

ANNUAL REPORT

THIRTY YEARS ON: Accelerating Impact for Thriving Coasts and Ocean in the East Asian Seas Region



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Annual Report 2023: Thirty Years On: Accelerating Impact for Thriving Coasts and Ocean in the East Asian Seas Region

May 2024

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About Us

Partnerships in Environmental Management for the Seas of East Asia (PEMSEA) is a regional coordinating mechanism for the sustainable coastal and marine development in the East Asian Seas Region.

PEMSEA Resource Facility

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List of Acronyms and Abbreviations

ACCORD	Addressing Challenges of	EAFM	Ecosystem Approach to
	Coastal Communities through		Fisheries Management
	Ocean Research for Developing	EAS	East Asian Seas
	Economies	EASICO	East Asian Seas Initiative on
ASEAN	Association of Southeast Asian		Clean Oceans
	Nations	EAS PC	East Asian Seas Partnership
AWGWRM	ASEAN Working Group on		Council
	Water Resources Management	ESTATAL	Ministry of State Administration
ATS	Arafura and Timor Seas	GBF	Global Biodiversity Framework
ATSEA	Arafura and Timor Seas	GEF	Global Environment Facility
	Ecosystem Action	ICM	integrated coastal management
BBNJ	Biodiversity Beyond National	ICMMBT	International Conference
	Jurisdictions		on Integrated Coastal
CCA	climate change adaptation		Management & Marine
CCFPI	Coca Cola Foundation		Biotechnology
	Philippines, Inc.	IGES	Institute for Global Environment
CCS	Carbon dioxide capture and		Strategies
	storage	IRBM	integrated river basin
CEDAW	Convention on the Elimination		management
	of All Forms of Discrimination	IWRM	Integrated Water Resources
	Against Women		Management
CI	Conservation International	IMO	International Maritime
CNA	community needs assessment		Organization
COP	Conference of Parties	IP	implementation plan
CSEAS	Center for Southeast Asian	IPB	Institut Pertanian Bogor
	Studies	IYRR- WQMA	Imus-Ylang Ylang-Rio
CTI	Coral Triangle Initiative		Grande Rivers Water Quality
CTI-CFF	Coral Triangle Initiative on Coral		Management Area
	Reefs, Fisheries, and Food	IUCN	International Union for
	Security		Conservation of Nature
DENR	Department of Environment and	KEI	Korea Environment Institute
	Natural Resources	KIOST	Korea Institute of Ocean
DEPTH	Digital Deep-Sea Typical		Science and Technology
	Habitats Programme	KOEM	Korea Marine Environment
DRR	disaster risk reduction		Management Corporation
DWR	Department of Water	KOSM	Korean National Ocean Science
	Resources		Museum

MALFFMinistry of Agriculture, Livestock, Fisheries and Forestry MALFFPGENRO Provincial Government Environment and Natural Resources OfficeMARPOLInternational Convention for the Prevention of Pollution from Municipal Environment and Natural Resources OfficePML Plymouth Marine Laboratory ShipsMENROMunicipal Environment and Natural Resources OfficeCoastal Development Coastal DevelopmentMEPMarine Environment Protector Ministry of Natural ResourcesPNLCPEMSEA Network of Learning MNRMinistry of Natural Resources and EnvironmentPRFMPAmarine protected area environmentRPMU Regional Action PlanMPA marine protected area marine spatial planning MAMSLRSOCRegional State of Ocean and Coasta UnitNAMSLNational Action Plan Marine EnvironmentSAPStrategic Action Plan Strategic Action PlanNAMSLNational Action Strategy for Marine LitterSDS-SEA Sustainable Development Goals Marine LitterSDS-SEA Sustainable Development Sustainable DevelopmentNAPNational Action Plan Mitigation ServiceSNUSeoulh East Asia Regional Program in Combating Marine Program in Combating Marine Program in Combating Marine Program in Combating Marine ResearchSWMNGOnongovernment organizationSNUSeoulh Actional UniversityNAPNational Action PlanSWMOSolid Waste Management Office Program in Combating Marine Program in Combating Marine ProgrammeNAPNational Action PlanSWMOSolid Waste Management Office Coa	LGU LPPCHEA	local government unit Las Piñas-Parañaque Critical Habitat and Ecotourism Area	PEMSEA	Partnerships in Environmental Management for the Seas of East Asia
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PCA Protected and conserved areas characterization study	OSEAN	Our Sea of East Asia Network	WACS	waste analysis and
	PCA	Protected and conserved areas		characterization study



Partnerships in Environmental Management for the Seas of East Asia

(PEMSEA) is a regional coordinating mechanism for the sustainable development of coastal and marine areas in the East Asian Seas Region. It was created with a clear mission—to foster and sustain healthy and resilient coasts and ocean, communities, and economies across the seas of East Asia through integrated management solutions and partnerships.

For close to three decades, the Partnerhips has provided solutions to effectively managed coasts and ocean across the shared seas of East Asia. As the regional coordinating mechanism for the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA), a shared marine strategy among countries in the region, PEMSEA works with national and local governments, companies, research and science institutions, communities, international agencies, regional programs, investors, and donors towards implementation of the SDS-SEA. Crucial networks such as learning centers also contribute their expertise and coastal management skills to the shared goals of the SDS-SEA.

We aim to proactively build effective intergovernmental and intersectoral partnerships, and expand the capacities of countries, local governments, and other stakeholders with innovative, crosscutting policies, tools, and services for integrated coastal, river basin, and ocean management. PEMSEA applies integrated coastal management (ICM) as our primary approach for generating and sustaining healthy ocean, people, and economies.

MESSAGE 30 YEARS MORE TO HEALTHY OCEAN, PEOPLE, AND ECONOMIES



Dr. Vann Monyneath EAS Partnership Council Chair



Aimee T. Gonzales Executive Director PEMSEA Resource Facility

Greetings to PEMSEA family and friends!

2023 was an eventful year for PEMSEA as we resumed normal operations with the declaration from the World Health Organization on the end of COVID 19 as a global health emergency. This report highlights PEMSEA's smart and collaborative planning and actions, and accelerated partners engagement achieved in just last year.

2023 marked the commemoration of PEMSEA's 30-year journey to collectively transform the region's coasts and seas. We celebrated this historic milestone by organizing an ICM lecture series, the first of which was graced by no less than our PEMSEA Chair Emeritus Dr. Chua Thia-Eng.

The ICM lecture series reflected how PEMSEA pioneered the application of ICM in the region; consolidated its successes and lessons as a regional model of ocean governance and recognized new and emerging developments in managing land and sea-use interactions and incorporating them in the ICM practice.

The year also marked the start of the implementation of our joint regional strategy, the SDS-SEA as well as the launch of two multiyear regional projects, namely 'Reducing Marine Pollution and Protecting Environmental Flows through the Integrated River Basin Management Project (IRBM)' and the 'Marine Plastics Project.'

After developing the SDS-SEA Gender Equality and Social Inclusion plan in 2022, we promoted metrics-based performance in 2023 through the formulation of the SDS-SEA monitoring and evaluation plan to be able to measure and monitor our impacts in the next five years. The projects initiated the development of analytic tools and guidelines such as the: a) State of the River Basin reports in six river basins in the ASEAN for the IRBM project, b) the marine plastics baseline reports to refine existing waste analysis and characterization studies, and c) beach plastics monitoring and measurement tool for the Marine Plastics Project, which will be implemented in 10 coastal cities and municipalities in the Philippines and Timor-Leste. The Arafura Timor Seas Programme likewise developed a monitoring and evaluation framework to assess the implementation of its Strategic Action Plan in the next ten years.

We discussed potential collaboration with the PEMSEA Network of Learning Centers, selected non-country partners, and other new collaborators to create a Blue Carbon program in the region. Initial steps include collating, discussing, and reviewing the various accounting methodologies for blue carbon ecosystems and looking at the management and supply of blue carbon ecosystems in the region. We also started working as a technical advisory organization to the World Bank/UNOPs/ASEAN South East Asia Regional Program in Combating Marine Plastics (SEA-MaP) where we provide technical advice in developing regional baseline assessment guides, toolkits and innovation, and investment platforms on marine plastics in ASEAN and continue to serve as the regional coordination organization for the UNDP/GEF/IMO GloFouling Partnerships Project.

We firmly believe that having strong baseline data and information as part of PEMSEA's capacity development and technical assistance toolkit is key to effectively managing and monitoring our coastal and marine resources to help inform and refine our policies and actions.

Acting purposefully into 2024, PEMSEA is fully committed to elevate PEMSEA's model practices worldwide, which has been honed over 30 years, promote accountability and transparency through measuring the impacts of our work, while securing institutional and financial sustainability to maintain the long-term health of the Partnerships.

The above only highlights a few of the exciting things we have done in 2023. We urge you to read the whole report, visit pemsea.org, and follow us on our social media channels if you wish to know more about PEMSEA and the programs and services it offers.





CHAPTER 1 PEMSEA at 30: **Milestones** and Voices

PEMSEA started as a regional marine pollution project implemented by the **United Nations Development Programme** (UNDP) and the International Maritime Organization (IMO), with funding from the Global Environment Facility in 1993. The success of the project has paved the way to solidify a partnership among countries and non-country partners to work together to develop and implement a joint regional framework called the 'Sustainable Development Strategy for the Seas of East Asia,' and create a regional coordination mechanism with its own international legal personality.

Thirty years of inclusive sustainable development work in the coastal and marine areas of the East Asian Seas region have brought significant benefits and lasting impacts to PEMSEA partners and communities.

These include the implementation and adaptation of ICM system in 10 countries, covering 40% of the region's coastline under a management regime; 10 national governments implementing and refining national coastal and ocean policies; establishing networks of 54 local governments and 21 learning centers in the region, working together through learning exchange and providing technical support.

PEMSEA has pioneered the development and publication of the State of the Ocean and Coasts reports at the regional, national, and some local levels. The State of the Ocean and Coasts reports offer sciencebased information for a more informed planning and monitoring of ecosystem habitats and services, ocean economy, policies, and program responses. The Partnerships has also set a triennial East Asian Seas (EAS) Congress, which is the premiere regional event for coasts and ocean in the region. It provides an oceanfocused forum for knowledge sharing, collaborative actions, and partnership building. Drawing over 1,000 participants including national and local government officials, policymakers, scientists, nongovernment organizations (NGO), donor agencies, companies, investors, and academia, the EAS Congress consists of a Ministerial Forum, International Conference, Environmental Exhibition, Youth Forum, and field visits to learn about sustainable coastal management firsthand, and for the partners to advance and reaffirm their commitment to the sustainable development of coastal and marine in the East Asian Seas.

PEMSEA 30 Years of Partnerships to Promote

1996

- Environment and Natural Resources Office (ENRO) was established by the Batangas Provincial Government.
- Batangas Bay Environmental Protection Council established by Provincial Ordinance.



1994

- Regional Programme office officially opened 3 lune.
- Xiamen (China) and Batangas (Philippines) were established as first National ICM Demonstration Projects.
- 1997
- Sea use zoning plan was adopted by the Municipal Government of Xiamen.
- Thailand,
- Malaysia, Indonesia, and Singapore agreed to implement the Malacca Straits Demonstration

Project.



