KEMENTERIAN SUMBER ASLI
DAN KELESTARIAN ALAM

CORAL TRIANGLE
INITIATIVE
ON CORAL REEFS, FISHERIES
AND FOOD SECURITY

MALAYSIA National Plan of Action 2.0

CTI-CFF

Coral Triangle Initiative
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Foreword

By Dato' Sri Arthur Joseph Kurup

It is my honour to present the National Plan of Action 2.0 (NPOA 2.0), a testament to Malaysia's steadfast commitment to the Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF). This document reflects our nation's collective resolve to safeguard our marine heritage, sustain our fisheries, and enhance food security for current and future generations.

Since the adoption of the first NPOA, Malaysia has made significant strides in strengthening marine conservation, promoting sustainable fisheries, and advancing regional partnerships. Our progress has been made possible through collaboration with CTI-CFF member countries and the unwavering support of local communities, policy makers, and stakeholders. Together, we have built a strong foundation of shared knowledge and mutual respect, enabling us to address emerging challenges with unity and purpose.

NPOA 2.0 is closely aligned with the Regional Plan of Action 2.0 (RPOA 2.0), reflecting Malaysia's dedication to regional priorities. This new edition places particular emphasis on climate change adaptation, gender equality and social inclusion (GESI), and the integration of science-based approaches into resource management. By prioritising these areas, we reaffirm our commitment to inclusive and resilient marine governance, ensuring that all voices are heard and that our actions remain responsive to the evolving needs of our communities and ecosystems.

This document serves as a living, non-legally binding framework that guides implementing bodies and agencies. It provides direction for planning, coordination, monitoring, and resource mobilisation, empowering all stakeholders to contribute effectively towards our shared goals. Through sustained collaboration and continued engagement, we can maximise the impact of our efforts and ensure the sustainable management of the Coral Triangle's invaluable resources.

Malaysia remains firmly committed to regional cooperation and the protection of the Coral Triangle's unique biodiversity. We look forward to working closely with our neighbours and partners, strengthening our bonds and advancing a sustainable future for the region. Together, let us renew our resolve to preserve the Coral Triangle for generations to come.

Dato' Sri Arthur Joseph Kurup
Minister
Ministry of Natural Resources and Environmental Sustainability
The Government of Malaysia

Foreword

By Datuk Wira Anis Rizana binti Mohd Zainudin

The Government of Malaysia has long remained steadfast in its commitment to safeguarding our invaluable marine ecosystems and enhancing the resilience of our coastal communities. In line with this vision, the Cabinet has approved Malaysia's continued participation in the second term of the Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF), which is closely aligned with the renewed mandate for the 2021-2030period.

In this strategic journey, the Ministry of Natural Resources and Environmental Sustainability (NRES) plays a pivotal role as the national focal point. Our ministry is not merely an administrator, but the custodian of Malaysia's natural heritage. The transition of this responsibility to NRES underscores our strengthened mandate to lead national efforts in marine conservation, biodiversity management, and climate resilience. It is our core mission to ensure that Malaysia's environmental sustainability is integrated into the heart of national development.

Malaysia's first National Plan of Action (NPOA) was a landmark achievement, developed through a concerted multi-agency effort. It successfully complemented the Sulu-Sulawesi Marine Eco-region (SSME) Programme, a vital trilateral collaboration between Malaysia, Indonesia, and the Philippines. Through these years of synergy, NRES has facilitated significant milestones in marine protection, fisheries management, and the expansion of protected areas across borders.

In 2024, Malaysia steered a bold expansion of our implementation scope. Moving beyond previous scientific boundaries, the mandate now covers Peninsular Malaysia and Sarawak, in addition to Sabah. This holistic approach, led by NRES, ensures that the benefits of CTI-CFF implementation reach every corner of our nation, protecting ecologically sensitive coral reefs from Pulau Redang, Pulau Tioman, and Pulau Payar to the Johor islands, which are essential for our biodiversity, tourism, and community livelihoods.

The development of this NPOA 2.0 reflects NRES's commitment to precision and inclusivity. Despite a demanding timeline, this document was completed through the dedication, technical expertise, and cooperation of numerous government agencies, state authorities, research institutions, and stakeholders. I extend my deepest appreciation to everyone who contributed to this monumental effort.

NPOA 2.0 stands as a testament to Malaysia's progress since 2021. It serves as our strategic compass for enhancing programme coordination, strengthening national planning, and ensuring that our conservation actions are inclusive and well-prioritised. Furthermore, it will support strategic budget planning and resource mobilisation, enabling NRES and Malaysia to meet our international commitments under the CTI-CFF while addressing our unique national priorities.

I am confident that NPOA 2.0 will further solidify Malaysia's mission to protect our marine ecosystems, empower our coastal communities, and contribute meaningfully to the shared vision of a resilient and sustainable Coral Triangle region.

Datuk Wira Anis Rizana binti Mohd Zainudin
Secretary General
Ministry of Natural Resources and Environmental Sustainability
The Government of Malaysia

Preface

By Professor Datuk Dr. Kasim Hj. Mansor, JP

The National Plan of Action 2.0 (2025–2030) provides the framework that will guide Malaysia's implementation of the Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF) for the years ahead. As the institution hosting the CTI-CFF Sabah Office, Universiti Malaysia Sabah (UMS) is pleased to support this process through technical coordination, scientific input and facilitation of multi-agency collaboration.

Established in 2012, the CTI-CFF Sabah Office has played a central role in compiling national reports, supporting federal–state engagement, and linking Malaysia's work with regional CTI-CFF processes. This technical function continues to strengthen communication between agencies and ensure that implementation is informed by current knowledge and field realities.

The formulation of NPOA 2.0 was shaped by consultations held throughout 2024–2025, involving government agencies, academic institutions, NGOs, and community representatives. These discussions were essential in identifying shared priorities and ensuring that the plan reflects practical needs across Malaysia's diverse marine and coastal contexts.

On behalf of UMS, I extend our appreciation to the Ministry of Natural Resources and Environmental Sustainability for the trust placed in us to support the preparation of this document. We look forward to continuing our collaboration through the CTI-CFF Sabah Office in strengthening Malaysia's contribution to the Initiative.

UMS remains committed to advancing marine science and strengthening Malaysia's efforts in marine conservation and sustainability. Through the CTI-CFF Sabah Office, we will continue to provide technical support, foster collaboration, and contribute to actions that safeguard our oceans and support the communities that rely on them.

Professor Datuk Dr. Kasim Hj. Mansor, JP
Vice Chancellor
Universiti Malaysia Sabah

Acknowledgements

The Ministry of Natural Resources and Environmental Sustainability conveys its deepest appreciation to all agencies, institutions, partners, and individuals who contributed to the development of the National Plan of Action 2.0 for the Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF).

We extend our gratitude to federal and state government agencies, academic and research institutions, non-governmental organisations, international partners, and members of the CTI-CFF networks whose guidance, technical inputs, and collaboration have been instrumental throughout this process.

We also acknowledge the commitment of participants from the national and state-level workshops (2024–2025), whose diverse expertise played a vital role in shaping the direction and priorities of this NPOA 2.0.

This document reflects a shared national effort and collective vision. The Ministry thanks everyone involved for their dedication in supporting Malaysia's continued commitment to safeguarding marine and coastal biodiversity for current and future generations.

Contributors to Malaysia's NPOA 2.0 (2025–2030)

Ministry of Natural Resources and Environmental Sustainability (NRES)
National Coordinating Committee (NCC) and National Secretariat for CTI-CFF Malaysia

Institut Marin Borneo (IMB), Universiti Malaysia Sabah (UMS)
Knowledge and Technical Lead Institution, on behalf of CTI-Sabah

Authors

- *Assoc. Prof. Dr. Juanita Joseph*
- *Dr. Chung Fung Chen/Achier*
- *Assoc. Prof. TS. Dr. Ejria Saleh*
- *Dr. Norasma Dacho*
- *Azlina binti Mohd Said*

Contributing Stakeholders

Lead agencies

- *Department of Fisheries Sabah (Goal 1 & Goal 2)*
- *Sabah Parks (Goal 3)*
- *Ministry of Natural Resources and Environmental Sustainability (NRES) / UMS (Goal 4)*
- *Department of Fisheries Malaysia (Goal 5)*

Government Agencies & Institutes

- *National Water Research Institute of Malaysia (NAHRIM)*
- *Department of Environment Malaysia*
- *Department of Mineral and Geoscience Malaysia (JMG)*
- *Forest Research Institute Malaysia (FRIM)*
- *Forestry Department of Peninsular Malaysia*
- *Maritime Institute of Malaysia (MIMA)*
- *Malaysia Marine Department*
- *Malaysian Maritime Enforcement Agency (MMEA)*
- *Malaysian Meteorological Department*
- *Department of Irrigation and Drainage Malaysia*
- *Malaysian Green Technology and Climate Change Corporation (MGTC)*
- *Department of Fisheries Melaka*
- *Department of Fisheries Pulau Pinang*
- *SEAFDEC/MFRDMD Terengganu*
- *Sarawak Fisheries Research Institute*
- *Sarawak Department of Marine Fisheries*
- *Sarawak Forestry Corporation*
- *Ministry of Tourism, Culture and Environment Sabah*
- *Sabah Wildlife Department (SWD)*
- *Sabah Forestry Department*
- *Environment Protection Department of Sabah (EPD)*
- *Institute for Development Studies Sabah (IDS)*

Universities

- *Universiti Malaysia Sarawak (UNIMAS)*
- *Universiti Malaya (UM)*
- *Universiti Malaysia Terengganu (UMT)*
- *Universiti Sains Malaysia (USM)*
- *Universiti Kebangsaan Malaysia (UKM)*
- *International Islamic University Malaysia (IIUM)*

NGOs and International Partners

- *WWF-Malaysia*
- *Reef Check Malaysia*
- *Marine Research Foundation (MRF)*
- *MareCet Research Organization*
- *Malaysian Society of Marine Sciences (MSMS)*
- *Wildlife Conservation Society (WCS)*
- *TRAFFIC Southeast Asia*
- *PULIHARA (formerly Lang Tengah Turtle Watch)*
- *Kudat Turtle Conservation Society (KTCS)*
- *Semporna Island Project (SIP)*
- *Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH*

Photos credits

- *Dr. Chung Fung Chen/Achier*
- *Mr. Adzmin Fatta*

List of Acronyms

ABS	Access and Benefit Sharing
ADB	Asian Development Bank
BAGF	Blue Accounting Geospatial Framework
BUR	Biennial Update Report
CBD	Convention on Biological Diversity
CCA	Climate Change Adaptation
CEPA	Communication, Education, and Public Awareness
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
COASTFISH	Sustainable Coastal Fisheries and Poverty Reduction Initiative
COTs	Crown-of-thorn starfish
CPUE	Catch Per Unit Effort
CSO	Civil Society Organization
CSR	Corporate Social Responsibility
CT Atlast	Coral Triangle Atlas (CTI-CFF regional data platform)
CTI - CFF	Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security
CTMPAS	Coral Triangle Marine Protected Area System
DBKK	Dewan Bandaraya Kota Kinabalu
DID	Department of Irrigation and Drainage Malaysia
DOFM	Department of Fisheries Malaysia
DOFS	Department of Fisheries Sabah
EAFM	Ecosystem Approach to Fisheries Management
EBM	Ecosystem-Based Management
EEZ	Exclusive Economic Zone
EPD	Environment Protection Department of Sabah
FAO	Food and Agriculture Organization of the United Nations
FRI	Fisheries Research Institute
FS	Forever Sabah
GEF	Global Environment Facility
GESI	Gender Equality and Social Inclusion
GHG	Greenhouse Gas
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (German Development Cooperation)
IAS	Invasive Alien Species
ICCD	International Coastal Cleanup Day
IOES	Institute of Ocean and Earth Sciences
ISME	International Society for Mangrove Ecosystems
IUCN-MMPATF	International Union for Conservation of Nature – Marine Mammal Protected Areas Task Force
IUU	Illegal, Unreported and Unregulated
IWT	Illegal Wildlife Trade
JAS	Jabatan Alam Sekitar
JIRCAS	Japan International Research Center for Agricultural Sciences
JMG	Department of Mineral and Geoscience Malaysia
JPSM	Jabatan Perhutanan Semenanjung Malaysia
JTMM	Jawatankuasa Teknikal Marin
KePKAS	Ministry of Tourism, Culture & Environment
KMGBF	Kunming-Montreal Global Biodiversity Framework
LMMA	Locally Managed Marine Area
M&E	Monitoring and Evaluation
MAFFI	Ministry of Agriculture, Fisheries and Food Industries
MareCet	Marine Mammal Research Organization
MARRS	Mars Assisted Reef Restoration System
MEL	Monitoring, Evaluation and Learning
METT-4	Management Effectiveness Tracking Tool-4
MFRDMD	Marine Fishery Resources Development and Management Department
MIMA	Maritime Institute of Malaysia
MOT	Ministry of Transport
MoTAC	Ministry of Tourism, Arts and Culture
MOU	Memorandum of Understanding
MPA	Marine Protected Area
MRF	Marine Research Foundation
MSMS	Malaysian Society of Marine Sciences
MSP	Marine Spatial Planning
MyFiRSt	Malaysia Fisheries Resource System
MyGDI	Malaysia Geospatial Data Infrastructure
MyMPA	Malaysia's Important Marine and Coastal Areas
MyNODC	Malaysian National Oceanographic Data Centre
NADMA	National Disaster Management Agency
NAHRIM	National Water Research Institute
NCC	National Coordinating Committee (Malaysia CTI-CFF)
NDC	Nationally Determined Contribution (under UNFCCC)
NDFs	Non-Detriment Findings
NGO	Non-Governmental Organization
NHC	National Hydrographic Centre
NPBD	National Policy on Biological Diversity
NPOA	National Plan of Action
NRES	Ministry of Natural Resources and Environmental Sustainability

List of Acronyms

OECM	Other Effective Area-Based Conservation Measure
PES	Payment for Ecosystem Services
PETRA	Kementerian Peralihan Tenaga dan Transformasi Air
RBP	Rapid Bioassessment Protocol
RCKK	Rotary Club of Kota Kinabalu
RCM	Reef Check Malaysia
RIMES	Regional Integrated Multi-Hazard Early Warning System
RPOA	Regional Plan of Action
RS	Regional Secretariat (CTI-CFF)
SaBC	Sabah Biodiversity Centre
SaBIIS	Sabah Biodiversity Integrated Information System
SAFMA	Sabah Fish Marketing Sdn Bhd
SDG	Sustainable Development Goal
SEACONNECT	Strengthening Marine and Coastal Resources Conservation in the Coral Triangle
SEADPRI	Southeast Asia Disaster Prevention Research Initiative
SEAFDEC	Southeast Asian Fisheries Development Center
SEEN	Sabah Environmental Education Network
SEPA	Sabah Environmental Protection Association
SFC	Sarawak Forestry Department
SFD	Sabah Forestry Department
SIMCA	Sugud Islands Marine Conservation Area
SIP	Semporna Islands Project
SMJ	Sabah Maju Jaya
SOMACORE	Sustainable Ocean Management and Conservation of Marine Biodiversity Project
SSME	Sulu-Sulawesi Marine Ecoregion
SST	Sea Surface Temperature
TARP	Tunku Abdul Rahman Park
TED	Turtle Excluder Device
TIHPA	Turtle Islands Heritage Protected Area
TMP	Tun Mustapha Park
TSMP	Tun Sakaran Marine Park
TWG	Technical Working Group
UM	Universiti Malaya
UMS	Universiti Malaysia Sabah
UMT	Universiti Malaysia Terrengganu
UNCLOS	United Nations Convention on the Law of the Sea
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNSW	University of New South Wales
WCS	Wildlife Conservation Society
WWF-MY	World Wide Fund for Nature Malaysia

Executive Summary

Malaysia's National Plan of Action (NPOA) 2.0 (2025–2030)

Malaysia's National Plan of Action 2.0 (NPOA 2.0) outlines the nation's renewed commitment to the Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF) for the period 2025-2030. Building on the foundation established under NPOA 1.0 (2010–2020) and the achievements of 2021–2025, this plan sets Malaysia's strategic direction for the final five years of the Regional Plan of Action 2.0 (RPOA 2.0), aligning national priorities with regional aspirations.

Situated at the northeastern boundary of the Coral Triangle, Malaysia is responsible for stewarding some of the world's most biodiverse and productive marine ecosystems. Coral reefs, mangroves, and seagrass beds across the country underpin fisheries, coastal livelihoods, and national food security, while also serving as globally significant blue carbon reservoirs. Recognising this ecological and socioeconomic importance, NPOA 2.0 expands its implementation boundary beyond Sabah's scientific Coral Triangle area to include Peninsular Malaysia and Sarawak, ensuring a cohesive whole-of-nation approach to marine governance.

NPOA 2.0 is guided by seven principles that frame Malaysia's pathway to resilient and inclusive ocean management: ecosystem-based management; integrated and participatory governance; precautionary and science-based decision-making; climate resilience and nature-based solutions; gender equality and social inclusion (GESI); regional and transboundary cooperation; and transparency with adaptive management.

These principles align with national policies and Malaysia's obligations under global agreements including the Sustainable Development Goals, the Convention on Biological Diversity, United Nations Convention on the Law of the Sea (UNCLOS), the Paris Agreement under the United Nations Framework Convention on Climate Change (UNFCCC), and Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

Through six targets, Malaysia will implement **29 actions and 139 activities by 2030**:

- **Target A1** – Coral Reefs, Mangroves, Seagrass (8 actions, 42 activities, 37 activities with GESI): Expanding marine protected areas, enhancing restoration, and strengthening financing.
- **Target A2** – Threatened Species (5 actions, 32 activities, 27 activities with GESI): Reducing threats, enforcing policies, and advancing systematic monitoring.
- **Target A3** – Healthy and Productive Fisheries (4 actions, 19 activities, 17 activities with GESI): Implementing ecosystem approaches, fisheries improvement projects, and addressing IUU fishing.
- **Target B1** – Food Security and Coastal Livelihoods (5 actions, 15 activities, 13 activities with GESI): Promoting alternative livelihoods, reducing poverty, and supporting sustainable fisheries.
- **Target B2** – Gender Equality and Social Inclusion (3 actions, 4 activities): Mainstreaming inclusivity across governance and conservation.
- **Target B3** – Climate-Resilient Communities (4 actions, 27 activities, 23 activities with GESI): Strengthening adaptive capacity, awareness, and nature-based restoration.

GESI integration is a defining feature of NPOA 2.0, with 112 of 136 activities (84%) incorporating gender and social inclusion elements. This reflects Malaysia's commitment to ensuring that benefits, opportunities, and decision-making processes are accessible and equitable for all, particularly for coastal women, youth, and marginalised groups.

Implementation will be coordinated through the National Coordinating Committee (NCC), supported by State Coordination Committees (SCCs), Technical Working Group (TWGs), state agencies, universities, NGOs, private sector partners, and local communities. This multi-tiered structure ensures cohesive national planning while strengthening links to regional CTI-CFF processes.

Effective execution of NPOA 2.0 requires strategic resource mobilisation. Chapter 5 outlines Malaysia's approach to advancing national and state budget commitments; expanding donor partnerships and international collaborations; and leveraging innovative financing mechanisms such as blue bonds, nature-based financing, payment for ecosystem services, structured CSR contributions, and the Coral Triangle Conservation Fund. A strengthened communication and stakeholder engagement strategy further supports transparency, awareness, and public participation.

A comprehensive Monitoring, Evaluation, and Learning (MEL) framework are supported by annual tracking, a national dashboard, thematic reporting, and a mid-term review that ensures accountability while enabling adaptive implementation.

By 2030, Malaysia aims to demonstrate tangible improvements in marine ecosystem health, threatened species conservation, fisheries sustainability, food security, and community resilience. NPOA 2.0 positions Malaysia not only as an active member of the CTI-CFF but as a regional leader in ocean governance, advancing shared goals for biodiversity conservation, sustainable development, and climate resilience. It also lays the foundation for a long-term National Ocean Strategy that will guide Malaysia's marine agenda beyond 2030.

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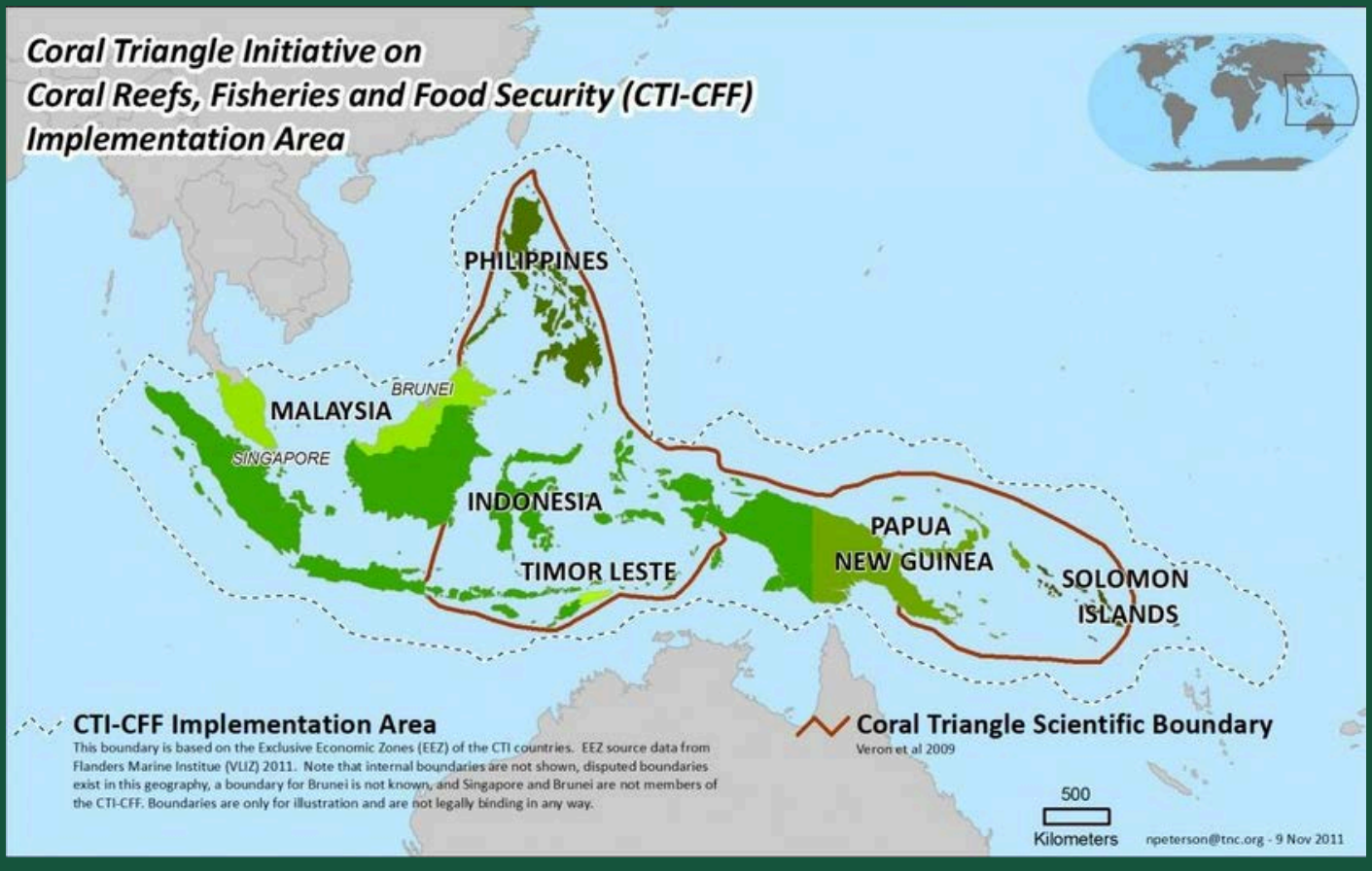
CHAPTER 1
INTRODUCTION

1.1 Overview of Coral Triangle Initiative on Coral Reefs, Fisheries, and Food Security (CTI-CFF)

The Coral Triangle often referred to as the 'Amazon of the Seas,' is the global center of marine biodiversity. It spans the waters of six countries (CT6): Indonesia, Malaysia, Papua New Guinea, the Philippines, the Solomon Islands, and Timor-Leste. Within this region, over 76% of known coral species and 37% of reef fish species are recorded, along with the world's largest mangrove and seagrass habitats. The Coral Triangle has also been identified as one of the most important global regions for sea turtles, marine mammals, and migratory species. It provides major nesting and foraging grounds for sea turtles, serves as critical breeding and feeding areas for marine mammals, and functions as an important migratory route linking populations across ocean basins. Increasingly, the Coral Triangle is also recognised as a significant blue carbon reservoir, where mangroves, seagrasses, and coastal wetlands play a vital role in carbon storage and climate regulation. Collectively, these ecosystems sustain essential ecological processes while providing food, livelihoods, cultural identity, and coastal protection for more than 120 million people. The health of the Coral Triangle is therefore crucial for regional prosperity and global food security.

The Coral Triangle
and its Global Significance



SIX
Countries


Indonesia


Malaysia


Papua New Guinea

1.6%
of world's ocean area


Philippines


Solomon Islands


Timor-Leste

76%
of all known coral species

Vast
Seagrass meadows

Largest
Mangrove forests

37%
of reef fish species

120M
Coastal people

USD 2.3B
Ecosystem services annually

Despite its richness, the Coral Triangle faces growing pressure from human and environmental factors. Overfishing, illegal and destructive fishing practices, marine pollution, and habitat loss have reduced ecosystem resilience. The accelerating impacts of climate change, including coral bleaching, ocean warming, sea level rise, and extreme weather, further intensify threats, placing both ecosystems and coastal communities at risk.

In response, the six countries, known as the CT6, established the CTI-CFF in 2009. This multilateral partnership brings together governments, civil society, academia, and development partners to safeguard biodiversity, promote sustainable fisheries, and enhance the resilience of coastal communities. Malaysia, as a founding member, launched its first National Plan of Action (NPOA 1.0, 2010-2020) in 2009 to implement the Regional Plan of Action (RPOA 1.0) within its national context.

In 2021, the CT6 adopted the Regional Plan of Action 2.0 (RPOA 2.0, 2021-2030). This new plan strengthens the focus on climate resilience, inclusive governance, marine pollution and marine debris management, innovative financing, and strategic partnerships. It reflects the recognition that the future of the Coral Triangle depends not only on protecting biodiversity but also on ensuring the well-being, equity, and prosperity of the people who depend on it.

For Malaysia, participation in the CTI-CFF carries particular significance. The country occupies a strategic position at the northern boundary of the Coral Triangle, serving as a gateway between the Sulu and Sulawesi Seas, the South China Sea, and the Strait of Malacca**.** This unique geography connects the Coral Triangle with two of the world's busiest maritime regions and underscores Malaysia's responsibility to act as both a steward of biodiversity and a bridge between regional conservation efforts and global commitments.

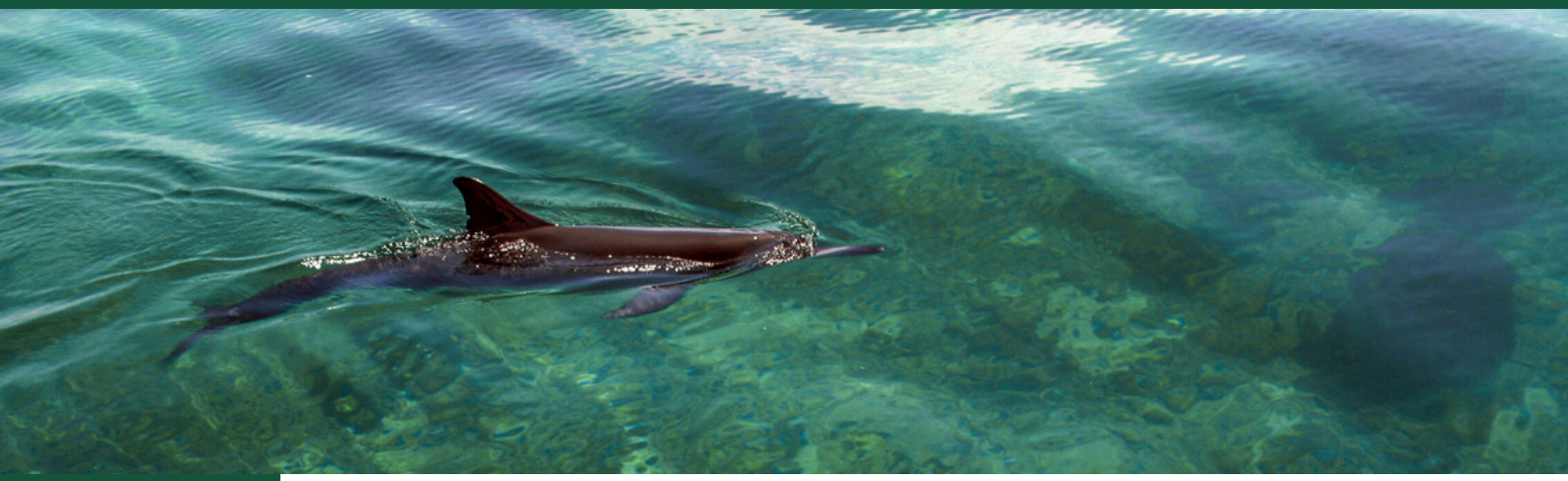
1.2 Malaysia's Commitment and Progress (NPOA 1.0)

Malaysia's NPOA 1.0 (2010-2020) marked a major milestone in the country's engagement under the CTI-CFF. Developed in alignment with the five goals of the RPOA 1.0, it provided Malaysia with a structured framework to guide actions across five thematic goals: Seascapes, Ecosystem Approach to Fisheries Management (EAFM), Marine Protected Areas (MPAs), Climate Change Adaptation (CCA), and Threatened Species. In total, 134 actions were outlined, reflecting Malaysia's ambition to advance biodiversity conservation, strengthen fisheries governance, and enhance climate resilience within the Sulu-Sulawesi Seascape.

Over the 11 years of implementation, NPOA 1.0 achieved a number of significant milestones. Among its most significant achievements was the establishment of Tun Mustapha Park, covering 898,762.76 hectares, one of Southeast Asia's largest multiple-use marine protected areas. Malaysia also strengthened trilateral cooperation through the Sulu–Sulawesi Marine Ecoregion (SSME) initiative, reinforcing joint efforts with Indonesia and the Philippines in biodiversity protection, fisheries management, and cross-border surveillance.

At the species level, Malaysia made notable progress through the declaration of the Sabah Shark Sanctuary, the development of national plans for turtles, dugongs, and sharks, and the continued strengthening of its long-standing participation in the Turtle Islands Heritage Protected Area (TIHPA). Although TIHPA predates the establishment of the CTI-CFF, Malaysia's engagement under the Initiative has further reinforced transboundary collaboration, monitoring, and protection measures within TIHPA. These efforts were complemented by the development of national databases for marine turtles and sharks, which now serve as essential platforms for long-term monitoring, research, and enforcement.

In sustainable fisheries, Malaysia introduced Sustainable Coastal Fisheries and Poverty Reduction Initiative (COASTFISH) and adopted improved tuna management measures, laying the groundwork for Ecosystem-based Fisheries Management. Community-led efforts in mangrove rehabilitation and local adaptation planning further demonstrated the importance of directly linking conservation actions with community well-being and livelihood resilience.



At the institutional level, NPOA 1.0 catalysed the formation of Malaysia's National Coordinating Committee (NCC) and associated Technical Working Groups (TWGs). The establishment of the CTI-CFF Branch Office at Universiti Malaysia Sabah in 2012 strengthened the science–policy interface and enhanced collaboration between government agencies, academia, and civil society.

Malaysia's implementation of NPOA 1.0 generated meaningful progress across coral reef conservation, fisheries management, threatened species protection, and regional cooperation. However, several structural and operational limitations emerged, offering important lessons that guided the development of NPOA 2.0.

Firstly, the plan's 134 actions proved overly broad and fragmented, making coordination, progress tracking, and reporting difficult. Implementation was also geographically uneven, with activities concentrated largely in Sabah, particularly within the Sulu and Sulawesi Seas, while Peninsular Malaysia and Sarawak received comparatively less attention. This imbalance highlighted the need for a clear and inclusive nationwide implementation boundary in the next phase.

Secondly, many achievements under NPOA 1.0 were made possible through significant support from development partners, including the Global Environment Facility (GEF), USAID, WWF-Malaysia, and WWF International. While these contributions were invaluable, the experience emphasised the importance of strengthening domestic financing, diversifying funding sources, and ensuring long-term national investment to maintain programme continuity and reduce external dependence.

