suffer poor living conditions,” he explains. “They meet their short term needs, but at the expense of resource sustainability.”

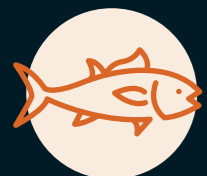
In the Philippines, where around 40 per cent of fishers live below the poverty line, ensuring healthy and thriving tuna fisheries is as much a social imperative as it is ecological.

Small-scale fishers are in competition with commercial vessels that have better gear, more capital and greater capacity, while also fishing illegally in municipal waters. Local people in poverty are resorting to ever-more drastic measures to catch what remains. This includes destructive fishing using dynamite and cyanide poisoning, along with dangerous jobs like compression diving, which also damages coral reefs. To make fisheries safer and more sustainable, development for small-scale fisheries is sorely needed.



“We could feel the impact of the explosion beneath the ocean. We felt the vibration in our vessel.”

ANTENOGENES REASO
Chairman of the Gulf of Lagonoy Tuna Fishers Federation

 **1 IN 5 TUNA**
are caught in the
Coral Triangle

PARTNERING UP FOR SUSTAINABLE TUNA

Recognising the need for fisherfolk to get organised, WWF-Philippines embarked on a Fisheries Improvement Project (FIP) in the Lagonoy Gulf and Mindoro Strait. The project, called Partnership Programme Towards Sustainable Tuna (PPTST), advocated for improved governance of fisheries in a bid to safeguard tuna stocks and secure long-term economic benefits for over 6,000 fishers in 140 villages.

Working closely with tuna fishers, WWF supported the establishment of tuna fisher associations to strengthen their collective position in the market and in policy platforms. Fisherfolk were now able to elect leaders to represent them in the local government's fisheries management councils, and contribute to local tuna management plans.

The project also promoted the use of sustainable gear and methods such as artisanal fishing, hand-line reels and circle hooks; important prerequisites for

certification schemes from organizations such as the Marine Stewardship Council (MSC), which would increase the value of their catch.

These methods helped ensure only mature tuna are caught, while also minimising bycatch of endangered species. The deployment of revolutionary C-shaped circle hooks, in particular, has reduced sea turtle deaths by as much as 90 per cent.

“Our partner fishers are at the centre of this story,” explains Joann Binondo, the programme’s manager. “They are the local leaders trying to safeguard the seas they rely on.”

“When you see these fisherfolk who once trembled in front of the microphone – when you see them standing in front of their communities, going down, telling them all about the importance of these FIPs – it’s very heartwarming,” said Binondo.

In 2021, the fisherfolk in the Gulf of Lagonoy and Mindoro Straits celebrated a major milestone that would have been unimaginable a decade ago – they became the first in the Philippines to achieve MSC certification. This meant access to consumers willing to pay premium prices for sustainability assurance – a market that they never would have been able to reach before.

“We have had the pleasure of watching them come together, empowered, constantly learning, so that they may better take care of their fisheries,” Binondo added.

“Millions rely on the health of our fisheries, from consumers to producers, diners to fishers,” says Binondo. “There are so many mouths to feed, and so many threats to fisheries – we have to work hard to ensure their continuity.”

“Our partner fishers are at the centre of this story.”

JOANN BINONDO
Sustainable Tuna Partnership
Programme Manager, WWF-Philippines

SUSTAINABLE TUNA PARTNERSHIP: PROGRESS OVER A DECADE

🐟 21 Municipal Tuna Fishers Associations and Two Fisher Federations set up

🐟 IUU fishing reduced through better licensing systems

🐟 Quotas for fish catch agreed and enforced to prevent overfishing, while improved tuna quality brings in higher prices for tuna catch

🐟 National plan for tuna management extended to 10 more sites

🐟 24 village savings clubs set up to improve access to finance

🐟 First to achieve MSC certification in the Philippines – supporting 500 artisanal boats in Mindoro and Lagonoy



Joann has been working alongside fishers in the Lagonoy Gulf and Mindoro Strait since 2011 © Alo Lantin / WWF-Philippines

LOCAL IMPACT:

COMMUNITY SAVINGS AND LOANS

A key systemic challenge for small-scale fishers is the lack of access to finance. Left with little option but to borrow from local traders who are also their customers, these fisherfolk are put in a poor bargaining position that pushes them into debt. This power imbalance means that fishers often need to concede to lower-than-market prices set by the traders. This is why WWF helped set up Group Savings and Loans Councils (GSLCs) – a scheme that has strengthened fishers’ access to finance and

empowers them to negotiate better prices for their tuna.

“These GSLCs are very important because many of the fishers we work with have problems they cannot solve on their own,” explains Marietta Calacal, WWF-Philippines’ Field Operation Manager. “By being part of a savings and loan council, our partner fishers can rely on their fellow members to support them in their time of need,” she added.



To date, the councils have raised over 700,000 pesos (US\$12,292), which can be used to buy fishing equipment or build facilities for the community.

© Alo Lantin / WWF-Philippines



A total of 24 GSLCs has been set up in the Lagonoy Gulf and Mindoro Strait by the end of 2022, surpassing the original goal of 21 by 2024.

© Alo Lantin / WWF-Philippines

EMPOWERING FISHERS

TO BUILD FOR THE FUTURE

Since his retirement, Sir Gene has been working closely with local fishers, government and WWF-Philippines to combat unsustainable fishing practices, change mindsets and restore the coastal habitats that have formed the backdrop of his life. Today, he is the President of the Tuna Fishers Association of Malilipot, Albay, one of 15 tuna fisheries affiliated with the Gulf of the Lagonoy Tuna Fishers Federation.

Looking back on the past 10 years of the STP programme, Sir Gene says, “We have seen what this can mean for us – a sense of stability, for those of us whose lives depend on fishing.”