2001

2000s

- Manila Bay Coastal Strategy/Declaration was signed in October, Manila, Philippines.
- Regional Network of Local Governments Implementing ICM (RNLG) is established in March, Seoul, RO Korea.



2003

The

- Inaugural East Asian Seas Congress was held on 8-12 December in Putrajaya, Malaysia.
- Ist Ministerial Forum adopted Putrajaya Declaration of Regional Cooperation for the Sustainable Development of the Seas of East Asia.
- Sustainable Development Strategy for the Seas of East Asia (SDS-SEA) was approved and initiated.



- Ist EAS Partnership Council Meeting was held in July in Manado, Indonesia.
- International Ocean Institute, IUCN Asia Regional Office, Northwest Pacific Action Plan, and Swedish Environment Secretariat for Asia joined PEMSEA and signed agreement supporting SDS-SEA implementation.

1990s

1993



GEF/UNDP/IMO Project on Marine Pollution Prevention in the East Asian Seas (MPP-EAS) was signed.



- First Regional Training Course on the Application of ICM System in Marine Pollution Prevention and Management was held in the Philippines, China, and Singapore.
- Batangas Coastal Resource Management Foundation (BCRMF) is established in support of Batangas Bay ICM Demonstration Project.



- · 2nd Phase of PEMSEA funded by the Global Environment Facility is implemented by UNDP and executed by IMO.
- National ICM demonstration sites were established in Cambodia (Sihanoukville), DPR Korea (Nampho), Thailand (Chonburi), and Vietnam (Danang), in addition to existing sites in China (Xiamen) and the Philippines (Batangas).



- EAS Congress 2006 was held 12-16 December in Haikou City, China.
- Lao PDR and Timor-Leste joined PEMSEA as country partners and agreed to implement the SDS-SEA.
- PEMSEA Network of Local Governments for Sustainable Coastal Development (PNLG) Charter is signed by 18 local governments.

2005

Xiamen International Forum for Coastal Cities (XIFCC) was held, and adopts the Xiamen Declaration on Coastal Cities-Global Cooperation for Sustainable Development.



- Ist State of Oceans and Coasts Report was published on Batangas Province, Philippines.
- Centre for Marine Environmental Research and Innovative Technology (MERIT) Hong Kong was designated as the first PEMSEA Regional Center of Excellence.
- Philippine Supreme Court required 14 agencies to implement the Operational Plan for the Manila Bay Coastal Strategy (OPMBCS).

Healthy and Resilient Coasts and Ocean in the Seas of East Asia



- 3rd EAS Congress was held in November in Manila, Philippines.
- 3rd Ministerial Forum adopted the Manila Declaration on Strengthening the Implementation of Integrated Coastal Management for Sustainable Development and Climate Change Adaptation in the Seas of East Asia Region in November, Manila, Philippines.
- Agreement Recognizing the International Legal Personality of PEMSEA was signed.
- World Bank signs MOU with PEMSEA as sponsoring agency to support initiatives on landbased pollution reduction, coastal governance, climate change adaptation, and publicprivate partnership on 25 November, Manila, Philippines.



 Headquarters Agreement is ratified by the Philippine Government.



2015

- China-PEMSEA Sustainable Coastal Management Cooperation Center was established.
- 5th EAS Congress was held in November in Danang, Vietnam, launching the PEMSEA Network of Learning Centers and SDS-SEA 2015; the Danang Compact was signed at the 5th Ministerial Forum.



14 LIFE BELOW WATER

2017

PEMSEA



- loilo, Philippines, the Iloilo Ministerial Declaration was signed and the SDS-SEA Implementation Plan 2018-2022 was endorsed.
- 10 National State and EAS Regional State of Ocean and Coasts Reports launched



- PEMSEA-Coca Cola Imus-Caritas partnership on integrated solid waste management project in Cavite, Philippines was launched.
- The Coastal and Ocean Management Institute (COMI) at Xiamen University and the Institute for Global Environmental Strategies (IGES) in Kanagawa were designated as Regional Centres of Excellence.
- Non-country partner agreement was signed with the Norwegian Institute for Water Research (NIVA).



- PNLG Forum was held in October 25-29 in Tangerang, Indonesia
- SDS-SEA IP 2023-2027 was approved by 29th Expanded Executive Committee meeting

2010s



Dongying Declaration on Building a Blue Economy through ICM was adopted during the 10th PNLG Forum in July, Dongying, China.



 GEF recognized PEMSEA and the SDS-SEA as a regional governance mechanism and framework for sustainable management of the Seas of East Asia at GEF stocktaking meeting in October, Manila, Philippines.



Changwon City Republic of Korea EAST ASIAN SEAS CONGRESS

- 4th EAS Congress was held in July in Changwon City, RO Korea.
- Port Safety, Health and Environmental Management (PSHEM) Code and Recognition System was launched.
- Headquarters Agreement was signed between the Department of Foreign Affairs of the Philippines and PEMSEA, 3 I July, Manila, Philippines.

• 2014 Knowledge 2016

GEF/World Bank project on development of a regional platform for knowledge management and facilitating investment in blue economy was launched. PNLG Forum in November in Ansan City, RO Korea adopted PNLG Strategic Action Plan

2016-2021.

2019 ATSEA-2

2020s

- GEF/UNDP five-year project on Arafura and Timor Seas Regional and National Strategic Action Programs (ATSEA-2) began.
- ASEAN-Norwegian cooperation project on local capacity building for reducing plastic pollution in the ASEAN region was launched.
- PEMSEA was designated as Regional Coordination
 Organization for EAS of the UNDP-IMO-GEF five-year
 project on minimizing the impacts of aquatic biofouling.



7th EAS Congress was held in Sihanoukville, Cambodia where Preah Sihanouk Ministerial Declaration was signed, PNLC Charter is approved and PNLC SAP 2022-2030 was endorsed.



- UNDP/GEF/ASEAN/ PEMSEA Reducing pollution and protecting environmental flows in the East Asian Seas through integrated river basin management in ASEAN countries (2023-2027) was launched.
- RO Korea-PEMSEA Project Cooperation Agreement on Marine Plastics project (2023-2028) kicked off.

A Toast to 30 Years of Partnerships for Healthy Ocean, People, and Economies

Former and current leaders of PEMSEA and its Secretariat gathered in a series of events to kick-off the 30th anniversary celebration of the Partnerships in the East Asian Seas region. On July 26, 2023, the Partnership Council Chair Dr. Vann Monyneath led the welcome dinner during the 15th Partnership Council Meeting in Ha Noi, Viet Nam, which officially marked the #PEMSEAat30 to commemorate the milestones and accomplishments of the Partnerships in the region.

In the Philippines, PEMSEA Partnership Council Co-Chair and Department of Environment and Natural Resources (DENR) Undersecretary Jonas Leones led the ceremonial event to commemorate the 30 years of partnerships and PEMSEA's sustainable work on the seas and coasts in East Asia in the evening of the inaugural lecture series on integrated coastal management. Former and current officials and staff of PEMSEA as well as partners and friends attended the event.







"The partners of PEMSEA are vital part in sustaining this organisation. Secondly, they contributed in promoting the activities of PEMSEA, especially in coastal governance and integrated coastal management. In front of us, there are still a lot to do, and with new partners, who can bring us to a new height in strengthening the implementation, and demonstrate to the world what this region can do in achieving sustainable development."

Dr. Chua Thia-Eng PEMSEA Chair Emeritus



The Lecture Series: Revisiting Integrated Coastal Management in the East Asian Seas region

Dr. Chua Thia-Eng, one of the pillars of ICM in East Asia and PEMSEA Chair Emeritus, led the inaugural lecture on ICM as part of the #PEMSEAat30 year-long commemoration. Over 150 online and on-site participants attended the first of the lecture series, which was held on August 30, 2023.

Dr. Chua shared the conceptual development and adaptive and iterative application of the ICM framework in the region. While the countries' level of implementation varies, he emphasized the need to continuously increase the collaboration among country and development partners in the region to accelerate addressing transboundary issues and promoting sustainable coastal and marine development in East Asian Seas.

He was also joined by Ms. Nancy Bermas, Regional Project Manager of PEMSEA, who presented a good example of ICM practice



PEMSEA Chair Emeritus Dr. Chua Thia-Eng formally opened the lecture series with the introduction of ICM in East Asian region and the lessons learned in the 30 years of PEMSEA.

in Guimaras Island, Philippines. She also emphasized the relevance of ICM as an approach and tool that complements other area-based management approaches such as marine spatial planning, integrated water resources management to achieve the UN Sustainable Development Agenda 2030, global biodiversity targets, and other international and regional targets.



The Province of Cavite represented by Ms. Anabelle Cayabyab, Provincial Environment and Natural Resources Officer, also shared how ICM application evolved in the province and how it is helping them tackle landbased sources of marine pollution through improved policies and practices on integrated solid waste management and helped them develop climate change adaptation (CCA) and disaster risk reduction (DRR) measures.



Ms. Nancy Bermas (top left) discussed the evolution of ICM in the East Asian region and the best practices that contributed to the success of its implementation, while Ms. Ana Cayabyab gave his perspective on the role of the local government on ICM implementation and its impact to the local communities in Cavite Province. A panel discussion was also conducted to further share the speakers' perspective on ICM (bottom).



PRF Executive Director Aimee T. Gonzales during the 4th International Conference on Integrated Coastal Management & Marine Biotechnology in Bali, Indonesia.

The second lecture was conducted by PEMSEA Executive Director Aimee T. Gonzales during the 4th International Conference on Integrated Coastal Management & Marine Biotechnology (ICMMBT) last September 12-13 in Bali, Indonesia, while the third lecture was delivered by PEMSEA Regional Project Manager Nancy Bermas at a learning exchange with PEMSEA Network of Learning Centers during the 6th GEO Blue Planet Symposium in Seoul, Korea.



PEMSEA Regional Project Manager Ms. Nancy Bermas delivered the third lecture series in one of the sessions during the 6th GEO Blue Planet Symposium in Seoul, Korea. She discussed area-based management approaches and ICM as a connector to the approaches.

Celebrating Local Champions for Global Solutions

PEMSEA launched the Humans of East Asian Seas (Humans of EAS) challenge in July 2023 through an open call for nomination. The challenge aims to honor and celebrate the work of local coastal and marine champions from among the many individuals and organizations in the last 30 years of collaborative actions with PEMSEA.

Any individual who fosters a success story and significant contribution to local/ national/regional efforts to promote sustainable developments of seas and coasts of East Asia, through the previous and current programmes/projects of

Humans of EAS East Asian Seas Stories

PEMSEA and its country and non-country partners can be nominated. The top three Humans of EAS who will garner the highest scores will be invited to participate in the 2024 East Asian Seas Congress in Xiamen, China; while the compilation of the profiles of Humans of EAS will be developed and published in 2024.



CHAPTER 2 Advancing Regional Coastal and Ocean Governance

Operationalizing the SDS-SEA IP 2023-2027

The year 2023 marked the start of the implementation of the SDS-SEA Implementation Plan 2023-2027. The SDS-SEA serves as a critical framework for action, guiding the concerted efforts of PEMSEA partners in achieving the shared vision of a sustainable and resilient future for the region's coasts and ocean in the next five years. During the 15th East Asian Seas Partnership Council Meeting last July 26-27, 2023, country and non-country partners of PEMSEA shared their programs and initiatives aligned with the targets of the SDS-SEA IP 2023-2027. The presentations provided a glimpse of the thematic focus and priorities of the Country and Non-Country Partners that would contribute to achieving the objectives of the SDS-SEA IP until 2027 and delivering on various international and regional commitments, especially, the UN Sustainable Development Goals (SDGs) by 2030.