Thirdly, monitoring, evaluation, and data-integration systems were not sufficiently robust to measure outcomes effectively, synthesise national progress, or support adaptive management. Additionally, Gender Equality and Social Inclusion (GESI) principles were not systematically embedded across activities, resulting in gaps in addressing the diverse needs, roles, and vulnerabilities of coastal communities.

These lessons collectively shaped the strategic repositioning of NPOA 2.0 towards a plan that is more focused and measurable, anchored in whole-of-nation implementation, and aligned with Malaysia's emerging environmental priorities and global commitments.

Key Achievements of Malaysia's NPOA 1.0 (2009–2020)

01. Establishment of Tun Mustapha Park, one of Southeast Asia's largest MPAs.

02. Strengthened trilateral cooperation with Indonesia & the Philippines (SSME).

03. Sabah Shark Sanctuary declared; national plans for turtles, dugongs & sharks prepared.

04. Continued leadership and active participation in the Turtle Islands Heritage Protected Area (TIHPA).

05. Development of national sea turtle & shark databases.

06. Implementation of Sustainable Coastal Fisheries and Poverty Reduction programmes (COASTFISH) and sustainable tuna management.

07. Mangrove rehabilitation and community-based climate adaptation projects.

Lessons Learned from NPOA 1.0

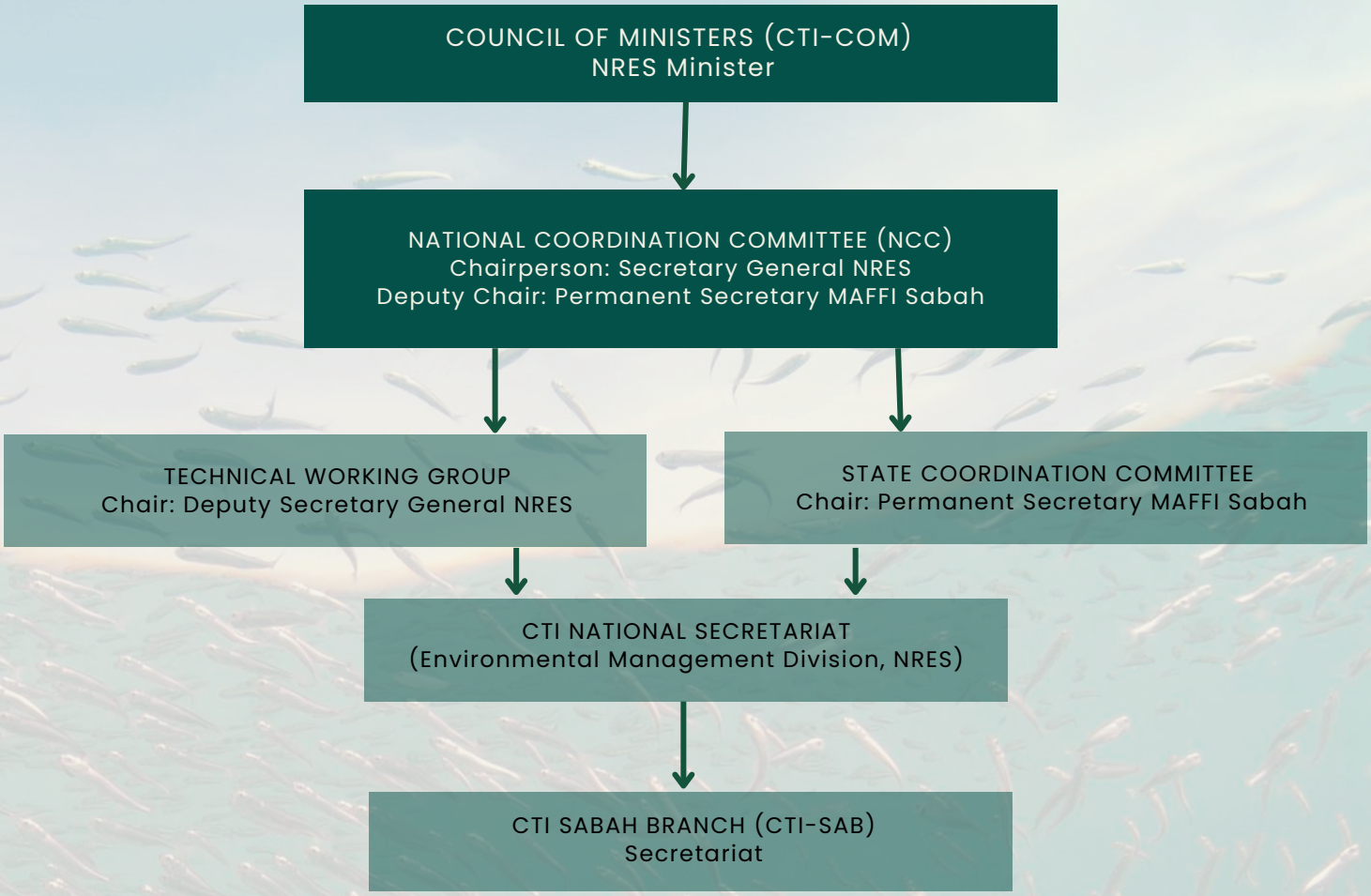
01. Uneven implementation → concentrated in Sabah (Sulu & Sulawesi Seas).

02. High reliance on external donors (GEF, WWF, USAID) → limited domestic financing.

03. Consistency in monitoring & evaluation varies.

04. GESI is not mainstreamed in planning & execution.

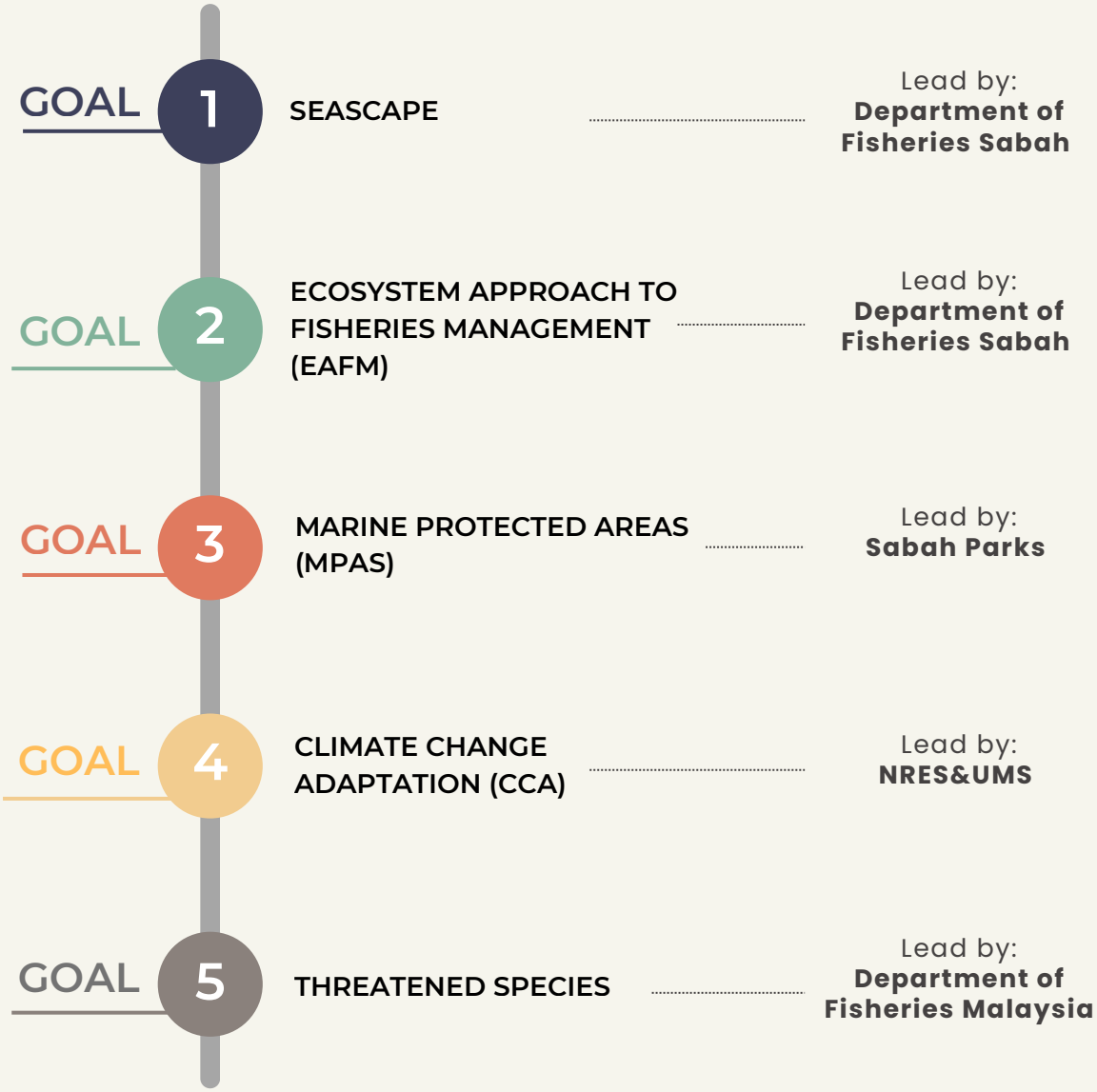
CTI Malaysia: Governance Structure



Transition to NPOA 2.0

The achievements of NPOA 1.0 reflect Malaysia's long-standing leadership in marine conservation, transboundary collaboration, and ecosystem-based management. At the same time, implementation experience revealed several structural and strategic gaps particularly in financing, monitoring, inclusivity, and national coverage that needed to be addressed for the next phase. These insights form the foundation of Malaysia's renewed direction under the NPOA 2.0 (2025–2030).

Five Goals Lead Agencies



1.3 Purpose and Scope of NPOA 2.0

The NPOA 2.0 represents Malaysia's renewed commitment to the CTI-CFF under the framework of RPOA 2.0 (2021–2030). Covering the period 2025–2030, it marks the second phase of Malaysia's engagement in the regional ten-year strategy. This plan consolidates the progress achieved during 2021–2025 and charts the course for accelerated implementation during the remaining years of the RPOA 2.0.

The primary purpose of the NPOA 2.0 is to provide a clear national framework that guides Malaysia's priorities in marine biodiversity conservation, sustainable fisheries management, climate change adaptation, disaster risk reduction, and the blue economy. It maintains continuity with the five thematic goals of NPOA 1.0: Seascapes, EAFM, MPAs, CCA, and Threatened Species, while expanding its scope to explicitly include cross-cutting commitments such as GESI, marine pollution and debris reduction, and sustainable financing mechanisms.

Another central purpose is to strengthen national coordination mechanisms. The NPOA 2.0 emphasizes synergy among the NCC, TWGs, federal and state agencies, academia, non-governmental organizations, the private sector, and local communities. This whole-of-nation approach ensures that actions implemented across multiple levels contribute to national outcomes and are aligned with regional and global commitments.

The implementation boundary of NPOA 2.0, which was previously extended only in a limited manner, is now applied more comprehensively beyond the Coral Triangle's scientific zone in Sabah's Sulu and Sulawesi Seas. It includes Malaysia's wider maritime areas namely the South China Sea and the Strait of Malacca, covering coastal and marine zones in Sarawak and Peninsular Malaysia. This broader application reflects the ecological connectivity and socio-economic linkages that unite Malaysia's marine ecosystems and coastal communities.

NPOA 2.0 therefore operates at both national and regional scales. Nationally, it aims to deliver measurable improvements in ecosystem health, sustainable fisheries, food security, and community resilience. Regionally, it positions Malaysia as an active contributor to CTI-CFF's targets for 2025–2030, ensuring systematic integration of national progress into regional reporting and indicators. Internationally, it supports Malaysia's obligations under key global frameworks including the Sustainable Development Goals (SDGs) (particularly Goals 1, 2, 5, 13 and 14), the Convention on Biological Diversity (CBD) and the Post-2020 Global Biodiversity Framework, Convention on International Trade in Endangered Species (CITES), the United Nations Convention on the Law of the Sea (UNCLOS), the United Nations Framework Convention on Climate Change (UNFCCC), and the Paris Agreement.

In this way, the NPOA 2.0 functions both as a national roadmap for the sustainable governance of Malaysia's marine resources and a strategic bridge to regional and global environmental commitments.

1.4 Alignment with Regional and National Policies

NPOA 2.0 is grounded in the CTI-CFF RPOA 2.0 (2021–2030) and is fully aligned with Malaysia's national policy landscape, including the National Policy on Biological Diversity (NPBD) 2022–2030, the Twelfth Malaysia Plan, and other relevant frameworks. NPOA 1.0 had been shaped by earlier frameworks such as the NPBD 1998, the Ninth and Tenth Malaysia Plans, and international conventions including the CBD, Ramsar Convention, UNCLOS, CITES, and UNFCCC.

At the regional level, the NPOA 2.0 responds to recent decisions of the CTI-CFF Senior Officials Meeting (SOM-19, 2024), including the adoption of the CT Atlas, the Monitoring, Evaluation and Learning (MEL) framework, the Women Leaders Forum, the University Partnership, and the Coral Triangle Conservation Fund (CTCF).

Strategically, Malaysia continues to structure its actions around the five thematic areas first adopted in NPOA 1.0. These are explicitly mapped against the revised RPOA 2.0 structure, which comprises three objectives (A, B, C) and seven targets (A1–A3, B1–B3, C1). This mapping approach preserves national clarity while ensuring regional coherence and comparability.

1.5 Vision, Goals and Strategic Focus

Malaysia's Vision for NPOA 2.0

"Securing healthy, resilient, and productive marine ecosystems that safeguard biodiversity, support fisheries and food security, and sustain the well-being of current and future generations through inclusive, science-based, and climate-resilient governance."

To achieve this vision, Malaysia will:

- Maintain the five CTI-CFF thematic goals (Seascapes, EAFM, MPAs, CCA, Threatened Species), while ensuring that GESI is mainstreamed across all objectives and targets.
- Strengthening cross-cutting themes including GESI, marine pollution and debris management, innovative financing, and blue economy solutions.
- Emphasize adaptive management, enabling timely responses to emerging issues such as climate risks, marine plastics, and illegal wildlife trade.

1.6 Ecosystem and Socioeconomic Context in Malaysia

Malaysia's marine realm includes more than 4,000 km^2 of coral reefs, extensive seagrass beds, and vast mangrove forests. These ecosystems sustain fisheries, tourism, and coastal livelihoods, while also providing shoreline protection, carbon storage, and cultural identity.

However, they face mounting pressures. Overfishing, including illegal, unreported, and unregulated (IUU) practices, together with habitat degradation, marine debris, and the impacts of climate change, threaten ecosystem health and resilience. At the same time, these ecosystems remain central to Malaysia's food security, tourism sector, and community well-being**,** underscoring the need for integrated conservation and management guided by Malaysia ridge to reef approach**.**

1.7 Rationale for Adaptive Action

The rationale for developing NPOA 2.0 is driven by three key considerations:

01 CONTINUITY

NPOA 2.0 builds upon the progress and lessons learned from NPOA 1.0, as well as subsequent initiatives undertaken between 2022 and 2024 including those documented through the pre-NPOA 2.0 assessments. This continuity ensures momentum in advancing biodiversity conservation and sustainable fisheries.

02 ALIGNMENT

Ensuring that Malaysia's commitments are consistent with the CTI-CFF RPOA 2.0, the NPBD 2022–2030, and other international agreements, while fulfilling reporting obligations to both the CTI-CFF and global frameworks.

03 RESPONSIVENESS TO EMERGING ISSUES

Addressing climate change impacts, marine pollution, IUU fishing, and inclusive governance. NPOA 2.0 extends beyond the Coral Triangle scientific boundary in Sabah to encompass national implementation across Sabah, Sarawak and Peninsular Malaysia, establishing a comprehensive framework for whole-of-country marine management.

Adaptive action will be operationalised through biennial policy and strategy reviews, applying a learning-by-doing approach to ensure that NPOA 2.0 remains dynamic, responsive, and evidence-based.

CHAPTER 2

GUIDING PRINCIPLES

GUIDING PRINCIPLE

Malaysia's NPOA 2.0 is guided by principles that balance conservation with sustainable development, inclusivity, and accountability. These principles are derived from NPOA 1.0, RPOA 2.0, and strengthened through findings from the pre-NPOA 2.0 assessments. Together, they provide the strategic foundation needed to balance ecological integrity, sustainable development, good governance, and climate resilience.

Guiding Principles of Malaysia's NPOA 2.0

and Indicative Commitments

2.1 Ecosystem-Based Management (EBM)

Ecosystem-Based Management (EBM) forms the foundation of Malaysia's marine governance and continues as a central principle in NPOA 2.0. Under NPOA 1.0, EBM was introduced mainly through pilot projects in Sabah, such as community-based fisheries and early ecosystem-approach practices. While these initiatives demonstrated potential, they were fragmented and not fully integrated into national planning.

RPOA 2.0 elevates EBM as a unifying principle across its Objectives and Targets, particularly under Action 1 (ecosystem resilience) and Action 3 (sustainable fisheries). It emphasizes ecological connectivity, cumulative impact management, and balancing biodiversity conservation with human well-being.

NPOA 2.0 advances this vision by embedding EBM into national and state policies, ensuring that coral reefs, mangroves, seagrass, fisheries, and marine protected areas are managed as interconnected systems. It also recognizes the role of EBM in strengthening climate resilience, food security, and sustainable livelihoods. Malaysia will move beyond project-based initiatives toward system-wide adoption across federal agencies, state governments, and local communities, supported by mainstreaming in national policies such as the National Policy on Biological Diversity 2022–2030 and the Twelfth Malaysia Plan.

2.2 Integrated, Inclusive, and Participatory Governance

Governance under NPOA 1.0 relied heavily on government structures, with limited engagement of local communities, women, youth, and private stakeholders. Participation was uneven, largely concentrated in scientific boundary and not in other part of Malaysia's EEZ.

NPOA 2.0 acknowledges that integrated, inclusive and participatory governance is essential for legitimacy, effectiveness, and sustainability. In line with RPOA 2.0, Malaysia commits to strengthening governance across multiple scales, including federal, state, local community and NGOs. This includes institutionalizing stakeholder engagement processes, expanding co-management models in MPAs and fisheries, and empowering indigenous and island communities as resource custodians.

The principle also reinforces cross-sectoral integration, linking fisheries, biodiversity conservation, tourism, coastal development, and climate action. Inclusivity extends beyond consultation into decision-making and benefit-sharing, supporting fairness, transparency and legitimacy.

2.3 Precautionary and Science-Based Decision Making

Malaysia has a strong research base, with agencies, universities, and non-governmental organizations contributing data on biodiversity, fisheries, and climate.

UNDER NPOA 1.0,

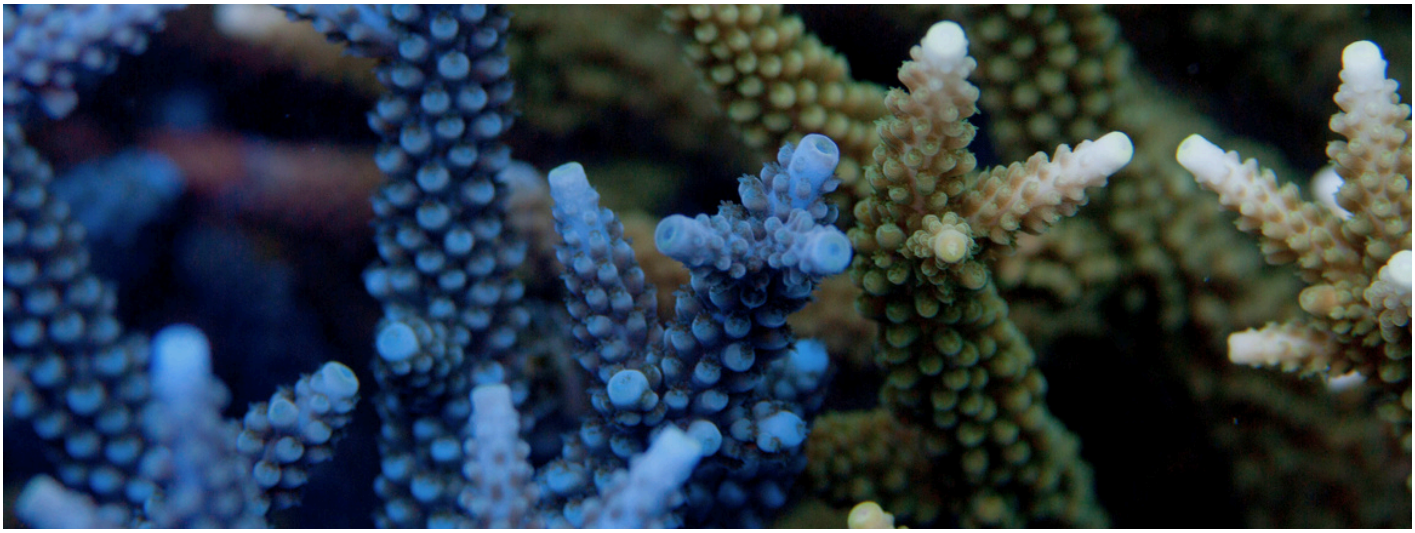
scientific evidence guided conservation planning and supported the designation of marine protected areas. While meaningful, progress was achieved, variations in coordination and data sharing occasionally reduced the efficiency of translating science into policy and management decisions.

NPOA 2.0,

formalizes the precautionary and science-based approach; ensuring action is taken even where uncertainty exists. Priority commitments include:

- *Standardised monitoring protocols*
- *Integration of datasets into a national–regional MEL system linking with the CT Atlas*
- *Scaling up modern tools including environmental DNA (eDNA), ShellBank genetic traceability, UAV mapping, and spatial analytics*
- *Translation of scientific findings into timely policy action*

This principle aligns with RPOA 2.0's emphasis on evidence-based adaptive management and transparent regional reporting.



2.4 Climate Resilience and Nature-Based Solutions

Climate change poses one of the greatest challenges to Malaysia's marine ecosystems. Coral bleaching, coastal erosion, sea level rise, and extreme weather events threaten both biodiversity and the well-being of coastal communities.

NPOA 1.0

Under NPOA 1.0, climate issues were addressed mainly through vulnerability assessments and blue carbon studies. While important, these efforts were fragmented and lacked long-term integration into national planning.

RPOA 2.0

RPOA 2.0 positions climate resilience at the center of regional action, particularly under Targets A1 (ecosystem resilience) and B3 (climate-resilient communities), and highlights the role of Nature Based Solutions (NbS). NPOA 2.0 reflects this shift by embedding NbS as a core strategy.

NPOA 2.0

Under NPOA 2.0, these commitments will be consolidated, scaled up, and integrated into broader climate strategies, including Malaysia's Nationally Determined Contributions (NDCs) under the UNFCCC.

Key focus:

01 Scaling mangrove, seagrass, and coral reef restoration

02 Mainstreaming NbS into coastal zone planning

03 Strengthening ecosystem health to support adaptive capacity of fisheries and communities

04 Integrating NPOA 2.0 actions with national climate commitments under Malaysia's NDCs

2.5 Gender Equality and Social Inclusion (GESI)

Under NPOA 1.0, inclusion was addressed mainly through general community participation without specific attention to gender or marginalized groups. This limited the effectiveness of conservation actions and meant that important perspectives were not fully reflected in planning and decision-making.

RPOA 2.0 explicitly mainstreams GESI across its objectives, particularly under Target B2. In line with this, NPOA 2.0 adopts GESI as a guiding strategic principle to ensure alignment with regional commitments while maintaining flexibility for national implementation. Women, youth, and marginalized groups will be represented in the NCC, TWGs, and local management committees, and gender-responsive approaches will be incorporated into fisheries management, coastal development, tourism, and biodiversity conservation initiatives.

Malaysia does not yet have a dedicated national GESI policy for the marine sector. To support alignment with regional standards, the NPOA 2.0 will refer to the CTI-CFF GESI Policy[1] and the CTI-CFF GESI Implementation Guidelines[2]. These documents provide detailed guidance and can be used by goal leaders and implementation partners who wish to further operationalise GESI in their programmes. This approach maintains coherence with CTI-CFF frameworks while avoiding the inclusion of highly specific or resource-dependent activities in the national plan.

Progress will be monitored through core indicators that measure representation in decision-making roles and the implementation of gender-responsive community or livelihood initiatives. Any further development of GESI data collection tools will be determined by the NCC and the CTI National Secretariat to ensure consistency with Malaysia's existing gender reporting systems.

Strengthening GESI will be a key focus under NPOA 2.0 to enhance the fairness and legitimacy of conservation and resource management efforts. This commitment supports Malaysia's obligations under the National Policy on Biological Diversity 2022–2030, the Convention on Biological Diversity, and the Sustainable Development Goals.

1. CTI-CFF Gender Equality and Social Inclusion (GESI) Policy: https://coraltriangleinitiative.org/sites/default/files/resources/Attachment%202.%20Final%20version%20of%20GESI%20Policy.pdf
2. CTI-CFF GESI Implementation Guidelines: https://www.coraltriangleinitiative.org/library/guidelines-implementation-cti-cff-gender-equality-and-social-inclusion-gesi-policy

2.6 Regional and Transboundary Cooperation

Malaysia has a long history of engagement in regional and transboundary conservation efforts, including the SSME, TIHPA, and various regional threatened species initiatives. Under NPOA 1.0, Malaysia played an active role in these platforms, although participation was at times dependent on external funding, which affected long-term continuity.

NPOA 2.0 reaffirms Malaysia's commitment to regional and transboundary cooperation by recognising that marine ecosystems and migratory species extend beyond national jurisdictions. In alignment with RPOA 2.0, Malaysia will continue contributing to collective regional actions under Target A2 on threatened species, Target A3 on sustainable fisheries and the reduction of illegal, unreported, and unregulated fishing, and Target C1 on governance and partnerships.

Malaysia will strengthen its commitments in CTI, maintain active participation in TIHPA, and contribute to emerging regional initiatives and projects such as strengthening engagements, actions, and cooperation through networks of sites in the Sulu-Sulawesi Seascape (e.g.: SEACONNECT and SOMACORE). These platforms support coordinated management, knowledge-sharing, joint enforcement, and collaborative responses to transboundary challenges including IUU fishing, climate impacts, and illegal wildlife trade.

Malaysia also remains committed to broader multilateral agreements such as the Convention on Biological Diversity (CBD), the United Nations Convention on the Law of the Sea (UNCLOS), CITES, the Ramsar Convention, ASEAN mechanisms, APEC working groups, and the UNFCCC. Alignment with these frameworks ensures coherence between national implementation and regional cooperation, reinforcing Malaysia's role as a key contributor to global marine governance.

2.7 Transparency, Accountability, and Adaptive Management

Transparency and accountability are essential for demonstrating progress and ensuring confidence in national and regional implementation. Under NPOA 1.0, reporting processes were not fully standardised, which made it challenging to consolidate information and assess outcomes consistently at the national and regional levels.

NPOA 2.0 positions transparency and adaptive management as core principles for delivery. A structured Monitoring, Evaluation and Learning (MEL) system will be institutionalised to strengthen national accountability and support the reporting requirements of the CTI-CFF. Key actions include the development of a national scorecard and dashboard aligned with RPOA 2.0 indicators, the conduct of a mid-term review in 2027, and the publication of periodic progress updates. The application of the beneficiary-pays and polluter-pays principles will help ensure that those who benefit from or impact marine resources contribute to their management and conservation.

Adaptive management will be integrated into NCC and TWG processes, with strategies reviewed regularly based on monitoring results, emerging threats, and new opportunities. This approach ensures that the NPOA 2.0 remains flexible, evidence-based, and responsive to changing environmental and socio-economic conditions.

CHAPTER 3

NATIONAL TARGETS & ACTIVITIES

3.1 National Impact Statement and 2030 Targets

Malaysia's NPOA 2.0 is aligned with the two (2) goals, three (3) objectives, and seven (7) targets of the RPOA 2.0 (2021–2030).

The first five years (2021–2025) focus on the initial regional goal:

By 2025, coastal communities and coastal and marine ecosystems in the Coral Triangle region are enabled to cope with the impacts of climate change, natural and anthropogenic threats, through measurable regional collaboration between the CT6 and partners, facilitated by a strong and effective CTI-CFF.

The subsequent five years (2026–2030) will consolidate progress and shift focus towards the second regional goal:

By 2030, coastal communities and coastal and marine ecosystems in the Coral Triangle region are more resilient and able to adapt to the impacts of climate change, natural and anthropogenic threats, through improved food security, sustainable fisheries, and coastal livelihoods.

This chapter is divided into two parts. Section 3.1 covers the targets, actions, and completed activities implemented in Malaysia between 2021–2025. Section 3.2 addresses the targets, actions, and activities related to the two objectives and six targets of RPOA 2.0 to be achieved by 2030.

Between 2021 and 2025, Malaysia implemented 46 activities (Section 3.2) within Malaysia's EEZ, covering both the scientific boundary of the priority seascape (Sulu-Sulawesi Seascape) and the wider implementing boundary (South China Sea and Strait of Malaca). Activities were distributed as follows:

These include:

17 ACTIVITIES UNDER **TARGET A1:** Coral Reef, Mangrove, and Seagrass

16 ACTIVITIES UNDER **TARGET A2:** Threatened Species

3 ACTIVITIES UNDER **TARGET A3:** Healthy and Productive Fisheries

1 ACTIVITY UNDER **TARGET B1:** Food Security and Coastal Livelihoods

9 ACTIVITIES UNDER **TARGET B3:** Climate-Resilient Communities

Key achievements

Marine Habitats and Protected Areas

- Expansion of important marine habitats, with the gazettement of new marine parks in Melaka and Johor:
    - *Taman Laut Melaka* (29.97 hectares, gazetted on 4 April 2023), comprising Pulau Undan, Pulau Nangka, and Pulau Dodol.
    - *Lima Islands Marine Park* (gazetted on 1 January 2023, Johor), comprising Pulau Lima Kechil, Pulau Lima Besar, Pulau Tokong Rakit, Pulau Tokong Yu, Pulau Mertang Barat, Pulau Mertang Timur, and Pulau Mertang Tengah.
- Berungus Marine Managed Area (BMMA), Sabah, designated as Malaysia's first marine OECM site (Other Effective Conservation Measure) in May 2022.
- Recognition of three Important Marine Mammal Areas (IMMAs).
- Identification of 24 Ecological Biological Sensitive Areas (MyIMCAs).

Regional and International Recognition

01

Sugud Islands Marine Conservation Area (SIMCA), recognized in 2022 as Malaysia's first marine-based IUCN Green List site and the first within the CTI region.

02

Identification of **Nine (9) Important Shark and Ray Areas** in Malaysia's waters (Beluran, Chagar Hutang Bay, Kuala Pahang, Lankayan, Layang-Layang, Mukah, Si Amil, Sipadan, and West Tioman) in the Regional Compendium of Important Shark and Ray Areas (IUCN SSC Shark Specialist Group, 2024).