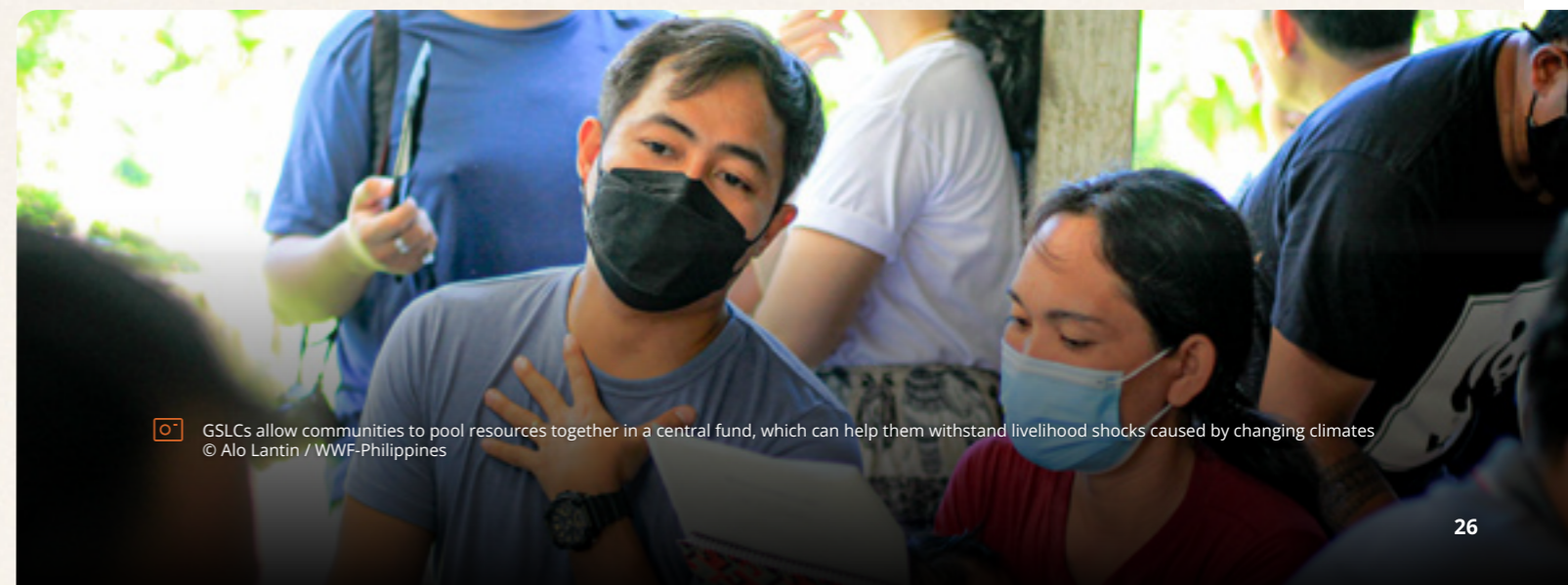
Since those early days of IUU fishing in the Lagonoy Gulf, Sir Gene has seen positive improvements and is grateful for the support he has received. “To WWF, thank you for your 10 years of sacrifice, for standing with us small-scale fishers, most especially in the founding of our different associations in our municipalities and for your never-ending help up until now. Many, many thanks.”

SECURING HARVEST STRATEGIES SUSTAINABLE TUNA FOR ALL

The Philippines belongs to the Western Central Pacific region, which the MSC has flagged for not having sufficient measures in place to protect local fisheries. Working on the ground with small-scale fisherfolk to raise standards in tuna fisheries, WWF is also taking a wider view to improve governance for the region.

Susan Roxas is the lead for fisheries and finance at the Coral Triangle Programme (CTP). Having worked at WWF for 16 years, she believes a holistic approach is needed. “People usually see this as a policy problem, or a problem with middle-men, overfishing and destroyed habitats,” she says. “They have to understand that all these issues are connected and have to be addressed as a system.”

The next milestone will be the adoption of harvest strategies and harvest control rules by the governments of the Western and Central Pacific Fisheries Commission – a goal that WWF CTP is working towards as part of the Sustainable Tuna Partnership 2 project. Working with teams and partners across the region, the project is striving to ensure that small-scale fishers like Sir Gene will have a voice at the regional level.



GSLCs allow communities to pool resources together in a central fund, which can help them withstand livelihood shocks caused by changing climates

© Alo Lantin / WWF-Philippines

TOWARDS GENDER EQUITY

EMPOWERING

WOMEN

in Melanesia



WWF is helping women in Melanesia to have greater agency and decision-making power in their communities, as part of long-term, sustainable resource management for the region.
© Jürgen Freund / WWF

“We women are usually the primary users of marine resources,” says Rindah Melsen, a 54-year-old mother of three from the Solomon Islands. “We clean, we cook and we sell whatever the family produces or catches at the market to bring in money – whether fish, seaweed, or shells.”

In the Solomon Islands, women make up at least half the labour in fishery, engaging in activities such as in-shore gleaning, preparing and mending fishing gear, while also selling and marketing fishery products. They also dominate the local tuna processing industry, but often earn a much lower wage than their male counterparts in the same job.

Despite their critical role in fisheries, women are often excluded from or marginalised in community meetings, discussions and decisions on marine resource management.

“Even when we do speak out, men sometimes ignore our views – they assume that their ideas are the best. However, without the input of women, they do not necessarily make decisions that are good for the future,” says Rindah.

Rindah is among a network of men and women trying to change this – they are community facilitators engaging with WWF-Pacific to help roll out community-based approaches to sustainable fisheries, financial inclusion and climate adaptation, while also working to improve gender equity.



“

We women are usually the primary users of marine resources. We clean, we cook and we sell whatever the family produces or catches at the market.

RINDAH MELSEN
Women's savings club leader

WOMEN IN THE SOLOMON ISLANDS EXPERIENCE HIGH RATES OF GENDER-BASED VIOLENCE AND ARE DISPROPORTIONATELY AFFECTED BY POVERTY AND FOOD INSECURITY:



Women are **only half** as likely as men to be in paid work (26% of women and 51% of men)



81% of women are in unpaid subsistence work, compared to **58%** of men in rural areas



Approx. **2/3** of women aged between 15 and 49 have experienced **physical or sexual violence**

“We recognise that the integration of gender equality, disability and social inclusion leads to more equitable and sustainable outcomes,” says Shannon Seeto, who is Country Manager for WWF-Solomon Islands. WWF believes equalising economic opportunity is an important step towards women having more agency and decision-making power in their communities; a critical feature of long-term, sustainable resource management.