The East Asian Seas countries continue to implement existing and adopt new ocean policies, long-term strategies, medium-term plans, and legislations with the required institutional and coordinating arrangements to facilitate their implementation, which falls within the duration of the SDS-SEA IP (Figure 1).

Figure 1. PEMSEA Country Partner priorities and initiatives for 2023-2027

EFFECTIVE GOVERNANCE

Country	Priority plans/programs/initiatives (2023-2027)
Cambodia	Development of Circular Economy Strategy and Action Plan
China	 14th Five-Year Plans for the Protection and Utilization of Natural Resources 14th Five-Year Plan for Development of the Marine Economy 14th Five-Year Plan for Marine Ecological Environmental Protection 14th Five-Year Plan for Modern Energy System 14th Five-Year Plan for the Development of Renewable Energy National Outline of Territorial Spatial Planning (2021-2035) Master Plan of Major Projects for the Protection and Restoration of National Important Ecosystems (2021-2035) Development of China Actions Framework for UN Ocean Decade
Japan	4 th Basic Plan on Ocean Policy
Lao PDR	Water Resources Utilization and Management Strategy 2030 and Vision to 2040
Philippines	 National Plan of Action for the Prevention, Reduction and Management of Marine Litter to 2040 Extended Producer Responsibility Act
RO Korea	 2050 Carbon Neutrality Strategy Blue Carbon Implementation Strategy 4th National Biodiversity Strategy 2019-2023 3rd Marine Debris Management Master Plan (2019 -2023) Comprehensive Strategy for Marine Plastic Reduction (2019-2030) 5th Masterplan to Support Female Fishers (2022-2026)
Singapore	 National Action Strategy Addressing Marine Litter NParks' Integrated Urban Coastal Management (IUCM) Framework Prevention of Pollution of the Sea Act (PPSA) National Action Strategy for Marine Litter (NASML) (2022-onwards) Bangkok Declaration on Combating Marine Debris, ASEAN Framework of Action on Marine Debris and the ASEAN Regional Action Plan (RAP) on Combating Marine Debris
Timor-Leste	Decree Law 37/2022: Zero plasticNational Ocean Policy

¹ The list is not exhaustive and is based on country presentations during the 15th EAS PC Meeting

Country	Priority plans/programs/initiatives (2023-2027)
Vietnam	 Strategy for the Sustainable Development of Marine Economy through 2023 with Vision to 2045 Strategy for Sustainable Exploitation and Use of Natural Resources and Protection of Marine and Island Environment to 2030 with Vision to 2050 Development of Ministerial Action Plans and Provincial Action Plans in line with the National Action Plan for the Management of Marine Plastics to 2030 Evaluation of 10 years of Implementation of the Law of the Sea and Island Resources and Environment 2015 Evaluation of the Law on Environmental Protection 2020 Development of National Marine Spatial Planning and Master Plan for sustainable exploitation and use of coastal resources from 2021-2030

HEALTHY OCEAN

Country	Priority plans/programs/initiatives (2023-2027)
Cambodia	 Integrated river basin management and pollution reduction Combating marine plastic litter in Cambodia (Project with Japan/UNDP) Development of Top Ten Plastics Report (with World Bank)
China	 Blue Bay Environmental Improvement Action Plan Coastal Area Protection and Restoration Projects The Red Line Regulation for Ecological Protection Development of national blue carbon standards Ocean to Climate Forecasting System (OFS) Global Ocean Negative Carbon Emissions (ONCE) Digital Deep-Sea Typical Habitats Programme (DEPTH)
Indonesia	 Scaling up Integrated Coastal Management (ICM) in city/district levels Rehabilitation of coral reef, mangrove and seagrass ecosystems Monitoring of seawater quality in 34 provinces through the Environmental Quality Index Development of methodology for monitoring microplastics
Japan	 Mainstreaming ICM through the National Ocean Renaissance Project Responses to marine plastic litter and others Designation of new marine and coastal protected areas Promotion of marine biological diversity
Lao PDR	 Protection and rehabilitation of water and water resources (i.e., headwater and riverbank protection, water treatment, wastewater discharge and environmental flow)
Philippines	Updating of National State of Ocean and Coasts (NSOC)

Country	Priority plans/programs/initiatives (2023-2027)
Singapore	National Action Strategy for Marine Litter (NASML)
Timor-Leste	 Net Zero Climate Policy Implementation of National Ocean Policy Objectives
Vietnam	Pollution reduction and waste management

HEALTHY PEOPLE

Country	Priority plans/programs/initiatives (2023-2027)
Lao PDR	Development of multiple-use water infrastructure
Philippines	Post-pandemic green and blue economic recovery effort

HEALTHY ECONOMIES

Country	Priority plans/programs/initiatives (2023-2027)
China	 Development of emerging marine industries (i.e., sea water desalinization, ocean energy, marine information service)
Japan	 Development of regulatory framework and designation of promotion areas to facilitate use of off-shore wind power Technical development and demonstration of Carbon Dioxide Capture and Storage (CCS)
Lao PDR	Water Financial Mechanism
Philippines	 Promotion of private-public partnerships, investments in solid waste management, and harmonization of circular economy approaches
Timor-Leste	Capacity building and promotion of green environment

In addition to the contributions of Country Partners, PEMSEA's Non-Country Partners play a crucial role in supporting the implementation of the SDS-SEA IP 2023-2027 by bringing diverse expertise, resources, and networks to the table, enabling a more comprehensive and multifaceted approach to addressing the complex challenges facing the region's coasts and oceans (Figure 2).

Figure 2. Non-Country Partner priorities and initiatives for 2023-2027

EFFECTIVE GOVERNANCE

Non-Country Partner	Priority plans/programs/initiatives (2023-2027)
ASEAN Center for Biodiversity (ACB)	 Establishment of a network of marine protected areas in selected large marine ecosystems in the ASEAN region (ENMAPS) through a UNDP/GEF funded project involving Indonesia, Philippines and Thailand 2024-2028
International Union for Conservation of Nature (IUCN)	 Country support to implementation of Roadmap towards GBF 30x30 with a focus on OECMs Provision of technical support and/or fostering dialogue on Global Plastic Treaty Knowledge products and conduct of dialogues on Biodiversity Beyond National Jurisdictions (BBNJ) Treaty 2023 Designing methodology for spatial governance assessment approach Coral Triangle Solutions for Marine and Coastal Resilience in the Coral Triangle (Somacore) (2023-2028) SEA Success - An innovative knowledge brokering approach to support MPAs management and governance improvement
Korean Marine Institute (KMI)	 Learning Exchange on Good Practices in Implementing Biodiversity Conservation- focused ecosystem and area-based management approaches (co-organized with PEMSEA)
Ocean Policy Research Institute of the Sasakawa Peace Foundation (OPRI-SPF)	 Support to national policy development on ocean and coastal management, development of institutional frameworks, and participation in regional/subregional organizations
Oil Spill Response Limited (OSRL)	Stakeholder engagement program on oil spill preparedness and response
Plymouth Marine Laboratory (PML)	 Support in the development of National Ocean Acidification Action Plans Observer NGO in UNFCCC Ongoing contributions to CBD and the GBF framework Working group to COP 16

² based on country presentations during the 15th EAS PC Meeting

³ Other effective area-based conservation measures

Non-Country Partner	Priority plans/programs/initiatives (2023-2027)
Plymouth Marine Laboratory (PML)	 Engagement in the UN Decade of Ocean Science and various global networks Provision of inputs to Global Plastics Treaty process Working group facilitator to the Global Plastics Summit 2023
PEMSEA Network of Local Governments (PNLG)	 Operationalizing the network through the PNLG Annual Forum and networking with the PNLC

HEALTHY OCEAN

Non-Country Partner	Priority plans/programs/initiatives (2023-2027)
International Union for Conservation of Nature (IUCN)	 Bay of Bengal Large Marine Ecosystem Project (BOBLME) (2023-2028) Provision of support to CBD parties to recognize and report OECMs as part of their 30x30 Plans Green list (global best practices for PCAs⁴) Coastal Ecosystems Health in Southeast Asia Phase 2 Protection and Conservation of Coastal and Marine Ecosystems in Asia: An MPA Capacity Development Progamme funded by the Ministry of Oceans and Fisheries (MOF) of ROK (2023-2024)
Korea Environment Institute (KEI)	 Development of environmental sensitivity mapping and oil spill risk assessment guidelines for coastal areas of Vietnam
КМІ	 Development of living shoreline technology based on blue carbon science toward climate change adaptation (2022-2025) Study on public beach camping and cooking system (2022-2023) Knowledge exchange on building coastal green infrastructure to mitigate coastal disasters Developing techniques for the restoration of blue carbon ecosystems and blue carbon credit system
OPRI-SPF	 Research on marine environment changes (e.g., temperature, acidification, marine plastic pollution)
OSRL	OSRL Stakeholder Engagement Programme on oil spill preparedness and response
PML	 UN Ocean Decade Programme: Ocean Acidification Research for Sustainability (OARS) Scientific research (ACCORD Project, Artificial Light at Night) Co-chair to Executive Council of Global Ocean Acidification Observing Network Host and leader of World Association of Marine Stations Future States of the Global Coastal Ocean: Understanding for Solutions (FOCUS) Monitoring of Aquaculture structures

⁴ Protected and Conserved Areas

HEALTHY PEOPLE

Non-Country Partner	Priority plans/programs/initiatives (2023-2027)
КМІ	• Study on improvement of marine ecosystem restoration policy (2023)
OPRI-SPF	 Engagement of small-scale fishermen and indigenous groups in the protection and sustainable use and management of coastal and marine resources
PML	 Launch of Marine and Natural Capital Laboratory Development of digital tools for water quality and human health

HEALTHY ECONOMIES

Non-Country Partner	Priority plans/programs/initiatives (2023-2027)
КМІ	Development of Blue Carbon Policy
OPRI-SPF	Promoting blue economy co-benefits and synergies
PML	 Sea the Value (Marine biodiversity valuation for green investment) Pier2Peer (scientific mentorship program) NF-POGO-PML Shipboard Training Fellowship onboard AMT⁵ cruise

⁵ Atlantic Meridional Transect

From Awareness to Action: Promoting Safe and Inclusive Workspaces at PEMSEA Resource Facility

In December 2023, the PEMSEA Resource Facility (PRF) organized an internal seminar for management and staff on "Creating a Safe Workplace Environment" as part of PEMSEA's efforts to promote gender equality and social inclusion under the SDS-SEA IP 2023-2027. The seminar aimed to enhance understanding of behaviors constituting sexual harassment, provide guidelines for promoting a safe work environment, and express commitment to a violence-free workplace.



Building on the seminar's outcomes, PRF developed a Sexual Harassment Policy and Guidelines released in February 2024.