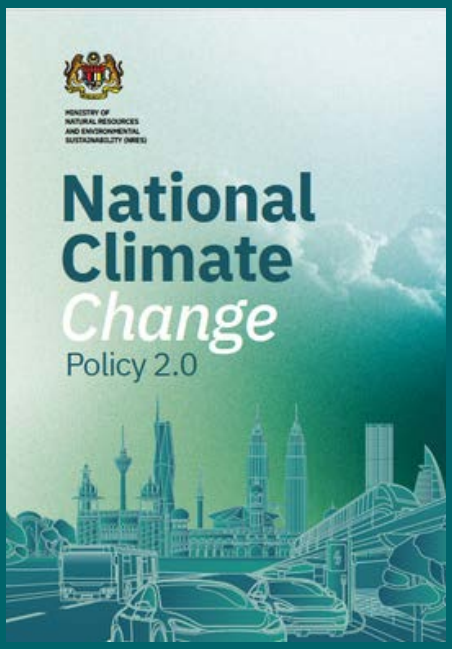
03

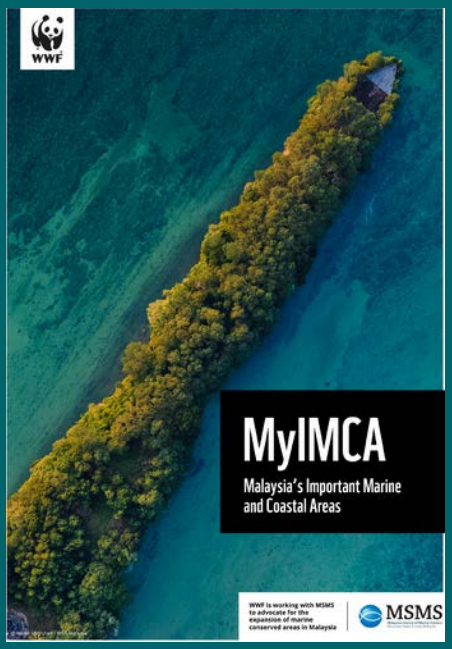
Recognition of **Five (5) Important Marine Mammal Areas (IMMAs).**

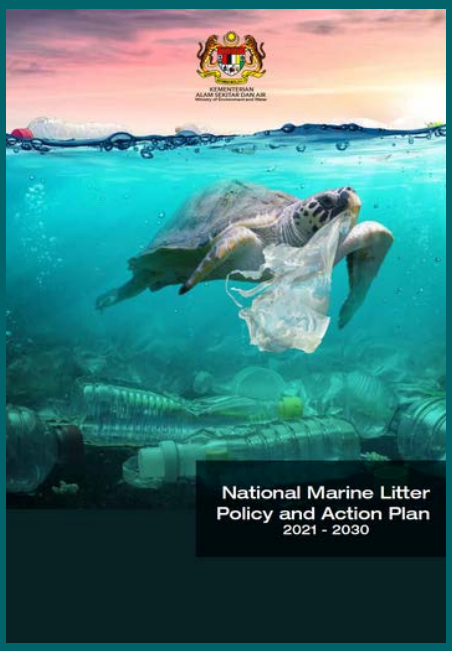
There were **nine activities** related to policy formulation and guidelines to strengthen species, habitat, and environmental protection and management.

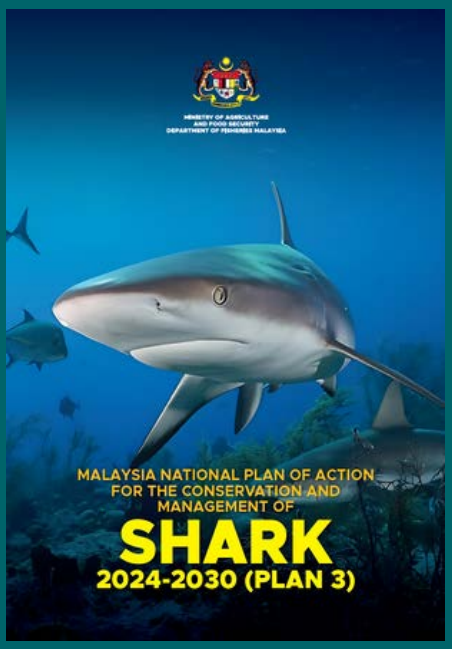
Key policy achievements :

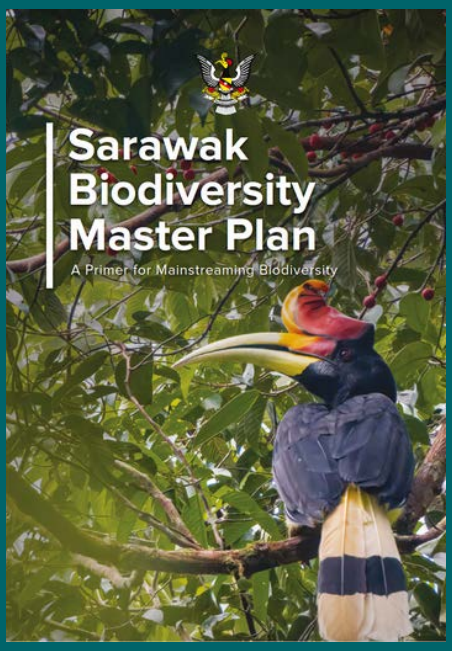
- National Plan of Action for the Conservation and Management of Sharks (2024–2025).
- Species Conservation Action Plan Marine Turtles in Sarawak (2023–2027).
- Rapid Reference Guideline for Combating Wildlife Trafficking (illegal wildlife trade).
- Amendment to the Turtle Enactment 1951 (Terengganu) banning the sale, collection, and consumption of turtle eggs (effective June 2022).











In support of national food security, fisheries, and coastal livelihoods (Target A3 and Target B1):

- The Department of Fisheries Sabah revised the **Sabah Fisheries Management Plan 2025–2030** in 2024 to improve fisheries resource management through licensing, monitoring, and enforcement under the Fisheries Act 1985.
- To address climate change impacts on the fisheries industry, Department of Fisheries Malaysia published the **Action Plan on Climate Change in the Fisheries Sector 2024–2030.**
- The Sabah State Legislative Assembly passed the **Sabah Climate Change and Carbon Governance Enactment 2025**, marking a major milestone in the state's efforts to address climate change and regulate carbon-related activities.

Between 2022 and 2024, **nine (9) marine habitat restoration** activities were carried out under Target B3: Climate-Resilient Communities. Key agencies included the Ministry of Natural Resources, Environment and Sustainability (NRES), Sabah Forestry Department, and Universiti Malaysia Sabah, focusing on mangrove rehabilitation and restoration.

In the coral reef ecosystem, **strategic coral restoration partnerships** were undertaken by the European Union (EU) Ocean Governance Project, Sabah Parks, WWF-Malaysia, and Universiti Malaysia Sabah in Tun Mustapha Park during 2022–2023.

3.2 ACTIVITIES ACHIEVED (2021–2025)

MANAGEMENT & IMPLEMENTATION

2022

A1	IUCN Green List certification for the Sugud Islands Marine Conservation Area (SIMCA), first marine site in the CTI, and Malaysia.	**SWD, Reef Guardian**
A1	Recognition of 5 Important Marine Mammal Areas (IMMAs) in Peninsular Malaysia (3 sites) and Sarawak (2 sites).	**MareCet, UNIMAS, IUCN-MMPATF**

2023

A1	Two new marine parks (Melaka and Johor) gazetted in Peninsular Malaysia to covers key biodiversity areas.	**DOFM**

2024

A1	Malaysian Important Marine and Coastal Area (MyIMCA) initiative with 24 areas recognized nationwide.	**MSMS, WWF-MY, DOFM, Universities, Reef Guardian, SFC, MareCet, RCM**
A1	One established LMMA at Pitas, Sabah (Berungus Marine Managed Area).	**Sabah Parks, WWF-MY**
A1	Develop Tun Mustapha Park (TMP) Business Plan to support TMP's management costs.	**Sabah Parks, WWF-MY, SOMACORE**
A2	Nine locations (Beluran, Chagar Hutang Bay, Kuala Pahang, Lankayan, Layang-Layang, Mukah, Si Amil, Sipadan, and West Tioman) identified as Important Shark and Ray Area in the Regional Compendium Of Important Shark and Ray Areas (IUCN SSC Shark Specialist Group).	**DOFM, WWF-MY, Reef Guardian, UMS, UMT**
A1	Adopt the IUCN Management Effectiveness Tracking Tool-4 (METT-4) in Tun Mustapha Park.	**Sabah Parks, WWF-MY, SOMACORE**

POLICY & LEGISLATION

2021	A2	National Marine Litter Policy (2021–2030).	**NRES**
	A2	Species Conservation Action Plan for Marine Turtles in Sarawak (2023-2027).	**SFC, DOFM**
2022	A2	A key legislative milestone was achieved in Terengganu with the passing of the Turtle Enactment 1951 (Amendment 2021), which banned the sale of all turtle eggs as of 1 June 2022.	**DOFM, UMT WWF-MY**
2023	A1	Publication of Sarawak Biodiversity Master Plan 2023-2030.	**Ministry of Natural Resources & Urban Development**
	A2	Development of a rapid reference guide on illegal wildlife trade for law enforcement agencies in Malaysia, Indonesia, and the Philippines to enhance their capacity to combat wildlife trafficking.	**DOFM, SWD, WWF-MY**
2024	A1	Publication of Sabah Biodiversity Stratergy 2024-2034.	**SaBC**
	A2	Publication of Malaysia National Plan of Action For the Conservation and Management of Shark 2024-2025 (Plan 3).	**DOFM**
	B3	National Climate Change Policy 2.0.	**NRES**
2025	A3	Publication of Sabah Fisheries Management Plan 2025-2030.	**DOFS**

RESEARCH & MONITORING

2020

A3	National Offshore Sand Resources Study Phase 3A (NOSRS3A) / Environmental Study East Johor and Pahang Offshore 2020 on fisheries data.	JMG

2021

B3	Forecasting Ocean Biogeochemistry in Malaysian Waters under CMIP6 Climate Scenarios.	PETRA, NRES, NAHRIM, Universities, JAS, DOFM

2022

A2	Key informant interviews and focus group discussions to assess and improve the traceability systems for shark and ray products in Pahang, Malaysia.	DOFM, UPM
B1	Conduct scoping studies and produce public consultation reports under the Small-Scale Fisheries Project (SSFP) at Banggi Island, Kudat, and Larapan Island Semporna.	DOFS, WWF-MY, Local District Office, Sabah Parks
A2	Understanding the fisheries, biological & socio-economic aspects of threatened sharks and rays in the east coast of Peninsular Malaysia.	UMT, WWF-MY, MFRDMD/SEAFDEC
A2	Assessment of reef associated sharks and rays species in the east coast of Peninsular Malaysia.	DOFM, RCM WWF-MY

2023

A1	Biodiversity Expedition in Melaka and Negeri Sembilan: Proposal for New Marine Parks.	IOES, Department of Marine Parks, DOFM
A2	Desktop research and market surveys on marine turtle trade in Sabah, Malaysia.	DOFM, TRAFFIC, WWF-MY
B3	Preliminary study on Coastal Vulnerability at selected Marine Park Islands in Sabah: A case study from Sipadan Island Park, Turtle Islands Park (Gulisaan, Bakkungaan, Selingaan) and Tunku Abdul Rahman Islands Park (Manukan, Mamutik, Sapi).	NRES, UMS, Sabah Parks
A2	Population assessment of key indicator shark and ray species in Sabah, Malaysia.	WWF-MY, UMS, DOFS

RESEARCH & MONITORING

2024

A1	Morphological, secondary metabolites and DNA sequence variation among mangrove populations of *Brugueira* sp. and *Sonneratia* sp. from varying environmental conditions in the Straits of Malacca.	**IOES, Forestry Department, JIRCAS**
A1	Status of Restored Mangrove Forest Across Different Environmental Settings In Peninsular Malaysia .	**IOES, Forestry Department, JIRCAS**
A1	Sediment sampling and environmental studies for National Offshore Sand Resources Study Phase 3B (NOSRS3B) of Kelantan and Terengganu.	**JMG, DOFM, FRI**
A1	Blue carbon assessment for seagrass in Johor and Penang.	**MareCet, Edith Cowan University (ECU); International Klimate Initiative (IKI), DOFM**
A1	Marine Landscape Mapping, Biodiversity Inventory and Ecological Carrying Capacity of Taman Laut Melaka.	**DOFM, UMT**
B3	Adaptation capacity assessment conducted together with the coastal community in Mabul island to see the impact of the implementation of climate action based on the CCA-Local Early Action Plan.	**NRES, UMS, WWF-MY, EPD, District Office Semporna**
B3	Climate Change Impact Assessment (CCIA) under TWG Initiatives BTR/NDC/NC report to UNFCCC.	**NRES, PETRA, NAHRIM, TNB, Universities**

2025

A1	Baseline assessment conducted at proposed Tun Juhar Marine Park.	**Sabah Parks, WCS**

CAPACITY BUILDING

2023

A2 Counter Transnational Organised Crime (CTOC) training for law enforcers of Malaysia, Indonesia and the Philippines, as well as the proper care and management of confiscated wildlife.

DOFM, SWD, WWF-MY

2024

A2 Training in enforcement of Fisheries Act 1985 (prohibition of import/export of listed Threatened Species)

DOFM, DOFS

RESTORATION & CLIMATE ADAPTATION

2020

B3 A Seagrass transplanting project funded by Sabah Ports Sdn Bhd aims to highlight the importance of seagrass and its carbon-storing capabilities.

NRES, UMS, Sabah Port Sdn Bhd, Suria Group, Seagrass Guardian

2022

B3 The mangrove restoration and rehabilitation project at degraded Sulaman Lake Forest Reserve, Tuaran and Lemaas Forest Reserve, Kota Belud area. The project was funded by Toyota UMW. The total fund of RM158,888.00 supported the restoration, ecosystem recovery, and biodiversity enhancement within these critical habitats.

NRES, UMS

B3 Mangrove tree planting (January-October 2022) using RM45,000.00 to restore mangrove areas in the Sulaman Lake Forest Reserve, Tuaran.

NRES, UMS

2023

A1 Reef restoration using the MARRS method (2022-2023) with 1,620 coral frames (Reef Stars) deployed in TMP under collaboration with EU.

Sabah Parks, WWF-MY

2024

B3 Suria Group funded the Seagrass awareness and transplanting program to enhance seagrass protection and restoration. Mangrove planting to increase mangrove cover and mitigation measured for Climate change, expected completion in 2025.

NRES, UMS, Sabah Port Sdn Bhd, Suria Group, Seagrass Guardian

COMMUNICATION & OUTREACH

2021

A3 Publication of the reduction of illegal fishing: The COVID-19 lockdown in 2021 resulted in fewer fish bombing incidents, with a 39.5% decrease in Tun Mustapha Park (TMP) compared to the baseline data from October 2019 to March 2021.

Sabah Parks, RCM, Reef Guardian

2023

A2 2023 Indonesia sea turtle conservation and the greater Coral Triangle region symposium, Jakarta, Indonesia.

DOFM, WWF-MY, Universities

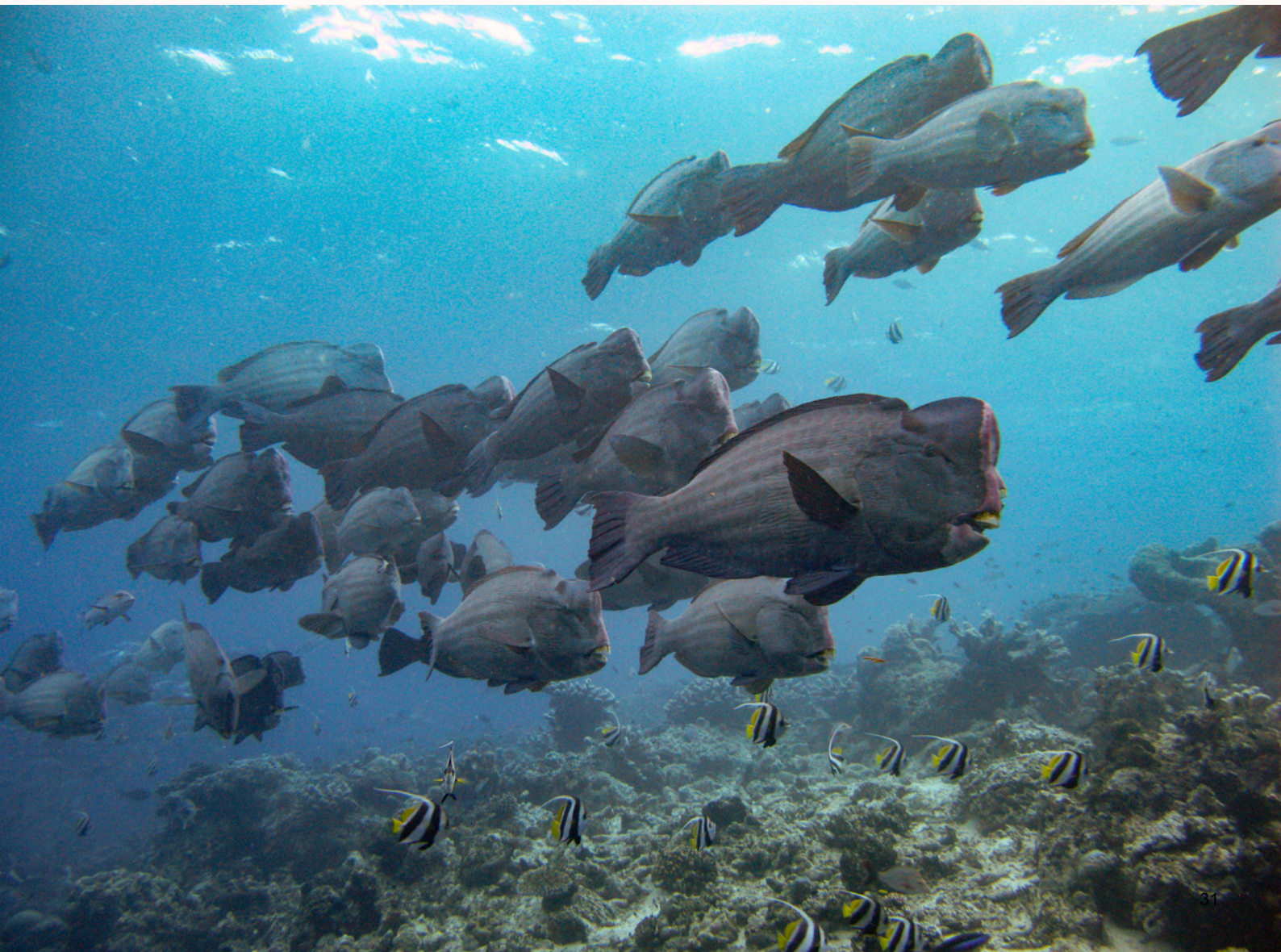
A2 Marine turtle genetic training by Asia-Pacific Marine Turtle Genetic Working Group, 6-8 June 2023, with members from Malaysia.

DOFM, WWF-MY, Universities, MRF

2024

A2 Dugong Tears and Sea Stories of Pulau Sibu documentary.

MareCet



3.3 STRATEGIC TARGETS, ACTIONS, ACTIVITIES AND INDICATORS (2025–2030)

NPOA 2025-2030 consists of:

6 Targets

29 Actions

139 Activities

TARGET A1

Coral Reefs, Mangroves, and Seagrass Beds

Target A1 comprises **8 actions and 42 activities**. Malaysia is committed to expanding the coverage and management of key marine habitats, including areas recognized as Other Effective Area-Based Conservation Measures (OECMs), with the goal of achieving 10% of total marine area coverage by 2030. This commitment aligns with the CBD Kunming-Montreal Global Biodiversity Framework Target 3 (30x30 by 2030). To ensure effective biodiversity conservation, Malaysia is strengthening strategic partnerships and initiatives that focus on sustainable funding, systematic monitoring, and the rehabilitation and restoration of degraded marine habitats, while also enhancing the management effectiveness of Marine Protected Areas (MPAs).

Management and Implementation

Action 1: Identify, and increase % coverage of Marine Protected Areas, LMMAs and OECMs in Sula-Sulawesi Seascape to achieve % coverage of resilient coral reefs, mangroves and seagrass beds.

Action 2: Effective management plan or action plan that effectively reduces stressors both from natural and human-induced impacts on coral reefs, mangroves, and seagrass beds.

Action 3: Management effectiveness is demonstrated in MPAs with robust management plans that align with management effectiveness frameworks, such as the IUCN Green List and CTMPAS levels 3 and 4.

Policy, Legislation & Regulations

Action 4: A national comprehensive guideline to identify critical habitats and establish effective management strategies for coral reefs, mangroves, and seagrass beds within and beyond MPAs.

Sustainable Finance & Resources Mobilization

Action 5: Strategies funding to support program and activities for protection of coral reefs, seagrass beds and mangroves within and beyond MPAs.

Partnerships & Regional/International Cooperation

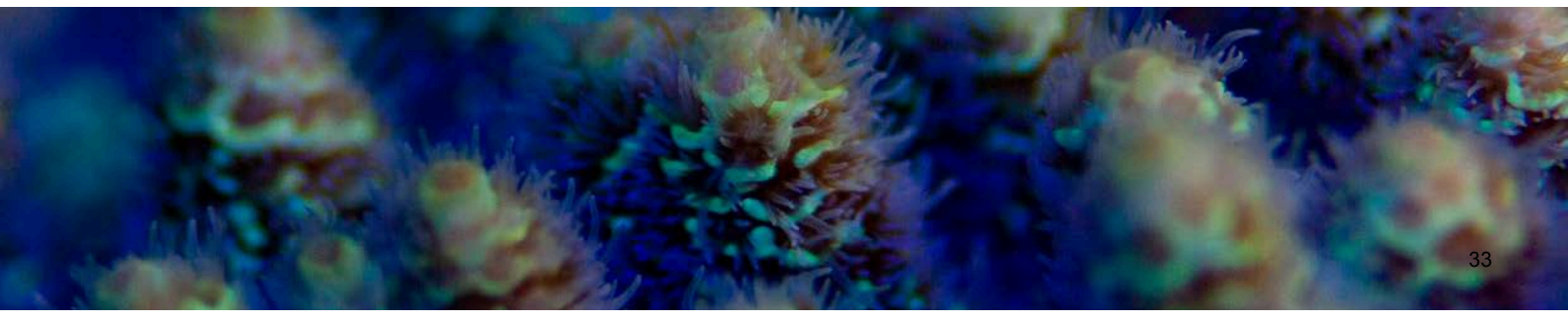
Action 6: Strategies multi-agencies/organization, civil-societies, and communities partnership to effectively reduce stressors from both natural and human- induced impacts on key marine habitats and species.

Restoration & Climate Adaptation

Action 7: Implement active marine ecosystem restoration through collaborative efforts with local communities, NGOs, and private companies.

Science, Research & Monitoring

Action 8: Comprehensive research and assessment within and beyond MPAs protected to achieve % coverage of resilient coral reefs, mangroves and seagrass beds.



TARGET A1:

Coral Reefs, Mangroves, and Seagrass Beds

MANAGEMENT & IMPLEMENTATION

ACTION 1:

Identify, and increase % coverage of Marine Protected Areas, LMMAs and OECMs in Sula-Sulawesi Seascape to achieve % coverage of resilient coral reefs, mangroves and seagrass beds.

ACTIVITY 1

Increase the recognition of marine habitats as LMMA and OECM sites outside of MPAs in Tun Mustapha Park and the Semporna Priority Conservation Area.

Target By: 2030

Description

At least five OECMs/LMMAs will be identified: Omadal, Bait, Tigabu, Banggi, and Larapan Island. The project supported awareness, capacity-building, governance training, and participatory mapping with communities, agencies, and NGOs.

GESI Related

Primary Actors:
NRES, SaBC, WWF-MY, SOMACORE

Outputs

At least five (5) OECMs /LMMAs will be recognized.

Indicators

% Coverage of resilient coral reefs, mangroves and seagrass beds.

RPOA 2.0 Indicators

Target Output Indicator A1.1

ACTIVITY 2

A Blueprint MyMPA covering Peninsular Malaysia, Sabah and Sarawak will be implemented to increase % coverage of marine habitats.

Target By: 2030

Description

In partnership with UMT, DOFM will adopt a holistic approach integrating Blue Economy principles with Marine Spatial Planning (MSP) to formulate guidelines that identify potential MPA sites and governance frameworks, helping Malaysia achieve its 10% protected waters target.

GESI Related

Primary Actors:
DOFM, UMT, WWF-MY

Outputs

A guideline to identify well-managed and protected MPAs and a series of programs/activities that will be implemented for strengthening MPA operation and management.

Indicators

# of well-managed and well-protected MPA.

% Coverage of resilient coral reefs, mangroves and seagrass beds (to be calculated from the recognized areas).

RPOA 2.0 Indicators

Target Output Indicator A1.1

TARGET A1:
Coral Reefs, Mangroves, and Seagrass Beds

MANAGEMENT & IMPLEMENTATION

ACTIVITY 3

Increase the percentage coverage of marine protected areas by gazette Darvel Bay Park as a multiple-use marine park.

Target By: 2025

Description

Announced in January 2021, Sabah's initiative marks a major step toward expanding MPAs to cover 13% of its seas by 2025. Activities include ecological surveys, biodiversity hotspot assessments, stakeholder consultations, zoning for conservation, fisheries, and tourism, and drafting the Darvel Bay Park Management Plan for effective marine protection. Darvel Bay Park is in the final stage of gazettement.

GESI Related

Primary Actors:
Sabah Parks, WWF-MY, SOMACORE

Outputs

Increase marine protected area covering important key biodiversity areas, and with involvement of local stakeholders in designing management plan.

Indicators

% coverage of Marine Protected Areas (MPAs), covering key biodiversity areas and management effectiveness.

RPOA 2.0 Indicators

Target Output Indicator A1.1

ACTIVITY 4

Propose to gazette Kelias peninsular as 3rd Ramsar site in Sabah

Target By: 2030

Description

The activity aims to gazette the Klias Peninsula as the third Ramsar site in Sabah. The gazettement process is ongoing and led by the Natural Resources Office.

GESI Related

Primary Actors:
Natural Resources Office, SFD, SaBC

Outputs

International recognition of the 3rd Ramsar site through the gazettement of Klias Peninsula, comprising several Forest Reserves and state land, with an estimated area of ~83,000 ha.

Indicators

Total area gazetted (ha).

RPOA 2.0 Indicators

Target Output Indicator A1.1

TARGET A1:

Coral Reefs, Mangroves, and Seagrass Beds

MANAGEMENT & IMPLEMENTATION

ACTIVITY 5

Strengthen collaboration between the CTI-CFF Technical Working Groups from CT6 countries, Regional Secretariat and development partners.

Target By: 2030

Description

Update events hosted and organized by the national agencies and development partners related to the regional activities for Coral Triangle Initiative on Coral Reef, Fisheries, and Food Security (CTI-CFF).

GESI Related

Primary Actors:
NRES, DOFM, DOFS, Sabah Parks, WWF-MY, SOMACORE

Outputs

- Strengthened governance mechanism and boost learning and exchange.
- Strengthened the transboundary cooperation in the CTI-CFF priority seascapes.

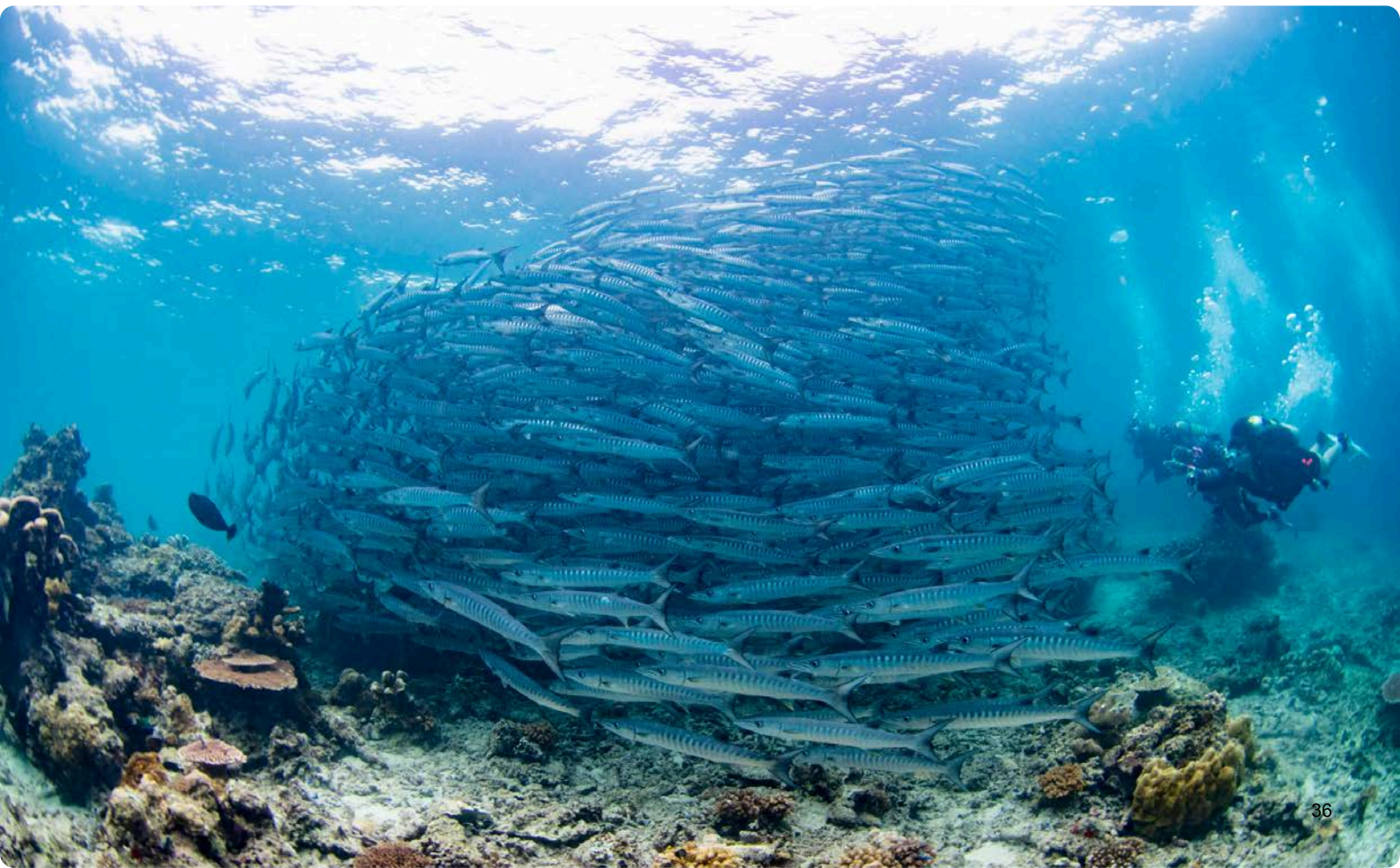
Indicators

of TWG meetings conducted.

# of exchange programs and dialogues conducted.

RPOA 2.0 Indicators

Output Indicator A1.1.1.a



TARGET A1:
Coral Reefs, Mangroves, and Seagrass Beds

MANAGEMENT & IMPLEMENTATION

ACTION 2:
Effective management plan or action plan that effectively reduces stressors both from natural and human-induced impacts on coral reefs, mangroves, and seagrass beds.

ACTIVITY 6

Protect and effectively manage the ten (10) key mangrove areas within the priority seascape.

Target By: 2030

Description

Sabah's 10 key mangrove areas cover approximately 365,643 ha, of which 308,824 ha are within Forest Reserves under the Forest Enactment 1968. The Kinabatangan-Segama Wetlands (78,803 ha) is a designated Ramsar site, while extensions of Balat Damit FR (4,810 ha) and Terusan Kinabatangan FR (649 ha) are included in the proposed Kinabatangan Biosphere Reserve core zone.

Primary Actors:
Natural Resources Office, SFD, WWF-MY

Outputs

A total of 308,824 ha of mangrove areas were identified and protected in the Forest Reserve.

Indicators

% Coverage of resilient coral reefs, mangroves and seagrass beds (Forest Reserve).

RPOA 2.0 Indicators

Output Indicator A1.1

ACTIVITY 7

Implement the Sabah Mangrove Action Plan 2024–2034 to conserve, restore, and manage mangrove ecosystems.

Target By: 2030

Description

Implementation of the Sabah Mangrove Action Plan 2024-2034 is ensure policy coherence for mangrove management, address threats, enhance synergies, and achieve sustainable outcomes.

GESI Related

Primary Actors:
SFD, SaBC

Outputs

Comprehensive action plan and strategy plan for marine habitats protection and biodiversity conservation.

Indicators

Increase # of integrated action plans and biodiversity strategy plan.

RPOA 2.0 Indicators

Output Indicator A1.1

TARGET A1:
Coral Reefs, Mangroves, and Seagrass Beds

MANAGEMENT & IMPLEMENTATION

ACTIVITY 8

Implement the Sabah Biodiversity Strategy Plan 2024–2034 to protect marine habitats, conserve biodiversity, and safeguard threatened species in the Priority Seascape.

Target By: 2030

Description

The Sabah Biodiversity Strategy is a 10-year roadmap that represents a renewed commitment to protecting and conserving Sabah's biodiversity, including marine habitats preservation, species biodiversity conservation, and engaging local communities and business partners to achieve species biodiversity conservation.

GESI Related

Primary Actors:
SaBC, Sabah Parks, SFD

Outputs

Comprehensive action plan and strategy plan for marine habitats protection and biodiversity conservation.

Indicators

# of marine habitats and species covered under new or strengthened conservation actions.

Level of community and business partner engagement.

RPOA 2.0 Indicators

Output Indicator A1.1

ACTIVITY 9

Transforming Malaysia's Port Infrastructure Development through a Nature-Centric Approach to Biodiversity Conservation and Land Degradation Control.