“By providing sustainable community livelihoods and new business opportunities, we can help to reduce fishing pressure on coastal ecosystems that communities highly depend on for their daily survival,” he added.



GIVE WOMEN ACCESS: UNLOCKING GENDER EQUITY IN COASTAL COMMUNITIES WITH MICROFINANCE

One of the key interventions by WWF has been fostering financial inclusion for women in the Melanesia region.

“Being a member of the savings club, I have gained skills and knowledge through trainings and be able to save money to support my family and the other members in my group,” said Rindah, President of the Nusatuva Women’s Savings Club, which started in 2014 with just five women and SB\$20.

Through women’s savings clubs, women are empowered with microfinance and encouraged to start small businesses. The clubs are a source of revolving capital and social support, whereby women can take small loans to fund needs and ambitions – from starting micro-enterprises to constructing new homes. Income generated

supports household income and puts children to school, while the savings have even helped families to weather the economic storm caused by COVID-19.

Today, the Nusatuva Women’s Savings Club boasts a membership of over 60 women. Soon they will open a women’s resource centre, which will provide rented accommodation, space for training and the community’s very first kindergarten.

“I am very proud and excited about these developments,” says Rindah, who has seen women in the community become more engaged and more involved in social development beyond the savings clubs. “With this (engagement), I believe we can ensure women are included in building a sustainable blue economy,” she added.

Women perform at a ceremony celebrating the launch of the Gizo and Nusatuva women’s savings clubs. Today, there are 15 women’s savings clubs with over 1,500 members across the Solomon Islands. © Arlene Bax / WWF-Australia



WOMEN'S SAVINGS CLUBS CHART A SUSTAINABLE WAY FORWARD FOR COASTAL COMMUNITIES



US\$45,000 COLLECTIVELY SAVED

in a country where per capita income is less than US\$300



REPRESENTATION GAINS

Today, there are more women on community-based fisheries management committees

0% WOMEN

Women committee members in 2016



34% WOMEN

Women committee members in 2021

To date, 145 initiatives have been successfully set up, including piggeries, chicken farms, cloth printing shops and small canteens. WWF is now helping members of these women's savings clubs to become trainers in financial literacy, microfinance and entrepreneurship, so that the women themselves can be champions to inspire new savings clubs in neighbouring communities.

For Seeto and his team, one of the biggest challenges was ensuring that this programme did not inadvertently increase conflict between men and women at home. Gender equity remains a new concept in Pacific countries like the Solomon Islands, where many still carry deeply patriarchal attitudes and where existing customs and norms do not necessarily address or capture gender equality.

Cognisant of this, WWF put special focus on raising community awareness and organising community consultations. "We made sure that men were involved in the consultations and awareness raising," explains Shannon. "This was to ensure that men in the households would learn about what gender equity means and why this project benefits everyone." Shannon believes it was essential that all the community members – men and women – who participated in gender initiatives were all on the same page.

To ensure that all actions were informed and guided by previous gender work in the region, WWF also struck up partnerships with the Ministry of Women and Youth, local church organisations, Oxfam, Save the Children and the Red Cross.



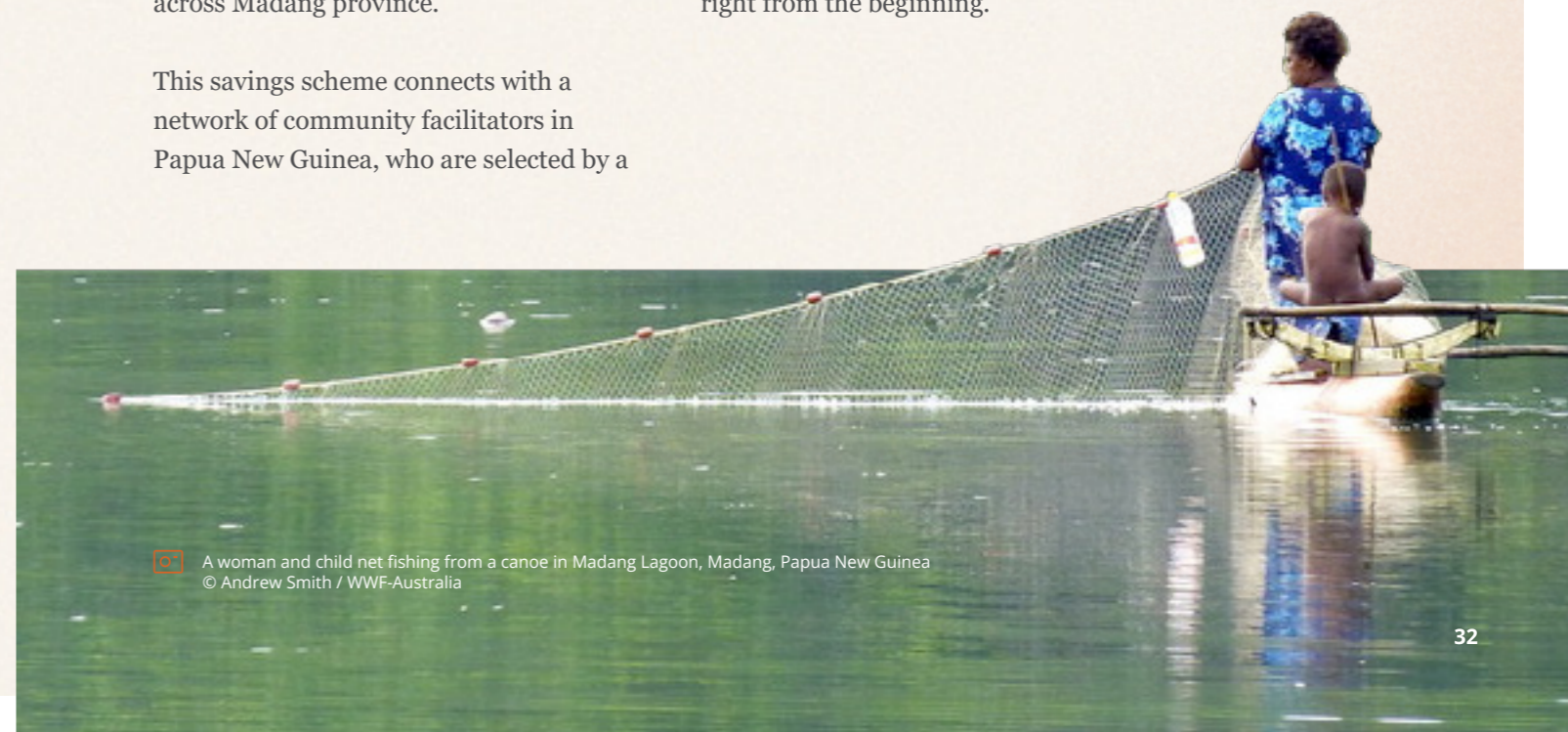
Since 2014, the women in Solomon Islands have saved over US\$45,000 (SB\$382,670) and withdrawn over US\$18,000 – an amazing feat for a country where the average per capita income is less than US\$300. © Arlene Bax / WWF-Australia