SDS-SEA Implementation Plan 2023-2027 Monitoring and Evaluation Plan

Recognizing the need to effectively track the progress and ensure timely achievement and accountability of set targets, the PEMSEA Resource Facility (PRF) spearheaded the development of a comprehensive Monitoring and Evaluation (M&E) Plan for the SDS-SEA Implementation Plan 2023-2027. To ensure an inclusive and collaborative process, a Technical Working Group (TWG) was established, consisting of representatives from PEMSEA Country and Non-Country Partners.

The TWG, chaired by the EAS Partnership Council Technical Session Chair, Dr. Keita Furukawa, and Co-Chair, Dr. Suk-Jae Kwon, played a crucial role in reviewing and providing recommendations on the draft M&E Framework and reporting templates developed by the PRF. Through a series of online meetings and consultations, the TWG deliberated on the metrics, outputs, roles and responsibilities, and data collection methodology to ensure the feasibility and effectiveness of the M&E Plan in verifying the Implementation Plan's outcomes and impacts.

The TWG also reviewed the M&E Plan's coherence with existing program and project indicators to streamline reporting processes for Partners and the PRF. The final draft of the M&E Plan, incorporating the TWG's inputs, was presented and approved during the 15th EAS Partnership Council Meeting. The collaborative effort in developing the M&E Plan demonstrates PEMSEA's commitment to accountability, transparency, and evidence-based decision-making in the implementation of the regional strategy.

Leadership Continuity in PEMSEA Resource Facility

The EAS Partnership Council's Intergovernmental Session unanimously approved the results of the Selection Committee's review and endorsement of the extension of the incumbent PRF Executive Director, Ms. Aimee T. Gonzales, for a third term from 2024-2026 during the 15th East Asian Seas Partnership Council Meeting in July 2023. The Council recognized her key role in the growth of the commitments and investments amassed in the region to support the implementation of the SDS-SEA under her term as Executive Director.

In their deliberation during the 30th PEMSEA Executive Committee Meeting in March 2023, the Selection Committee, composed of the Chairs of the Executive Committee, cited Ms. Gonzales's experienced and steady leadership as crucial to the continuing efforts to improve PRF's performance, ensure effective implementation of the SDS-SEA IP 2023-2027, and enhance discussions and collaborations with PEMSEA partners. Country representatives expressed their support, emphasizing the need for continued leadership given the ongoing operationalization of the SDS-SEA Implementation Plan 2023-2027 and several new projects under the PRF.

Ms. Gonzales, in her acceptance speech, underscored the need to enhance the institutional and financial sustainability of PEMSEA during her third term as ED which include a) enhancing PEMSEA's suite of income generating services, by working with non-country partners and the network of learning centers to continue to provide technical support to country and local government partners; b) building the next generation of coastal and ocean managers in the region; and c) developing a succession plan within the PRF. She thanked the Partnership Council for their trust and support in her abilities to lead the secretariat's work.





East Asian Seas Regional Strategy on Biofouling Management

Addressing potential threats of invasive aquatic species through regional cooperation in the East Asian Seas was among the primary agenda during the 3rd Regional Task Force meeting on BioFouling Management held in Surabaya, Indonesia last September 20-23, 2023. The Regional Strategy on Biofouling Management in the East Asian Seas Region was agreed upon by members of the Regional Task Force on Biofouling Management created under the UNDP/GEF/ IMO GloFouling Partnerships Project.

The regional strategy on biofouling management sets out a clear framework which includes promoting research and development and technology exchange in the region, the establishment of national biofouling governance arrangements, the development of sustainable financing mechanisms within national and regional levels. The meeting also highlighted the importance of gender balance participation in any biofouling initiatives in the maritime sector as being promoted by the GloFouling Partnerships.

The regional meeting was organized by PEMSEA and the IMO through the UNDP/GEF/IMO GloFouling Partnerships Project and was hosted by the Directorate General of Sea Transportation, Ministry of Transportation of the Government of Indonesia. The meeting was attended by approximately 70 participants consisting of representatives from 12 countries from the region and beyond in the maritime sector.

The strategy was jointly endorsed by the Indonesia and Philippines head of delegations, on behalf of the Regional Task Force at the ASEAN Working Group on Maritime Transport during its meeting on October 11, 2023 in Ho Chi Minh, Vietnam, for approval. The strategy was also submitted by PRF, as the regional cooperation organization to the GloFouling Partnerships Project as well as the Korean Institute of Ocean Science and Technology (KIOST). KIOST is one of PEMSEA's noncountry partners who has been funding and supporting the biofouling work in the region, alongside IMO.



Participants exchanged their perspectives on the creation of a Regional Strategy on Biofouling Management during the 3rd Regional Task Force meeting on Biofouling Management held in Surabaya, Indonesia.



Advancing Sustainable Ocean Management in the Arafura and Timor Seas

In 2023, the Arafura and Timor Seas Ecosystem Action Phase II (ATSEA-2) Project made substantial strides in promoting sustainable ocean management and enhancing regional cooperation. Its strategic alignment with PEMSEA's SDS-SEA 2015 and Implementation Plan focused on governance, Large Marine Ecosystem (LME) improvement, and knowledge management. These efforts led to significant contributions towards SDS-SEA priorities, including ATSEA-3 project development, interim fund management, and forging vital partnerships, emphasizing ATSEA-2's pivotal role in resource mobilization.

The year also marked important milestones for ATSEA-2, reinforcing its commitment to effective ocean management and regional collaboration. The project successfully secured agreements on the Regional Governance Mechanism (RGM) structure, Terms of Reference (TORs), and a Transition Plan. This progress was complemented by consensus on RGM cost estimates, Cost-Benefit Analysis (CBA), and a comprehensive financing strategy for the 2025-2026 bridging phase, with PEMSEA appointed as the Interim Fund Manager. The timely update, completion, and publication of the Transboundary Diagnostic Analysis (TDA) showcased ATSEA-2's dedication to accessible information.

Significant advancements in the Strategic Action Programme (SAP) and the conclusion of the Papua New Guinea National Action Plan (NAP), with drafts for Timor-Leste and Indonesia, were other key achievements. The 5th Regional Steering Committee (RSC) focused on the SAP financing strategy and monitoring system framework, highlighting ATSEA-2's commitment to transparency and accountability.

Despite facing challenges, such as delays in specific activities/targets, issues with the National Inter-Ministerial Committee (NIMC) in Indonesia, and slow Marine Protected Area (MPA) establishment in Timor-Leste, ATSEA-2 proactively completed the ATSEA-3 Project Identification Form (PIF), ensuring ongoing program impact. These efforts underscore ATSEA-2's role as a catalyst for positive change in the region.

Moreover, in 2023, ATSEA-2 surpassed its end-of-project targets, achieving remarkable milestones. Notable accomplishments include the endorsement of the RGM model in governance, advancements in ICM plans, and exceeding Healthy Ocean and Healthy People targets with expanded MPA coverage and successful Ecosystem Approach to Fisheries Management (EAFM) plans. The project's effectiveness in communication, knowledge management, and monitoring was demonstrated through over 500 publications and participation in more than 200 events, including a pivotal role at the 4th International Conference on Integrated Coastal Management and Marine Biotechnology (ICMMBT) in Bali. Financially, ATSEA-2 showcased prudent fund utilisation, delivering 70% of the combined regional and Papua New Guinea budget by September. The year 2023 was a significant milestone for ATSEA-2, contributing greatly to sustainable ocean management in the Arafura and Timor Seas (ATS) region.

Notable Success in organizing at International Conference featuring the Arafura Timor Seas

At the 4th ICMMBT in Bali in September, ATSEA-2 achieved a significant milestone by hosting a successful plenary session titled "Translating Science into Policy." Collaborating with The Center for Coastal and Marine Resources Studies (CCMRS) of IPB University and the Archipelagic and



Group photo of the participants of 4th International Conference on Integrated Coastal Management and Marine Biotechnology (ICMMBT) held in Bali, Indonesia.

Island States (AIS) Forum, the session showcased ATSEA-2's success in integrating scientific assessments into policy-making. Focused on the TDA-SAP process, the session addressed key transboundary issues in the ATS region, unveiling the TDA for the ATS Region and a new ATS Atlas. It also explored ongoing contributions to governance and biodiversity in the region, emphasizing the role of science in shaping policy.

Grounded in scientific insights, experts such as Casandra Tania and Cristine Ingrid Narcise emphasized the crucial link between science and governance, particularly in addressing challenges within the ATS ecosystem. Tania highlighted the role of recent ATSEA-2 studies in shaping effective strategies, while Narcise underscored the significance of the RGM for fostering collaborative partnerships.

Dr. Handoko Adi Susanto, the ATSEA-2 Project's Regional Manager, demonstrated how the project bridged the gap between science and policies through the TDA-SAP process, addressing issues like marine pollution and illegal, unreported, and unregulated (IUU) fishing. The plenary session illustrated how the TDA-SAP process, in conjunction with the RGM, facilitates effective collaboration between science and governance for impactful interventions.

Dr. Susanto highlighted ATSEA-2's holistic approach and collaborations. The upcoming 2024 ministerial forum aims to adopt this model. Dr Susanto stated, "The TDA-SAP process, combined with the RGM as undertaken by ATSEA-2, provides an example of how science interfaces with governance."

As the project nears its 2024 culmination, efforts focus on targets like releasing Q4 2023 e-Newsletter, signing the updated SAP, confirming RGM financing, and organising the Ministerial Forum in Dili, Timor-Leste.

The 4th International Conference on Integrated Coastal Management & Marine Biotechnology Good Practices and Innovations Towards Blue Economy

Pali, Indonesia ptember 202

> The ATSEA-2 project team facilitated several sessions during the 4th ICMMBT, highlighting the programme's contribution to the promote blue economy in the region.


Marine Plastics Regional Project Manager Dr. Won-Tae Shin during a panel discussion at ICMMBT.

The project commits to knowledge sharing, collaboration, and sustainable practices. ATSEA-2 stands at the forefront of sustainable ocean management, contributing to regional collaborations for a resilient and prosperous future.

The session concluded with Dr. Aretha Aprilia from UNDP Indonesia stressing the essential links between scientific knowledge, action plans, and governance for future collaborations in the ATS region. Dr Aprilia emphasised the importance of community involvement and long-term collaboration for sustainability. Dr. Aprilia, a key figure in the ATSEA-2 Project, highlighted the crucial role of community empowerment, especially women, in shaping a sustainable and resilient future for the ATS region.

According to Dr. Aprilia, "Empowering women is crucial. Their active involvement strengthens coastal communities and plays a pivotal role in sustainable ocean management. We aim to foster ownership and leadership among women, recognizing their unique perspectives and contributions to the well-being of the ATS region."



Dr. Susanto (left) giving a token of appreciation to Dr. Aretha Aprilia of UNDP Indonesia (middle).



PRF Executive Director Ms. Aimee T. Gonzales received a certificate of appreciation as the keynote speaker for ICMMBT.

WOMEN EMPOWERMENT IN ATSEA-2 PROJECT AT A GLIMPSE

Mama Metri: Catalyst of Empowerment and Sustainable Progress in Rote Ndao, Indonesia

Metri Nainatu, also known as Mama Metri, stands as a symbol of empowerment. She is a resilient figure in Rote Ndao, East Nusa Tenggara, is a skilled fisher and seaweed farmer facing challenges with fluctuating catches. To address this, she turned to innovative entrepreneurship. Combining local wisdom and natural ingredients, Mama Metri created 'Minano,' an all-natural soap infused with leaves from the Siam weed, a traditional herbal remedy in the community.