Target By: 2029

Description

Ports in Malaysia play a vital role in driving national and international trade; however, their development and expansion have contributed to significant biodiversity loss. This project seeks to integrate nature-based solutions (NbS) into port planning and development to strike a balance between economic growth, environmental protection, and long-term ecological sustainability.

GESI Related

Primary Actors:
MIMA, NRES, MOT, Port Authorities, UNEP

Outputs

Project output include biodiversity conservation, coastal erosion control, stronger climate resilience for ports and communities, and improved socio-economic benefits for marine resource–dependent communities.

Indicators

# of integrate nature-based solution plan.

# of mitigation plan.

RPOA 2.0 Indicators

Outcome Indicator A1.3.2

TARGET A1:
Coral Reefs, Mangroves, and Seagrass Beds

MANAGEMENT & IMPLEMENTATION

ACTION 3:
Management effectiveness is demonstrated in MPAs with robust management plans that align with management effectiveness frameworks, such as the IUCN Green List and CTMPAS levels 3 and 4.

ACTIVITY 10

Develop and revised management or action plans for MPAs to ensure effective marine resources management.

Target By: 2030

Description

This activity updates and revises management plans for Malaysia's MPAs, many of which are outdated, to address current threats and conservation priorities, ensuring effective marine resource management, biodiversity protection, and sustainable benefits for coastal communities.

Primary Actors:
Sabah Parks, WWF-MY, DOFM

Outputs

MPA management plans are revised and integrated with current threats and issues.

Indicators

# of MPAs with revise Management Plan.

RPOA 2.0 Indicators

Outcome Indicator A1

ACTIVITY 11

Conduct an assessment of Tun Mustapha Park (TMP) to advance its CTMPAS status from Level 3 to Level 4.

Target By: 2030

Description

This activity involved an internal assessment of TMP using the Management Effectiveness Assessment Tool (MEAT–MPA) in 2024. The TMP CTMPAS level is pending RS assessment, which will determine its regional standing and guide future management improvements.

Primary Actors:
Sabah Parks, DOFM, WWF-MY, SOMACORE

Outputs

TMP advancing to CTMPAS Level 4 status.

Indicators

Increase # of CTMPAS levels 3 and 4.

RPOA 2.0 Indicators

Outcome Indicator A1

TARGET A1:

Coral Reefs, Mangroves, and Seagrass Beds

MANAGEMENT & IMPLEMENTATION

ACTIVITY 12

Adopt the IUCN Management Effectiveness Tracking Tool-4 (METT-4) to evaluate and strengthen management effectiveness in all marine parks in Sabah.

Target By: 2030

Description

This activity introduced IUCN Management Effectiveness Tracking Tool-4 (METT-4) as management effectiveness assessment tool for Marine Park in Malaysia. The management effectiveness is needed for the preparation for the IUCN Green List application. The Sugud Islands Marine Conservation Area (SIMCA), Tun Mustapha Park (TMP), has utilized METT-4 as a management effectiveness assessment tool since 2022.

Primary Actors:
Sabah Parks WWF-MY, SOMACORE, Reef Guardian, SWD

Outputs

MPAs management effectiveness and conservation outcome demonstrated and track using IUCN Management Effectiveness Tracking Tool-4 (METT-4).

Indicators

of MPA adopted to the yearly METT-4 management effectiveness assessment.

# of IUCN Green Listed site.

# of IUCN Green List candidate site .

# of IUCN Green List application site.

RPOA 2.0 Indicators

Outcome Indicator A1

TARGET A1:
Coral Reefs, Mangroves, and Seagrass Beds

POLICY, LEGISLATION & REGULATIONS

ACTION 4:
A national comprehensive guideline to identify critical habitats and establish effective management strategies for coral reefs, mangroves, and seagrass beds within and beyond MPAs

ACTIVITY 13
Establish national and state frameworks for Other Effective Area-Based Conservation Measures (OECMs).

Target By: 2030

Description

The Other Effective Area-based Conservation Measures (OECMs) Framework guides recognising area conservation and management outside of legally protected areas. This will complement the national target on protected areas towards international framework obligations.

GESI Related

Primary Actors:
NRES - National, SaBC – State, WWF-MY, SOMACORE, Sabah Parks

Outputs

National and/or State-level OECM Framework to be developed.

Indicators

# of appropriate regulations and frameworks The Other Effective area-based Conservation Measures (OECMs).

RPOA 2.0 Indicators

Output Indicator A1.2:

ACTIVITY 14
Development and refining legal frameworks for MyIMCA sites.

Target By: 2027

Description

Development of a legal frameworks for MyIMCA sites by gathering site-specific data, operational mechanism for the management of MyIMCA sites.

GESI Related

Primary Actors:
WWF-MY, MSMS, UM, RCM, MareCet

Outputs

Legal frameworks for MyIMCA sites and potential governance structure.

Indicators

Complete Legal framework report.

Stakeholder consultation conducted.

RPOA 2.0 Indicators

Output Indicator A1.2:

TARGET A1:

Coral Reefs, Mangroves, and Seagrass Beds

POLICY, LEGISLATION & REGULATIONS

ACTIVITY 15

Update and initiate implementation of the Semporna Marine Spatial Plan (MSP) to conserve critical habitats and guide sustainable use in Semporna's coastal and marine waters.

Target By: 2030

Description

Review and update the existing Semporna MSP with relevant agencies and communities, and initiate implementation of agreed zoning and management measures that conserve critical habitats, maintain ecological linkages, improve coastal fisheries management (e.g.: Live Reef Food Fish Trade), reduce cumulative impacts and support locally led initiatives in Semporna's waters. Lessons and tools from the Semporna MSP will be documented as guidance that Sabah may draw on in coastal–marine planning processes.

GESI Related

Primary Actors:
Town and Regional Planning Department Sabah (TRPD), District Offices and Councils, SaBC, DOFS, Sabah Parks, SWD, SFD, WWF-MY, RCM, SIP, SEACONNECT

Outputs

- Updated Semporna MSP document, including zoning and management measures for key habitats and uses.
- Agreed implementation plan for priority Semporna MSP measures with relevant agencies and local stakeholders.

Indicators

- An updated Semporna MSP completed.
- An implementation plan for priority Semporna MSP measures agreed by relevant agencies.
- # of stakeholder consultation meetings held on Semporna MSP revision and implementation.

RPOA 2.0 Indicators

Output Indicator A1.2:

TARGET A1:
Coral Reefs, Mangroves, and Seagrass Beds

SUSTAINABLE FINANCE & RESOURCES MOBILIZATION

ACTION 5:
Strategies funding to support program and activities for protection of coral reefs, seagrass beds and mangroves within and beyond MPAs

ACTIVITY 16

Community-based Coral Adoption program as a sustainable financing mechanism in Tajau Laut, Kudat (TMP), to demonstrate a potential for coral protection and conservation.

Target By: 2025

Description

This program is a collaboration between Sabah Parks and Reef Check Malaysia in preparation for the TMP Coral Restoration Roadmap (by 2025). This program could generate revenue from tourism activities and benefit local communities through coral adoption programs and diving activities. Local community participation is through capacity building by training the communities to be certified scuba divers and generate revenue through water recreational activities.

GESI Related

Primary Actors:
Sabah Parks, WWF-MY, RCM

Outputs

Implement a community-based program as funding strategies for coral reef conservation work and alternative income generation for the local community.

Indicators

# of local community involved in the program.

# of coral adoption.

RPOA 2.0 Indicators

Outcome Indicator A1.2.1

TARGET A1:

Coral Reefs, Mangroves, and Seagrass Beds

SUSTAINABLE FINANCE & RESOURCES MOBILIZATION

ACTIVITY 17

Develop the Sabah Blue Economy Framework as a platform for strategic funding and networking to support sustainable ocean-based initiatives.

Target By: 2030

Description	Outputs	Indicators
The Sabah State is developing the Blue Economy Framework, which will concentrate on mariculture, the pharmaceutical and chemical industry, mining, renewable energy, the shipping industry, and port and infrastructure services, including ocean health and challenges, monitoring surveillance technology, and research development. It will be a multi-stakeholder effort. A Conceptual Paper was presented to the Chief Minister on 18 October 2023. The Sabah Maju Jaya Secretariat (SMJ) then received the endorsement from the Sabah State Cabinet to proceed with the Sabah Blue Economy Framework.	A Sabah Blue Economy Framework (10 years).	# of efforts taken to explore opportunities for seeking funding through a blue economy initiative to support conservation and management.

Primary Actors:
SMJ, Sabah Parks, WWF-MY, SaBC

RPOA 2.0 Indicators

Outcome Indicator A1.2.1

TARGET A1:
Coral Reefs, Mangroves, and Seagrass Beds

PARTNERSHIPS & REGIONAL/INTERNATIONAL COOPERATION

ACTION 6:
Strategies multi-agencies/organization, civil-societies, and communities partnership to effectively reduce stressors from both natural and human-induced impacts on key marine habitats and species.

ACTIVITY 18

Strengthen strategic partnership between Sabah Parks and Reef Check Malaysia to advance marine conservation through annual coral reef health monitoring and Green Fins certification.

Target By: 2030

Description

The partnership developed in 2013 between Sabah Park and Reef Check Malaysia that involved annual coral reef monitoring inside and outside of MPAs to document reef health and produce data on the reef's condition annually. The partnership is also involved in certifying Green Fin dive operators operating in Sabah since 2016, including those inside and outside of MPAs.

GESI Related

Primary Actors:
Sabah Parks, RCM

Outputs

- Annual Reef Check Report features the condition of the reefs and the reef health trend since 2013 (10 years Reef Check Report).
- A total of 35 active Green Fin members throughout Malaysia until 2023.

Indicators

of strategic partnerships to support local conservation and management actions.

RPOA 2.0 Indicators

Outcome Indicator A1.1.1

TARGET A1:
Coral Reefs, Mangroves, and Seagrass Beds

PARTNERSHIPS & REGIONAL/INTERNATIONAL COOPERATION

ACTIVITY 19

Form a strategic partnership between Sabah Parks, MRF, RCM, and Sabah Dive Rangers to support conservation in Priority Seascapes through illegal fishing reporting, underwater clean-ups, and crown-of-thorns starfish population control.

Target By: 2030

Description

Since 2018, the Sabah Dive Rangers WhatsApp group has connected Sabah Parks, enforcement agencies, NGOs, and dive operators to report illegal fishing, coordinate ghost net removals, marine debris clean-ups, and COTs control in TARP, alongside major clean-up events like the Borneo Ultra Clean-up (2022–2024).

GESI Related

Primary Actors:
Sabah Parks, MRF, RCM

Outputs

A total of 2 tonnes of ghost nets have been removed between 2018 and 2024 through an underwater clean-up program.

Indicators

of coordinated clean-up and removal activities conducted.

Number of COTs removed or controlled Volume/quantity of marine debris and ghost nets removed.

RPOA 2.0 Indicators

Output Indicator A1.1.1

TARGET A1:
Coral Reefs, Mangroves, and Seagrass Beds

PARTNERSHIPS & REGIONAL/INTERNATIONAL COOPERATION

ACTIVITY 20

Strengthen strategic partnerships between Sabah Parks and the Semporna Islands Project (SIP) to implement community action programs for a fish-bomb-free environment and coral reef conservation in Tun Sakaran Marine Park (TSMP).

Target By: 2030

Description

The strategic partnership involves steps to encourage and promote technical cooperation in:

1. Activities to maintain fish bomb sensors within TSMP and provide live information and monitoring reports relating to fish bombing activities.
2. Exchange expertise in the giant clam and abalone breeding programmes.
3. Education and awareness programmes for local communities within TSMP to engage culture and ocean farming of giant clams and abalone.
4. To establish Semporna Seas Community Action Groups.

GESI Related

Primary Actors:
Sabah Parks, SIP

Outputs

Data on fish bombing activities and trends in Tun Sakaran Marine Park will support monitoring and enforcement, alongside hatchery and ocean farming protocols for giant clam and abalone, and efforts to raise environmental awareness in island communities through the 'No Plastic in Nature' initiative.

Indicators

of strategic partnerships to support local conservation and management actions.

# of communities involved in ocean farming for income generation.

# of giant clam and abalone produced from the hatchery.

# of consultation and meeting.

# of feasible study reports produced.

RPOA 2.0 Indicators

Output Indicator A1.1.1

TARGET A1:
Coral Reefs, Mangroves, and Seagrass Beds

PARTNERSHIPS & REGIONAL/INTERNATIONAL COOPERATION

ACTIVITY 21

Develop and operationalize SaBIIS, a marine biodiversity database, in collaboration with SaBC and stakeholders to centralize, manage, and share data.

Target By: 2030

Description

Since 2023, SaBC has collaborated with research institutions, NGOs, and individual researchers to deposit marine biodiversity data into SaBIIS, ensuring accurate information for state and stakeholder management. WWF Malaysia, Sabah Parks, and the Sabah Forestry Department have signed consent forms for data sharing.

GESI Related

Primary Actors:
Sabah Parks, SaBC, WWF-MY, UMS

Outputs

A comprehensive marine database of marine biodiversity in Sabah.

Indicators

# of collaboration in database compilation.

RPOA 2.0 Indicators

Outcome Indicator A1.1.1

ACTIVITY 22

Strengthen strategic partnership between Sabah Parks and WWF-Malaysia to develop an effective management system for the proposed Darvel Bay Park.

Target By: 2026

Description

Activities include drafting a management plan on governance, zoning, and sustainable use, conducting social impact assessments, and integrating conservation with community benefits. Effective management involves community collaboration, enforcement, research, education, and protecting critical ecosystems (coral reefs, seagrass, mangroves) and key species (turtles, dugong, sharks, and commercial fish).

GESI Related

Primary Actors:
Sabah Parks, SaBC, WWF-MY, UMS, SOMACORE

Outputs

Strategic partnership between the state government and NGOs to empower local communities' involvement in conservation and management actions in proposed Darvel Bay Park.

Indicators

# of strategic partnerships to support local conservation and management actions.

# of activities planned, and implemented in the MOU.

RPOA 2.0 Indicators

Outcome Indicator A1.1.1

TARGET A1:
Coral Reefs, Mangroves, and Seagrass Beds

PARTNERSHIPS & REGIONAL/INTERNATIONAL COOPERATION

ACTIVITY 23

Foster partnerships with Reef Check Malaysia, government agencies, and stakeholders to implement nationwide annual coastal clean-up activities on ICCD to raise environmental awareness and reduce marine pollution.

Target By: 2030

Description

This nature-based approach involves multi-agency participation in activities such as annual coastal clean-ups, ghost net removal, reef restoration in TMP and TSMP, environmental education (SEEN), and expanded community-led coral restoration efforts coordinated by Sabah Parks with partners.

GESI Related

Primary Actors:
Sabah Parks, EPD, Sabah Environmental Education Network (SEEN), RCM, WWF-MY

Outputs

Enhance NGO participation in coastal clean-ups and build capacity of 12 Sabah Parks staff and community members through dive training to support reef restoration and guiding.

Indicators

# of involvement of non-government agencies in marine conservation, or environmental activities.

# of coastal and marine clean-ups.

# of reef restoration projects implemented.

RPOA 2.0 Indicators

Outcome Indicator A1.1.1

ACTIVITY 24

Implement the Oceans 5 (Sabah) through partnership with Forever Sabah, WWF-Malaysia, and Reef Check Malaysia to develop integrated coastal maps and socio-economic data for ecosystem-based conservation in Sabah.

Target By: 2028

Description

This activity involves developing coastal maps through intensive ground data collection and stakeholder consultations to strengthen decision-making. It is supported by a coalition of NGOs, CBOs, and CSOs, resulting in baseline data and maps for ecosystem-based management.

GESI Related

Primary Actors:
WWF-MY, FS, RCM

Outputs

Baseline data and coastal maps to support ecosystem-based management and informed decision-making.

Indicators

# of stakeholder consultations conducted.

# of NGOs, CBOs, and CSOs involved.

RPOA 2.0 Indicators

Outcome Indicator A1.1.1

TARGET A1:

Coral Reefs, Mangroves, and Seagrass Beds

PARTNERSHIPS & REGIONAL/INTERNATIONAL COOPERATION

ACTIVITY 25

Implement and strengthen sustainable, community-based ecotourism in Semporna to reduce climate-related and human stressors on key habitats.

Target By: 2030

Description

Program activities include promoting Green Fins and eco-friendly snorkeling guide standards to resort operators; establishing and supporting community-based ecotourism (CBET) initiatives on identified islands; and conducting destination and carrying-capacity assessments using the Global Sustainable Tourism Council (GSTC) Destination Criteria and the Limits of Acceptable Change (LAC) approaches to develop a Sustainable Tourism Action Plan and Responsible Tourism Guidelines for marine tourism stakeholders in Semporna.

GESI Related

Primary Actors:
Sabah Parks, RCM, WWF-MY, MTCE, District Office, UMS, SEACONNECT

Outputs

- 1Increased adoption of environmentally friendly practices among tourism operators through Green Fins and EFSG
- Functioning CBET programmes led by indigenous and local communities that generate incomes.
- A district-wide, science-based Sustainable Tourism Framework for Semporna that includes site-specific carrying capacity and Limits of Acceptable Change (LAC) guidelines.

Indicators

- # of tourism operators assessed and certified under Green Fins, categorized by certification level.
- # of snorkeling guides trained and certified through the EFSG course.
- Sustainable Tourism Framework endorsed and adopted by key district stakeholders, with site-specific carrying capacity and LAC thresholds integrated into formal tourism planning(MSP) and monitored annually.

RPOA 2.0 Indicators

Outcome Indicator A1.1.1

TARGET A1:

Coral Reefs, Mangroves, and Seagrass Beds

PARTNERSHIPS & REGIONAL/INTERNATIONAL COOPERATION

ACTIVITY 26

Implement and strengthen stakeholders partnerships to co-deliver training, monitoring and peer learning on area-based conservation and climate-risk response in key habitats in Semporna.

Target By: 2030

Description

National and state agencies, park authorities, civil-society and communities co-deliver standardised training curricula on area-based conservation, compliance and climate-risk response, develop common monitoring toolkits and implement a structured peer-learning programme that institutionalises adaptive management and coordinated responses to human- and climate-induced stressors on key marine habitats and species.

GESI Related

Primary Actors:
NRES, DOFS, Sabah Parks, RCM, WWF-MY, MTCE, District Office, SEACONNECT

Outputs

- Common participatory monitoring protocols and toolkit developed.
- Peer-learning exchanges implemented in priority sites.

Indicators

- # of common monitoring protocols and toolkit adopted.
- # of joint peer-learning events or exchanges conducted.
- # of people trained (gender and age group aggregated).

RPOA 2.0 Indicators

Outcome Indicator A1.1.1

TARGET A1:
Coral Reefs, Mangroves, and Seagrass Beds

RESTORATION & CLIMATE ADAPTATION

ACTION 7:
Implement active marine ecosystem restoration through collaborative efforts with local communities, NGOs, and private companies.

ACTIVITY 27

Implement Community-Based Coral Restoration and Conservation programs in Selakan Island within the Tun Sakaran Marine Park, Semporna.

Target By: 2030

Description

This project is a collaboration between Sabah Parks and Reef Check Malaysia, funded by the Ministry of Tourism, Culture and Environment Sabah (KePKAS). It implements a coral restoration programme on Selakan Island using the MARRS Coral Restoration method. Activities also include environmental training for the local community and other stakeholders, as well as reef resilience surveys in Tun Sakaran Marine Park.

GESI Related

Primary Actors:
Sabah Parks, RCM, Selakan Marine Conservation Group

Outputs

Capacity building trained 15 stakeholders as MARRS practitioners, deployed 500 Reef Stars for restoration, and identified resilient sites.

Indicators

# of collaborations and partnerships implemented with clear and measurable goals for improving the status of coastal and marine ecosystems.

RPOA 2.0 Indicators

Outcome Indicator A1.1.1

ACTIVITY 28

Foster collaboration between the Forestry Department and the International Society for Mangrove Ecosystems to improve mangrove ecosystems through rehabilitation works.

Target By: 2029

Description

MOU between Sabah Forestry Department and ISME 2024-2029 on Mangrove rehabilitation in selected forest reserve in Sabah.

GESI Related

Primary Actors:
SFD, WWF-MY

Outputs

Collaboration outputs included identifying and selecting degraded mangrove areas for rehabilitation work and sharing knowledge in planting methodology.

Indicators

# of collaborations and partnerships implemented with clear and measurable goals for improving the status of coastal and marine ecosystems.

RPOA 2.0 Indicators

Outcome Indicator A1.1.1

TARGET A1:
Coral Reefs, Mangroves, and Seagrass Beds

RESTORATION & CLIMATE ADAPTATION

ACTIVITY 29

Implement a community-based coral restoration and conservation project in Semporna through a partnership between Sabah Parks and Reef Check Malaysia.

Target By: 2030

Description

The project is a joint collaboration between Sabah Parks and Reef Check Malaysia. It involves a series of training and coral restoration programs on four (4) selected islands in Semporna (Kulapuan, Mabul, Larapan, and Selakan). Training included open-water diving certification, Eco Diver certification, and coral restoration methodologies, which were provided to selected local youths, allowing them to participate in the project.

GESI Related

Primary Actors:
Sabah Parks, RCM

Outputs

Local youths were trained in seven reef restoration methods, leading to the deployment of 997 units and the transplantation of 16,358 coral fragments, supporting reef rehabilitation and community conservation.

Indicators

# of youths trained for coral restoration methods (nature-based approach).

# of active participation of youth in coral restoration project.

# of youths trained and certified as scuba divers (Open water or Advance open water divers).

RPOA 2.0 Indicators

Outcome Indicator A1.1.1

ACTIVITY 30

Project PULIH (Protecting Underwater Life through Integrated rehabilitation)

Target By: 2030

Description

Traditionally, coral rehabilitation has focused on placing artificial reefs of various shapes and sizes on the seafloor. However, there is much more potential to support corals in healing and recovering naturally. In Malay, the word pulih means to heal or restore. Through Project PULIH, it take a broader approach to reef rehabilitation, scientifically testing which methods are effective and which are not.

GESI Related

Primary Actors:
IOES, UM, DOFM, Rawa Island Resort, Orca Nation, RHB Islamic Bank, NRES

Outputs

Validated coral restoration methods and improved reef resilience through scientific research and community engagement.

Indicators

# of restoration methods scientifically validated.

# of monitoring reports or publications produced.

RPOA 2.0 Indicators

Outcome Indicator A1.3.2.b

TARGET A1:
Coral Reefs, Mangroves, and Seagrass Beds

SCIENCE, RESEARCH & MONITORING

ACTION 8:
Comprehensive research and assessment within and beyond MPAs protected to achieve % coverage of resilient coral reefs, mangroves and seagrass beds.

ACTIVITY 31
Development of Blue Accounting Geospatial Framework (BAGF) in Malaysia: pilot study of Pulau Tioman Marine Park.

Target By: 2030

Description

This project develops a geospatial framework to integrate ecological, socio-economic, and spatial data for Pulau Tioman Marine Park. Using GIS and SEEA-EA accounting, it compiles datasets, assesses ecosystem services, and produces maps and analytical tools. Outputs include an integrated Ocean Accounting inventory, physical and monetary ecosystem accounts, the Blue Accounting Geospatial Framework (BAGF) with maps and analytical tools, and a replicable model for other marine parks.

GESI Related

Primary Actors:
UM, UNSW, DOFM

Outputs

A pilot area for developing Malaysia's Blue Economy satellite account and produce a comprehensive Blue Accounting Geospatial Framework (BAGF) for coastal and marine ecosystem accounting.

Indicators

# of datasets compiled.

# of ecosystem services assessed.

# of maps and analytical tools produced Completion of the Ocean Accounting inventory.

RPOA 2.0 Indicators

Outcome Indicator A1.2.1.a

TARGET A1:
Coral Reefs, Mangroves, and Seagrass Beds

SCIENCE, RESEARCH & MONITORING

ACTIVITY 32

Establish ecological baseline and monitoring for coral reef and seagrass beds at the proposed Tun Juhar Park.

Target By: 2030

Description

This activity will involve assessment of baseline ecological data of the proposed Tun Juhar Park, which include coral reef and seagrass beds surveys, and surveys on the valuable, threatened, ecologically important species (eg. sharks and rays, sea turtles, marine mammals).

GESI Related

Primary Actors:
WCS Malaysia, Sabah Parks

Outputs

Establishment of ecological baselines for coral reefs and seagrass beds the proposed Tun Juhar Park.

Indicators

Ecological baseline report to support establishment at Tun Juhar Park.

RPOA 2.0 Indicators

Outcome Indicator A1.1.1

ACTIVITY 33

Establish ecological baseline and monitoring for coral reef and seagrass beds at the proposed Ligitan Island Park.

Target By: 2030

Description

This activity will involve assessment of baseline ecological data of the proposed Ligitan Island Park, which include coral reef and seagrass beds surveys.

GESI Related

Primary Actors:
WCS Malaysia, Sabah Parks

Outputs

Establishment of ecological baselines for coral reefs and seagrass beds for the proposed Ligitan Island Park.

Indicators

Ecological baseline report to support establishment at Ligitan Island Park.

RPOA 2.0 Indicators

Outcome Indicator A1.1.1

TARGET A1:

Coral Reefs, Mangroves, and Seagrass Beds

SCIENCE, RESEARCH & MONITORING

ACTIVITY 34

Enhancement of production and environmental adaptability by evaluating characteristics of tropical forest genetic resources for sustainable tropical forest management.

Target By: 2026

Description

This study evaluates the performance of mangrove species by assessing growth, survival, and productivity in reforested areas using a model that incorporates plant functional traits and environmental conditions. It also examines mangrove soil microbial communities and quantifies greenhouse gas (GHG) emissions through field measurements and metagenomic analysis.

GESI Related

Primary Actors:
Institute of Ocean and Earth Sciences, Universiti Malaya, Forestry Dept, JIRCAS

Outputs

Mangrove species performance data, productivity models, soil microbial profiles, and GHG emission measurements to guide restoration.

Indicators

% Survival/mortality rate of replanted mangroves.

Mangrove productivity estimates from models.

RPOA 2.0 Indicators

Outcome Indicator A1.1.1

ACTIVITY 35

Seagrass and dugong feeding trail surveys in the Sibu Archipelago and Dugong monitoring surveys.

Target By: 2030

Description

This activity involves conducting dugong feeding trail surveys through scuba diving and in-situ observations, complemented by drone-based monitoring surveys to enhance data collection on dugong presence and habitat use.

GESI Related

Primary Actors:
MareCet, DOFM

Outputs

Outputs include scientific publications (e.g., Heng et al., 2022), technical reports, community-based monitoring with local islanders, and contributions to the development of the management plan.

Indicators

Number of dugong feeding trails recorded.

Community participation in monitoring activities.

RPOA 2.0 Indicators

Outcome Indicator A1.1.1

TARGET A1:
Coral Reefs, Mangroves, and Seagrass Beds

SCIENCE, RESEARCH & MONITORING

ACTIVITY 36

Conduct coral reef research and monitoring with integration of MERMAID (Marine Ecological Research Management Aid) web application in Sulu-Sulawesi Sea.

Target By: 2030

Description

This project conducts coral reef surveys in the Sulu-Sulawesi Sea using the MERMAID web application for data management. It provides hands-on training, builds local capacity to monitor reef health, identifies climate-resilient sites, and expands knowledge on coral reef conservation status.

GESI Related

Primary Actors:
WCS Malaysia, Sabah Parks, Reef Guardian

Outputs

The activity will generate ecological survey data, strengthen local capacity through MERMAID training, enable reef health monitoring, identify climate-resilient sites, and expand datasets on coral reef conservation status in the Sulu-Sulawesi Sea.

Indicators

of ecological surveys completed.

# of local partners and stakeholders trained to use MERMAID.

RPOA 2.0 Indicators

Outcome Indicator A1.1.1

ACTIVITY 37

Sarawak Coral Reef Research: Administering Trade Export Quotas for Protected Species under NCTF fund.

Target By: 2025

Description

In collaboration with INOS, UMT, and DOFM, this activity aimed to build staff capacity in coral identification. It involved belt transects and the Rapid Bioassessment Protocol (RBP) for stony corals, data analysis, and documentation to produce the CITES National Anthozoa Export Quota from Bintulu, Sarawak.

GESI Related

Primary Actors:
SFC, INOS, UMT, DOFM

Outputs

Scientific report on % of live coral cover for all survey reef areas in Sarawak.

Indicators

Local expertise on coral reef conservation and management will be produce.

RPOA 2.0 Indicators

Outcome Indicator A1.1.1

TARGET A1:
Coral Reefs, Mangroves, and Seagrass Beds

SCIENCE, RESEARCH & MONITORING

ACTIVITY 38

Sarawak Coral Reef Research: Development of Species Conservation Action Plan (SCAP) for Coral Reefs in Sarawak under EFT Fund.

Target By: 2025

Description

This activity conducts coral reef surveys using coral video transects to assess reef health. The scientific data generated will guide future management decisions in Sarawak and provide baseline information for ongoing monitoring, including status, trends, responses, effectiveness, and climate vulnerability reassessments.

GESI Related

Primary Actors:
SFC, UMT, DOFM

Outputs

Baseline scientific data on coral reef health in Sarawak, supporting management decisions and enabling continuous monitoring of status, trends, responses, effectiveness, and climate vulnerability.

Indicators

# of survey conducted.

RPOA 2.0 Indicators

Outcome Indicator A1.1.1

ACTIVITY 39

Piloting a Development Risk Assessment Tool for TMP and Adjacent Areas to Evaluate Impacts on Sensitive Marine Habitats in MPAs

Target By: 2028

Description

Capacity building for park managers to develop and use management tools, including a GIS platform to identify potential development risks to sensitive marine habitats, thereby improving the management of parks and adjacent areas.

GESI Related

Primary Actors:
WWF-MY, Sabah Parks

Outputs

Trained park managers, an operational GIS platform to assess development risks, improved management plans, and stronger conservation measures for sensitive habitats in marine parks.

Indicators

# of park manager trained.

# of capacity building workshop.

RPOA 2.0 Indicators

Outcome Indicator A1.1.1

TARGET A1:
Coral Reefs, Mangroves, and Seagrass Beds

SCIENCE, RESEARCH & MONITORING

ACTIVITY 40

Identify and map the distribution and key hotspots of seagrass areas in Sabah.

Target By: 2027

Description

This activity is a collaboration between Sabah Biodiversity Center, Yayasan Petronas and UMS to identify and map important areas for seagrass in Sabah.

GESI Related

Primary Actors:
SaBC, Yayasan Petronas, UMS

Outputs

A comprehensive mapping of seagrass area in Sabah.

Indicators

% Coverage of resilient coral reefs, mangroves and seagrass beds (to be calculated from the recognized areas - seagrass area in Sabah.)

RPOA 2.0 Indicators

Outcome Indicator A1.1.1

ACTIVITY 41

Seagrass mapping and community-based programme for Johor, Malaysia.

Target By: 2026

Description

The four (4) objectives of the activity are as below:

a. To map intertidal seagrass distribution within the shallow water seagrass areas of Johor.
b. To assess seagrass species diversity, seagrass cover, and evaluate the habitat characteristics of seagrass ecosystems in the shallow waters of Johor.
c. To determine and map the carbon stock status of identified seagrass habitats.
d. To establish Community Engagement and Public Awareness (CEPA) in seagrass conservation and restoration by elucidating the significance of seagrass ecosystems and their benefits to local communities, fostering sustainable stewardship through education and active involvement.

GESI Related

Primary Actors:
UM, PETRONAS, DOFM, RCM

Outputs

- Seagrass areas in Johor are mapped and management and conservation is enhanced.
- Community awareness on seagrass ecosystems and its functions is raised and community based actions for seagrass conservation is established.

Indicators

Report to DOFM to support seagrass management and conservation.

RPOA 2.0 Indicators

Outcome Indicator A1.1.1

TARGET A1:

Coral Reefs, Mangroves, and Seagrass Beds

SCIENCE, RESEARCH & MONITORING

ACTIVITY 42

Establish a knowledge hub to integrate biological, ecological and socio-economic knowledge among key stakeholders in Semporna to improve marine resources planning and management decisions.

Target By: 2030

Description

UMS, in collaboration with Sabah Parks, the Department of Fisheries Sabah, and partner NGOs such as Reef Check Malaysia, WWF-Malaysia, Marine Research Foundation, and the Semporna Islands Project, will coordinate the establishment of a biological, ecological, and socio-economic knowledge hub mechanism for the management of Sabah's coastal and marine ecosystems. Ecological and socio-economic data from priority sites such as Semporna will be standardised and, where relevant, channelled into state biodiversity information systems (e.g., SaBIIS). The data will also be synthesised into publications, reports, maps, and guidance materials to support management decisions within and beyond MPAs.