In Papua New Guinea, WWF applies a similar approach. Referred to by locals as "village banking", the Village Loans and Savings Scheme (VLSA) encourages women and men to save money so that collectively, the budget generated can support other income-generating activities. This has helped to reduce the community's dependency on fisheries, while also building economic empowerment and overall community resilience. There are now 35 of these so-called 'village banks' across Madang province.

This savings scheme connects with a network of community facilitators in Papua New Guinea, who are selected by a

council of local leaders that includes clan chiefs, ward councillors and village elders. Out of 60 community facilitators spanning 15 communities, 27 are women.

"I think one important aspect of our work is empowering the resource owners – the coastal communities," says Rebecca Samuel, the coordinator of WWF's marine programme in Papua New Guinea. "We need to involve them with decision making and the implementation of project activities right from the beginning."



A woman and child net fishing from a canoe in Madang Lagoon, Madang, Papua New Guinea © Andrew Smith / WWF-Australia

Community facilitators are trained and engaged by WWF to raise awareness and support activities on sustainable resource management. At the same time, they are responsible to local leadership, helping for communicate community needs and interests to WWF and other partners. They also share experiences and support each other through a peer-to-peer learning network.

Recognising that this continues to be an uphill task in a society where gender inequality and discrimination persists, WWF-Pacific has been working to address these issues through Community-Based Fisheries Management (CBFM) in the Solomon Islands and Papua New Guinea; a strategy that focuses on improving current fishing practices, developing alternative livelihoods and empowering the most vulnerable members of society.

Central to this approach is a recognition that communities with strong and equitable social structures are better able to manage their resources towards a more sustainable future.

“We need to build their capacity,” explains Rebecca Samuel. “Projects can wind up, but these skills and knowledge must remain in the community; with that, they can continue to manage their own resources with what they have learned and – hopefully – inspire others to do the same.”

WOMEN LEADERS FORUM

TAKING POSITIVE IMPACTS TO THE REGIONAL LEVEL

The Women Leaders Forum (WLF) was established by the CTI-CFF in 2014. The forum recognises the important roles that women play in marine conservation and provides a peer learning network for the region, established with a clear strategic focus, effective leadership, committed membership, annual activities and adequate resources.

To support WLF, WWF CTP has been contributing to the Gender Equity and Social Inclusion (GESI) framework. Part of CTI-CFF’s regional plan of action, it is intended to be mainstreamed and integrated into national action plans, while also utilising events and high-profile fora for profiling the role of women in conservation.

“With increased engagement and empowerment of women in decision-making processes at all levels in the Coral Triangle region and in the various CTI-CFF bodies, the Women Leaders Forum is a key pillar in the pursuit of more effective management in marine and coastal resources,” says Jackie Thomas, Policy & Advocacy Lead for the WWF CTP and Senior Advisor to WWF-Pacific.

Jackie is energised by recent progress with the WLF, and optimistic that its success can catalyse meaningful and systematic change with regards to gender, both in local communities and in regional governance institutions throughout the six Coral Triangle countries (CT6).



YOUTH AND PARTNERSHIPS

LOCAL HEROES

Taking a Stand



Sabah has the largest area of mangroves of any state in Malaysia, with over 232,000 hectares, mainly along Sabah's east and southeast coast.
© ANBATAR

“Our fishing community don’t normally travel far out to sea,” explains Sabarudin Samba, a young man from the village of Taritipan, located at the northern tip of Sabah in Malaysian Borneo. “They fish near the mangroves, looking for shrimp and crabs – in one way or another, they rely on mangroves through all their life stages.” Just as marine animals depend on these habitats for survival, so do the communities that fish for them.

Several years ago, a factory was built near Sabarudin’s village. He remembers the immediate impact this had, as workers began cutting down the mangroves to make charcoal. “Some of our community members who are fishers complained that the factory was causing pollution, scaring away our fish and affecting our income,” he says. When their objections were ignored, Sabarudin and his friends took matters into their own hands.

“We decided to mobilise, to highlight the importance of mangrove forests in our village,” he explains. What began as a youth movement slowly attracted more and more adults to the cause. Together, they set up local NGO ANBATAR, a portmanteau meaning ‘The Taritipan Youth Club’. To local people, they are known simply as ‘The Mangrove Avengers’.

“I see our role as stewards of the mangrove forests, protecting them from illegal exploitation,” explains Sabarudin, who is now the Chairman of ANBATAR. “Although only small scale, we’re taking action to reduce threats to the mangroves through education and awareness activities.” In the beginning, ANBATAR struggled to change minds in local communities, where people didn’t recognise the link between mangroves and livelihoods.



“

We decided to mobilise, to highlight the importance of mangrove forests in our village.

SABARUDIN SAMBA
Chairman of ANBATAR (Taritipan Youth Club)

PARTNERSHIP FOR TRAINING, EDUCATION AND PROTECTION

Joannie Jomitol is the leader of WWF-Malaysia's Kudat team, who work with government and communities to support the protection of marine habitats and the ecosystem services they provide. She understands that changing minds is the first step towards preserving resources. "Marine biodiversity does not resonate well sometimes," she says. "But access to food or food security does, all of which rely on ecosystem services."

Since 2006, WWF-Malaysia has been working to engage with local communities, raising awareness and garnering support for protection of the natural world. This collaboration includes patrolling, setting up an Interim Steering Committee for the region, providing knowledge exchange through training and building relationships with local communities.