Teaming up with 15 friends, Mama Metri established Ita Esa ('we are one') to produce Minano on a larger scale. Unaware of its lasting impact, the group significantly influenced the lives of many women fishers in the community. Supported by ATSEA-2 through training and facilitated connections to sustainable resources from the local government and the private sector, notably Bank NTT, Mama Metri smoothly transitioned from seaweed farming to soap production. Her leadership not only ensured economic sustainability but also financed community projects, including the construction of a local church. Driven by a commitment to preserve coastal ecosystems, Mama Metri meticulously selects ingredients, actively contributing to the long-term health of the mangroves.



Beyond Ita Esa, Mama Metri empowers women in Oeseli Village to explore alternative livelihoods. Her journey exemplifies the transformative role of women in building resilient coastal communities. Expressing pride in Minano's recognition, she says, "Thanks to ATSEA-2, Rote Ndao is known all over Indonesia and even overseas. Foreigners using Minano make us proud to put Rote Ndao on the map." Mama Metri's story is a beacon of hope, inspiring sustainability and empowerment.





Emerging Initiative for the Seas of East Asia: The Blue Carbon Program

Since 2016, PEMSEA has been working on blue carbon as part of the Biodiversity Conservation priority program under the SDS-SEA Implementation Plan 2018-2022. In 2017, PEMSEA published a seminal report entitled <u>"Understanding Strategic Coastal</u> <u>Blue Carbon Opportunities in the East Asian</u> <u>Seas Region,"</u> in collaboration with GEF, UNDP, TNC, Silvestrum, International Union for Conservation of Nature, and the Blue Carbon Initiative. The report highlights the importance of blue carbon ecosystems in climate change mitigation and the need for a detailed understanding of the carbon cycle within them.

Building on these efforts, PEMSEA has initiated the development of a regional Blue Carbon Program to support the conservation and improvement of coastal blue carbon ecosystems in the East Asian Seas region. The program aims to optimize the contribution of these ecosystems to the reduction of greenhouse gases and carbon sequestration, ultimately contributing to coastal resilience and habitat restoration. As part of the initial stage, PEMSEA has developed a concept note outlining the rationale, merits, and key elements for setting up the program, including potential services, roles of PEMSEA and its partners, and the roll-out process. In 2023, The PRF has completed stage one of the roll-out process, which involved a public learning event on blue carbon and a closed roundtable discussion with an ad-hoc working group composed of select members from the PEMSEA Network of Learning Centers (PNLC) and non-country partners to identify and understand various available methodologies and initiatives in blue carbon accounting in the region.

The results of the roundtable showed that PEMSEA country partners have been working on blue carbon accounting at the national policy level. However, there is no standard accounting method or certification existing in the region. In response, the PRF is conducting a detailed market study to gather experiences and existing methodologies for blue carbon activities amongst PEMSEA partners, particularly in the PNLC, in preparation for the development of a standard methodology for blue carbon in the region.

Parallel to this effort, the PRF has drafted the PEMSEA Blue Carbon roadmap, which outlines the short-term, medium-term, and long-term strategies from 2023-2030 and detailed steps for developing the Blue Carbon Certification Program. The roadmap identifies relevant PEMSEA Partners and stakeholders needed to ensure the successful implementation of the strategies identified, with initial support targeted from the Republic of Korea and in-kind contributions from select PNLC members. The program and its respective roadmap were approved by the EAS Partnership Council and PEMSEA Executive Committee during its 15th Meeting and 31st meeting, respectively.

For 2023 and 2024, PEMSEA has initiated activities to secure funding and capacity for the Blue Carbon Program, review accounting methodologies and the supply side of blue carbon ecosystems, and gather key actors to refine the approach for developing a regional blue carbon certification program. These efforts aim to create a regional network of Blue Carbon researchers, practitioners, and investors, with the goal of a public launch at the East Asian Seas Congress in 2024.

PEMSEA Blue Carbon Program Roadmap

	BC Standardized Accounting Methodology	Supply	Demand	Certification
Immediate (2023-2024)	Target: Standard BC accounting methodology developed	 Targets: Baseline survey of BCEs in (#) sites (inventory) BCE accounting done in BCE accounting done in (#) sites using standards 	Target: Policy and market research conducted	 Targets: Business plan developed Core team trained (assessment, certification, management)
Medium-term (2025-2028)	Target: Approved BC Accounting Standards used in sites	 Targets: BCE accounting done in at least (#) sites using BC Accounting Standards Models for co-benefits arrangements 	Target: Partnerships with private sector and sites forged/projects developed	Target: Certification system established
Long-term (2029-2033)	Target: PEMSEA BC Accounting Standards recognized/accredited as voluntary standard in (#) countries	 Targets: BCE Accounting done in (#%) of PEMSEA sites (#) PEMSEA sites in registry 	Target: (#) private sector partners in registry	Target: PEMSEA Certification System operational

New Partnerships on the Horizon

Endorsement of the National Marine Hazard Mitigation Service as a Non-Country Partner

During its 31st Meeting on October 2023, the PEMSEA Executive Committee (EC) endorsed the admission of the National Marine Hazard Mitigation Service (NMHMS) of China as a Non-Country Partner (NCP) to the East Asian Seas Partnership Council, marking a significant milestone in PEMSEA's efforts to expand its network of collaborators and strengthen its capacity to address critical issues facing the seas of East Asia.

The NMHMS, a non-profit research and academic institution under China's Ministry of Natural Resources, brings a wealth of expertise and experience in providing technical support and conducting scientific research on marine disaster mitigation, ecological early warning, and monitoring. The organization's nationwide scope and ambition to work regionally align well with PEMSEA's vision of fostering sustainable ocean and coastal development in the East Asian Seas region.

The EC recognized the NMHMS's current efforts and their potential to contribute to the implementation of the SDS-SEA Implementation Plan 2023-2027. These efforts include the development of a national marine disaster risk inventory, preparation of marine disaster-related standards, establishment of an index system for evaluating coastal ecology and resources, and the development of technical regulations on blue carbon assessment and monitoring.

Moreover, the NMHMS has identified key areas for potential collaboration with PEMSEA, such as the preparation of Regional and National State of the Oceans and Coasts reports, knowledge sharing events, capacity development on Integrated Coastal Management, targeted research on marine disasters, as well as knowledge management and climate change adaptation and disaster risk reduction initiatives.

By welcoming the NMHMS as an NCP, PEMSEA has demonstrated its commitment to engaging with diverse stakeholders and leveraging their expertise to address the complex challenges facing the East Asian Seas region. This partnership is expected to facilitate the exchange of knowledge, best practices, and innovative solutions, ultimately contributing to the sustainable management and development of the region's marine and coastal resources.

Fostering Good Practices in Implementing Biodiversity Conservation-Focused Ecosystem and Area-based Management Approaches

In 2023, PEMSEA and the Korea Maritime Institute (KMI) further strengthened their partnership by signing a Letter of Cooperation to jointly organize a Learning Exchange Workshop on Good Practices in Implementing Biodiversity Conservation-Focused Ecosystem and Area-based



A group photo of the participants of the 6th Geo Blue Planet Symposium in Seoul, RO Korea, which was also attended by PNLC members.



Mr. Jungho Nam during the learning exchange session that was co-organized by PEMSEA, KMI and KOEM during the 6^{th}

Management Approaches. The workshop was conducted during the 6th Geo Blue Planet Symposium in Seoul, RO Korea, and jointly organized by the PEMSEA Resource Facility in collaboration with the Ministry of Oceans and Fisheries (MOF) of RO Korea, KMI, the Korea Marine Environment Management Corporation (KOEM) and the Blue Carbon Research Center.

The Learning Exchange workshop discussions aimed to discuss the directions set by the Kunming-Montreal Global Biodiversity Framework (KMGBF) in relation to utilizing area-based conservation measures and other areabased management approaches and their integration into wider landscapes and seascapes to realize the 30x30 target.

The event, participated by representatives of the PNLC, provided a platform for sharing practical experiences and emerging/new developments in the region in implementing biodiversity-focused area-based management approaches, such as ICM, marine spatial planning (MSP), and other Effective Area-based Conservation Measures (OECM) as measures to operationalize the KMGBF requirements in line with country commitments.

Participants' discussions focused on three thematic areas: ICM and other area-based management approaches, Approaches in Habitat and Biodiversity Conservation and Management, and identifying the role of learning institutions in scaling up biodiversity conservation and management. Gaps and challenges to implementation were identified through the sharing of case studies, and breakout discussions identified synergies in plans and programs in support of KMGBF targets, as well as opportunities for capacity development and networking as well as transformative actions that would highlight the region's contribution to achieving the relevant KMGBF targets.

Presentations were delivered by key experts from KOEM, Seoul National University (SNU), and PNLC members, such as IPB University, Zhejiang University, and the University of the Philippines Marine Science Institute, among others.

The Learning Exchange provided a valuable platform for sharing knowledge, experiences, and best practices among PNLC members and Korean institutions, fostering collaboration and capacity building in implementing the GBF and promoting sustainable coastal and marine management in the East Asia region.

Shaping the Next Generation of Ocean Leaders

RO Korea supports PEMSEA's goal to help shape future climate and ocean leaders. As an initial step, the Korean National Ocean Science Museum (KOSM) committed to host a regional youth forum in East Asia tackling the ocean and climate nexus.

PEMSEA signed an agreement with KOSM last November 2, 2023 during the GEO Blue Planet 6th Symposium in Seoul, Korea. One of the key highlights of the agreement is the regional youth forum related to marine sciences and technology, climate change

국립해양과학관



Korea National Ocean Science Museum President Seo Jang Woo with PRF Executive Director Aimee Gonzales during the signing of Memorandum of Understanding last November 2, 2023 in Seoul, Korea.

adaptation, marine litter, or marine protected areas as part of the East Asian Seas Congress 2024.

The KOSM and PEMSEA partnership aims to share knowledge and drive more impactful initiatives for the youth sector on climate change adaptation and marine conservation in the East Asian Seas region.

Established in 2020, KOSM organizes innovative exhibitions and educational programs to promote science-based marine conservation. Building partnerships with institutions at the national and regional levels, KOSM offers education, exhibitions, and experiences in marine science, to share the value of the ocean with people.

CHAPTER 3 Global Challenges, Regional Interventions, and Local Solutions

Charting the ASEAN Rivers

2023 marks the beginning of a breakthrough collaboration among six ASEAN member states (AMS) and development partners in Southeast Asia for the protection and management of select priority river basins that drain into four large marine ecosystems in the Southeast Asian Region, the Bay of Bengal, South China Sea, Gulf of Thailand and Indonesian Sea.

Guided by the principle of source-to-sea system, the five-year regional project, Reducing Pollution and Preserving



Environmental Flows in the East Asian Seas through the Implementation of Integrated River Basin Management (IRBM) in ASEAN Countries, or IRBM Project, aims to establish functional IRBM mechanisms in priority river basins in Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia, the Philippines, and Vietnam for reducing pollution and sustaining freshwater environmental flows as well as adapting to climate change vulnerabilities.

The IRBM project is supported by GEF, implemented by the UNDP and executed by the PRF, in collaboration with the ASEAN.