GESI Related

Primary Actors:
UMS, SaBC, Sabah Parks, DOFS, RCM, MRF, WWF-MY, SEACONNECT

Outputs

- Biological, ecological and socio-economic knowledge hub for Sabah's coastal and marine ecosystems established and coordinated by UMS CTI-SAB with state agencies and NGOs.
- Standardised protocols for ecological and socio-economic data collection, sharing and agreed by partner institutions.

Indicators

- Knowledge mechanism for Sabah's coastal and marine ecosystems established.
- No of ecological and socio-economic datasets compiled/updated using agreed protocols.
- No of knowledge products (publications, reports, maps, guidance notes) produced .

RPOA 2.0 Indicators

Outcome Indicator A1.1.1

TARGET A2

Threatened Species

Target A2 consists of **5 actions and 32 activities.** The commitment focuses on enhancing protection of priority threatened species by reducing key threats, improving waste and pollution management, strengthening regional policies and collaborations, building community and enforcement capacity, and advancing systematic monitoring to guide effective conservation and recovery efforts.

Management and Implementation

Action 1: Comprehensive threat mitigation measures address the survival challenges of threatened species, effectively reducing threats and enhancing the conservation status of priority threatened species.

Action 2: Effective waste management and pollution control measures address environmental threats, enhancing ecosystem health and improving the conservation status of priority threatened species

Policy, Legislation & Regulations

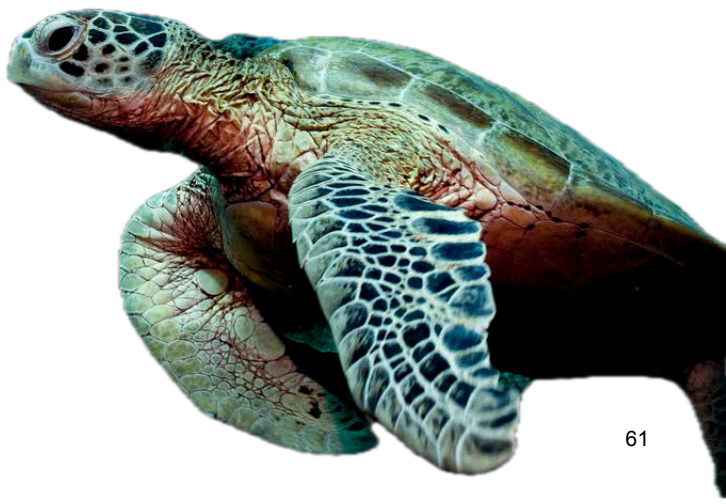
Action 3: Robust policies, regulatory frameworks, and transboundary collaborations are implemented to tackle regional conservation challenges, decreasing threats and improving the status of priority threatened species across the Coral Triangle

Capacity building

Action 4: Targeted capacity-building initiatives and public engagement empower communities and enforcement agencies to effectively address conservation challenges, reduce threats, and enhance the conservation status of priority threatened species.

Science, Research & Monitoring

Action 5: Systematic assessment and ongoing monitoring provide critical data to inform conservation strategies, reduce threats, and improve the conservation status of priority threatened species



TARGET A2:
Threatened Species

MANAGEMENT & IMPLEMENTATION

ACTION 1:
Comprehensive threat mitigation measures address the survival challenges of threatened species, effectively reducing threats and enhancing the conservation status of priority threatened species.

ACTIVITY 1
Implement an integrated threat-mitigation measures for CTI priority threatened species.

Target By: 2030

Description
This activity focuses on reducing threats through targeted actions: boat-based surveys and photo-ID for marine mammals, onboard monitoring of bycatch for turtles, sharks, rays, and marine mammals, trials of gear modifications such as TEDs and acoustic pingers, UAV/GIS mapping of critical habitats (including nesting beaches and seagrass beds), community clean-ups to reduce plastic in key areas, and oil spill drills to safeguard marine ecosystems.

GESI Related

Primary Actors:
DOFM, Sabah Parks, SWD, SFC, Universities, NGOs, Private sectors, DOE

Outputs
- Population data of priority threatened species.
- Habitat maps of nesting beaches, coral reefs, and seagrass beds.
- Reports on bycatch rates, vessel traffic, and habitat degradation.
- Reduction of marine debris in key areas.
- Records of oil spill drills and response actions.

Indicators
of identified threats to the survival threaten species

frequency and # of bycatch incidents reported by onboard monitoring

quantity (kg/volume) of plastic and waste removed from key sites

# of drills conducted, response time, and incidents reported

RPOA 2.0 Indicators
Output indicator A2.1
Outcome Indicator A2.1.1

TARGET A2:
Threatened Species

MANAGEMENT & IMPLEMENTATION

ACTIVITY 2

Identify and prioritize threats to CTI priority species through targeted research and collaborative working group discussions.

Target By: 2030

Description

Engages national and regional stakeholders in research and working group discussions to identify and prioritize threats to CTI priority threatened species. Findings guide the development and publication of National Action Plans to mitigate these threats.

GESI Related

Primary Actors:
DOFM, DOFS, SFC, Sabah Parks, SWD, Universities, NGOs, Private sectors

Outputs

- Prioritised a list of threats to CTI priority species identified through research and stakeholder discussions.
- National Action Plans for threatened species developed and published (In Progress: Sea Turtle Action Plan 2.0, Dugong action plan 2.0, Sabah Marine Turtle Action Plan).

Indicators

of specific threats identified and prioritized through research and stakeholder engagement

# of revise national plan of action

RPOA 2.0 Indicators

Output Indicator A2.2.1.d

ACTIVITY 3

Development of Boating code-of-conduct for Langkawi.

Target By: 2026

Description

Boating guidelines, developed in 2024 and translated into Bahasa Malaysia and Chinese with supporting outreach materials, are being voluntarily adopted by tour operators in Langkawi to reduce marine mammal injuries and deaths by boat collisions.

GESI Related

Primary Actors:
DOFM, MareCet, LADA, MMEA, Marine Department Malaysia, Royal Malaysian Navy, Marine Police, local Fishermen Associations, village/community cooperatives and Langkawi Tourisms Associations.

Outputs

A comprehensive boating guideline to reduce marine mammals boat collision.

Indicators

#of operators adopting the guideline

# of reported marine mammal injuries or deaths from vessel collisions before and after guideline adoption

RPOA 2.0 Indicators

Outcome Indicator A2

TARGET A2:
Threatened Species

MANAGEMENT & IMPLEMENTATION

ACTIVITY 4

Cetacean Bycatch Mitigation project in Peninsular Malaysia.

Target By: 2030

Description

Acoustic pinger trials with fishers on the west coast of Peninsular Malaysia demonstrated potential to reduce marine mammal bycatch and depredation, preventing accidental entanglements and improving survival rates.

GESI Related

Primary Actors:
MareCet, DOFM

Outputs

- Presentation and technical reports submitted to DOFM
- Reduction of marine mammal bycatch and depredation

Indicators

# of fishers trained and actively engaged in pinger trials.

# of reported marine mammal bycatch incidents before and after pinger adoption.

RPOA 2.0 Indicators

Outcome Indicator A2

ACTIVITY 5

Protection and monitoring of critical habitats (turtle nesting beaches, coral reefs and seagrass beds) with community engagement.

Target By: 2030

Description

Protects and monitors critical habitat across Malaysia, including turtle nesting beaches, coral reefs, and seagrass beds. Safeguards and incubates turtle eggs to improve hatching success, rehabilitates degraded reefs, and strengthens local stewardship through training of rangers, turtle guides, and fishers. Outreach and education programmes with schools and communities promote long-term awareness and conservation support.

GESI Related

Primary Actors:
DOFM, SFC, Sabah Parks, SWD, Universities, Private agencies, NGOs and local community

Outputs

- Critical habitats (turtle nesting beaches, coral reefs, and seagrass beds) across Malaysia protected and monitored.
- Turtle eggs safeguarded and incubated to improve hatching success.
- Community members and fishers trained in habitat protection and safe turtle release.
- Schools and communities engaged through awareness and outreach programmes.

Indicators

#of community members trained as rangers or turtle guides.

# of schools and communities reached.

# of eggs protected and incubated.

# of participants in awareness programmes.

RPOA 2.0 Indicators

Outcome Indicator A2

TARGET A2:
Threatened Species

MANAGEMENT & IMPLEMENTATION

ACTIVITY 6

Implementation of Sarawak Species Conservation Action Plan for Marine Turtles 2023-2027.

Target By: 2027

Description

The Sarawak Species Conservation Action Plan (SCAP) for Marine Turtles 2023–2027 focuses on reducing direct and indirect causes of turtle mortality; protecting, conserving, and rehabilitating habitats; strengthening research, monitoring, and information exchange to improve understanding of marine turtle ecology and populations; raising public awareness and participation in conservation; enhancing national, regional, and international cooperation; and promoting the overall implementation of SCAP for marine turtles.

GESI Related

Primary Actors:
SFC, UMT, DOFM

Outputs

- Reduced mortality of marine turtles through mitigation of direct and indirect threats
- Increased public awareness and participation in marine turtle conservation activities across Sarawak

Indicators

Progress against annual SCAP action targets achieved (%)

# of implementation reports produced and disseminated

RPOA 2.0 Indicators

Outcome Indicator A2

ACTIVITY 7

Maintain the Turtle Islands Heritage Protected Area (TIHPA), the trans-boundary sea turtle conservation between Malaysia and the Philippines.

Target By: 2030

Description

TIHPA, established in 1996, is recognised as the world's first transboundary area dedicated to marine turtle conservation. Malaysia and the Philippines collaborate to jointly manage and safeguard green and hawksbill turtle populations within this shared conservation area.

GESI Related

Primary Actors:
Sabah Parks, UMS, SOMACORE, WWF-MY

Outputs

- The Memorandum of Agreement (MoA) between two countries in managing and conserving the sea turtle population.

Indicators

# of networks of MPAs of endangered species protection.

RPOA 2.0 Indicators

Output Indicator A2.3.1.a

TARGET A2:
Threatened Species

MANAGEMENT & IMPLEMENTATION

ACTIVITY 8

Trial of seasonal closure for fisheries in area designated as shark and ray hotspot.

Target By: 2030

Description

The re-zoning of Sabah Fisheries Operation Zones will establish a Special Prohibited Area for sharks and rays, alongside a revised licensing policy that prohibits commercial purse seine and trawler fleets from operating between May and October in a designated hotspot identified by the Marine Research Foundation as a potential nursery and breeding ground outside Tun Mustapha Park. A six-month seasonal closure trial from May to October will be implemented to reduce unintentional fishing pressure on sharks and rays.

GESI Related

Primary Actors:
DOFS, MRF

Outputs

- A Special Prohibited Area and seasonal closure will be established in Sabah to protect shark and ray hotspots, reducing fishing pressure and supporting the conservation of critical nursery and breeding grounds.

Indicators

and % of fishing vessels adhering to the trial closure regulations.

Baseline vs. trial-period observations of shark and ray presence

RPOA 2.0 Indicators

Outcome Indicator A2

TARGET A2:
Threatened Species

MANAGEMENT & IMPLEMENTATION

ACTION 2:
Effective waste management and pollution control measures address environmental threats, enhancing ecosystem health and improving the conservation status of priority threatened species

ACTIVITY 9

Joint committee meetings and initiatives for oil spill prevention and impact mitigation.

Target By: 2030

Description

Malaysia conducts joint oil spill response exercises in high-risk areas such as the Straits of Malacca and the South China Sea under the National Oil Spill Contingency Plan, including drills, information exchange, and collaboration with agencies, industries, and international partners to strengthen readiness, improve cross-border coordination, and safeguard threatened species and critical habitats.

GESI Related

Primary Actors:
NRES, DOE

Outputs

- Increase joint committee meetings to improve oil spill response for key species
- Stop drills in high-risk areas to protect threaten species and critical habitats
- Updated contingency plans with species protection measures and mitigation reports

Indicators

Increased # of joint committee meetings/initiatives to reduce oil spills and address their impact on critical habitats

# of personnel trained and capacity strengthened through drills and information exchange.

RPOA 2.0 Indicators

Output Indicator A2.1.1.c

TARGET A2:
Threatened Species

MANAGEMENT & IMPLEMENTATION

ACTIVITY 10

Implementation of the National Marine Litter Policy and Action Plan 2021-2030 to address marine pollution and protect CTI marine threatened species in Malaysia.

Target By: 2030

Description

The National Marine Litter Policy and Action Plan (2021 to 2030), developed by NRES, aims to reduce marine litter, particularly plastic waste, through monitoring, innovative waste management technologies, and stakeholder collaboration. Initiatives include community-based waste management on islands and a cleanliness campaign in Semporna to reduce pollution and protect CTI marine threatened species and their ecosystems.

GESI Related

Primary Actors:
DOFM, NRES, DOFS, Sabah Parks, SWD, SFC, Universities, City Council, NGOs, District Offices, private sectors and local community

Outputs

Nationwide efforts under the National Marine Litter Policy include advancing plastic bag bans, raising public awareness, and improving waste management. Notable initiatives include the SC Johnson program on Larapan Island (Sept 2024), which prevented 22,896 kg of waste and engaged 3,000 participants, and the Semporna Cleanliness Campaign (June 2024), which mobilized 11 villages and collected 29,782 kg of waste.

Indicators

of waste management and pollution measures implemented to protect priority species and ecosystems

Total volume/weight of waste prevented from entering the sea (kg).

# of community-based waste management initiatives established.

# of participants engaged in clean-up or awareness activities.

RPOA 2.0 Indicators

Output Indicator A2.1.1.c

TARGET A2:
Threatened Species

MANAGEMENT & IMPLEMENTATION

ACTIVITY 11

Implementation of nationwide to local-level cleanup initiative addressing marine debris in Malaysia, in collaboration with private sector entities, government-linked companies and NGOs.

Target By: 2030

Description

Regular coastal and ocean cleanup initiatives are conducted across Malaysia, from national-scale efforts such as the International Coastal Cleanup (ICC) to local community-led activities. These initiatives engage private companies, government-linked corporations, NGOs, and local communities to reduce marine debris, raise awareness, and support marine conservation nationwide.

GESI Related

Primary Actors:
DOFM, DOFS, Sabah Parks, SWD, SFC, Universities, Private sectors, NGOs and local communities.

Outputs

- Nationwide and local cleanup programmes conducted annually (e.g. ICC Malaysia).
- Private sector and GLCs actively engaged in cleanup partnerships.
- Local communities and NGOs mobilised for island and coastal cleanups.
- Volume of marine debris collected and managed.

Indicators

of private sector actions implemented to address marine debris through cleanup initiatives and waste management efforts

RPOA 2.0 Indicators

Output Indicator A2.1.1.c

TARGET A2:
Threatened Species

MANAGEMENT & IMPLEMENTATION

ACTIVITY 12

Support the development of community-based waste management systems in selected sites and provide technical assistance to inform policy recommendations for addressing plastic pollution in Sabah.

Target By: 2028

Description

This activity supports island communities in improving their waste management systems through the development and implementation of community-based waste management plans, with the goal of enhancing waste handling practices and reducing plastic leakage into the natural environment.

GESI Related

Primary Actors:
WWF-MY, local communities

Outputs

- Community-based waste management plans developed and implemented on target sites.
- Improved waste collection, segregation, and disposal practices within island communities.
- Reduced plastic leakage into surrounding marine and coastal environments.
- Increased community participation and awareness in sustainable waste management.

Indicators

% of households or community members participating in waste management initiatives

#of awareness and capacity-building activities conducted for local communities.

RPOA 2.0 Indicators

Output Indicator A2.1.1.c

TARGET A2:
Threatened Species

MANAGEMENT & IMPLEMENTATION

ACTIVITY 13

Regional Communication and Outreach Strategy for Marine Pollution and CTI Species Protection.

Target By: 2030

Description

Develops and implements regional communication and outreach programmes to address marine pollution and raise awareness on the protection of CTI priority threatened species. Activities include stakeholder engagement, production of educational materials, school and youth programmes, and public campaigns and events.

GESI Related

Primary Actors:
DOFM, DOFS, Sabah Parks, SWD, District Council, SFC, Universities, NGOs, Private Sectors

Outputs

- Marine Plastics Program: surface and underwater cleanups in Sabah with MRF and partners.
- Pelan Komunikasi (BKOPP): stakeholder engagement and awareness on threatened species.
- Awareness tools: educational films, reports, and campaigns on endangered species conservation.
- Junior Park Rangers: school-based conservation education in Sabah Parks.
- Public campaigns and events: World Ocean Day, World Turtle Day, online talks, and community forums.

Indicators

of regional communication and campaign strategies, tools, and materials developed and implemented

# of schools and students participating

# of campaigns/events held

# of films, reports, or awareness tools created

RPOA 2.0 Indicators

Output Indicator A2.2.1.d

TARGET A2:
Threatened Species

POLICY, LEGISLATION & REGULATIONS

ACTION 3:
Robust policies, regulatory frameworks, and transboundary collaborations are implemented to tackle regional conservation challenges, decreasing threats and improving the status of priority threatened species across the Coral Triangle

ACTIVITY 14
Regional and trans-boundary collaboration for the conservation of CTI priority threatened species

Target By: 2030

Description
This activity highlights Malaysia's involvement in key regional and trans-boundary conservation efforts aimed at improving the protection of CTI priority threatened species. These include:

- Turtle Island Heritage Protected Area (TIHPA): A trans-boundary conservation effort between Malaysia (Sabah) and the Philippines, focusing on protecting critical nesting habitats for marine turtles in shared waters through joint management and enforcement.
- Important Marine Mammal Areas (IMMA) and Important Shark and Ray Areas (ISRA): While the mapping exercises have been completed, their implementation continues through integration into spatial planning, protected area management, and policy frameworks, ensuring long-term protection of marine mammals, sharks, and rays.
- IOSEA Marine Turtle MoU: Malaysia's membership in the IOSEA framework promotes cross-border cooperation on marine turtle conservation, enhancing habitat protection and coordinated management across Southeast Asia.
- ShellBank Project: A global genetic traceability initiative that enables identification of sea turtle populations and illegal trade routes, strengthening international collaboration to combat wildlife crime and support conservation.

GESI Related

Primary Actors:
DOFM, DOFS, Sabah Parks, SFC, SWD, UMS, WWF-MY

Outputs
- Ongoing joint conservation initiatives under TIHPA for marine turtles protection.
- Continued use of IMMA and ISRA outputs in national and regional planning processes as well as MPA management review or expansion.
- Active participation in regional agreements such as IOSEA MoU for turtle conservation.
- Contribution to global initiatives like ShellBank for genetic traceability and international enforcement cooperation.

Indicators
of regional/trans-boundary efforts established between Malaysia and neighbouring countries, contributing to the improved conservation status of CTI priority threatened species

RPOA 2.0 Indicators
Output Indicator A2.2.1.d

TARGET A2:
Threatened Species

POLICY, LEGISLATION & REGULATIONS

ACTIVITY 15

Implementation of the regional and international policies adopted and implemented for CTI priority threatened species.

Target By: 2030

Description

This activity involves the adoption and implementation of regional and international policies relevant to CTI priority threatened species, including alignment with the IUCN Red List for species assessment and conservation action, compliance with CITES regulations to control and monitor international trade of endangered species, and integration of the Kunming-Montreal Global Biodiversity Framework (KMGBF) under the CBD to ensure coordinated action towards biodiversity conservation targets at national and regional levels.

GESI Related

Primary Actors:
DOFM, NRES, DOFM, SWD, Sabah Parks, SFC, Universities, NGOs, IUCN Specialist Group

Outputs

Enhanced protection of CTI priority threatened species, including marine turtles, marine mammals, sharks, rays, and Napoleon wrasse, through the adoption and enforcement of IUCN, CITES, and CBD-KMGBF frameworks at national and regional levels.

Indicators

of regional and international policies adopted and implemented by Malaysia to reduce threats to CTI priority threatened species.

# of CTI priority species assessed and updated in the IUCN Red List at national/regional level.

# of CTI priority species (e.g., sharks, rays, turtles, Napoleon wrasse) regulated under CITES Appendices.

RPOA 2.0 Indicators

Output Indicator A2.2.1.d

TARGET A2:
Threatened Species

POLICY, LEGISLATION & REGULATIONS

ACTIVITY 16

Listing of nine (9) additional species of marine mammals and revision of the names of three species in the protected list under the Fisheries Act 1985.

Target By: 2026

Description

An additional nine marine mammal species were added to the protected list under the Fisheries Act 1985, increasing the total from 20 to 29 species. The newly listed species include *Balaenoptera omurai*, *Peponocephala electra*, *Feresa attenuata*, *Tursiops aduncus, Stenella coeruleoalba, Stenella attenuata, Ziphius cavirostris, Steno bredanensis*, and *Kogia sima*. Revisions were also made to the scientific names of *Physeter macrocephalus, Stenella longirostris longirostris,* and *Stenella longirostris roseiventris.*

GESI Related

Primary Actors:
MareCet, DOFM

Outputs

Species factsheets were developed to support the revision process, and eight additional species were formally recognized as protected under the Act.

Indicators

# of species factsheets developed to support policy updates.

Official gazettement or publication of the revised species list.

RPOA 2.0 Indicators

Output Indicator A2.2.1.a

TARGET A2:
Threatened Species

CAPACITY BUILDING

ACTION 4:

Targeted capacity-building initiatives and public engagement empower communities and enforcement agencies to effectively address conservation challenges, reduce threats, and enhance the conservation status of priority threatened species

ACTIVITY 17

Capacity building for the implementation of Turtle Excluder Devices (TEDs) to reduce bycatch of threatened species.

Target By: 2030

Description

This activity focuses on training commercial fishing trawler operators in Malaysian waters on the effective use of Turtle Excluder Devices (TEDs) to reduce bycatch of threatened species. The training covers installation, operation, and maintenance of TEDs, with emphasis on legal compliance and conservation. Current efforts are concentrated in Sarawak, with plans for nationwide implementation. The activity also raises awareness among fishers about bycatch issues and equips them with the skills needed to support sustainable fishing practices. Monitoring data on bycatch rates, affected species, and mortality will be collected and analyzed to assess the impact of TED adoption.

GESI Related

Primary Actors:
DOFM, DOFS, MRF

Outputs

- Reduction in bycatch of species has not yet been assessed.
- Fishing crews trained and skilled in TED usage.
- Training materials on TED installation and operation developed.
- Monitoring data collected on bycatch rates, species identification, and mortality across key states (Kelantan, Terengganu, Pahang, Johor, Perak, Sabah, Sarawak).

Indicators

of fishing crews and fisheries officers trained in TED installation and operation.

# of training sessions conducted and training materials produced

% of commercial trawlers using TEDs in key states

Reduction in bycatch of threatened species over time

RPOA 2.0 Indicators

Output Indicator A2.2.1.a

TARGET A2:
Threatened Species

CAPACITY BUILDING

ACTIVITY 18

National and regional capacity-building for tracking, monitoring, and addressing illegal wildlife trade.

Target By: 2030

Description

Strengthen the technical and organizational capacity of Malaysian law enforcement agencies to combat illegal wildlife trade. Initiatives include implementing ShellBank for genetic tracking of marine turtle trade, training on transnational organized crime and wildlife trafficking identification, improving the care and management of confiscated wildlife, and enhancing tracking, monitoring, and communication systems nationwide.

GESI Related

Primary Actors:
DOFM, DOFS, SWD, Universities, WWF-MY

Outputs

- ShellBank genetic database established and law enforcement trained in its use.
- At least 30 officers trained in wildlife trafficking detection, organized crime investigation, and confiscated wildlife management.
- Tracking, monitoring, and communication systems on illegal wildlife trade improved and institutionalized.

Indicators

of capacity-building programs and training efforts implemented to strengthen law enforcement's ability to track, monitor, and communicate on illegal wildlife trade

RPOA 2.0 Indicators

Output Indicator A2.2.1.c

TARGET A2:
Threatened Species

CAPACITY BUILDING

ACTIVITY 19

Regional capacity-building programs on the taxonomy, biology, and data collection of sharks and rays for law enforcement, scientists, and fisheries managers.

Target By: 2030

Description

SEAFDEC/MFRDMD leads regional training to strengthen shark and ray identification, biology, data collection, and stock assessment. These programs build enforcement and scientific capacity to improve monitoring, management, and control of illegal trade.

GESI Related

Primary Actors:
DOFM, SEAFDEC/ MFRDMD

Outputs

- Ongoing annual regional training and workshops conducted, with four sessions completed between 2022–2023 (Malaysia and Cambodia).
- Law enforcement officers, scientists, and fisheries managers trained in taxonomy, biology, data collection, and stock assessment of sharks and rays.
- Enhanced regional capacity for monitoring, conservation, and management of shark and ray populations.

Indicators

of regional capacity building activities are conducted including training, knowledge and information sharing and exchanges, for combating illegal marine wildlife trade

RPOA 2.0 Indicators

Output Indicator A2.2.1.b

TARGET A2:
Threatened Species

CAPACITY BUILDING

ACTIVITY 20

Regional Workshops and Training Programs on Combating Illegal Wildlife Trade.

Target By: 2030

Description

This activity delivers regional workshops, webinars, and training programs to strengthen the capacity of law enforcement and stakeholders in combating the illegal trade of priority threatened species. These initiatives focus on improving identification of illegal wildlife products, understanding trafficking networks and promote the adoption of regional traceability mechanisms.

GESI Related

Primary Actors:
DOFM, SWD, TRAFFIC, WWF-MY, MMEA

Outputs

Ongoing regional workshops and training programs conducted annually to strengthen capacity in combating illegal wildlife trade. From 2022–2024, a total of six workshops and training sessions were held, enhancing law enforcement skills, promoting traceability mechanisms, and improving regional collaboration.

Indicators

of regional initiatives, workshops, or training programs implemented to combat the illegal trade of priority threatened species

# of participants trained

# of regional guidelines, protocols, or traceability systems developed and implemented

# of information-sharing events or networks created among CT6 countries

RPOA 2.0 Indicators

Output Indicator A2.2.1.b

TARGET A2:
Threatened Species

CAPACITY BUILDING

ACTIVITY 21

Conducting workshops on marine mammal stranding response and safe release, and updating procedures for the National Marine Mammal Stranding Response Network.

Target By: 2030

Description

This activity strengthens national capacity to respond to marine mammal strandings and accidental entanglements by training fishers, responders and stakeholders. It also ensures the collection of biological samples from deceased strandings to support research and conservation.

GESI Related

Primary Actors:
MareCet, DOFM, Marine Wildlife Veterinary Network (MWVN), RCM, LADA, Sabah Parks, SWD, Universities, MRF, Perlis Nature Xplorer, Zoologico Club (UPM), Tengah Island Conservation

Outputs

- At least five workshops and training sessions conducted annually on marine mammal stranding response and safe release.
- Updated and adopted SOPs for the National Marine Mammal Stranding Response Network.
- Genetic and biological samples collected from deceased strandings to support research.
- Enhanced data and records on strandings, bycatch, and response actions for monitoring and management.

Indicators

of worksnops or training sessions conducted.

Updated National Marine Mammal Stranding Response Network procedures officially adopted.

# of genetic/biological samples collected from deceased strandings.

RPOA 2.0 Indicators

Output Indicator A2.2.1.b

TARGET A2:
Threatened Species

SCIENCE, RESEARCH & MONITORING

ACTION 5:
Systematic assessment and ongoing monitoring provide critical data to inform conservation strategies, reduce threats, and improve the conservation status of priority threatened species

ACTIVITY 22
Data collection, assessment and review of threatened species for CITES appendices.

Target By: 2030

Description
This activity involves the systematic collection of landing and trade data, species identification, and conservation assessments of CTI priority threatened species (e.g., sharks and rays in Terengganu, Pahang, Sarawak, and Sabah). The data will be used to review the status of these species under the CITES Appendices and to support new submissions or amendments.

GESI Related

Primary Actors:
DOFM, DOFS, SEAFDEC-MFRDMD, Sabah Parks, SWD, SFC, Universities, NGOs

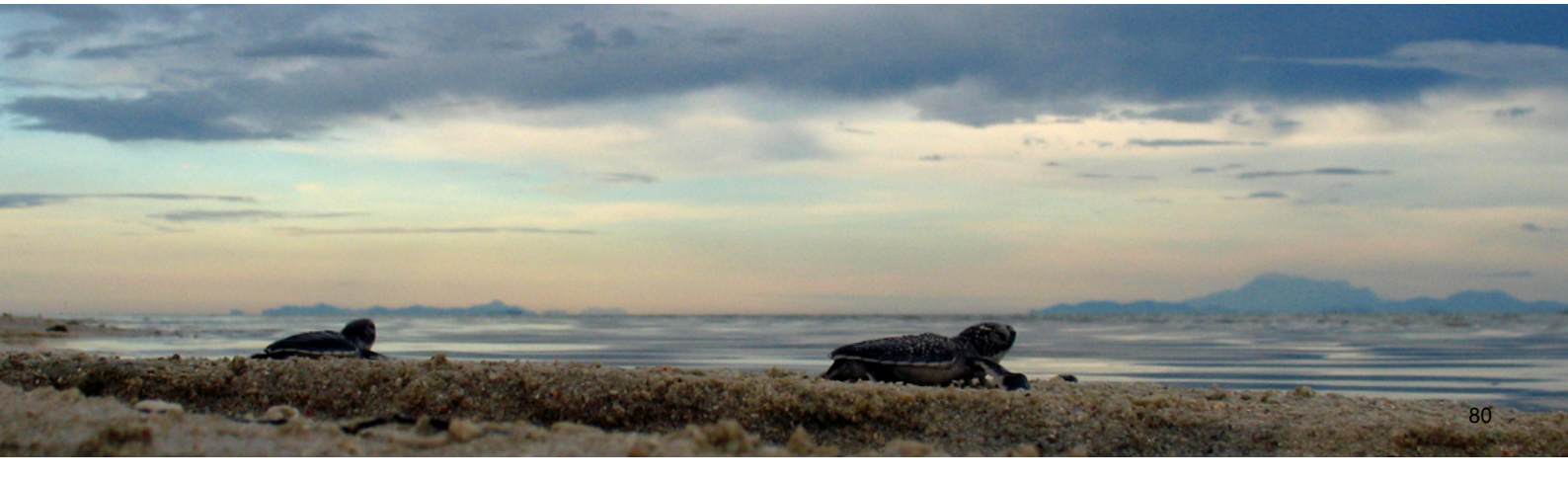
Outputs
- Ongoing data collection and assessment of threatened species at key landing sites.
- Regular review of CTI priority threatened species under the CITES Appendices.
- Species-specific reports prepared for CITES submission.

Indicators
Increased # of CTI priority threatened species submitted for inclusion and protected under CITES Appendices I, II, or III

# of species-specific reports prepared for CITES submission

# of species successfully added to CITES Appendices following submission.

RPOA 2.0 Indicators
Outcome Indicator A2.2.2



TARGET A2:
Threatened Species

SCIENCE, RESEARCH & MONITORING

ACTIVITY 23

Conduct ongoing assessment and monitoring of threatened Species, focusing on their status in the IUCN Red List categories, including Near Threatened, Vulnerable, Endangered, Critically Endangered, Extinct in the Wild, and Extinct.

Target By: 2030

Description

This activity ensures periodic assessment of CTI priority threatened species to track their status on the IUCN Red List, in coordination with IUCN Specialist Groups. It evaluates conservation impacts across key areas.

Primary Actors:
DOFM, Sabah Parks, SWD, SFC, DOFS, Universities, NGOs, IUCN Specialist Groups

Outputs

- Comprenensive reports on population trends and habitat conditions of threatened species.
- Regular status updates and upcoming IUCN assessments submitted for Red List reviews.

Indicators

Improved status of CTI priority threatened species in the IUCN Red List categories.

RPOA 2.0 Indicators

Output Indicator A2.2.1.b

TARGET A2:
Threatened Species

SCIENCE, RESEARCH & MONITORING

ACTIVITY 24

Develop traceability mechanisms for shark fins and rays in Malaysia to strengthen monitoring and sustainable management.

Target By: 2030

Description

This activity assess and develops mechanisms to strengthen the traceability of shark fins and rays in Malaysia. It involves stakeholder consultations and the application of technological and regulatory solutions to improve transparency, support fisheries management, and curb illegal wildlife trade. This activity apply universal shark and ray PCR identification molecular tool to enhance database on species specific information and CITES-listed species composition found in the international trade points.