WWF has been supporting ANBATAR in its outreach efforts, helping to inform, inspire

and demonstrate how local livelihoods are intrinsically linked to mangrove health. "Anchoring marine biodiversity in this context helps communities, governments and all our partners see the shared value in protection," explains Jomitol.

With support from WWF-Malaysia, ANBATAR has expanded its network to include organisations such as the Kota Kinabalu Wetland Centre, where they engaged in hands-on training for mangrove conservation. "WWF has been instrumental in helping us to increase our knowledge and skills in conducting mangrove conservation activities," says Sabarudin.

Over time, knowledge leads to engagement. With partnerships forged, this can spark new networks of connection, leading to protection on an unprecedented scale. This time-tested approach is what supported the establishment of Malaysia's first multi-use marine park.



ESTABLISHING MALAYSIA'S LARGEST MARINE PARK

In 2016, establishment of the Tun Mustapha Park (TMP) was supported by the Coral Triangle Support Partnership (CTSP); a group funded by USAID and comprising WWF, The Nature Conservancy (TNC) and Conservation International (CI). The CTSP represented multilateral collaboration on a regional scale that had not been achieved before.

Spanning 50 islands, 900,000 hectares and three districts in Sabah – Kudat, Kota Marudu and Pitas – TMP as a multi-use marine park is the largest of its kind in Malaysia, identified as a priority site for the conservation and management of marine resources. Its main objective is to safeguard globally important marine ecosystems

that are threatened with overexploitation, while also helping to make the livelihoods dependent on these resources more sustainable.

"Government agencies, indigenous peoples and local communities, industries, and scientists all have different perspectives on the societal-ecological threats that surround us," explains Jomitol. "But we must all agree on the gravity of the pressing issues and work together to find solutions within our own capacities."

In an effort to synergise these perspectives and devise workable solutions, the park adopts a collaborative management approach, led by a group that includes Sabah Parks, the Sabah Fisheries Department, University Malaysia Sabah and the Land and Survey Department, along with NGOs such as WWF-Malaysia. Together, this group is working to achieve its conservation outcomes and tackle the myriad challenges to sustainability in TMP.

Establishing the Tun Mustapha Park took a remarkable 13-year journey that started in 2003 with the proposal of gazettelement by the Sabah State government. © Eric Madeja / WWF-Malaysia



BLOWING DYNAMITE

FISHING OUT OF THE WATER

In 2019, WWF-Malaysia teamed up with Sabah Parks, the Department of Fisheries Sabah and various other enforcement agencies to address the long-standing problem of dynamite fishing in the TMP. Using data to build up a clearer picture of when and where explosions were happening, WWF helped create patrol strategies, which were shared with officials, district offices and enforcement agencies.

Jomitol says this collaborative approach was key to the success of the programme. “This is a classic example of a team effort,” she explains. “Long hours of good, old-fashioned partnership work.” This partnership had a dramatic impact; within

just two years of programme inception, incidents of blast fishing in the park had been reduced by 45 per cent.

Sharing knowledge, expanding networks and building capacity have been the three pillars of WWF action in the KMP, all of which have been built on a strong foundation of partnerships. Jomitol sees this collaborative approach as essential to success: “At WWF, we strongly believe that safeguarding the environment involves everyone – from the public to the private sector, non-governmental organisations (NGOs), industries and of course the local communities.”

FINDING SUSTAINABLE ALTERNATIVES

The park currently provides for around 80,000 people, comprising a diverse range of ethnic groups. To safeguard these livelihoods and ensure their sustainability, collaborations between WWF and local organisations such as ANBATAR are leading the way. Since taking on the factories, ANBATAR has created a new innovative arm – a start-up social enterprise known as Po’ON.

While continuing to raise awareness of mangrove forests, Sabarudin’s group is also providing alternative ways to utilise these resources. “We are currently working on a number of small projects,” he explains. “Such as producing insect repellents from mangrove leaf extracts, honey from stingless bees and charcoal made from

coconut husks instead of mangrove trees.” These innovations have demonstrated the versatility and the value of mangroves to local people, along with the importance of using them sustainably.

Po’ON has submitted a proposal to the Sabah Forestry Department, which would grant long-term co-management status to the people of Taritipan for around 240 acres of forest in the area surrounding their village, thereby securing its preservation and allowing indigenous people and local communities to develop livelihoods around these resources. Sabarudin and his group intend to conduct mangrove conservation activities for the people in and around Kota Marudu, while also using the area as a testing ground for sustainable livelihoods.



Proposal to secure 240 acres of forest for co-management with the people of Taritipan



A NEW CHAPTER:

PARTNERSHIPS ROOTED IN PASSION

WWF-Malaysia has come a long way in Sabah, by working closely with government and local communities. But Joannie Jomitol is adamant the best is yet to come. “All the hard work towards the gazettement of Tun Mustapha Park over 13 years was just the beginning,” she explains. “It represents a new chapter and requires all parties to take it to the next level.”

Looking to the future, Sabarudin hopes to continue supporting his community with mangrove planting projects, education and sustainable livelihoods. He also hopes Po’On products can find their way into the global market, while also extending his partnerships with the Sabah Forestry Department to preserve the mangroves that are so central to lives and livelihoods in Taritipan.

Here, among the twisted roots and branches on the shores of Sabah, WWF partnerships are binding communities together and keeping them connected to their natural heritage. Over the past two decades, collaboration has changed perspectives and created new livelihood opportunities based on the sustainable management of coastal resources. At the root of it all is the passion and determination of youth groups.

The Mangrove Avengers are an example that anyone can be a hero – so long as they work together. “Together, we can all have a positive impact,” says Sabarudin, who has a message for other youths in the Coral Triangle: “No matter how small your group may be, whether you’re focused on turtles, coral reefs or mangroves, keep on doing your conservation work.”

ANBATAR organises Mangrove Camps to raise awareness on the importance of mangrove forests among youths and local communities in Kota Marudu, with the hope to inspire more local action to protect the mangrove forests. © ANBATAR




BACK FROM THE BRINK

SAVING

MARINE TURTLES

in Malaysia

 Green sea turtle (*Chelonia mydas*), Sipadan Island, Semporna, Sabah, Malaysia
© Jürgen Freund / WWF

Gavin Jolis and his team were on one of their regular visits to Pandanan Island, part of the Semporna Priority Conservation Area (PCA) in Sabah, Malaysia. While photographing the coastal landscapes using a drone, they found something totally unexpected.