Project Launching and Regional Inception Workshop

The IRBM Project launch was organised in conjunction with a Project Inception Workshop and the first Project Steering Committee Meeting to discuss project implementation arrangements on February 16, 2023. It was attended by representatives from the ASEAN Working Group on Water Resources Management, ASEAN Secretariat, UNDP, PEMSEA, and project implementing partners.



"The Project will integrate knowledge about the vital connections between rivers and seas. Best practices and pitfalls shall be shared for other rivers to emulate and avoid."

> Dr. Inthavy Akkharath Chair of the ASEAN Working Group on Water Resources Management



"Water use among ASEAN countries is growing rapidly, while water quality and quantity challenges threaten to derail much-needed economic growth."

> Dr. Selva Ramachandran, Resident Representative UNDP Philippines



"We view this project as a natural extension of PEMSEA's work on integrated coastal management – as rivers are natural conduits to our coasts and open seas."

> Ms. Aimee T. Gonzales Executive Director PEMSEA Resource Facility



IRBM Project kicks off in Cambodia, holds National Inception Workshop for national and provincial partners

The IRBM Project was introduced to the officials from national government agencies, provincial departments of Kampot Province and local governments of Kampot City and Bokor City, including the academe on June 14-15, 2023 during the National Inception and Collaborative Planning Workshop.

Key actions were identified on the various aspects of the project, i.e., implementing arrangements, project results framework, capacity development, knowledge management and monitoring, evaluation and reporting, with the aim of ensuring effective project implementation in the next five years.



National Inception workshop in Kampot Province in Cambodia.



Mr. Roath Sith, Deputy Director General of the Directorate General of Environment Protection under the Ministry of Environment of Cambodia during the National Inception Workshop of the IRBM Project last July 2023.



Kampong Bay River Basin: The Lifeline of Kampot Province

Wading through the communes of Kampot Province, the glossy waters of Kampong Bay River Basin strides on to riverbanks and riprap walls, providing a steady source of food and livelihood, as well as means of transport to over 184,000 people in the southern region of Cambodia.

The Kampong Bay River Basin is one of the main coastal river systems in Cambodia with 12-kilometer long or 3,018 km² total area. From Kamchay Mountain, it flows through the Teuk Chhou district and Kampot City toward the Gulf of Thailand, a large marine ecosystem shared with Thailand and Viet Nam. This river system also plays an important role in ensuring the water supply of Kampot communities and the local tourism economy in the province.

The coastal and riverbank developments, alongside the increase of pressure from utilization of water resources in Kampot, have contributed to the continuous decline of water quality in Kampong Bay River Basin. This endangers the critical water source of the Province as it provides essential water services to different sectors including agriculture, transportation, and tourism. Kampong Bay River Basin produces hydropower up to 194 megawatts that generates electricity not only for Kampot Province but also for other cities including Phnom Penh and Sihanouk. It is also considered as the only source of clean water for people living in Kampot City.

Today, the Kampong Bay River Basin is one of the national priority rivers in Cambodia. It is also included as one of the priority river basins of the Integrated River Basin Management (IRBM) Project being implemented by Partnerships in Environment Management for the Seas of East Asia, with support from the UNDP and GEF, and in collaboration with the ASEAN.



In the Southeast Asian region, the IRBM Project covers priority river basins in six countries including Cambodia to set-up a functional mechanism to reduce pollution, sustain freshwater water quality, and adapt to impacts of climate change. It is designed to improve governance and management arrangements through the source-to-sea approach within a five-year period.

In Cambodia, the State of River Basin (SORB) in Kampong Bay will be developed to provide evidence-based data and information to better understand the current challenges being faced by the river basin and the communities surrounding the areas. In the five-year implementation of the Project, it will also strengthen the governance and management strategies of the Kampong Bay through investments in pilot initiatives to improve infrastructure in the area, strengthening public-private partnership, building the capacity of local and provincial leaders, and increasing awareness among communities.

With available and updated data on the state of the river basin, stronger policies, management regime, and infrastructures in place, a cleaner and healthier river basin can support the social, economic and environmental goals and aspirations of the Khmer communities.

Read the full story here: https://bit.ly/kampongbaystory





DWR-MONRE Director General Dr. Inthavy Akkharath and PRF Executive Director Ms. Aimee T. Gonzales during the signing of the Memorandum of Agreement on the implmentation of the IRBM Project in Nam Tha River Basin in Lao PDR.

Lao PDR signed the agreement to reduce pollution and strengthen water resources management in Nam Tha River Basin

The Government of Lao PDR through the Department of Water Resources - Ministry of Natural Resources and Environment (DWR-MONRE) signed a Memorandum of Agreement with PRF that will serve as a framework for cooperation to implement the IRBM Project in Nam Tha River in 2023-2027. The signing was held during the 15th East Asian Seas Partnership Council Meeting in Ha Noi, Viet Nam on July 27, 2023.

On July 14, 2023, the Collaborative Planning and National Inception Workshop was organized in Luang Nam Tha Province, convening officials from relevant national government agencies, provincial and district level departments of the three provinces, the private sector, DWR and PRF to introduce the project and discuss and agree on the scope of project activities and implementing arrangements, including identifying potential challenges and solutions to facilitate project implementation in Lao PDR for the period 2023-2027.

Two priority river basins in the Philippines held consultations, identified lead project oversight for the IRBM Project implementation

The Subcommittee on Environment under the Committee on Economic Development of the Regional Development Council (RDC) III agreed to provide oversight for the implementation of the IRBM Project in Pasac-Guagua River Basin, one of the two project sites in the Philippines. During its first meeting on October 17, 2023, Ms. Nancy Bermas, Regional Project Manager, presented the Project's objectives, components, and major outcomes to the subcommittee co-chaired by the Honorable Daniel Fernando, Governor of Bulacan and Chairperson of the RDC III Subcommittee on Environment, and Engr. Paguito Moreno, Jr., Regional Executive Director of DENR Region III and Vice Chairperson of the Subcommittee. It was highlighted that the project's source-to-sea framework complements the framework and priorities of existing strategic plans in the river basin, including the Climate Responsive Integrated



Participants of the meeting of the Subcommittee on Environment under the Committee on Economic Development of the Regional Development Council III in Pampanga, Philippines.



Participants of the meeting of the Imus-Ylang Ylang-Rio Grande Rivers WQMA Governing Board of Region IV-A held in Tagaytay City, Philippines.

Master Plan for Pampanga River Basin 2016-2030, which uses the ridge-to-reef framework.

The agreement to include the Provinces of Aurora, Zambales, and Bataan in knowledge management activities of the Project will facilitate replication of good practices involving other provinces in the Pampanga River watershed where Pasac-Guagua River is one of the sub-basins.

As part of the oversight function of the Subcommittee, progress in project implementation will be reported during their regular meetings and their guidance will be sought in addressing the implementation gaps and challenges.

Meanwhile, on November 26, 2023, the Imus-Ylang Ylang-Rio Grande Rivers Water Quality Management Area (IYRR WQMA) Governing Board of Region IV-A has agreed to lead the project oversight for the IRBM Project in Imus-Ylang Ylang River Basin. The Governing Board appreciated how the IRBM project complements and supports the achievement of targets of the IYRR WQMA Action Plan 2016-2025. The Board agreed to draft a resolution to formalize its designation as coordinating mechanism for the project for adoption in its next meeting.

IRBM Project organized stakeholder consultation for the Pasac-Guagua River Basin in the Philippines

A collaborative planning and stakeholder consultation for the implementation of IRBM Project in Pasac-Guagua River Basin in the Philippines was held on December 1, 2023 in San Fernando City, Pampanga. Mayor Catalina Cabrera-Bagasina of Sasmuan Municipality joined the local partners in the consultation and signified the commitment of the local government to the project.

The implementation of the Project is a welcome development in helping address some of the priority issues in the river basin which include flooding, erosion, and pollution from domestic and agricultural/aquaculture activities.

As host to Sasmuan Bangkung Malapad Critical Habitat and Ecotourism Area, which is part of the larger Sasmuan Pampanga Coastal Wetland, a declared Ramsar Site



Collaborative planning and stakeholder consultation meeting for the implementation of IRBM in Pasac-Guagua River Basin.



Participants of the High-Level Policy Forum on Integrated Water Resource Management held in Oudomxay Province, Lao PDR on December 14, 2023.

in 2021 and the very first in Central Luzon, the contribution of the IRBM Project to the protection of the wetland would be critical.

Lao PDR government leaders convened for the High-level Policy Forum on Water Resources Management

Led by DWR of MONRE, Lao PDR, High-level Policy Forum on Integrated Water Resources Management was organized on December 14, 2023. The forum was attended by H.E. Mr. Chanthanet Boulapha, Vice Minister of MONRE; H.E. Mr. Khammuan Zomsihapanya, Vice Minister of the Committee on Economy, Technology and Environment, National Assembly; H.E. Mr. Onkeo Ounarlom, Vice Governor of Oudomxay Province; Dr. Inthavy Akkharath, Director General of DWR, and high level officials from the eight provinces in northern Lao PDR (Oudomxay, Bokeo, Luang Nam Tha, Phongsaly, Houaphan, Xiengkhuang, Luang Prabang, Xaiyabouly). The Vice Minister of MONRE, Vice Minister of the Committee on Economy, Technology and Environment of the National Assembly

"Every level of governance, i.e., national, provincial, district and village, has responsibility in implementing water laws and regulations with the engagement of all sectors that are directly and indirectly deriving benefits from the water resources,"

MONRF

H.E. Mr. Chanthanet Boulapha Vice Minister



and Vice Governor of Oudomxay Province co-chaired the forum.

With 119 participants in attendance, the Forum aimed to disseminate and raise awareness on the policies, laws and regulations on water and water resources management, as well as gather feedback on the level of implementation of these policies at the local level. "Water resource is life; without water, people will not survive. Its protection and sustainable use should always be considered"

H.E. Mr. Khammuan Zomsihapanya Vice Minister Committee on Economy, Technology and Environment, National Assembly



Among the priority issues in Nam Tha River Basin that were raised during the forum were the mapping of flood zones including flood forecasting and early warning system, knowledge and information sharing among different sectors on river protection and water resource management, and the inclusion of women and youth in grassroots level activities.

The participants also shared their experiences in the implementation of relevant policies and regulations on water, including challenges, and collectively identified possible solutions to enhance the effectiveness of existing policies.

Project Steering Committee Meeting organized for the Nam Tha River Basin

Spearheaded by DWR of Lao PDR, the first meeting of the Project Steering Committee (PSC) of the IRBM Project in Nam Tha River Basin was held on December 15, 2023 to discuss the roles and functions of the committee at the national and provincial levels (Oudomxay, Bokeo and Luang Nam Tha provinces). The PSC also reviewed and approved the workplan and targets for 2024.

A field visit was organized to the World Bank-funded Nam Kor and Nam Mao River Improvement and Disaster Risk Management Project in Oudomxay Province. The project covers river widening and reinforcing the embankment along the 8-km stretch of the river, including setting up of early warning system to enhance preparedness and response to flooding incidents in the city.

National and provincial leaders in Kampot Province, Cambodia took part in Integrated Coastal and River Basin Management Training

The IRBM Project organized a four-day orientation on ICM and IRBM with 40 national government representatives from different ministries and offices as well as local government departments involved in or with relevant scope of work in the Kampong Bay River Basin.