Primary Actors:
DOFM, Sabah Parks, SWD, SFC, DOFS, Universities, NGOs

Outputs

- Initiative underway with mechanisms developed and implemented to enhance shark and ray traceability, including tracking systems, updated regulations, and stakeholder agreements for improved monitoring and management.
- Data on collection of species-specific/CITES-listed species information involved in the trade.

Indicators

of traceability mechanisms developed and implemented to monitor and regulate the trade of shark fins and rays in Malaysia

A database of trade species-specific information.

RPOA 2.0 Indicators

Output indicator A2.1

TARGET A2:
Threatened Species

SCIENCE, RESEARCH & MONITORING

ACTIVITY 25

Develop and implement the MY-CITES electronic permit system to strengthen regulation, traceability and monitoring of wildlife trade in Malaysia.

Target By: 2026

Description

MY-CITES is an electronic platform for managing CITES permit applications in Malaysia, enabling online submission, tracking, and issuance of permits. The system will enhance efficiency, transparency, and data management in regulating the trade of CITES-listed species, and is scheduled to launch by January 2026.

Primary Actors:
DOFM, NRES, MMEA

Outputs

- MY-CITES electronic system developed and launched by January 2026.
- Streamlined, transparent permit processing for CITES-listed species.
- Enhanced data management and reporting for wildlife trade monitoring.

Indicators

# of initiatives and programs implemented to enhance traceability mechanisms for monitoring and enforcement of wildlife trade, including sharks and rays.

RPOA 2.0 Indicators

Output Indicator A2.2.2.a

ACTIVITY 26

Collect species-level data on sharks and rays in Kota Kinabalu to support monitoring and management

Target By: 2030

Description

Collects species-level data on sharks and rays landed at SAFMA, Kota Kinabalu to improve identification, enhance landing records, and build capacity in elasmobranch taxonomy. Data supports Non-Detriment Findings (NDFs) for sustainable management and conservation.

Primary Actors:
DOFS, DOFM, SEAFDEC- MFRDMD, WWF-MY

Outputs

- Species-level landing data (size and weight) collected for sharks and rays.
- Landing records improved from generic to species-specific.
- Capacity in elasmobranch taxonomy strengthened.

Indicators

# of initiatives and programs implemented to enhance traceability mechanisms for monitoring and enforcement of wildlife trade, including sharks and rays.

RPOA 2.0 Indicators

Output Indicator A2.2.2.a

TARGET A2:
Threatened Species

SCIENCE, RESEARCH & MONITORING

ACTIVITY 27

Data collection for marine threatened species of high trade demand.

Target By: 2030

Description

Conducts continuous field data collection to assess the status of marine threatened species in high trade demand. Findings support recommendations for their inclusion in CITES Appendices I, II, and III to ensure protection from overexploitation and illegal trade.

Primary Actors:
DOFM, NRES, DOFM, SWD, Sabah Parks, SFC, Universities, NGOs

Outputs

- Comprehensive field data collected on high-demand marine threatened species.
- Recommendations prepared for potential CITES listings.
- Monitoring systems improved for tracking trade and population trends.
- No new inclusions or amendments to date, pending further data collection.

Indicators

Expansion/ extension of coverage of CTI priority threatened species protected under CITES appendices.

RPOA 2.0 Indicators

Outcome Indicator A2.2.2

ACTIVITY 28

Monitoring of import and export packages at primary entry and exit points to curb illegal trade

Target By: 2030

Description

Ongoing enforcement at Malaysia's main entry and exit points targets illegal trade in species prohibited under the Fisheries Act 1985. The Enforcement and Regulation Division leads inspections and interceptions.

Primary Actors:
DOFM, DOFS, MAQIS, SWD, SFC

Outputs

- Strengthened monitoring of import and export packages at primary entry and exit points.
- Illegal trade cases involving priority threatened species detected and reported annually.
- Examples of Reported Cases:(2021: 1 coral, 2022: 2 corals, 2023: 2 Humphead Wrasse, 1 coral, 2024: 2 Giant Clams, 1 seahorse)

Indicators

# of reported illegal trade cases for priority threatened species

# of reported cases

RPOA 2.0 Indicators

Output Indicator A2.2.1.a

TARGET A2:
Threatened Species

SCIENCE, RESEARCH & MONITORING

ACTIVITY 29

Research to identify, protect, and monitor migratory corridors for threatened Species in Malaysia.

Target By: 2030

Description

Identifies and monitors migratory corridors of threatened species through satellite tracking, tagging, onboard surveys, photo-ID, and genetic studies. Findings support the integration of these corridors into the management of seascapes, Marine Protected Areas (MPAs), Locally Managed Marine Areas (LMMAs), and Other Effective Conservation Measures (OECMs). Research is ongoing to expand coverage.

Primary Actors:
DOFM, Sabah Parks, SWD, SFC, SEAFDEC-MFRDMD, Universities, NGOs

Outputs

- At least three migratory routes identified for species such as green turtles, hawksbills, and whale sharks.
- Migration routes mapped between breeding and feeding areas.
- Key ecological and biological areas integrated into existing MPAs, with additional areas proposed for gazettement.

Indicators

of migratory species corridors are identified, integrated, and monitored

RPOA 2.0 Indicators

Output Indicator A2.3.1.a

ACTIVITY 30

Study on biodiversity conservation awareness under the National Policy on Biological Diversity 2022-2030.

Target By: 2026

Description

Collects data on public awareness of biodiversity conservation, including poaching, illegal harvesting and trade, invasive alien species (IAS), and Access and Benefit Sharing (ABS). Also assesses enforcement agencies' roles in combating IUU activities, providing baseline information for NPBD 2022–2030 (Target 12). Study runs from 2025 to 2026.

GESI Related

Primary Actors:
DOFM, NRES, FRIM, PERHILITAN, DOFS, SFD, MMEA

Outputs

- Comprehensive report on public awareness of biodiversity conservation and threats.
- Baseline data on awareness of IAS and ABS.
- Assessment of enforcement agencies' role in addressing IUU activities.

Indicators

of assessments conducted to establish baseline data on public awareness and enforcement efforts related to the conservation of CTI priority threatened species.

RPOA 2.0 Indicators

Output indicator A2.1

TARGET A2:
Threatened Species

SCIENCE, RESEARCH & MONITORING

ACTIVITY 31

Research on marine megafauna (whales, dolphins, porpoises, dugongs and sea turtles) in Peninsular Malaysia, Sabah and Sarawak.

Target By: 2030

Description

Conducts research and conservation studies on marine megafauna through visual and acoustic surveys, satellite tracking, tagging, photo-ID, genetic and bioacoustics studies across Malaysia. Research focuses on identifying critical habitats, monitoring population trends, and assessing threats to inform conservation planning and management.

GESI Related

Primary Actors:
DOFM, DOFS, Sabah Parks, SWD, SFC, WWF-MY, MRF, private agencies, MareCet, Perak State Park Corporation, LADA

Outputs

- Technical reports submitted to DOFM (Peninsular Malaysia), SFC (Sarawak) and SWD/Sabah Parks (Sabah).
- Critical habitats for marine megafauna identified and population trends monitored.
- Peer-reviewed scientific publications produced.

Indicators

of technical reports submitted

# of critical habitats identified

# of peer-reviewed publications produced

RPOA 2.0 Indicators

Output indicator A2.1

ACTIVITY 32

Onboard fishing observation and bycatch monitoring of threatened species.

Target By: 2026

Description

Activities include conducting onboard fishing observation surveys, and assesses bycatch of marine mammals and threatened species in trawl fisheries across Sabah and Sarawak. The aim is to collect data on bycatch incidents involving priority species, such as marine mammals, sea turtles, sharks, and rays, to inform conservation measures and improve compliance with fishing regulations.

GESI Related

Primary Actors:
DOFM, DOFS, Sabah Parks, SWD, SFC, WWF-MY, MRF

Outputs

- Comprehensive data on bycatch of marine mammals, sea turtles, sharks, and rays collected and analysed.
- Recommendations developed for bycatch reduction measures and improved enforcement of fishing regulations.

Indicators

of species (marine mammals and threaten species) recorded in trawl fisheries.

# of and location high diversity (Hot Spot) area..

RPOA 2.0 Indicators

Outcome Indicator A2.2.1

TARGET A3

Healthy and Productive Fisheries

Target A3 consists of **4 actions and 19 activities**. The focus is on advancing healthy and productive fisheries through the Ecosystem Approach to Fisheries Management, integrating ecological knowledge and awareness, and implementing Fisheries Improvement and Small-Scale Fisheries Projects nationwide to strengthen practices and ensure long-term sustainability.

Management and Implementation

Action 1: Effective management actions are in place to improve the health of coastal and marine ecosystems, priority species and fisheries in the Coral Triangle region.

Action 2: Effective enforcement strategies and plan to reduce threats and IUU fishing to marine habitats and threatened species in the priority seascapes.

Science, Research & Monitoring

Action 3: Effective study, monitoring strategies to reduce threats and IUU fishing to marine habitat in the priority seascape.

Restoration & Climate Adaptation

Action 4: Fisheries habitat enhancement to increase fish biomass and CPUE for commercially important species.

TARGET A3:
Healthy and Productive Fisheries

MANAGEMENT & IMPLEMENTATION

ACTION 1:
Effective management actions are in place to improve the health of coastal and marine ecosystems, priority species and fisheries in the Coral Triangle region.

ACTIVITY 1

Implement an Ecosystem Approach to Fisheries Management (EAFM) Marine Awareness Program to build knowledge, strengthen stewardship, and promote sustainable practices among fishing communities.

Target By: 2030

Description

From 2022 to 2024, the Department of Fisheries (DOFM) implemented the EAFM Marine Awareness Program, expanding initiatives annually, while DOF Sarawak held biannual trainings in Lawas and Mukah, engaging communities and fishers to promote sustainable fishing, marine conservation, and long-term ecosystem stewardship.

GESI Related

Primary Actors:
DOFM

Outputs

- Marine awareness conducted to fishing communities.
- For example seven marine awareness program implemented between 2022 to 2024.

Indicators

# of EAFM initiatives and programs implemented.

RPOA 2.0 Indicators

Outcome Indicator A3.1

TARGET A3:
Healthy and Productive Fisheries

MANAGEMENT & IMPLEMENTATION

ACTIVITY 2

Implementation of Fishery Improvement Project (FIP) on Reef Fishes in Tun Mustapha Park (TMP), Sabah.

Target By: 2030

Description

A Fishery Improvement Project (FIP) is a collaborative effort to enhance a fishery's environmental sustainability. Stakeholders, including fishermen, seafood firms, NGOs, and governments, work together to analyze fisheries concerns, implement improvements, and promote sustainable practices. FIPs often leverage market incentives to encourage participation, linking progress to increased access to environmentally conscious buyers. The objective is to bring fisheries into compliance with global sustainability standards, with progress publicly documented for transparency and accountability. This FIP focuses on reef fish—particularly groupers, snappers, and trevally/jacks—and involves fishers using gill nets, hooks, and lines. The project covers Kudat, Kota Marudu, and Pitas.

GESI Related

Primary Actors:
DOFS, Sabah Parks, WWF-MY, District Offices, LKIM, MMEA, Marine Police, Native Court, UMS

Outputs

Output includes:

- Built partnerships with nine government agencies in Marudu Bay, Tun Mustapha Park.
- Annual Coordination Meeting engages communities in fisheries management.
- Steering committee established for transparent decision-making and action plan updates.
- Thirteen community researchers trained to assess fish stocks, fostering local ownership of marine resources.

Indicators

of partnership created.

# of coordination meeting implemented.

# of local community trained to carry out fish stock assessment.

RPOA 2.0 Indicators

Outcome Indicator A3.1

TARGET A3:

Healthy and Productive Fisheries

MANAGEMENT & IMPLEMENTATION

ACTIVITY 3

Implement a Fishery Improvement Project (FIP) on Yellowfin tuna at Mabul Island, Semporna, Sabah.

Target By: 2030

Description

A Fishery Improvement Project (FIP) is a collaborative effort involving fishers, seafood firms, NGOs, and governments to enhance sustainability. This FIP focuses on yellowfin tuna caught by handline across 400,000 hectares, promoting sustainable practices, market incentives, compliance with global standards, and transparent progress reporting.

GESI Related

Primary Actors:
Semporna District Office, DOFS, WWF-MY LKIM, Persatuan Nelayan Kawasan Marine Police Mabul, Youth/fishers SAFMA, UMS

Outputs

Output includes:

- Annual Coordination Meeting (ACM) provides a platform to review project progress and stakeholder initiatives.
- A steering committee ensures inclusive decision-making on action plans and updates.
- Active citizen-scientist programs collect data to support fisheries management decisions.
- Improvements in seafood quality and landing sites enhance operations and sustainability.

Indicators

of coordinate meeting conducted.

# of steering committee meeting.

# of citizen science program.

RPOA 2.0 Indicators

Outcome Indicator A3.1

TARGET A3:
Healthy and Productive Fisheries

MANAGEMENT & IMPLEMENTATION

ACTIVITY 4

Small-Scale Fisheries Project (SSFP) in Banggi Island, Kudat Sabah.

Target By: 2030

Description

Small-Scale Fisheries Project (SSFP) is designed to enable a sustainable small-scale fishery management where the fishing community participates in good governance to meet fish stock recovery and reduce environmental impacts that improves community livelihood and resilience. This is a new project initiated by WWF-Malaysia under the Sustainable Fisheries Initiatives.

GESI Related

Primary Actors:
Sabah Parks, DOFS, WWF-MY, *Perpaduan* community

Outputs

Output includes:

- Established 4P, a community association of women, youth, girls, and fishers.
- Developed a community management plan and identified alternative livelihoods.
- Conducted capacity-building on fish stock enhancement, marine protection, and community resilience.

Indicators

An active 4P community association.

One community management plan.

# of identified alternative livelihood.

# of community trained.

RPOA 2.0 Indicators

Outcome Indicator A3.1

TARGET A3:
Healthy and Productive Fisheries

MANAGEMENT & IMPLEMENTATION

ACTIVITY 5

Small-Scale Fisheries Project (SSFP) in Larapan Island, Semporna Sabah.

Target By: 2030

Description

The Small-Scale Fisheries Project (SSFP) is designed to enable sustainable small-scale fishery management where the fishing community participates in good governance to meet fish stock recovery and reduce environmental impacts that improve community livelihood and resilience. This is a new project initiated by WWF-Malaysia under the Sustainable Fisheries Initiatives.

GESI Related

Primary Actors:
DOFS, WWF-MY, JPDS (Jabatan Pelabuhan Dermaga Sabah)

Outputs

- Community actively participated in developing the SSFP Community Management Plan through consultations to provide input and feedback.
- Capacity-building programs and alternative livelihoods, like sea cucumber fish cages, promoted marine resource management and financial literacy.
- A youth-led patrolling group in Larapan was established to enhance marine conservation and protection.

Indicators

of community involved in developing SSFP Community management plan.

# of capacity building program conducted.

# of youth participate on patrolling group.

RPOA 2.0 Indicators

Outcome Indicator A3.1

TARGET A3:
Healthy and Productive Fisheries

MANAGEMENT & IMPLEMENTATION

ACTIVITY 6

Develop the Tun Mustapha Park (TMP) Fisheries Master Plan to guide sustainable fisheries management and conservation efforts.

Target By: 2030

Description

Fisheries, including aquaculture and bycatch, are important for sustainable management in TMP, but a systematic approach is currently lacking. A Fisheries Master Plan is proposed as a roadmap to develop specific Fisheries Management Plans (FMPs) and guide legislators, managers, and stakeholders. The Master Plan highlights FMP requirements and other issues needing clarification. Developing an FMP is urgent to identify priorities, set strategies and objectives, and outline the process and resources needed to manage wild-caught fisheries, aquaculture, and bycatch in the park.

GESI Related

Primary Actors:
Sabah Parks, WWF-MY, SOMACORE

Outputs

A Fisheries Master Plan guiding TMP fisheries management, setting priorities, strategies, objectives, and resource needs for sustainable practices.

Indicators

A of Fisheries Master Plan produce.

# of consultation meeting conducted.

RPOA 2.0 Indicators

Outcome Indicator A3.1

ACTIVITY 7

Implementation of Longtail Tuna Fishery Improvement Project (FIP) in Tok Bali Kelantan.

Target By: 2030

Description

A Fishery Improvement Project (FIP) is a collaborative effort involving fishers, seafood firms, NGOs, and governments to enhance sustainability. This FIP focuses on longtail tuna caught by purse seine across 1.1 million hectares, promoting sustainable practices, market incentives, compliance with global standards, and transparent progress reporting.

GESI Related

Primary Actors:
DOFM, WWF-MY, LKIM

Outputs

The activity developed a longtail tuna FIP action plan and a Social Responsibility action plan, and conducted capacity-building for local authorities as well as local and foreign fishers.

Indicators

A Longtail tuna FIP action plan.

# of local authorities personnel and fishermen attended capacity building program.

RPOA 2.0 Indicators

Outcome Indicator A3.1

TARGET A3:
Healthy and Productive Fisheries

MANAGEMENT & IMPLEMENTATION

ACTIVITY 8

Small-Scale Fisheries Project (SSFP) in Rajang-Belawai-Paloh in Sarawak.

Target By: 2030

Description

This activity conduct at Rajang-Belawai-Paloh in Sarawak, is a Small-Scale Fisheries Project (SSFP), initiated by WWF-Malaysia, promotes sustainable small-scale fisheries, community participation in governance, fish stock recovery, reduced environmental impact, and improved livelihoods and resilience.

GESI Related

Primary Actors:
SFC, WWF-MY, DOFM

Outputs

Community actively participated in the SSFP Management Plan, with capacity-building and alternative livelihoods promoting marine resource management and financial literacy.

Indicators

# of community participate in developing SSFP Community Management Plan.

# of capacity building conducted.

RPOA 2.0 Indicators

Outcome Indicator A3.1

ACTIVITY 9

Small-Scale Fisheries Project (SSFP) in Kemaman, Terengganu.

Target By: 2030

Description

This activity conduct at Kemaman, Terengganu, is a Small-Scale Fisheries Project (SSFP), initiated by WWF-Malaysia, promotes sustainable small-scale fisheries, community participation in governance, fish stock recovery, reduced environmental impact, and improved livelihoods and resilience.

GESI Related

Primary Actors:
DOFM, LKIM, WWF-MY, Persatuan Nelayan Kawasan

Outputs

Community actively participated in the SSFP Management Plan, with capacity-building and alternative livelihoods promoting marine resource management and financial literacy.

Indicators

# of community participate in developing SSFP Community Management Plan.

# of capacity building conducted .

TARGET A3:
Healthy and Productive Fisheries

MANAGEMENT & IMPLEMENTATION

ACTIVITY 10

Establish marine sanctuaries in Kudat, Kota Belud, and Kg. Tambisan through cooperation with coastal fishing communities.

Target By: 2030

Description

Establishing marine sanctuaries through cooperation with coastal fishing communities. Deploying artificial reefs helps increase the distribution of coral reef areas and conserve coral reef areas that have been degraded due to IUU.

GESI Related

Primary Actors:
DOFS, local communities

Outputs

DoFS- Establishment of marine sanctuary.

1. 2021 - Kudat, Sabah (pilot site)
2. 2024 - Kota Belud, Sabah (replication site).

Indicators

# of marine sanctuaries established.

RPOA 2.0 Indicators

Outcome Indicator A3.1

ACTIVITY 11

The Fishery Improvement Project (FIP) on Mabul Island, Semporna, Sabah, collects fisheries data on yellowfin tuna through daily fish catch records.

Target By: 2030

Description

A Fishery Improvement Project (FIP) is a collaborative effort involving fishers, seafood firms, NGOs, and governments to enhance sustainability. This FIP targets yellowfin tuna caught by handline across 400,000 hectares, focusing on fish stock assessment, harvest strategies, control rules, stock rebuilding, and compliance with global sustainability standards. One of the focuses of this project is to establish healthy fish stock.

GESI Related

Primary Actors:
Semporna District Office, DOFS, WWF-MY, LKIM

Outputs

- Fisheries stock data, particularly for reef fish, have been established.
- Population dynamics of reef fishes have been determined using fisheries stock data.
- Harvest control rules will be developed to support fisheries management in Mabul Island, Semporna.

Indicators

# of improved fisheries stock data.

# of harvest control rules developed and implemented.

RPOA 2.0 Indicators

Outcome Indicator A3.1

TARGET A3:
Healthy and Productive Fisheries

MANAGEMENT & IMPLEMENTATION

ACTIVITY 12

A Small-Scale Fisheries Project (SSFP) community management plan in Larapan Island, Kudat, Sabah, includes community-led activities such as patrolling fishing grounds.

Target By: 2030

Description

Small-Scale Fisheries Project (SSFP) is designed to enable a sustainable small-scale fishery management where the fishing community participates in good governance to meet fish stock recovery and reduce environmental impacts that improves community livelihood and resilience. This is a new project initiated by WWF-Malaysia under the Sustainable Fisheries Initiatives.

GESI Related

Primary Actors:
DOFS, WWF-MY, JPDS

Outputs

Fishing grounds are patrolled by the communities to avoid habitat destruction incidents.

Indicators

# of patrolling activity conducted annually.

RPOA 2.0 Indicators

Outcome Indicator A3.1

ACTIVITY 13

Improve *Penaeus monodon* fisheries through Fisheries Refugia management practices in Kuala Baram, Miri, Sarawak.

Target By: 2030

Description

Two (2) areas are identified for the fisheries refugia management around Kuala Baram, Miri covers approximately 852 km2 (85, 200 hectares) for sustainable harvest through the implementation of specific fishery management strategies aimed at sustainable fisheries and proposed the protection of P. monodon at different life stages.

GESI Related

Primary Actors:
DOFM

Outputs

Identified the areas for fisheries refugia for P. monodon Fisheries Refugia, data collection, stakeholder involvement and proposed harvest strategies.

Indicators

# of areas identified for fisheries refugia.

# of sustainable fisheries practices implemented.

RPOA 2.0 Indicators

Outcome Indicator A3.1

TARGET A3:
Healthy and Productive Fisheries

MANAGEMENT & IMPLEMENTATION

ACTION 2:
Effective enforcement strategies and plan to reduce threats and IUU fishing to marine habitats and threatened species in the priority seascapes.

ACTIVITY 14
Monitoring, Control & Surveillance (MCS) to ensure compliance under the Fisheries Act 1985.

Target By: 2030

Description	Outputs	Indicators
Enforcement of rules and regulations under the Fisheries Act 1985 in Sabah.	Monitoring, Control, and Surveillance (MCS) is conducted to enforce fisheries regulations under the Fisheries Act 1985.	# of cases prosecuted under the Fisheries Act 1985.

Primary Actors:
DOFS, DOFM, MMEA, Marine Police

RPOA 2.0 Indicators
Output Indicator A3.1.1

ACTIVITY 15
Implement joint enforcement operations between DOFS, NGOs, and enforcement agencies to effectively combat IUU fishing.

Target By: 2030

Description	Outputs	Indicators
The Department of Fisheries Sabah (DOFS) is engaged in inter- agency collaboration to combat illegal fishing through various initiatives, including the Enforcement Action Committee (ESSCOM), the Joint Marine Police Committee, and MARDOF. Key operations like Ops Gasak and routine Monitoring, Control, and Surveillance (MCS) by DOFS strengthen enforcement efforts. Additionally, WWF-Malaysia conducts a blast fishing monitoring program in Kudat, Tun Mustapha Park (TMP), and Semporna to aid in data collection and enhance conservation strategies.	Joint-enforcement between enforcement, government agencies and NGOs to effectively combat IUU fishing.	# of cases prosecuted under Fisheries Act 1985. # of joint enforcement operation conducted. # of cases convicted under Fisheries Act 1985.

Primary Actors:
DOFM, DOFS, MMEA

RPOA 2.0 Indicators
Output Indicator A3.1.1

TARGET A3:
Healthy and Productive Fisheries

SCIENCE, RESEARCH & MONITORING

ACTION 3:
Effective study, monitoring strategies to reduce threats and IUU fishing to marine habitat in the priority seascape

ACTIVITY 16
Implement monitoring and detection programs to curb blast fishing activities in Sabah.

Target By: 2026

Description

The use of passive and real-time blast detectors are installed around MPAs in Sabah to monitor fish bombing trends. Passive blast data is used to identify hot spot areas for enforcement presence. Real-time blast data used by agencies for effective enforcement on site.

GESI Related

Primary Actors:
Sabah Parks, WWF-MY, Reef Guardian, SIP, SOMACORE, MMEA, Marine Police

Outputs

Collection of data on the number of blast fishing occurs in MPAs and outside MPAs in monitoring fish bombing trend.

Indicators

# of active monitoring of illegal fishing activities within MPAs and outside MPAs.

RPOA 2.0 Indicators

Output Indicator A3.1.1

ACTIVITY 17
Instant reporting system from the public to enforcement authorities to report threats from fish bombing and other illegal fishing.

Target By: 2025

Description

A WhatsApp platform was established to report fish bombing activities in Sabah's water. The group includes enforcement agencies, park rangers, tour operators, and the public.

GESI Related

Primary Actors:
Sabah Parks, WWF-MY, Reef Guardian, MCS/SIP, MMEA, Marine Police, RCM

Outputs

An established platform for authorities, resort operators, and the general public to use for reporting illegal fishing activities within and outside of MPAs.

Indicators

# of communication strategies developed and implemented.

RPOA 2.0 Indicators

Output Indicator A3.1.1

TARGET A3:
Healthy and Productive Fisheries

SCIENCE, RESEARCH & MONITORING

ACTIVITY 18

Implement fisheries monitoring, control, and surveillance (MCS) through the Integrated International Vessel Monitoring System (IIVMS).

Target By: 2025

Description	Outputs	Indicators
The Integrated International Vessel Monitoring System (IIVMS) is used for fisheries monitoring, control, and surveillance (MCS). The Department of Fisheries Sabah (DOFS) has proposed installing 1,400 AIS units on Sabah's fishing vessels to monitor fishing activities and violations.	Commercial fishing in Sabah boats installed with IIVMS.	# of commercial fishing boats installed with IIVMS.

Primary Actors:
DOFS, DOFM

RPOA 2.0 Indicators

Output Indicator A3.1.1

RESTORATION & CLIMATE ADAPTATION

ACTION 4:
Fisheries habitat enhancement to increase fish biomass and CPUE for commercially important species.

ACTIVITY 19

Fisheries enhancement in Sarawak, and Sabah through the deployment of Fish Aggregating Devices (FADs).

Target By: 2030

Description	Outputs	Indicators
The annual deployment of artificial reefs and Fish Aggregating Devices (FADs), carried out in at least two areas per year, aims to increase fish biomass, enhance fishery productivity, and support sustainable livelihoods for coastal communities. GESI Related	Increases fish abundance biomass, enhances fishery productivity, restores habitats, and supports sustainable livelihoods for coastal communities.	# of FADs deployed annually. Increase % of fish abundance and biomass.

Primary Actors:
DOFM, SFC, DOFS

RPOA 2.0 Indicators

Outcome Indicator A3.1

TARGET B1

Food Security and Coastal Livelihoods

Target B1 consists of **5 actions and 15 activities** to be implemented by 2030. The focus is on enhancing capacity for alternative livelihoods, assessing the status of fisheries resources, strengthening partnerships, and promoting community-based initiatives to reduce poverty, improve food security, and support sustainable coastal fisheries.

Management and Implementation

Action 1: Community based programs to reduce hunger, poverty and increase food security are effectively pursued to improve coastal livelihood.

Science, Research and Monitoring

Action 2: Assessment of resources, needs and opportunities of sustainable livelihoods in the Priority Seascapes.

Communication, Awareness & Outreach

Action 3: Exchange knowledges, lessons learned documents to promote and share knowledge, technology, and best practices are supported/implemented for the COASTFISH.

Action 4: National efforts to enhance awareness and strengthen outreach activity.

Capacity Building

Action 5: Capacity building and alternative livelihood for sustainable coastal fisheries and poverty reductions to achieve food security and improve coastal livelihood.

TARGET B1:
Food Security and Coastal Livelihoods

MANAGEMENT & IMPLEMENTATION

ACTION 1:
Community based programs to reduce hunger, poverty and increase food security are effectively pursued to improve coastal livelihood.

ACTIVITY 1

Develop and implement the National Agrofood Policy 2021–2030 (DAN 2.0) alongside the Sabah Maju Jaya (SMJ) initiatives to strengthen agrofood programs and sustainable development in Sabah.

Target By: 2030

Description

The National Agrofood Policy 2021–2030 (DAN 2.0) seeks to build a sustainable, resilient, high-tech agrofood sector that supports economic growth, public welfare, and food security, with strategies embedded in Sabah Maju Jaya programs on agriculture, tourism, industry, human resources, infrastructure, and sustainability.

Primary Actors:
DOFM, DOFS

Outputs

DAN 2.0 builds a resilient agrofood sector with high-tech solutions, better productivity, stronger communities, and improved food and nutrition security.

Indicators

# of relevant policies on food security and sustainable livelihoods.

RPOA 2.0 Indicators

Output Indicator B1.1.2

ACTIVITY 2

Develop a comprehensive report on the Socio-ecological and Economic Impacts of Climate Change on Malaysian Fisheries and Food Security.

Target By: 2030

Description

To evaluate the current state of productivity in coastal areas and fish farming in the Malaysian South China Sea by 2050 and 2100 due to different climate and fishing scenarios and understand the economic effects of climate changes on small-scale fishers.

GESI Related

Primary Actors:
DOFM, DOFS

Outputs

A Report on Socio-ecological and Economic Impact of Climate Change on Malaysian Fisheries and Food Security.

Indicators

of the Socio-ecological and Economic Impacts of Climate Change on Malaysian Fisheries and Food Security Report.

RPOA 2.0 Indicators

Output Indicator B1.1.1.a

TARGET B1:
Food Security and Coastal Livelihoods

MANAGEMENT & IMPLEMENTATION

ACTIVITY 3

Implement eleven (11) Socioeconomic Transformation Programs in Sabah to enhance productivity, skills, income, gender and social inclusion (women and single mothers), youth participation, and the sustainability of coastal livelihoods.

Target By: 2030

Description

DOFS (2021-2024): These strategies are included in the programs under the Sabah Maju Jaya (SMJ) initiatives.

1. Local Fishermen Income Improvement – assets like boats, motors, GPS, and fishing gear.
2. Coastal Fishermen Assistance – fibreglass boats.
3. Socio-Economic Transformation – full fishing equipment for poor fishermen.
4. Marine Aquaculture Entrepreneurs 2.0 – support for small-scale and sole proprietors.
5. Crab Farming Development – eco-friendly mangrove crab culture.
6. Nutritional Info & Labeling – printing and product labels for entrepreneurs.
7. Young Agropreneurs – freshwater fish farming courses and support.
8. Aquaculture Incentives – tanks and materials for hatcheries.
9. Seaweed Empowerment – technical aid and incentives.
10. Downstream Development – processors' support.
11. Island Communities & Cottage Industry – conservation, reef care, training, and product marketing.

GESI Related

Primary Actors:
DOFS, Sabah Parks, RCM, WWF-MY, KTCS, SOMACORE

Outputs

Socioeconomic Transformation Programs (2021–2024) supported recipients through initiatives including Local and Coastal Fishermen Assistance, Poor Fishermen Support, Marine Aquaculture 2.0, Crab Farming, Nutritional Info, Product Labeling, Young Agropreneurs, Aquaculture Incentives, Seaweed Empowerment, and Downstream Industry Development, enhancing livelihoods and fostering sustainable fisheries and aquaculture growth in Sabah.

Indicators

of recipients under the Socioeconomic Transformation Program.

# of coastal communities trained and livelihoods improved.

RPOA 2.0 Indicators

Output Indicator B1.1.5

TARGET B1:

Food Security and Coastal Livelihoods

MANAGEMENT & IMPLEMENTATION

ACTIVITY 4

Implement ecotourism-based capacity-building training (Mate Domestic <500GT course) for marine park communities in Kedah and Terengganu.

Target By: 2024

Description

This training is an alternative livelihood aside from engaging in fishing activities in the marine protected area.

GESI Related

Primary Actors:
DOFM

Outputs

The # of participants in this training was 16 in 2023, while 45 people participated in 2024.

Indicators

# of capacity assessment Reports prepared.

RPOA 2.0 Indicators

Output Indicator B1.1.1.a

ACTIVITY 5

Develop and implement marine aquaculture initiatives as alternative livelihoods for coastal communities.