“We noticed several black dots in the shallow waters around the island,” remembers Gavin, who assumed they must be looking at rocks. “But then we realised... those black dots were green turtles foraging on seagrasses.” As they flew the drone lower over the shallow sea, more turtles came into view. And then more. The team counted around 100 individuals, all of different sizes and species.

In his role as Marine Species Strategy Manager at WWF-Malaysia, Gavin has devoted the past 13 years of his life to the protection of these animals. In all that time, he had only ever seen fleeting glimpses of them swimming in the wild. “I have seen female turtles nesting at night before, measured a dead turtle carcass and caught some marine turtles underwater for research, but I had never seen hundreds of turtles foraging in seagrass beds like that before.”

That day in the Semporna PCA had added significance for the WWF team, as it was the culmination of more than a decade of hard work. In partnership with local communities, they have been fighting to save one of the Coral Triangle’s most iconic creatures, bringing Malaysia’s marine turtles back from the brink.



“
We noticed several black dots in the shallow waters around the island, but then we realised those black dots were green turtles foraging on seagrasses

GAVIN JOLIS
Marine Species Strategy Manager at WWF-Malaysia

NATIONAL TREASURE: THE VALUE OF TURTLES IN MALAYSIA



4 of 7
marine turtle
species are found
in Malaysia

From beaches to bank notes, marine turtles are synonymous with Malaysia. Four out of the seven marine turtle species found worldwide can be found here: green (*Chelonia mydas*), hawksbill (*Eretmochelys imbricata*), olive ridley (*Lepidochelys olivacea*) and leatherback (*Dermochelys coriacea*) turtles, and they are all threatened with extinction.

As they migrate through the Coral Triangle, marine turtles stop at various key points in Malaysia, including Sabah, Sarawak, Terengganu and Melaka. Beaches in these locations harbour nesting sites, while coral reefs and seagrass meadows offer feeding grounds. In return, turtles provide a range of ecosystem services.

“Turtles can be considered the lawnmowers of the sea,” explains Monique Sumampouw, who is head of the marine programme at WWF-Malaysia. “When green turtles graze, they increase the productivity and nutrient content of seagrass blades.” This constant grazing promotes growth, helps trap sediments and protects coastlines from

erosion, storms and rising tides.

Hawksbill turtles feed on sponges and algae, while leatherbacks control jellyfish populations to keep them from consuming excessive amounts of fish eggs and larvae. This helps coral reefs and a variety of fish populations, along with shrimp and lobster, to increase in number. The fishing industry benefits from these ecosystem services too, with increased haul indirectly leading to healthy livelihoods.

In 2018, WWF-Malaysia published a study -- *An Economic Approach to Marine Megafauna Conservation in the Coral Triangle: Marine Turtles in Sabah, Malaysia*, which estimated the Total Economic Value (TEV) of marine turtles in Semporna PCA to be around RM73 million (US\$23 million). In a 30-year scenario, full protection of turtles would result in a TEV three times greater than a business-as-usual scenario. This could create over 1,000 tourism-related jobs and contribute an estimated US\$469,000 in employment benefits to local communities each year.

THREATS AND CHALLENGES

Despite their economic value and the crucial role they play in marine ecosystems, marine turtles in Malaysia have been in serious decline. Terengganu on Peninsular Malaysia is one location where this disappearance has been keenly felt; the coastlines here were once home to one of the world’s largest breeding populations of leatherback turtles, with 10,000 nest sites documented in the early 1950s. In 2017, the Department of Fisheries Malaysia found only two.

Marine turtles globally are threatened by habitat loss, bycatch in fisheries and poaching for consumption and trade; they are hunted for their meat, shells and eggs. Between 1999 and 2017, the Sabah Wildlife Department recorded a total of 129 egg trade cases involving a total of around 238,396 eggs in Sabah. In 2016, the marine police confiscated 9,900 turtle eggs that were being smuggled into Sandakan in Sabah from neighbouring

countries. Between 2004 and 2017, 835 turtles fell victim to turtle poaching, mostly in Semporna in Sabah.

Climate change and rising sea levels are also damaging nesting sites, while the increase in global temperatures is expected to result in an increasingly female-skewed sex ratio among turtle populations in future. To make matters worse, turtles’ slow breeding rate makes it difficult for populations to bounce back when threatened, with only one out of every 1,000 hatchlings expected to reach adulthood.

Urgent action is needed to address these issues. For the past 15 years, the WWF CTP has been encouraging governments to strengthen legislation, while working with local communities and law enforcement to secure protection. In Malaysia, these actions have led to positive impacts.



US\$23M
estimated value
of marine turtles
in Semporna

Only 1 out of every 1,000 hatchlings is expected to reach adulthood.
© Chris Hof / WWF-Australia

WORKING ALONGSIDE COMMUNITIES

WWF-Malaysia has been advocating for a total ban on the sale of all species of turtle eggs with the Department of Fisheries in Terengganu. In June 2022, the state joined Sabah and Sarawak in placing a total ban on the sale of turtle eggs. The Terengganu Turtle Enactment 1951 (Amendment 2021) is landmark legislation, which paves the way for other regions to follow.

Turtle poaching has been on the rise in Sabah for the past 19 years. Now, following integrated operations by enforcement agencies supported by WWF-Malaysia throughout Sabah in 2021 and 2022, the number of cases is beginning to decline.

Egg poaching rates are showing signs of slowing down in community-monitored beaches (eight per cent in 2021 compared to nine per cent the year before), in no small part thanks to Honorary Wildlife Wardens and Honorary Park Rangers who monitor, patrol and collect important information to support enforcement.

“We have seen an increasing trend of marine turtle nests secured for incubation in our Melaka, Terengganu, Tun Mustapha Park and Semporna PCA priority sites in Sabah,” explains Gavin. “During the 2021 nesting season, a total of 995 hawksbill turtle nests secured for incubation were recorded in Melaka – a record high for Malaysia.”