DWR led the first meeting of the Project Steering Committee of the IRBM Project in Nam Tha River Basin on December 15, 2023.

The orientation shared the concepts, principles, framework, tools, and application of ICM and IRBM and how both management approaches can complement each other, if not merged, to address in an integrated manner the challenges and threats in managing river basins and the adjacent coastal areas.

As support tools to implement ICM and IRBM, the orientation also introduced the basics of integrated information management system, communication planning and knowledge management, and the SORB reporting.

Provincial and district leaders in Nam Tha River Basin received training on Integrated Water Resources Management

The IRBM Project continues to rollout national level activities in Lao PDR. From December 18-21, DWR, National University of Laos and PRF facilitated a training on Integrated Water Resources Management (IWRM) and IRBM held in



Led by H.E. Mr. Chanthanet Boulapha, Vice Minister of MONRE, a field visit to the World Bank-funded Nam Kor and Nam Mao River Improvement and Disaster Risk Management Project in Oudomxay Province was conducted following the 1st PSC meeting.

Luang Prabang City. Among the participants are representatives from the Provincial and District Offices of Natural Resources and Environment of the provinces of Bokeo, Oudomxay, Luang Nam Tha, and Luang Prabang City, relevant sectors in Nam Tha River Basin, national government agencies, DWR, and the National University of Laos.

The training aimed to enhance understanding on the concept of IWRM and IRBM, and the application of relevant tools and methodologies in the field.

Prior to the training, DWR conducted a needs assessment among government staff who have mandates and roles in water resources management in Nam Tha River Basin on November 13-17, 2023. The assessment identified the current capacity and gaps to ensure that the trainings will fit the need of the government staff, and the skills acquired will facilitate the effective implementation of policies and programs on water resources management.

IRBM Project supported Cavite Water and Solid Waste Summit 2023 in the Philippines

The Provincial Government of Cavite in the Philippines, through the Office of the Provincial Environment and Natural Resources Officer (OPENRO), hosted the biennial Cavite Water and Solid Waste Summit with the theme "Cavite Ecological Network: Establishing Consortium of Academic Institution for Open Data Bank." The summit was held in partnership with Cavite State University, De La Salle University Dasmarinas, and PEMSEA on November 20-21, 2023 at the International Convention Center, Cavite State University-Main Campus, Indang, Cavite.

Attended by more than 200 representatives from local academic institutions and other government and nongovernment partners of Cavite Province, the Summit discussed the establishment of a "one-stop" database under the Provincial Government's website covering environment-related data/ information including relevant policies, laws and ordinances, academic researches and studies, and project outputs, among others.

The Consortium of Academic Institutions for Sustainable Development of Water Resources of Cavite comprising of 17 colleges and universities in Cavite Province were present and pledged their commitment and support for the sustainable development of water resources in the province.

The IRBM project was presented particularly highlighting the potential role of the consortium in its implementation in Imus-Ylang Ylang River.

State of River Basin framework and indicators introduced in Cambodia and Lao PDR

The SORB framework and indicators were introduced to national and provincial partners in Kampong Bay River Basin during the four-day orientation workshop on ICM and IRBM in Kampot City, Cambodia on November 17, 2023 and in Nam Tha River Basin during the IWRM Training in Luang Prabang City, Lao PDR on December 18, 2023. The SORB will serve as the monitoring, evaluation and reporting mechanism for IRBM implementation.

In Cambodia, Dr. Pham Ngoc Bao, Deputy Director, Adaptation and Water, Institute for Global Environmental Strategies (IGES), introduced the SORB framework and indicators while PRF introduced and facilitated the discussions on SORB in Lao PDR.

During the workshop, the participants reviewed the initial list of governance and management indicators, including the monitoring parameters for the SORB reporting, as appropriate and relevant for Cambodia and Lao PDR. The review of the applicability of the indicators by national and local partners in consideration of the local context is necessary to ensure that appropriate data is collected and analyzed to further support program interventions and policy responses on water resources management.

The SORB will be piloted and implemented in all six participating AMS, with the end goal of sustaining the reporting mechanism by the countries beyond project duration.



SORB facilitated discussions in Luang Prabang City, Lao PDR.



Turning the tide against marine plastics in the East Asian Seas region

Acknowledging the pressing issue of marine plastic pollution, PEMSEA initiated the implementation of the Official Development Assistance (ODA) Project entitled "Reducing Marine Plastics in the East Asian Seas Region" in January 2023. The six- year, US\$9M ODA project is funded by RO Korea through the Ministry of Oceans and Fisheries (MOF). The first year was focused on establishing a robust foundation to implement the planned activities across four components in ten selected cities and municipalities in the Philippines and Timor Leste. For the efficient implementation of the project, the Regional Project Management Unit (RPMU) within PEMSEA was created and National Project Board (NPB) and local project teams were established in each participating country.

The project goal is to reduce ocean-bound plastics in the project sites of the Philippines and Timor-Leste to help protect and improve the health and wellbeing of people and marine ecosystems by addressing the causes of plastic pollution through coordinated efforts of stakeholders including governments, industry, civil society, and individuals.

The objectives of the project are to i) improve local governance on marine plastic management, ii) demonstrate best practices and innovative solutions for reducing marine plastics and marine plastic management, iii) conduct beach monitoring on marine plastics and litter, and iv) raise capacity and awareness and improve communication among stakeholders and public on the impact of marine plastics on the environment, human health, and economy.



Group photo of the participants of the Marine Plastics Project Regional Inception Workshop in Manila, Philippines.

Project Kick-off: Regional Inception Workshop on the Reduction of Marine Plastics in the East Asian Seas region

To formally discuss the project with participating countries and PEMSEA, the Inception Workshop was organized on 19-20 July 2023 at the New Coast Manila Hotel in the Philippines. The workshop was attended by the national representatives from the MOF of Republic of Korea, the DENR of the Philippines and the Ministry of Tourism and Environment (MTE), the Ministry of Agriculture, Livestock, Fisheries and Forestry (MALFF) and Ministry of State Administration (ESTATAL) of Timor-Leste. The workshop was also attended by about 30 regional and local government officers from the 10 project sites located in the Philippines and Timor-Leste. The RPMU presented the background, objectives and the elements of the project document. Representatives of local government units from the 10 project sites presented their current solid waste management practices, key challenges to combat plastic pollution, and recommendations on the focus and activities of the project, relevant to their needs and contexts.

The national and local government partners from the three countries visited Planet CORA Philippines' site in Las Piñas-Parañaque Critical Habitat and Ecotourism Area (LPPCHEA). CORA's marine litter initiatives in Manila Bay included plastic recycling initiatives led by women leaders in local communities supported by USAID, and a marine litter monitoring and clean-up site in LPPCHEA supported by OSEAN and Korea International Cooperation Agency (KOICA). RO Korea has been advocating for the reduction of marine plastics pollution in recent years. In 2021, the third basic plan of Korea was established to reduce marine plastic waste generation by 60% in 2030, and an ambitious zero waste by 2050 through the life-cycle management system that involves marine debris generation. collection, treatment, and recycling.

"Through this project, we hope to contribute to enhance the capacities for combating marine debris and plastic pollution in the Philippines and Timor-Leste with opportunities to share experiences and best practices on RO Korea's marine plastic wastes management policies and recycling technologies,"

> Sunhyung Ryu Director of Marine Conservation Division MOF, RO Korea



Scoping and Establishment of national/ local project teams per project site in the Philippines and Timor-Leste

In March 2023, the RPMU conducted consultation meetings in Timor-Leste with key stakeholders, including representatives from the national and local governments, including the MALFF and MTE, and four municipalities (Dili, Liquica, Manatuto, and Atauro), as well as a private recycling company (Caltech). The national government officials of Timor-Leste agreed to implement the Marine Plastic ODA Project in the above-mentioned four sites, and local government officials also expressed their willingness to participate in the project in their municipalities. Solid waste management policies have yet to be comprehensively incorporated into the practices of businesses and the general public in Timor-Leste. There is an urgent need for the widespread adoption and institutionalization of waste segregation practices in both households and nonhouseholds. However, efforts are in progress to execute plastic segregation and recycling initiatives including the production of ecobricks, spearheaded by the private company Caltech through the USAID project.

In June 2023, the RPMU conducted site visits to six sites of Philippines to present the project document and its detailed components and activities to local government authorities, collect basic information of solid waste management and recycling businesses in the sites, and identify potential collaborators including beach litter monitoring institutes and NGOs for Marine Environment Protector (MEP) activities. Foreign-Assisted and Special Projects Service (FASPS) of DENR, Regional Environment Management Bureau (REMB) also joined the trip and supported the identification of focal points of local governments and build a network with Municipality Environment and Natural Resources Office (MENRO) and Solid Waste Management Office (SWMO) in the project sites of the Philippines.

Training of Trainers on Plastic Analysis and Characterization Study for national and local governments in the Philippines and Timor-Leste

A two-part training for the Philippines and Timor-Leste partners was organized in preparation for the conduct of plastic analysis and characterization study (PACS) in each site. The PACS aims to estimate the amount and composition of plastics generated by households and non-households and provide information for the baseline assessment, which can be used to determine data-driven interventions for developing practical action plans and strategies for the components of the Marine Plastic Project.

In the Philippines, a training was organized to introduce ICM methodology in managing plastics and solid waste management and provide practical knowledge on the



ODA Marine Plastics Project Regional Project Manager Dr. Won-Tae Shin joined the participants' activities during the PACS Training that was held in Manila, Philippines.

objectives of PACS and survey techniques at national and local levels. AMH Philippines, the consulting firm hired to carry out PACS in all sites, led the training of 30 representatives from DENR, Regional EMB, local government units (LGU), and local consultants who participated in the workshop. The workshop was designed to provide necessary knowledge and information according to the stages of PACS including i) introduction of PACS and preliminary preparations for conducting PACS, ii) conduct of PACS on-site encompassing social-behavior survey on plastic waste management, iii) dry-run of PACS, iv) encoding data and sample analysis. The RPMU also shared the template of the baseline assessment report at the workshop to help the LGUs and local consultants understand the structure of the report.

In Timor-Leste, the same format was used to organize a training of trainers on November 14, 2023. Facilitated under the oversight of the RPM, technical experts from AMH Philippines, Inc. delivered comprehensive lectures to participants on PACS methods. The training also included mock exercises to demonstrate the identification, classification, and measurement of various types of plastics. The training aimed to prepare for the on-site PACS implementation in the four designated project sites in Timor-Leste for next year (2024).

Conduct of baseline assessment in the six project sites in the Philippines

The RPMU hired local consultants to lead the site level data gathering to generate an initial plastics waste baseline study in support of the PACS. The local consultants also undertook an initial assessment of socio-economic behavior on plastics waste management of sample households.

The baseline assessment diagnosed the existing state of plastic waste management in the project sites, as well as identified the key challenges and priorities to be addressed. The result of the baseline study will be used as a basis for strategic interventions to combat marine plastic issues including sciencebased planning and policy development, innovation and technology on upcycling and promoting circular economy, beach monitoring, capacity building, and awareness raising.



Plastics Analysis and Characterization Study was conducted in 6 project sites in the Philippines as part of the baseline assessment of the Marine Plastic Project.