Target By: 2027

Description

This project is from 2024–2027, transfers aquaculture knowledge to coastal communities through seminars, training, awareness, and rearing support, aiming to diversify incomes, create jobs, enhance responsible aquaculture practices, and evaluate program SROI.

GESI Related

Primary Actors:
DOFS, UMS

Outputs

Involvement of aquaculture operators (private) in Research and Development work to improve fisheries productivity, increase capacity in marine aquaculture activities, and increase marine conservation awareness for local communities.

Indicators

# of aquaculture operators (large or small operated) involved in the project.

RPOA 2.0 Indicators

Output Indicators B1.1.1

TARGET B1:

Food Security and Coastal Livelihoods

MANAGEMENT & IMPLEMENTATION

ACTIVITY 6

Assessment of current national and local government and private sector economic and social development support programs and fishery livelihoods and enterprise programs to identify sources of assistance.

Target By: 2030

Description

Projects funded to support the implementation of the COASTFISH regional framework to assess inter-agency initiatives for economic and social development programs and fishery livelihoods.

GESI Related

Primary Actors:
DOFS, NGOs, UMS, SOMACORE

Outputs

Assessment report of inter-agency initiatives for economic and social development programs and fishery livelihoods to support the implementation of the COASTFISH regional framework.

Indicators

of Projects funded report to support the implementation of the COASTFISH regional framework.

RPOA 2.0 Indicators

Output Indicator B1.1.1.a

TARGET B1:
Food Security and Coastal Livelihoods

SCIENCE, RESEARCH & MONITORING

ACTION 2:
Assessment of resources, needs and opportunities of sustainable livelihoods in the Priority Seascapes

ACTIVITY 7
Document daily fish landings and Catch Per Unit Effort (CPUE) in Tun Mustapha Park and Mabul Island using a citizen science approach.

Target By: 2030

Description
Fisheries data collection is essential to understand the accessibility, availability, and utilization of food by coastal communities. Data are categorized into own consumption and market use. By empowering local communities to participate in data collection and resource management, Tun Mustapha Park and Mabul Island can enhance food security, promote sustainable fisheries, and improve marine ecosystem health. This integrated approach fosters resilience in coastal communities, securing livelihoods while conserving vital marine resources.

GESI Related

Primary Actors:
DOFS, Sabah Parks, WWF-MY, SOMACORE

Outputs
Data on seafood caught and available for coastal communities for their consumption and market.

Indicators
Increasing trend in # of accessibility, availability and utilization of food from marine and coastal resources for coastal communities through fisheries data collection.

RPOA 2.0 Indicators
Output Indicator B1.1.1.a

TARGET B1:
Food Security and Coastal Livelihoods

SCIENCE, RESEARCH & MONITORING

ACTIVITY 8

Conduct scoping studies and produce public consultation reports under the Small-Scale Fisheries Project (SSFP).

Target By: 2030

Description

A scoping study was conducted in selected Banggi Island villages to understand the available resources, issues and challenges, and fisheries gaps. Public consultations were conducted to discuss and understand the issues in depth with the communities, which were then used to develop a community management plan.

GESI Related

Primary Actors:
DOFS, WWF-MY, Local District Office

Outputs

Scoping study report and findings .consisting of resources available, issues and challenges, and fisheries gaps are identified.

Indicators

# of complete study identified resources, needs, opportunities for sustainable livelihoods and enterprises in targeted coastal areas.

RPOA 2.0 Indicators

Output Indicator B1.1.2

ACTIVITY 9

Assess livelihood opportunities, resource requirements, and environmental conditions in targeted coastal areas as part of the COASTFISH regional framework.

Target By: 2030

Description

The COASTFISH project supports implementation of the regional COASTFISH framework by assessing resource needs, livelihood opportunities, and environmental conditions in targeted coastal areas. This ensures livelihood development reflects community capacities while identifying new opportunities for sustainable income generation.

GESI Related

Primary Actors:
DOFS, NGOs, UMS, SOMACORE

Outputs

Successful COASTFISH implementation delivers community-driven livelihood models, new opportunities, improved food security, stronger incomes, and sustainable resource management in coastal areas.

Indicators

# of Projects funded to support the implementation of the COASTFISH regional framework.

RPOA 2.0 Indicators

Output Indicator B1.1.1.a

TARGET B1:

Food Security and Coastal Livelihoods

SCIENCE, RESEARCH & MONITORING

ACTIVITY 10

Continuously monitor weather and marine conditions, providing early warnings for extreme events.

Target By: 2030

Description

Provide continuous forecasts of weather and sea conditions, along with timely early warnings, to ensure the safety, security, and well-being of communities and stakeholders involved in socio-economic marine activities.

Primary Actors:
Malaysian Meteorological Department

Outputs

Real-time weather forecasts and early warning alerts for local communities and public.

Indicators

# of real-time forecasts of extreme weather.

RPOA 2.0 Indicators

Output Indicator B1.1

ACTIVITY 11

Marine Sand Resource Study Phase 3B in Offshore Areas of Kelantan and Terengganu.

Target By: 2024

Description

This activity involves a fish trawling survey across 18 transect lines, with environmental sampling at each start and end point. Data collected include fish biomass, species identification (commercial and non-commercial), and yield composition to assess stock exploitation by life stage (juvenile or adult).

GESI Related

Primary Actors:
Department of Mineral and Geoscience, DOFM, FRI

Outputs

The survey produces documentation and report on fish biomass, species composition, commercial and non-commercial yields, and stock exploitation by life stage across survey areas.

Indicators

# of report produced from the study.

RPOA 2.0 Indicators

Output Indicator B1.1.1.a

TARGET B1:
Food Security and Coastal Livelihoods

COMMUNICATION, AWARENESS & OUTREACH

ACTION 3:
Exchange knowledges, lessons learned documents to promote and share knowledge, technology, and best practices are supported/implemented for the COASTFISH

ACTIVITY 12
Develop and conduct seminars, workshops, exchange visits, online platforms, and lessons-learned documents to promote knowledge sharing, technology transfer, and best practices under the COASTFISH regional framework.

Target By:
2025

Description
Support and implement relevant activities to enhance regional collaboration and information dissemination based on the COASTFISH regional framework.

GESI Related

Primary Actors:
DOFS, SOMACORE

Outputs
Outputs include conducted seminars, workshops, exchange visits, developed online platforms, and lessons-learned documents to enhance COASTFISH knowledge sharing and technology transfer.

Indicators
Outputs include conducted seminars, workshops, exchange visits, developed online platforms, and lessons-learned documents to enhance COASTFISH knowledge sharing and technology transfer.

RPOA 2.0 Indicators
Outcome Indicator B1.1.2

TARGET B1:
Food Security and Coastal Livelihoods

COMMUNICATION, AWARENESS & OUTREACH

ACTION 4:
National efforts to enhance awareness and strengthen outreach activity

ACTIVITY 13
Learning exchanges community empowered for marine governance and increase the percentage of LMMA.

Target By: 2028

Description

Facilitate learning exchanges and promote community innovation sites to strengthen peer learning, local adaptation, and conservation knowledge-sharing across community-managed marine areas.

GESI Related

Primary Actors:
WWF-MY, Sabah Parks

Outputs

Enhance local community empowerment for marine governance and increase the number of LMMA.

Indicators

# of learning exchange.

# of community participate in the exchange.

RPOA 2.0 Indicators

Output Indicator B1.1.2.a

TARGET B1:
Food Security and Coastal Livelihoods

CAPACITY BUILDING

ACTION 5:
Capacity building and alternative livelihood for sustainable coastal fisheries and poverty reductions to achieve food security and improve coastal livelihood

ACTIVITY 14
Project Sea, Science and Schools: Building capacity of local youths.

Target By: 2030

Description

This activity provides capacity training for local youths in Langkawi to become nature guides, offering alternative livelihood opportunities.

GESI Related

Primary Actors:
MareCet

Outputs

Trained local youths as certified nature guides, enhancing livelihoods, promoting ecotourism, strengthening conservation awareness.

Indicators

# of youth received capacity training.

RPOA 2.0 Indicators

Output Indicator B1.1.4

ACTIVITY 15
Implementation of livelihood enhancement initiatives for communities in TMP-Pitas and Semporna, alongside technical capacity support for community-based enterprises.

Target By: 2031

Description

Conduct Sustainable Livelihood Framework (SLF) training for community-based enterprises to improve their understanding of gaps, potential opportunities, and strategies for strengthening sustainable livelihoods.

GESI Related

Primary Actors:
WWF-MY, Sabah Parks

Outputs

- Sustainable Livelihood Framework Training Report
- Trained participants, improved SLF knowledge, identified livelihood gaps, recognised opportunities, strengthened enterprises, and enhanced sustainability.

Indicators

# of training report.

# of participants trained and demonstrating improved SLF knowledge.

RPOA 2.0 Indicators

Output Indicator B1.1.4

TARGET B2

Gender Equality and Social Inclusion (GESI)

In the Gender Equality and Social Inclusion, there are **3 actions and 4 activities** to be implemented by 2030. This includes integrating GESI in CTI-CFF efforts, assessing CEPA impact, and leveraging CEPA strategies strengthen stakeholder understanding, promote inclusion, and enhance equitable, sustainable marine conservation across the Coral Triangle.

Policy, Legislation & Regulations

Action 1: Integrating GESI into CTI TWG activities ensures that marine conservation efforts are inclusive, equitable, and responsive to the diverse needs of all stakeholders, enhancing both environmental sustainability and community resilience across the Coral Triangle.

Science, Research and Monitoring

Action 2: Assessing the impact of CEPA initiatives on enhancing GESI policy understanding among key CTI- CFF stakeholders.

Communication, Awareness & Outreach

Action 3: Leverage Communication, Education, and Public Awareness (CEPA) strategies to raise awareness and foster a deeper understanding of Gender Equality and Social Inclusion (GESI) principles among key stakeholders in the CTI-CFF.

TARGET B2:

Gender Equality and Social Inclusion (GESI)

POLICY, LEGISLATION & REGULATIONS

ACTION 1:

Integrating GESI into CTI TWG activities ensures that marine conservation efforts are inclusive, equitable, and responsive to the diverse needs of all stakeholders, enhancing both environmental sustainability and community resilience across the Coral Triangle.

ACTIVITY 1

Integrating Gender Equality and Social Inclusion (GESI) into CTI Technical Working Group Meetings and activities.

Target By: 2030

Description

This activity integrates Gender Equality and Social Inclusion (GESI) into CTI TWG meetings, promoting inclusive decision-making in Malaysia's conservation policies. By embedding GESI agendas, fostering awareness, and building capacity, it ensures diverse groups women, youth, persons with disabilities, and marginalized communities—are recognized, strengthening equity and sustainable resource management strategies.

Primary Actors:
NCC, All TWGs

Outputs

GESI principles guide NCC MY TWG decisions, ensuring women, youth, persons with disabilities, and marginalized groups' participation, advancing inclusive, equitable marine resource management.

Indicators

# of evidence/reports by NCC and Partners' are captured/ prepared on GESI Policy being socialized, mainstreamed and implemented by the NCCs.

RPOA 2.0 Indicators

Output indicator B2.1.1.a

TARGET B2:

Gender Equality and Social Inclusion (GESI)

POLICY, LEGISLATION & REGULATIONS

ACTIVITY 2

Development and Implementation of Practical Tools for Systematic Gender and Social Group Data Collection and Analysis.

Target By: 2026

Description

This activity develops and integrates tools for collecting and analyzing gender- and social group-disaggregated data. By 2026, these tools will inform monitoring, reporting, and decision-making, strengthening inclusive, data-driven policies and programs for equitable resource allocation and sustainable outcomes.

Primary Actors:
NCC, Universities

Outputs

By 2026, practical tools for collecting and analyzing gender and social data will support TWG monitoring, reporting, and decision-making.

Indicators

# of practical tools for systematic gender and social data collection and analysis are developed and mainstreamed.

RPOA 2.0 Indicators

Output Indicator B2.1.1.c

TARGET B2:

Gender Equality and Social Inclusion (GESI)

SCIENCE, RESEARCH & MONITORING

ACTION 2:

Assessing the impact of CEPA initiatives on enhancing GESI policy understanding among key CTI- CFF stakeholders.

ACTIVITY 3

Survey-Based Assessment of Increased Understanding and Awareness of GESI Policies Among NCCs and Implementing Agencies in Malaysia through CEPA Initiatives.

Target By: 2030

Description

This activity conducts surveys to evaluate CEPA initiatives' effectiveness in raising awareness of CTI GESI Policy among NCCs and agencies. By measuring knowledge before and after CEPA, it identifies gaps, informs strategies, and strengthens GESI integration in decision-making for inclusive, equitable marine resource management in the Coral Triangle.

Primary Actors:
NCC, Universities, NGOs, TWG agencies

Outputs

Surveys show increased GESI policy awareness among NCC MY and agencies post-CEPA, highlighting knowledge gains and remaining integration gaps.

Indicators

of surveys that indicate increased understanding and awareness of NCC MY and implementing agencies.

RPOA 2.0 Indicators

Output Indicator B2.1.1.d

TARGET B2:

Gender Equality and Social Inclusion (GESI)

COMMUNICATION, AWARENESS & OUTREACH

ACTION 3:

Leverage Communication, Education, and Public Awareness (CEPA) strategies to raise awareness and foster a deeper understanding of Gender Equality and Social Inclusion (GESI) principles among key stakeholders in the CTI-CFF.

ACTIVITY 4

Implementation of Communication, Education, and Public Awareness (CEPA) Activities to Enhance GESI Understanding in the CTI-CFF during CT Day.

Target By: 2030

Description

This activity organizes CEPA events during CT Day to raise awareness of GESI within CTI-CFF. Through workshops and capacity-building, it engages officials, communities, youth, and marginalized groups, promoting inclusive decision-making and highlighting GESI's role in effective, sustainable marine and coastal resource management across the Coral Triangle.

Primary Actors:
NCC, Universities, NGOs, TWG agencies

Outputs

CT Day CEPA activities conducted, including events, workshops, and training, increased GESI awareness among officials, communities, youth, and marginalized groups.

Indicators

# of Communication, Education and Public Awareness (CEPA), activities/ events/capacity building programs in Malaysia during CT Day.

RPOA 2.0 Indicators

Output Indicator B2.1.1.d

TARGET B3

Climate-Resilient Communities

Target B3 consists of **4 actions and 27 activities** aimed at building climate-resilient communities by conducting vulnerability assessments, increasing awareness and adaptive capacity, promoting best practices, and expanding marine habitat rehabilitation and restoration to mitigate climate change impacts.

Management and Implementation

Action 1: Availability of best practices report /guideline to prove that the coastal communities are resilient and adapt to climate change-related risks.

Science, Research and Monitoring

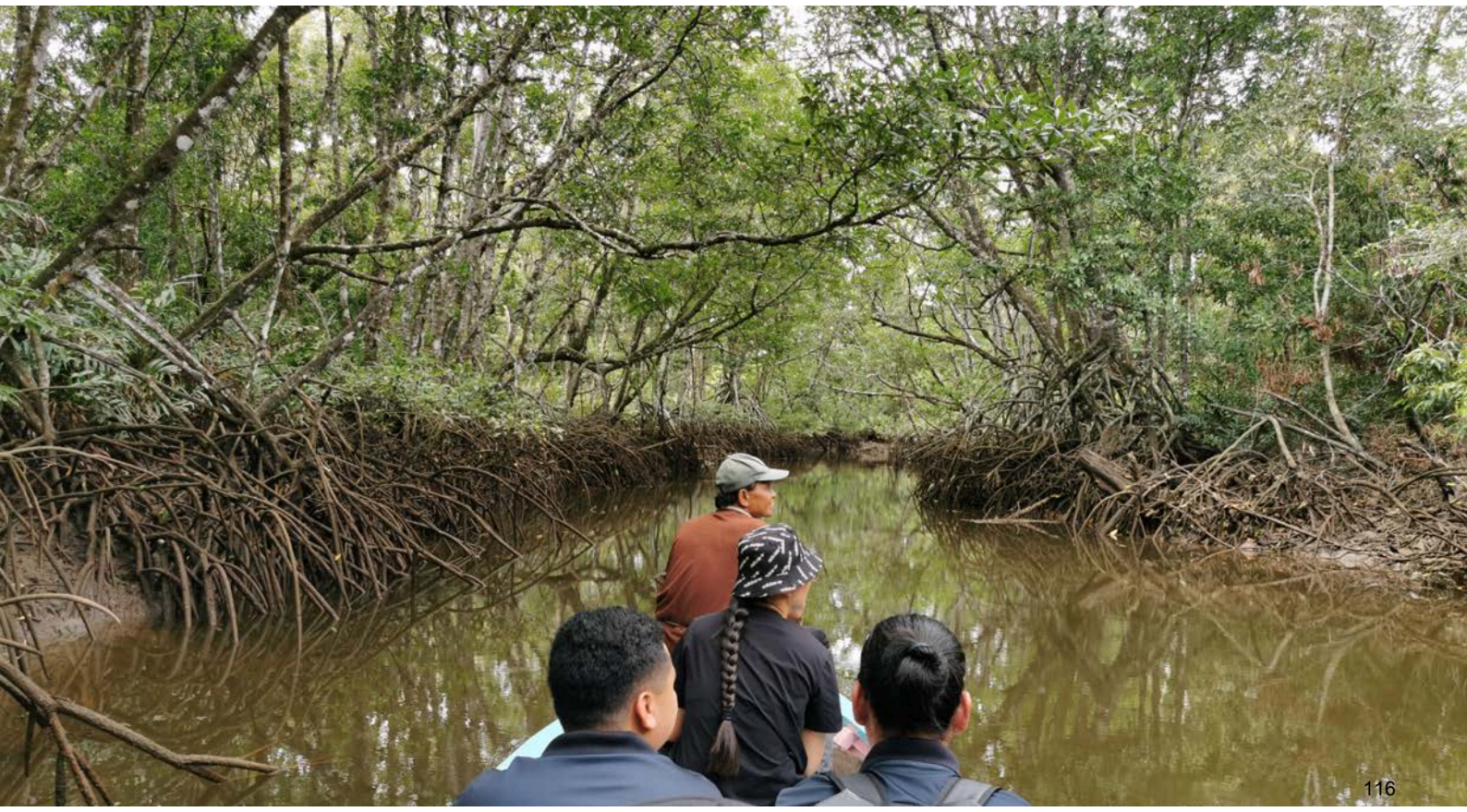
Action 2: Comprehensive vulnerability assessments are carried out to identify vulnerability levels of the coastal environment and small-islands ecosystems.

Communication, Awareness and Outreach

Action 3: Relevant awareness, training and outreach program designed for stakeholders to strengthen levels of adaptive capacity and resilient to climate change.

Restoration and Climate Adaptation

Action 4: Increase marine habitats coverage to mitigate climate change through habitats rehabilitation and restoration.



TARGET B3:
Climate-Resilient Communities

MANAGEMENT & IMPLEMENTATION

ACTION 1:
Availability of best practices report /guideline to prove that the coastal communities are resilient and adapt to climate change-related risks.

ACTIVITY 1

Formulate a National Coastal Policy through data compilation, environmental assessment, and guideline development to ensure climate-resilient and sustainable coastal development.

Target By: 2030

Description	Outputs	Indicators
Provide information on existing policies for coastal and marine environments, such as coastal erosion control, coastal area development, mining activities, coastal environmental conservation, beach tourism, etc., from various government agencies. This study will consider development and activities that may disrupt natural coastal resources and recovery plans. **GESI Related**	The National Coastal Policy Study Report.	# of reports produced.

Primary Actors:
NRES, PETRA, DID, State Governments, Universities

RPOA 2.0 Indicators

Outcome Indicators B3.1

ACTIVITY 2

Document and share coastal community best practices for climate change adaptation.

Target By: 2030

Description	Outputs	Indicators
Compile information from coastal communities that have implemented climate actions and document them as best practices for climate change adaptation. **GESI Related**	Best practice report for the climate change adaptation.	# of reports produced.

Primary Actors:
NRES, UMS, SFD (Sabah Climate Change Council), District offices, and WWF–MY

RPOA 2.0 Indicators

Outcome Indicators B3.1

TARGET B3:
Climate-Resilient Communities

MANAGEMENT & IMPLEMENTATION

ACTIVITY 3

Produce and submit the Nationally Determined Contribution (NDC) Biennial Update Report (BUR) to the UNFCCC.

Target By: 2025

Description

The report is a biennial publication, with the last submission in 2022. The report contains a comprehensive TWG Vulnerability and Adaptation assessment based on the critical sectors of the CCIA, including sea level rise (with saltwater intrusion as a new addition), water resources, infrastructure, aquaculture, forestry, and public health.

GESI Related

Primary Actors:
NRES, SFD (Climate Change Council), NAHRIM, JPSM, MOH

Outputs

- Accurate GHG (Greenhouse Gas) reporting, showcasing mitigation efforts, tracking.
- NDC progress, documenting adaptation strategies, building capacity and technology transfer, enabling access to climate finance, and ensuring ETF compliance.

Indicators

of Biennial Report to UNFCCC.

RPOA 2.0 Indicators

Output Indicators B3.1.1

ACTIVITY 4

Implementation of Climate Change Action Plan for the Fisheries Sector 2024–2030.

Target By: 2030

Description

The Climate Change Action Plan for the Fisheries Sector 2024–2030 provides a strategic framework to strengthen the resilience of Malaysia's fisheries to climate change. Aligned with national policies (NCCP 2.0, MyNAP) and international commitments (Paris Agreement, SDGs), the plan focuses on assessing climate risks, safeguarding food security, building adaptation and mitigation strategies, integrating climate-resilient approaches into fisheries management, and strengthening institutional capacity, research, and stakeholder participation.

GESI Related

Primary Actors:
DOFM

Outputs

- Risk and vulnerability assessments conducted through scientific studies on the impacts of sea level rise, warming seas, and ocean acidification on fisheries, aquaculture, and habitats (coral reefs, mangroves, seagrass).
- Capacity building delivered through training modules, workshops, and extension services for fishers, aquaculture operators, and local communities.

Indicators

of program/training/activities carried out.

# of research and publication related to the plan.

Total # of fund supporting the plan.

RPOA 2.0 Indicators

Output Indicators B3.1.1

TARGET B3:
Climate-Resilient Communities

MANAGEMENT & IMPLEMENTATION

ACTIVITY 5

Enforcing Sabah Climate Change and Carbon Governance Enactment 2025.

Target By: 2030

Description

In July 2025, Sabah passed the Climate Change and Carbon Governance Enactment 2025 to regulate carbon-related activities, greenhouse gas reporting, carbon rights, and carbon credits, as well as to establish institutions and frameworks for climate governance at the state level. This project is enforcing the enactment by supporting its implementation and strengthening compliance mechanisms.

GESI Related

Primary Actors:
Sabah Climate Action Council (SCAC)

Outputs

- Legal frameworks and regulations established for carbon rights, carbon credits, and GHG reporting.
- State carbon inventory reports and emission baselines produced.

Indicators

# of frameworks & regulations.

# of carbon inventory report.

RPOA 2.0 Indicators

Output Indicators B3.1.2

Output Indicators B3.1.1

ACTIVITY 6

Integrating National Nature-Based Solutions (NbS) into Coastal Dynamics and Climate Adaptation Frameworks.

Target By: 2030

Description

Implementation of ecosystem-based adaptation through mangrove, seagrass, and coral restoration across Malaysia Coastal landscapes and identified location.

GESI Related

Primary Actors:
JPSM, FRIM, DID, NAHRIM, Mangrove Alliance Network, Universities

Outputs

- Creating a pilot NbS projects at high-risk coastal zones.
- Policy briefs to scale up scaling NbS into National Coastal Management.

Indicators

# of NbS pilot sites established and integrated into state or national coastal management.

RPOA 2.0 Indicators

Outcome Indicators B3.1

TARGET B3:
Climate-Resilient Communities

SCIENCE, RESEARCH & MONITORING

ACTION 2:
Comprehensive vulnerability assessments are carried out to identify vulnerability levels of the coastal environment and small-islands ecosystems

ACTIVITY 7

Compiling data from various stakeholders, assessing and formulating guidelines for coastal development, depending on the environmental status, and considering the impact of increasing sea water levels on coastal communities and development.

Target By: 2030

Description	Outputs	Indicators
To determine sensitive areas, climate-change sensitive areas along the coastline of Sabah. In addition, another Sabah SMP is ongoing, including the development of an updated National Coastal Erosion (the previous version was completed in 2015) by the Department of Drainage and Irrigation, Malaysia. **GESI Related**	Sabah Shoreline Management Plan produce.	# of reports produced.

Primary Actors:
EPD

RPOA 2.0 Indicators

Outcome Indicator B.3.2.1

TARGET B3:
Climate-Resilient Communities

SCIENCE, RESEARCH & MONITORING

ACTIVITY 8

Map a sustainable future for coastal communities in Kota Belud District by harnessing biodiversity and science to improve livelihoods.

Target By: 2030

Description

This activity aims to enhance the livelihoods of local communities by promoting sustainable, climate-resilient tourism that leverages existing marine resources, supports ecosystem conservation, and strengthens community adaptation to climate change impacts.

GESI Related

Primary Actors:
NRES, UMS, Private sectors

Outputs

Local marine habitats and resources identified to enhance community knowledge, capacity, and livelihoods through sustainable resource management.

Indicators

of community resilience and adaptation programs implemented.

% of coastal community members reporting improved capacity to adapt to climate change impacts.

RPOA 2.0 Indicators

Output Indicators B3.1.4

ACTIVITY 9

Malaysia Sea Level Rise Monitoring Network (MySLR).

Target By: 2030

Description

An ongoing program is providing a long-term database on tidal oscillations and key oceanographic parameters across Malaysia's major seas, alongside a nationwide monitoring network to track sea level rise.

Primary Actors:
PETRA (NAHRIM), NRES

Outputs

- Establish a dedicated primary oceanographic database for monitoring nearshore conditions at strategic locations across Malaysian seas.
- Collect real-time data on tidal patterns, anomalies, and storm surge events.

Indicators

number of monitoring stations established and operational.

The availability of open-access sea level data for stakeholders.

RPOA 2.0 Indicators

Output Indicators B3.1.2

TARGET B3:
Climate-Resilient Communities

SCIENCE, RESEARCH & MONITORING

ACTIVITY 10

National Climate Change Impacts on Marine Resources Habitats.

Target By: 2030

Description

Assessing vulnerability to temperature rise, acidification, and sedimentation through Numerical Modelling Tools / Approaches.

GESI Related

Primary Actors:
NRES, DOF, NAHRIM, Universities, NGOs

Outputs

- The database of seagrass health and distribution.
- Technical reports on climate stress impacts.

Indicators

- The number of seagrass sites assessed and findings incorporated into national management plans e.g MyNAP and TWG for CCA frameworks.
- National Report for COBSEA, UNFCCC and IOC-WESTPAC updates.

RPOA 2.0 Indicators

Output Indicators B3.1.2

TARGET B3:
Climate-Resilient Communities

SCIENCE, RESEARCH & MONITORING

ACTIVITY 11

Establish a Knowledge Hub for Climate Change Adaptation in the Coral Triangle to capture lessons learned and guide regional and national programs.

Target By: 2030

Description

The Knowledge Hub Initiative for Climate Change Adaptation in the Coral Triangle establishes and updates knowledge platforms that capture lessons from national and regional exchanges. It provides practitioners, policymakers, and stakeholders with best practices, case studies, and actionable guidance, supporting the integration of climate adaptation insights into programs and promoting informed decision-making and resilience across the region.

GESI Related

Primary Actors:
NRES, NAHRIM, PETRA, Universities, NGOs

Outputs

- Develop and update digital and physical platforms to capture and share lessons learned.
- Provide practical guides and case studies with actionable climate adaptation strategies.
- Conduct seminars and hands-on training for regional and national stakeholders.
- Facilitate partnerships and communication among national focal points and stakeholders.
- Document and assess program activities and the impact of knowledge-sharing on adaptation efforts.

Indicators

of knowledge management platforms are developed and updated, and activities implemented.

# of workshops conducted.

# of participants trained.

RPOA 2.0 Indicators

Output Indicators B3.1.4

Output Indicator B3.1.1.b

TARGET B3:
Climate-Resilient Communities

SCIENCE, RESEARCH & MONITORING

ACTIVITY 12

Research climate change and its effects toward the sea and the equator.

Target By: 2030

Description

Research investigates how climate change affects equatorial marine environments and ecosystems, including changes in sea surface temperature (SST), ocean warming, sea level rise, acidification, deoxygenation, and impacts on biodiversity such as coral reefs, mangroves, and seagrasses, while also examining how equatorial processes like heat distribution and currents may amplify or buffer these effects.

GESI Related

Primary Actors:
NRES

Outputs

- Peer-reviewed publications on the studies quantifying SST changes, sea level rise, acidification, and other equatorial ocean changes.
- Vulnerability and risk assessments Reports on equatorial coastal communities' exposure to sea level rise, erosion, and fisheries loss.

Indicators

# of reports/journals.

# of Workshops or stakeholder engagements with local communities, governments, Universities, NGOs in equatorial zones to present findings, get feedback, ensure usability.

RPOA 2.0 Indicators

Output Indicators B3.1.1

ACTIVITY 13

Produce a comprehensive study on the impact of storm surges on nearshore dynamics in Malaysian seas, assessing coastal vulnerabilities and formulating mitigation strategies.

Target By: 2030

Description

This activity involves conducting a nearshore risk assessment for Malaysia's coastal areas, which will be presented at the 13th Malaysia Plan (RMK13) meeting. The assessment considers morphological features and dynamic coastal oceanographic processes and includes storm surge hazard maps, storm surge forecast models, scenario-based impact projections, infrastructure and critical asset impact assessments, and climate change impact analyses on storm surges.

Primary Actors:
NRES, NADMA, NHC, DID, NAHRIM, DOFM, Universities, NGOs

Outputs

Surge hazard maps, forecast models, scenario-based impact projections, assessments of infrastructure and critical assets, climate change impact analyses, technical reports and policy briefs, and data sets to support coastal risk management and decision-making.

Indicators

# of reports and documents produced and submitted to the Regional Secretariat.

RPOA 2.0 Indicators

Output Indicators B3.1.1

TARGET B3:
Climate-Resilient Communities

SCIENCE, RESEARCH & MONITORING

ACTIVITY 14

Deploy reputable oceanographic sensors to complete the mapping and monitoring of Malaysia's nearshore seas, generating reliable data to support research, coastal management, and policy development.

Target By: 2030

Description

As a maritime nation, Malaysia is highly vulnerable to the effects of climate change. Addressing and mitigating these impacts requires a robust system to monitor and understand the physical processes in its coastal and oceanic regions. Physical oceanographic sensors are essential for building a comprehensive climate change database and repository, a program that began in 2018. The Nationally Determined Contribution (NDC) platform facilitates data sharing among members, including the Malaysian National Oceanographic Data Centre (MyNODC), JTMM (Jawatankuasa Teknikal Marin), MyGDI, PHN, the Southeast Asia Disaster Prevention Research Initiative (SEADPRI-UKM), the Regional Integrated Multi-Hazard Early Warning System (RIMES), and Mangrove and Wetland Restoration Initiatives.

Primary Actors:
NRES, PETRA (NAHRIM), PHN, DID, DOFM, JAS, Universities, NDC

Outputs

The primary database for wave and current data, as well as physical water quality parameters, covering sites in the Andaman Sea (Kuala Sala, Penang), Strait of Malacca (Port Dickson, Pulau Pisang), South China Sea (Terengganu, Desaru, Labuan, Semantan, Mukah), Sulu Sea (Sandakan), and Celebes Sea (Mabul).

Indicators

reports and documents produced and submitted to the Regional Secretariat.

RPOA 2.0 Indicators

Output Indicators B3.1.1

TARGET B3:
Climate-Resilient Communities

SCIENCE, RESEARCH & MONITORING

ACTIVITY 15

Conduct an assessment of climate change impacts in the coastal areas of Sabah to identify vulnerabilities, risks, and appropriate adaptation measures.

Target By: 2030

Description

Assessment of climate change impacts on the landscape of Sabah and its projection in the coming years.

GESI Related

Primary Actors:
NRES, Universities, Forever Sabah, WWF-MY

Outputs

Identify vulnerable areas to rising seawater levels and seawater temperature increases.

Indicators

# of round Table Discussion.

# of assessment report.

RPOA 2.0 Indicators

Outcome Indicator B.3.2.1

ACTIVITY 16

Implement climate change vulnerability assessment tools to evaluate the resilience of fisheries within Tun Mustapha Park.