In an effort to stem the tide of climate change, WWF-Malaysia has been collecting data to highlight issues and inform decisions. This involves monitoring the temperature of sand in turtle hatcheries; by documenting these changes, WWF-Malaysia is piecing together a bigger picture of the problem and revealing patterns that can form the basis for more targeted action.



“

There is a feeling of joy, especially when the baby turtle is released into the sea.

SITTI RASAH
Founding Members of WAPO

Since 2010, WWF-Malaysia has been working alongside community groups, supporting these conservation partners with training and funding. One of the groups established that year was the Women’s Association of Omadal Island (WAPO), who are the first community-based organisation in Semporna staffed entirely by women. Between 2013 and 2019, they managed to save a total of 20 turtle nests from poaching.

“There is a feeling of joy, especially when the baby turtle is released into the sea,” says Sitti Rasah, one of the founding members of WAPO. This group of 12 dedicated women, who are trained as honorary wildlife wardens, patrol beaches, rescue stranded hatchlings, report illegal

crimes and raise awareness in local communities. They even help with the incubation of nests. In light of their tireless work, WAPO has been officially recognised by the Sabah State Government.

“WWF helped us get training and we were given technical advice on our turtle conservation activities,” explains Roziah, the group’s chairperson. She hopes these efforts continue to be repeated in other locations in Malaysia such as in the Tun Mustapha Park, where precious nests are in need of protection. “I hope more communities out there can continue to become active and help to raise turtle conservation, not only in Malaysia, but also (elsewhere) in the world.”

THE BIGGER PICTURE

SECURING A FUTURE FOR MARINE TURTLES

After decades of decline, turtles are making a comeback in Malaysia. Gavin believes that, in order to save turtles, governments and communities should learn to think like them: “Marine turtles do not recognise borders,” he explains. “We must continue to acknowledge the importance of marine turtles as shared resources and ignore these borders too, by collaborating with each other.”

Protecting marine turtles across the Coral Triangle – and indeed globally – requires urgent actions to halt the unsustainable use and transboundary illegal trade of turtles and their parts. By working with law enforcement agencies, scientists, researchers,

conservationists and local communities, WWF CTP aims to drive effective transboundary policy reform to strengthen enforcement in reducing bycatch and achieve zero poaching. Together with partners, we launched ShellBank – the world’s first marine turtle global DNA database that aims to trace, track and protect turtles from illegal take and trafficking. Such innovative and deeply collaborative approaches will continue to be a hallmark of how we pursue the goals of safeguarding marine turtles from threats and securing their long-term survival.

 **Learn more:** shellbankproject.org

IT TAKES A VILLAGE

OVERCOMING

the Plastic Crisis

“This effort is by, from and for the community,” insists Saharuddin Ridwan. Better known as ‘Pak Sahar of the waste bank’ by the people who know him in Makassar, the second-largest city on the Indonesian island of Sulawesi, he has helped local communities set up a waste bank and tackle environmental problems.

Starting out as a journalist more than a 12 years ago, Pak Sahar joined a massive clean-up operation with

thousands of activists. There, he witnessed the scourge of plastic waste along 14 km of waterways lined with homes that had no access to proper waste management.

The experience made its mark. Sahar soon began working to devise solutions at the very lowest unit level of waste management – households and villages.



Untia's waste banks buy recyclables such as paper, metal, glass and plastic from residents which reduces the amount of plastic and other waste polluting land, rivers and oceans. © Yayasan Peduli Negeri

BURNT, BURIED OR THROWN IN THE SEA

Just outside Makassar is Untia – a coastal village with fewer than 2,500 residents, most of whom are fisherfolk. Despite the proximity, this village is not included in the city government’s waste collection or management services, which left the community struggling with heap of trash for years.

There were just three main ways of dealing with waste – burn, bury or throw, albeit right into canals which connect to the sea.

Since working with Yayasan Peduli Negeri (YPN), Untia has changed. Now equipped with eight waste banks that service 500 households, the community is “banking” one tonne of plastic waste each month, while composting organic waste into fertiliser for gardening.

“Many *ibu ibu* (local women) are customers of the waste bank,” explains Pak Sahar. The women here can earn IDR 6-7 million

(US\$ 390-460) in a year through these operations – money that is used to pay rent, or buy daily necessities. “This means there is social value from the waste bank,” says Sahar, who proudly relates that families are becoming more aware and more concerned about how to properly dispose of waste. “Even if we manage just half of the waste produced, we can already have a significant impact on many things, such as human and environmental health, and even economic benefits,” he added.

As Chairman of YPN Pak Sahar has facilitated transformational changes in the communities that he’s been working with. This includes waste banks, which buy recyclable materials such as paper, metal, glass and plastic from residents. In turn, this reduces the amount of plastic and other waste going into landfills, or worse, leaking into oceans.



“
The money is used to pay rent, or buy daily necessities. This means that there is social value from the waste bank.

SAHARUDIN RIDWAN
Chairman of the Yayasan Peduli Negeri (YPN)

BANKING ON WASTE

Commonly known in Indonesia as TPS3R, local waste facilities are focusing on the 3Rs - Reduce, Reuse and Recycle.

5 STEPS TO RECYCLE HOUSEHOLD MATERIALS



TPS3Rs are designed to reduce the amount of trash going into landfills, thereby helping Indonesia’s local governments better manage and monetise waste management. It is therefore essential to support and revitalise MRFs, to ensure they retain a strong connection between households and the recycling industry.

In reality, running these centres profitably and effectively requires investment and maintenance. With this in mind, WWF-Indonesia joined the Coordinating Body on the Seas of East Asia (COBSEA) to support YPN in renovating the facility centre, while also training and building the capacity of waste workers. Thanks to funding from the Norwegian Agency for Development Cooperation (NORAD) and other partners, Untia’s TPS3R are now better equipped to

process plastic and other recyclable waste coming through community waste banks.

YPN is not alone. A social enterprise called Rappo is giving new life to plastic bags and other soft plastics which, deemed “unrecyclable”, often end up littering streets, rivers and seas.

Rappo provides training and employment for low-income women in Untia, where they clean, sort and upcycle soft plastics into durable and trendy products like purses, laptop sleeves and tote bags. These products target young urbanites who prefer eco-conscious products, and online buying allows Rappo to sell beyond their physical store.