Target By: 2030

Description

Utilizing tools developed at the regional level and applying tool locally.

GESI Related

Primary Actors:
NRES, Universities, WWF-MY, District Office, EPD

Outputs

Vulnerability assessment for TMP on targeted social and ecological resources.

Indicators

# of adaptive capacity assessments have been conducted.

RPOA 2.0 Indicators

Outcome Indicator B.3.2.1

TARGET B3:
Climate-Resilient Communities

SCIENCE, RESEARCH & MONITORING

ACTIVITY 17

Conduct coastal Vulnerability Assessment for adaptivity capacity of coastal community at CTI scientific boundary area.

Target By: 2030

Description

Preliminary study on coastal vulnerability at selected marine park islands in Sabah, including a case study of Sipadan Island Park, Turtle Islands Park (Gulisaan, Bakkungaan, Selingaan), and Tunku Abdul Rahman Islands Park (Manukan, Mamutik, Sapi).

GESI Related

Primary Actors:
NRES, UMS, Sabah Parks

Outputs

Conducted coastal vulnerability assessments on the shorelines of seven (7) selected marine protected area (MPA) islands.

Indicators

# of assessment Coastal Vulnerability report.

RPOA 2.0 Indicators

Outcome Indicator B.3.2.1

ACTIVITY 18

Adaptation capacity assessment conducted together with the coastal community in Mabul island to see the impact of the implementation of climate action based on the CCA-Local Early Action Plan.

Target By: 2030

Description

Utilizing tools developed at the regional level and applying them locally. The application of tools were applied at several coastal areas of Sabah.

GESI Related

Primary Actors:
NRES, WWF-MY, District Office, EPD, Universities

Outputs

Develop toolkits with best practices that are suitable for the island community in Sabah to ease the replication to other island communities.

Indicators

number of area adaptive capacity assessments have been conducted.

number of published papers/abstracts on vulnerability index and adaptation assessments and Climate Change Adaptation initiatives.

RPOA 2.0 Indicators

Outcome Indicator B.3.2.1

TARGET B3:
Climate-Resilient Communities

SCIENCE, RESEARCH & MONITORING

ACTIVITY 19

Support two coastal communities—Mabul, Semporna, and Batu Sirih, Balambangan—in implementing resilience and adaptation programs to strengthen their adaptive capacity, in collaboration with WWF-Malaysia

Target By: 2030

Utilizing tools developed at the regional level and applying them locally.

GESI Related

Primary Actors:
NRES, Universities, WWF-MY, District Office, EPD

Adaptive capacity assessment report for the island community in Sabah to ease the replication to other island communities.

#of adaptive capacity assessments have been conducted.

RPOA 2.0 Indicators

Outcome Indicator B.3.2.1

TARGET B3:
Climate-Resilient Communities

COMMUNICATION, AWARENESS & OUTREACH

ACTION 3:
Relevant awareness, training and outreach program designed for stakeholders to strengthen levels of adaptive capacity and resilient to climate change

ACTIVITY 20

Develop and implement a series of capacity-building and awareness programs and activities with relevant stakeholders on the importance of integrating GESI into CCA initiatives based on CTI GESI Policy.

Target By: 2030

Description

This activity designs and implements capacity-building workshops, training, and awareness campaigns to integrate Gender Equality and Social Inclusion (GESI) into Climate Change Adaptation (CCA) strategies. Targeting government agencies, community leaders, civil society, and the private sector, the programs aim to build stakeholder capacity to address GESI in CCA, raise awareness on its benefits for vulnerable groups and resilience, and encourage collaboration through platforms for dialogue and joint action.

GESI Related

Primary Actors:
NRES, Universities, NGOs, and Regional Partners.

Outputs

- Stakeholder capacity strengthened through workshops, training modules, and practical tools on GESI–CCA integration.
- Awareness raised through campaigns and outreach materials, with documented reach and engagement.
- Collaboration and knowledge sharing enhanced through platforms, best practices, and case study documentation.
- Monitoring and learning supported through participant feedback and activity reports.

Indicators

of CCA initiatives and projects that integrate gender mainstreaming guided by GESI policy.

# of stakeholders trained on GESI–CCA integration.

# of awareness materials produced and campaign reach achieved.

# of collaboration platforms established and actively used.

RPOA 2.0 Indicators

Output Indicators B3.1.2

Output Indicator B3.1.1.a

TARGET B3:
Climate-Resilient Communities

COMMUNICATION, AWARENESS & OUTREACH

ACTIVITY 21

Conduct training and seminars on blue carbon ecosystems (seagrass and mangroves) to promote awareness and strengthen their role in climate change mitigation.

Target By: 2030

Description

Blue carbon awareness and education program on climate change mitigation. Develop infographics on the importance of seagrass in carbon sequestration based on scientific knowledge (science communication) and conduct training and seminar to highlight the transboundary importance of seagrass.

GESI Related

Primary Actors:
NRES, Sabah Parks, Universities, NGOs

Outputs

Infographic materials produced and cross-promoted through social media platforms.

Indicators

Number of stakeholders trained on climate change adaptation through courses, workshops, and programs.

Percentage of trained participants reporting improved knowledge and skills on climate change adaptation.

RPOA 2.0 Indicators

Output Indicator B3.1.1.a

ACTIVITY 22

Conduct training and consultation on mangrove nursery management, species identification, and restoration/rehabilitation techniques to enhance conservation capacity.

Target By: 2030

Description

Training and consultations on mangrove nursery practices, species identification, and restoration/rehabilitation for stakeholders, private companies, academic institutions, and coastal communities.

GESI Related

Primary Actors:
NRES, Sabah Parks, SFD, Universities, NGOs

Outputs

Three to five training sessions on mangrove nursery practices, species identification, and restoration/rehabilitation conducted annually for stakeholders, private companies, academic institutions, and coastal communities.

Indicators

Number of adaptation courses, trainings, and programs designed.

Number of participants trained on climate change adaptation.

RPOA 2.0 Indicators

Outcome Indicator B.3.2.1

TARGET B3:
Climate-Resilient Communities

COMMUNICATION, AWARENESS & OUTREACH

ACTIVITY 23

Implement capacity building on Climate Change Impact Assessment focusing on hydrodynamics, oceanography, big data analysis, and AI for climate prediction.

Target By: 2030

Description	Outputs	Indicators
Conduct Training of Trainers (TOT) for implementing agencies and park managers on coastal morphological processes and citizen science as climate action advocacy.	Numerical modeling tools developed and applied for climate change impact assessment, including automated coastal erosion analysis, climate impact prediction, scenario-based risk assessment, AI-driven management and resilience planning, and big data integration for coastal monitoring.	# of park manager trained. # Number of numerical modeling tools developed and applied for coastal climate impact assessment. # Number of coastal risk scenarios and predictions generated using AI and big data integration.

GESI Related

Primary Actors:
NRES, NAHRIMSabah Parks, Universities, NGOs

RPOA 2.0 Indicators

Output Indicator B3.1.1.a

TARGET B3:
Climate-Resilient Communities

COMMUNICATION, AWARENESS & OUTREACH

ACTIVITY 24

Conduct an annual Ocean Celebration month to increase climate change awareness to stakeholders, local communities, and publics.

Target By: 2030

Description

An annual Ocean Celebration month to be conducted in UMS to celebrate Coral Triangle Day, and World Sea Turtle Day to increase awareness on climate change, and marine conservation. The event involves exhibitions, talks, beach and underwater clean-up, science activities, and competition.

GESI Related

Primary Actors:
NRES, UMS

Outputs

An annual event that implement in engaging stakeholders, communities and public in marine conservation, and climate-change awareness event.

Indicators

# of activities conducted during the Ocean Celebration month.

# of participants attended to each activity.

# of joint-participation from state agencies, NGOs and individuals in the event.

RPOA 2.0 Indicators

Output Indicator B3.1.1.a

ACTIVITY 25

Climate Change Research Dissemination Roadshow.

Target By: 2030

Description

National Roadshow to disseminate climate change research to state agencies and stakeholders.

GESI Related

Primary Actors:
PETRA (NAHRIM), Federal & State Government, Universities

Outputs

- Organizing workshops and technical briefings on climate change at state level.
- Policy briefs, infographics, and stakeholder-tailored knowledge products.

Indicators

#of states engaged and workshops conducted.

# of agencies adopting climate-informed planning.

RPOA 2.0 Indicators

Output Indicator B3.1.1.a

TARGET B3:
Climate-Resilient Communities

RESTORATION & CLIMATE ADAPTATION

ACTION 4:
Increase marine habitats coverage to mitigate climate change through habitats rehabilitation and restoration

ACTIVITY 26
Mangrove Rehabilitation Project in at coastal areas of Sabah.

Target By: 2030

Description

The Mangrove Rehabilitation Project focuses on restoring degraded areas of the Mangrove Forest Reserve through replanting, habitat restoration, and community engagement, implemented in collaboration with the International Society for Mangrove Ecosystems (ISME) to promote biodiversity conservation, enhance climate-resilient coastal ecosystems, and support sustainable livelihoods.

Primary Actors:
NRES, SFD, Universities, NGOs, Private sectors

Outputs

Mangrove forest expansion achieved through planting of 35 hectares annually in areas adjacent to mangrove forest reserve.

Indicators

# of hectares of mangrove forest planted annually.

# of area planted annually.

RPOA 2.0 Indicators

Output Indicators B3.1.4

ACTIVITY 27
Firefly & mangrove Project in Darau Wetland.

Target By: 2030

Description

Implementation of firefly & mangrove Project in Darau Wetland by Rotary Club of Kota Kinabalu (RCKK) Pear and Ministry of Tourism, Culture & Environment (KePKAS) for restoring and planting of mangroves to rehabilitate degraded wetland–mangrove areas and support firefly conservation.

GESI Related

Primary Actors:
Rotary Club, UMS, SFD, DBKK

Outputs

Mangrove seedlings planted / mangrove rehabilitation and Firefly conservation program established.

Indicators

# of mangrove tree planted.

# of participant involved in restoration and planting.

# of program organized.

RPOA 2.0 Indicators

Output Indicator B3.1.1.a

CHAPTER 4

INSTITUTIONAL ARRANGEMENT & COORDINATION MECHANISM

Malaysia's Implementation of the Coral Triangle Initiative

is supported by an institutional framework that enables coordination across national, state, and community levels. These structures were established under NPOA 1.0 and continue to evolve to support effective delivery, reporting, and partnership building under NPOA 2.0.

NPOA 2.0 adopts a whole-of-nation approach. Implementation covers all regions of Malaysia and brings together government agencies, universities, NGOs, private sector partners, and communities. This ensures that knowledge, policy, and on-the-ground action remain connected and mutually reinforcing.

4.1 National Coordinating Committee (NCC)

The NCC is Malaysia's central governance body for CTI implementation. It is chaired by the Ministry of Natural Resources and Environmental Sustainability and includes federal agencies, state representatives from Peninsular Malaysia, Sabah and Sarawak, and selected academic and civil society partners. This composition supports effective coordination across sectors and ensures national coherence.

Core Functions of the NCC Include:

- Planning, coordinating, and monitoring implementation of NPOA 2.0 implementation.
- Endorsing national projects and contributing to regional initiatives.
- Aligning and prioritising funding at national and regional levels.
- Serving as Malaysia's official focal point with CTI-CFF and the other CT6 countries.
- Facilitating joint activities and stakeholder engagement.
- Reporting on national progress through CT Atlas and other regional platforms.

The NCC will convene at least twice a year to review progress, validate reports, and set strategic directions.

4.2 State Coordination Committees (SCCs)

State-level coordination is essential for ensuring that NPOA 2.0 is implemented in a way that reflects local priorities and supports national objectives. Under NPOA 1.0, most implementation took place in the scientific boundary. NPOA 2.0 broadens this approach by strengthening coordination mechanisms across Malaysia's EEZ, covers implementing boundary.

The **Sabah SCC** continues to play an important role due to the state's long-standing involvement in CTI activities. The committee brings together key agencies responsible for marine conservation, fisheries, marine parks, marine enforcement, and community engagement. Its functions include coordinating state-level implementation, aligning activities with national priorities, and providing technical input to the NCC.

Peninsular Malaysia and Sarawak will establish or strengthen similar committees to ensure more balanced national participation. These SCCs will support communication between state agencies and the NCC, facilitate reporting, and help integrate local initiatives into national and regional CTI frameworks.

Across all states, SCCs provide the platform for:

This structure ensures that NPOA 2.0 is implemented through a whole-of-nation approach, with each state contributing according to its ecological, institutional, and socio-economic context.

4.3 Technical Working Groups (TWGs)

Technical Working Groups form the technical foundation of NPOA 2.0 implementation. Established under NPOA 1.0 based on the five CTI thematic areas, these groups bring together government agencies, universities, NGOs, and technical experts relevant to each theme.

Current leadership of TWGs:

- Seascapes and Ecosystem Approach to Fisheries Management (Goal 1 & 2): Department of Fisheries Sabah
- Marine Protected Areas (Goal 3): Sabah Parks
- Climate Change Adaptation (Goal 4): Ministry of Natural Resources and Environmental Sustainability with support from Universiti Malaysia Sabah
- Threatened Species (Goal 5): Department of Fisheries Malaysia

Under NPOA 2.0, the TWGs will continue to coordinate technical planning and implementation, supported by updated Terms of Reference to strengthen collaboration, enhance knowledge exchange, and improve national and regional reporting. The expanded mandate also enables TWGs to address cross-cutting areas such as gender inclusion, marine pollution, emerging technologies, and innovative financing.

Core functions of the TWGs include:

- Providing technical advice to the NCC and SCCs
- Supporting the design and delivery of NPOA 2.0 activities
- Strengthening data collection, monitoring, and scientific analysis
- Facilitating partnerships with research institutions, NGOs, and communities
- Contributing to national and regional reporting, including inputs to CT Atlas

TWG meetings will be convened regularly as required and guided by SCC and NCC to ensure that implementation remains technically sound, evidence based and aligned with national and regional priorities.

4.4 Role of Academia, NGOs, Private Sector and Communities

Implementation of NPOA 2.0 is supported by a wide network of partners that contribute knowledge, technical skills, and community engagement. This collaborative model ensures that national priorities are delivered through actions that are locally relevant and scientifically informed.

Academia

contributes research, monitoring, capacity building, and scientific input to the TWGs. Universities across Malaysia are involved in supporting national implementation. The CTI Sabah Office, hosted by Universiti Malaysia Sabah, functions as a coordination and reporting unit, while technical implementation continues to be led by the respective Goal Teams.

NGOs

provide expertise in conservation, community outreach, marine resource management, and sustainable development. NGOs play an important role in supporting state and national initiatives, strengthening local stewardship, and mobilising community participation.

Private Sector

contributes through partnerships that promote sustainable practices, innovative technologies, and financing mechanisms aligned with Malaysia's blue economy agenda. Engagement with industries such as tourism, fisheries, and maritime services helps enhance compliance, awareness, and investment in sustainability.

Communities and Households

remain central to NPOA 2.0 implementation. Their participation supports effective co-management, local monitoring, and adoption of sustainable practices. Community stewardship also strengthens long-term ownership of conservation initiatives.

These partnerships reinforce Malaysia's whole-of-nation approach by ensuring that planning, implementation, and monitoring benefit from diverse expertise and sustained engagement at all levels.

4.5 Regional Engagement and Partnerships

Malaysia continues to participate in regional cooperation mechanisms that support transboundary conservation, sustainable fisheries, and marine governance. Earlier initiatives such as the Sulu–Sulawesi Marine Ecoregion (SSME) provided important foundations for trilateral collaboration, while the Turtle Islands Heritage Protected Area remains an active bilateral platform for the protection of shared turtle populations and their habitats.

Under NPOA 2.0, Malaysia aligns with RPOA 2.0 Target C1 by strengthening participation in active CTI-CFF regional mechanisms and complementary platforms across the region.

Key priorities include:

- Strengthening bilateral cooperation with the Philippines through the ongoing Turtle Islands Heritage Protected Area.
- Collaborating with all Coral Triangle member countries through CTI-CFF platforms, building on lessons from earlier regional cooperation such as SSME.
- Participating in emerging regional mechanisms such as SEACONNECT and SOMACORE.
- Supporting regional financing mechanisms including the Coral Triangle Conservation Fund.
- Contributing to regional knowledge platforms such as the CT Atlas, monitoring and evaluation systems, the University Partnership, and the Women Leaders Forum.
- Supporting institutional strengthening and capacity building of the CTI-CFF Regional Secretariat.
- Sustaining engagement with ASEAN and SEAFDEC to support policy harmonisation, sustainable fisheries, and regional marine governance.
- Participating in COBSEA to enhance cooperation on marine pollution control, coastal zone management, and environmental monitoring.

Through these mechanisms, Malaysia contributes to coordinated regional action in biodiversity conservation, sustainable fisheries, and climate-resilient marine governance across the Coral Triangle and surrounding seas.

CHAPTER 5

RESOURCE MOBILISATION, COMMUNICATION AND COMMITMENTS

5.1 National and State Budget Allocations

Implementation of NPOA 2.0 is supported through a combination of national and state-level budget allocations. The Ministry of Natural Resources and Environmental Sustainability (NRES) provides the core federal financing required for Malaysia's CTI-CFF commitments, while state governments contribute through their respective coastal and marine management budgets. These allocations support enforcement, protected area management, biodiversity monitoring, climate resilience work, and community engagement programmes.

Strengthening coordination between federal and state planning cycles will help ensure predictable, sustained, and well-aligned financing. This integrated approach allows resources to be mobilised more effectively to support national priorities and ensure long-term continuity of CTI-CFF implementation.

5.2 Donor Support and International Collaboration

Malaysia continues to receive strategic support from international partners working across the Coral Triangle. Programmes such as SOMACORE, SEACONNECT, and collaborations with local and international NGOs provide technical expertise, capacity building, and targeted investments that complement national and state efforts.

Malaysia will maintain transparent and constructive engagement with existing partners and explore new collaborations with ASEAN mechanisms, Southeast Asian Fisheries Development Center (SEAFDEC), Coordinating Body on the Seas of East Asia (COBSEA) and other regional initiatives focused on marine biodiversity, sustainable fisheries, climate adaptation, and pollution reduction.

Future partnerships will be directed towards activities that strengthen national capacity, reinforce priority targets, and contribute to Malaysia's broader ocean governance agenda.

5.3 Innovative Financing Mechanisms

NPOA 2.0 encourages the exploration of innovative financing mechanisms to enhance long-term sustainability. Potential approaches include nature-based tourism contributions, ecosystem service valuation, voluntary corporate conservation investments, and public–private partnerships that support habitat protection and community livelihoods.

Any development of new financing instruments will be guided by national policies and coordinated with relevant ministries to ensure that mechanisms are feasible, transparent, and aligned with Malaysia's conservation and blue economy priorities.

5.4 Private Sector Participation and Sustainability Commitments

The private sector plays an increasingly important role in advancing sustainable management. Under NPOA 2.0, partnerships with tourism operators, fisheries and aquaculture industries, maritime stakeholders, and other marine-related sectors will be strengthened to promote responsible practices and shared stewardship.

Collaborative efforts may include co-investment in conservation programmes, voluntary sustainability commitments, adoption of best practices, and support for community-based initiatives. These partnerships will help expand the reach of national programmes while promoting innovation and long-term sustainability.

5.5 Communication and Stakeholder Engagement Strategy

Effective communication and stakeholder engagement are essential for the successful implementation of NPOA 2.0. While NPOA 1.0 generated significant conservation outcomes, documentation, visibility, and cross-agency coordination can be further strengthened to ensure that achievements are widely communicated and inform national planning processes. NPOA 2.0 adopts a more structured communication approach to support transparency, shared learning, and inclusive participation.

Key measures include:

- Facilitating regular multi-stakeholder dialogues through the NCC and TWGs, ensuring the active involvement of government agencies, universities, NGOs, private sector partners, and community groups.
- Establishing a clear reporting pathway where implementing partners (agencies, academia, NGOs, and private sector collaborators) submit activity updates and monitoring data to the NCC Secretariat for consolidation and standardisation.
- Developing a centralised digital dashboard managed by the NCC to improve transparency, harmonise information with regional systems such as the CT Atlas, and enable timely sharing of progress.
- Organising periodic knowledge-sharing workshops across all coastal states to encourage collaboration, strengthen coordination, and support adaptive management.

Through these measures, NPOA 2.0 will enhance national visibility, promote shared ownership, and strengthen Malaysia's role in regional communication and reporting under the CTI-CFF.

5.6 Monitoring, Evaluation and Learning (MEL) Framework

NPOA 2.0 introduces an enhanced Monitoring, Evaluation, and Learning (MEL) system to support transparent reporting, harmonised data management, and evidence-based decision-making. This system is aligned with the monitoring and reporting guidance provided through the CTI-CFF and relevant resources available on the CTI website.

The MEL framework strengthens national processes while ensuring Malaysia contributes effectively to regional assessments, annual country reports, and shared learning across the CT6.

1. National MEL Scorecard & Digital Dashboard

- Establish a centralised dashboard to track progress against NPOA 2.0 indicators.
- Align national indicators with CT Atlas categories and RPOA 2.0 priorities, including ecosystems, threatened species, fisheries, climate resilience, governance, and GESI.
- Strengthen data validation through the NCC and TWGs, with support from universities and NGOs.

2. Reporting to CTI-CFF and National Authorities

- Implement annual NCC-led reporting to the CTI-CFF Regional Secretariat in accordance with regional reporting expectations.
- Ensure reports include progress analysis, effectiveness assessments, and evidence of outcomes.
- Integrate MEL outputs into national planning frameworks such as RMK12/13, NPBD 2022–2030, SDG updates, and reporting under the CBD.

3. Mid-Term Review in 2027

- Commission an independent mid-term review to assess implementation progress and recommend adjustments.
- Use findings to refine NCC planning cycles and strengthen coordination with regional reporting systems.

4. Knowledge Management and Learning

- Document lessons learned, case studies, and technical innovations across all coastal states.
- Share knowledge through workshops, digital platforms, and learning exchanges including the CTI University Partnership.
- Promote a culture of adaptive management through continuous learning.

5. Capacity Development

- Provide training for agencies and coastal stakeholders on data collection, indicator reporting, and alignment with regional systems such as the CT Atlas.
- Leverage technical support through regional initiatives including SOMACORE, SEACONNECT, and university networks.

6. Integration with National Planning Frameworks

- Ensure MEL outputs inform national development planning, biodiversity strategies, fisheries management, climate adaptation, and Malaysia's international commitments.
- Harmonise monitoring processes with the Kunming-Montreal Global Biodiversity Framework to support global alignment.

OVERALL APPROACH

This strengthened MEL system supports clearer institutional responsibilities, consistent national reporting, and structured knowledge management. It ensures that NPOA 2.0 implementation remains transparent, adaptive, and aligned with regional and global commitments under the CTI-CFF.

1 BUDGET ALLOCATIONS

- Federal and state financing for CTI activities
- Supports enforcement, MPAs, biodiversity, climate, communities
- Aligned planning cycles for long-term sustainability

2 DONOR & INTERNATIONAL SUPPORT

- SOMACORE, SEACONNECT, NGOs collaborations
- ASEAN, SEAFDEC, COBSEA partnerships
- Capacity building & technical support

3 INNOVATIVE FINANCING

- Nature-based tourism contributions
- Corporate conservation investments
- Blue economy alignment

4 PRIVATE SECTOR PARTICIPATION

- Tourism, fisheries, maritime sectors
- Best practices and co-investment
- Support for community livelihoods

5 COMMUNICATION & ENGAGEMENT

- Multi-stakeholder dialogues through NCC & TWGs
- Clear reporting pathway
- NCC central digital dashboard aligned with CT Atlas

6 MEL FRAMEWORK

- National dashboard and scorecard
- Annual reporting & 2027 mid-term review
- Knowledge sharing and capacity building

Malaysia strengthens its financing, partnerships, communication systems, and MEL processes to support effective and transparent implementation of the NPOA 2.0 and its leadership within the CTI-CFF region.

CHAPTER 6

FUTURE GUIDELINES

Malaysia's NPOA 2.0

provides a coherent national framework for implementing the CTI-CFF RPOA 2.0 from 2025–2030. However, marine and coastal governance is dynamic, influenced by environmental change, economic transitions, and evolving regional priorities. Looking beyond 2030, Malaysia must anticipate new challenges, harness emerging opportunities, and establish a strong foundation for NPOA 3.0.

6.1 Emerging Issues and Challenges

Several emerging trends are expected to shape Malaysia's future marine governance landscape. Understanding these issues will support early preparation and ensure continuity of national action under the CTI-CFF regional action.

- **Climate Change Intensification:**
  Rising temperatures, sea-level rise, coastal erosion, and recurrent coral bleaching and storm surges will continue to threaten marine ecosystems and coastal communities. Nature-based solutions, climate-resilient planning, and improved risk management will be increasingly important.
- **Marine Pollution and Emerging Contaminants:**
  Plastic pollution remains widespread, and emerging contaminants such as chemical waste, microfibres, e-waste derivatives, and pharmaceutical residues threaten marine ecosystem. All these pose growing ecological and health risks. Stronger national and state regulations and regional coordination will be essential.
- **Blue Economy Transformation:**

  The expanding Blue Economy offers opportunities for sustainable development but may also increase pressure on ecosystems if not well-governed. Clear standards for fisheries, aquaculture, tourism, and maritime industries will be needed to ensure balanced and responsible growth.
- **Biodiversity Loss and New Development Frontiers:**

  Coastal reclamation, offshore renewable energy development, and potential future exploration of deeper waters may introduce new pressures on biodiversity. Strategic assessments and precautionary approaches will help safeguard ecosystems.
- **Geopolitical and Transboundary Pressures**

  Issues related to maritime security, transboundary IUU fishing, migratory species management, and shared habitats will continue to influence marine governance. Strengthened cooperation is vital.

- **Technological Transformation**

  Issues related to maritime security, transboundary IUU fishing, migratory species management, and shared habitats will continue to influence marine governance. Strengthened technological transformation cooperation is vital.

- **Food Security and Coastal Livelihoods**

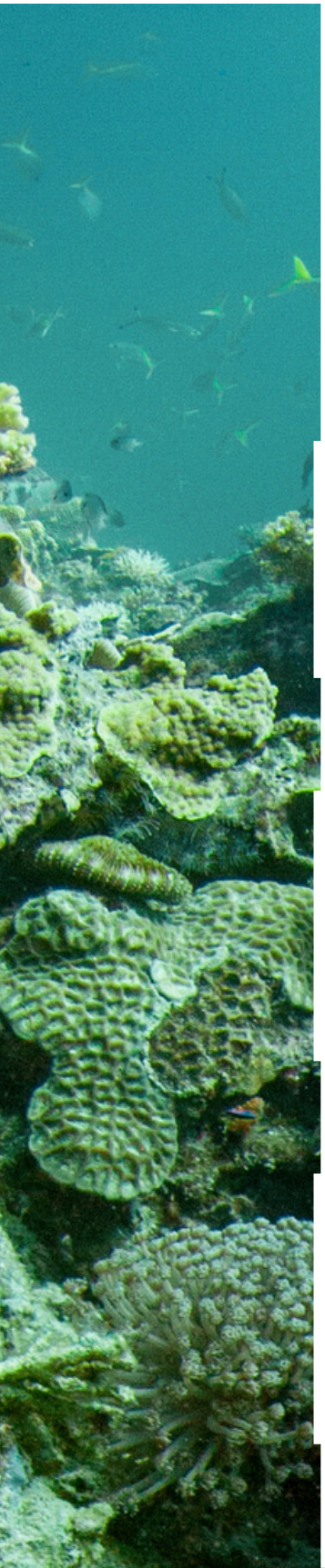
  Fisheries remain essential to food security, but climate change, stock shifts, and bycatch trends create vulnerabilities. Small-scale fishers and seaweed farmers will require targeted support to sustain livelihoods and strengthen adaptive capacity.

- **Equity and Inclusion:**

  Ensuring inclusive participation in conservation and the Blue Economy particularly for women, youth, and indigenous communities remains both a challenge and an opportunity. Stronger engagement frameworks are necessary to ensure benefits are equitably shared.

6.2 Recommendations for the Next Decade

The following recommendations provide broad directions for the period beyond 2030, guiding the development of Malaysia's NPOA 3.0. They are aligned with the intent of RPOA 2.0 and focus on actions that are practical, measurable, and realistic within national capacity.



MALAYSIA'S NPOA 3.0 (POST-2030)

01 DEEPEN CLIMATE ACTION

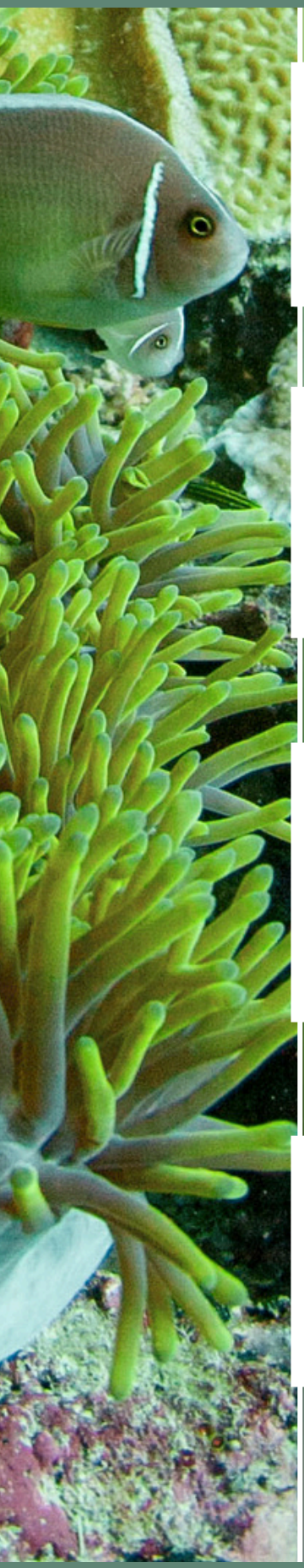
- Strengthen and expand blue carbon ecosystems (mangroves, seagrass, and saltmarshes).
- Integrate climate adaptation into long-term coastal planning frameworks.
- Enhance Malaysia's contributions to relevant global climate reporting and commitments.

02 STRENGTHENING BLUE ECONOMY GOVERNANCE

- Develop a coherent national Blue Economy policy framework.
- Introduce sustainability criteria for fisheries, aquaculture, marine tourism, and maritime industries.
- Ensure Blue Economy growth supports ecosystem health and provides livelihood security.

03 EXPAND REGIONAL LEADERSHIP

- Continue active participation in regional partnerships such as TIHPA, SEACONNECT, and SOMACORE.
- Support knowledge-sharing platforms on biodiversity, pollution, and climate resilience.
- Promote regional cooperation on transboundary conservation and marine pollution reduction.



04 INVEST IN INNOVATION AND TECHNOLOGY

- Gradually adopt AI, drones, remote sensing, eDNA, and digital traceability tools to improve monitoring and enforcement.
- Strengthen collaboration with universities and technology partners to localise solutions.
- Ensuring technology adoption is accompanied by training and capacity development.

05 MAINSTREAM GESI AND SOCIAL RESILIENCE

- Move towards measurable, accountable GESI integration.
- Promote meaningful participation of women, youth, indigenous groups, and small-scale fishers in planning and decision-making.
- Develop monitoring indicators to track equity-related outcomes.

06 INSTITUTIONALISE SUSTAINABLE FINANCING AND MEL

- Explore feasible blue financing options such as blue bonds, ecosystem services payments, and voluntary conservation contributions.
- Strengthen national Monitoring, Evaluation and Learning (MEL) systems to support adaptive management and long-term accountability.
- Ensure financing and MEL mechanisms align with national priorities and avoid over-dependence on external funding.

07 DEVELOPING A NATIONAL OCEAN STRATEGY

- Integrate biodiversity conservation, sustainable fisheries, climate adaptation, marine pollution prevention, and Blue Economy goals into a unified national ocean strategy.
- Gradually position Malaysia as a strong contributor to marine governance within the Coral Triangle region

Annex I: Key References and Supporting Documents

Regional Frameworks

- Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF). Regional Plan of Action 1.0 (2009–2020). CTI-CFF Regional Secretariat, Jakarta.
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- Department of Fisheries Malaysia, Sabah Parks, and partners. National Action Plans for Sea Turtles (2011), Dugongs (2011), and Sharks (2024).