“When people buy these products they directly contribute to solving the problem of plastic waste,” said Akmal Idrus, the founder of Rappo, who aims to improve not just the economic status of women but also their emotional well-being and overall empowerment. In the two months’ of training with Rappo, the women also participate in workshops on journaling, physical exercise, public speaking and meditation.



“
When people buy these products they directly contribute to solving the problem of plastic waste.

AKMAL IDRUS
Rappo Founder

CLOSING THE LOOP - FROM GRASSROOT COLLABORATION TO GLOBAL TREATY

“It’s like flying a plane while you build it,” explains Yumi Nishikawa, who leads WWF’s Plastic Smart Cities programme. “While innovation is happening at ground level, we need to be ready to adapt; the key question now is ‘how do we make this happen at scale?’”

As part of WWF’s *No Plastic in Nature* global initiative, Plastic Smart Cities is designed to support cities, island and coastal centres in finding workable pilot solutions – such as YPN and Rappo – and then helping to scale them effectively, in order to achieve a vision of zero plastic leakage into nature by 2030.

Another key pillar is a policy drive to secure a global treaty that establishes rules and regulations needed to end the plastic crisis.

This requires the commitment of many countries – especially in the Coral Triangle. Identified for being among the world’s top plastic leakage hotspots, the region is also a top destination for illegal waste shipments from the US and the European Union, further exacerbating already struggling waste systems.

“The future of the Coral Triangle needs the global community to recognise its role in the plastics challenge,” explains Jackie Thomas, Policy and Advocacy Lead at WWF-CTP and senior advisor to WWF-Pacific. “There is so much at stake – the world’s most diverse and pristine marine ecosystems, which sustain more than 360 million people,” she added.

UN PLASTIC TREATY

In March 2022, UN Member States agreed on a mandate to negotiate a legally binding global treaty to end plastic pollution – a historic decision, and a major leap towards a plastic free ocean for all, with the Coral Triangle countries in support. Now, this framework will be negotiated throughout a series of meetings across the globe, and is expected to be in place by the end of 2024.

Learn more: unplasticstreaty.org



Plastic Smart Cities is a WWF initiative working with cities worldwide to keep plastic out of nature. Since 2018, WWF has been working with 25 pilot cities to achieve a 30 per cent reduction in plastic leakage by 2025, through better waste management and advancing circular economies.

Learn more: plasticsmartcities.org

Since 2018, Jackie has been working with policy-makers, researchers, advocates and partners to tackle the plastic pollution, as well as pushing for greater uptake of the plastic issue within WWF.

Today, Yumi and Jackie are among hundreds of WWF staff dedicated to ending plastic pollution, working with dozens of local and national governments, and hundreds more partners including local community groups, social enterprises, national businesses and global brands. “No one has all the answers,” says Yumi, who believes that’s why collaboration is essential. As she explains, “it’s the only way to escape tunnel vision and a great way to put our heads and our hands together to create greater impact; after all, we are trying to implement the same goal – to make sure there’s no plastic in nature.”



Plastic pollution often disproportionately affects coastal communities, making community-based waste management a crucial part of greater efforts to tackle the global plastic crisis © Rappo Indonesia

PLASTIC-FREE OCEANS SCALING LOCAL SOLUTIONS

Untia represents just one of over 80,000 villages in Indonesia – many of them coastal. Thousands more exist across the Coral Triangle. Most are struggling with the mounting plastic crisis on their shores.

The Coral Triangle Programme has been part of WWF’s efforts to find solutions to the plastic crisis. Engaging with academia, civil society, industry and governments from local level to regional and international platforms, we are working to identify regional strategies that support the global treaty while connecting local plastic waste solutions, as simple as collection and transportation of plastic trash, with remote islands and coastal communities across the Coral Triangle.

Together with the Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF), we have put together a regional stocktake on marine plastic pollution in the Coral Triangle. This report was presented to senior government officials by 2022. Looking ahead, we hope to see recommendations addressing marine plastic pollution endorsed and implemented in coastal communities, tourism centres, MPAs and Other Effective area-based Conservation Measures (OECMs) across the region.

REPAIR, RESTORE AND
BUILD RESILIENCE

TOGETHER

POSSIBLE

As we reflect on 15 years of the Coral Triangle Programme (CTP), we are reminded of the countless individuals who have supported collective efforts to protect marine life and conserve valuable resources in the Coral Triangle. All of us have come together with the shared goal of a stronger, more equitable and resilient Coral Triangle, for the benefit of the millions of people who rely on it and the blue planet we all share.


From women's savings clubs in the Pacific and local fishers in the Philippines, to a new generation of youths advocating for sustainable development; we are connected by a common cause and committed to finding a better, more resilient way forward. Through the stories in this publication, we wish to honour the dedication, passion and collaboration that reflects our collective commitment and pay tribute to all the organisations, communities and individuals who have joined us on the journey.

Special thanks goes to WWF's very own field staff, who sacrifice time away from family and friends to be stationed in often far-flung places; our donors, who come from all walks of life and generously give whatever they can to the cause; and the government partners, researchers, scientists, fellow conservationists and development partners, whose tireless work continues to motivate us.

Our main partners in conservation are the many community members across the region who are at the forefront of conservation. On a daily basis they devote their time, knowledge and expertise to safeguard the Coral Triangle. We continue to support global targets to effectively protect 30 per cent of marine areas by 2030 and advocate for communities' participation and leadership in co-management.

We hope the stories shared within these pages have informed and inspired you, just as they have motivated us to continue working towards our goal of a healthy, more resilient Coral Triangle. We look forward to taking the next steps of this journey with you in the years ahead.



 M'buke Islands, Manus, Papua New Guinea
© Jürgen Freund / WWF



Working to sustain the natural world for the benefit of people and wildlife.

together possible™ panda.org

WWF Coral Triangle Programme (hosted by WWF-Indonesia)

Address: Gedung Graha Simatupang Tower 2 Unit C, 7th floor
Jl. Letjen TB. Simatupang Kav. 38, Jakarta

Visit: panda.org/coraltriangle

Follow: twitter.com/coral_triangle