Identifying Pilot Sites for Innovative Solutions for Reducing Marine Plastics

Through field visits and consultations, the RPMU gathered fundamental data and information pertaining to existing solid waste management practices in various sites. The RPMU visited recycling facilities operated by local governments and private companies to assess the existing infrastructure for plastic waste management and identify gaps and local needs in addressing problems caused by plastic pollution.

Training of Trainers on Marine Plastics/ Litter Beach Data Monitoring for national and local partners in the Philippines and Timor-Leste

The training on marine plastics/litter beach monitoring was held in Regional Capacity

Center for Clean Seas (RC3S), Bali, Indonesia on 13-14 September 2023, where the local partners had the opportunity to learn regional actions to promote sustainable development in coastal and marine areas including transboundary issues of marine environment. The training was attended by 30 participants from local governments and academe partners in the Philippines and Timor-Leste.

The training included knowledge-sharing on good practices and lessons learned from the Republic of Korea and Indonesia on marine litter monitoring methodologies, site selection, and field exercise on beach monitoring at Kuta beach in Bali. The field exercise allowed the participants to engage in a practical exercise, based on the beach litter monitoring protocol learned during the training workshop. It involved identification of various types of litter collected from Kuta beach and recording data on the actual data card.



ODA Marine Plastic Project organized a training of trainers on Marine Plastic/Litter Beach Data Monitoring for national and local partners from the Philippines and Timor-Leste.

Beach data monitoring is a citizen-science empowerment activity to track long-term marine litter inflow to coastal areas. It will be conducted every quarter by applying a monitoring methodology developed by the Ministry of Ocean and Fisheries at the designated monitoring sites in the Philippines and Timor-Leste. A five-year beach litter monitoring from 2024-2028 targets for providing evidence-based insights to help improve plastic waste management in the project sites in the Philippines and Timor-Leste.

Site Selection of Beach Data Monitoring and preparatory work with local academe partners

The RPMU led the development of the beach data card based on the template and methodology employed by the RO Korea in implementing their national marine litter monitoring program.

During the series of scoping work and site visits, the RPMU coordinated with the local government partners and DENR in identifying potential beach monitoring sites that would fit the criteria of the methodology. These sites were agreed upon with the local academic partners, who will lead the beach data monitoring every quarter starting in 2024.

The partnership with local academic institutions is aimed at training and empowering local experts in up-to-date research methodologies and citizen science monitoring and evaluation tools. Their established local presence can greatly contribute to the sustainability of the monitoring beyond project life.



Marine Plastics/Litter Beach Monitoring Data Card.

Stakeholders Consultation and Introduction of the Marine Environment Protector Program to local partners

The RPMU and local government entities at the project sites have identified the Marine Environment Protector (MEP) Program partners within their respective site through the stakeholders' consultation meetings, which were organized in parallel with the conduct of on-site PACS in October 2023 at the sites of the Philippines and PACS training in November 2023, in Dili, Timor-Leste, respectively. The MEP local partners will play a pivotal role in facilitating communication, education, and public awareness programs concerning marine plastic pollution with various local stakeholders.

Virtual meetings with the identified MEP partners in the Philippines were also conducted from November 21 to 24, 2023.



The PRF ODA Regional Project Management Unit organized a stakeholders' consultation meeting with the 6 project sites in the Philippines, which includes the meeting in the Municipality of Bulan, Sorsogon attended by their local government officials, representatives of different government agencies and local organizations.



Marine Plastic Project Regional Project Manager Dr. Won-Tae Shin during the stakeholders' consultation meeting in Timor Leste.

The meetings provided an opportunity for the RPMU to articulate the conceptual framework and operational modalities of the MEP initiative. Furthermore, the RMPU and MEP partners shared ideas and discussed the timeline for MEP programs for 2024 and clarified challenges and



The training of trainers on PACS organized in Dili, Timor-Leste.

constraints to be addressed through the mutual collaboration.

The signing of the MOU and letter of agreement between PEMSEA partners and PEMSEA will be completed in the first quarter of 2024.

Developing the East Asian Seas Marine Plastics Data Center

The SEA Knowledge Bank, PEMSEA's online knowledge management platform, will host the Marine Plastics Data Center to ensure that data is accessible to the partners and the public. During the last quarter of 2023, the RPMU developed the sitemap and structure of the data center for immediate execution and launch the following year.

The Marine Plastics Data Center is an important platform for standardizing data collection and management, and facilitating data sharing among stakeholders including policy and decision-makers working on marine plastic pollution, as well as support longterm monitoring of marine plastics and litter, which is necessary to track changes in the extent and severity of plastic pollution over time.



ODA Project's East Asian Seas Marine Plastics Data Center.



Public-Private Sector Partnership in strengthening solid waste management and promoting circular economy

The Coca Cola Foundation Philippines, Inc. (CCFPI) and PRF signed an agreement to implement the Ecological Solid Waste Management in Cavite Province (Plastic Wastes Recycling) Project in January 2020. Despite several challenges such as the global pandemic, Taal Volcano eruption, local and national elections, the Project was successfully implemented in partnership with the Caritas Diocese of Imus Foundation. Inc. and in close coordination with Cavite's OPENRO. The Project supported the diversion rate target for solid wastes in five project sites, namely: Banaybanay, Amadeo; B. Pulido, GMA; San Rafael 3, Noveleta; San Jose, Tagaytay; and Bucana, Ternate.

Notable results from the project included the refinement of data analytics through the plastic circularity audit, community needs assessment, and waste analysis and characterization study (WACS). The information from these assessments provided updated data and information for a



more informed evaluation and identification of effective actions to strengthen solid/ plastic waste management at the community level.

Five capacity building and awareness raising sessions focused on solid waste management, circular economy, and livelihood development were also completed, engaging 210 representatives from the communities and barangay leaders from the five project sites and the Provincial Task Force on Solid Waste Management (SWM). The Project also supported the livelihoods of 110 individuals, mostly women, in barangays B. Pulido, Bucana, San Rafael 3, and San Jose. These women have been considered as potential trainers to scale up the livelihood program in other barangays. In support of knowledge sharing and possible replication, the Project published four articles documenting the good practices, lessons learned, benefits and impacts of solid waste management programs (https://www.pemsea.org/resources/ publications/reports).



Lessons from the field

The project affirmed a number of lessons learned in working with local communities to effect behavioral and positive changes.

- Although it takes time, the consultation process is crucial in ensuring that project activities are aligned with the priorities and programs of the LGUs and communities that will warrant the sustainability of project results and outputs.
- Although online platforms can be utilized to augment face-to-face consultations in view of the global pandemic, in-person interaction is still the best way to work and build relations with the communities.
- Local government units (provincial, municipal and barangay) play a key role in project implementation particularly in the provision of their own technical, human and financial resources supporting implementation and linking with local

government programs for sustainability of project results and creating larger impacts.

- The strong commitment and support of local leaders, partner agencies and communities are key in ensuring that activities are implemented and sustained.
- Enabling policies, legal basis and regulations are key considerations in identifying and implementing solid waste management interventions.
- The introduction of 'innovative' technologies should carefully consider the local context particularly in terms of environmental and socio-economic impacts, the sustainability of its operations including maintenance of personnel and operating costs, local acceptability, and clear demonstration of its use and application.

Representatives from the Coca-Cola Foundation Philippines, Inc., Cavite's OPENRO and PEMSEA visited the project sites and interacted with local partners and communities in February 2023. A ceremonial turnover of project outputs to the Provincial Solid Waste Management Board chaired by Provincial Governor of Cavite was also conducted in March 2023, followed by a Stakeholder's Forum and Turnover of Outputs in April 2023.

After the turn-over of outputs, Barangay Banay-banay sought PEMSEA's assistance for the installation of materials recovery storage (MRS) in strategic locations in the 7 puroks of the barangay which would minimize plastics leakage, establish a centralized trash collection, and at the same time, generate revenue from the collected recyclables. The operation of the MRS would facilitate the institutionalization of a data monitoring system for recyclable

wastes at the barangay level. Barangay Banay-banay will enter into an agreement with a junk shop who will collect and buy the recyclable wastes on a regular schedule to ensure the sustainable operation of the MRS. For transparency and accountability, the barangay intends to set up a Barangay Trust Fund for the revenue collected from recyclables as well as explore other incentive mechanism to encourage the community members to use the MRS and manage their wastes effectively. With support from Cavite's **OPENRO** and Municipal Environment and Natural Resources Office (MENRO) Amadeo, the barangay will put in place the necessary policy and legal basis for setting up the Barangay Trust Fund from collected recyclables and sustaining the data monitoring system including the necessary capacity building and awareness raising to sustain and scale up the operations of MRS.



PRF Executive Director Aimee T. Gonzales and Ms. Anna Cayabyab recognizing the province's active participation in the Coke Foundation project.



PRF Technical Officer Ms. Daisy Padayao shares key lessons of the project during the turnover ceremony of the Coke Foundation Project to Cavite Province.



Taking a step forward to combat marine plastic pollution in Southeast Asia

The Southeast Asia Regional Program for Combating Marine Plastics (SEA-MaP) is a collaborative project funded by the World Bank and jointly managed by the UN Office for Project Services (UNOPS) and the ASEAN Environment Division. The project runs from 2023- 2027 and engages 10 ASEAN member states. The project aims to reduce plastics consumption, increase recycling, and minimize leakages to prevent land and sea-based marine plastic pollution in Southeast Asia. It focuses on strengthening plastics policies and regulatory frameworks and promoting innovative solutions to help reduce plastic pollution in the ASEAN member states.

PRF acts as a Technical Advisory Organization (TAO) for the project. We help prepare the terms of reference for various deliverables of the project, taking into account environmental and social safeguard requirements; identify suitable organizations as potential bidders; provide technical advice in evaluating proposals and selecting suitable candidates; as well as provide advice and guidance and quality assurance of the project's deliverables.

In 2023, PRF provided technical advice in developing the terms of reference and selecting consultants who will produce the following deliverables:

- · Regional Baseline Report
- Best Practice Manual on Standards for Plastic Packaging
- Regional Guidebook on Standards for Responsible Plastic Waste Trade, Sorted Plastics, Recycled Plastics
- Regional Guidebook on Phasing Out Single-Use Plastics
- Extended Producers Responsibility
 Handbook and Customized Toolkit
- Guidebook for Common Methodologies for Assessment and Monitoring of Plastic Pollution

CHAPTER 4 Building Stronger Networks for the Seas of East Asia

A new decade of connection and home for the PEMSEA Network of Learning Centers (PNLC)

The PNLC plays a crucial role in strengthening PEMSEA network by fostering collaboration, capacity building, and knowledge sharing among higher education institutions and research institutions in the East Asian Seas region. In 2023, the PNLC made significant strides in expanding its membership, developing strategic plans, and transitioning its Secretariat to enhance the network's sustainability and impact.

A key development in 2023 was the transition of the PNIC Secretariat from the PRF to the Center for Coastal and Marine Resources Studies, IPB University, Indonesia (PKSPL-IPB). This transition was formalized through the signing of a Memorandum of Agreement (MOA) during the 15th East Asian Seas Partnership Council meeting in Hanoi, Vietnam. As part of the transition, PKSPL-IPB has set up a dedicated PNLC office with furniture and equipment, and has committed to secure operational support funds to ensure the effective provision of services of the PNLC Secretariat. The PRF continues to provide technical support to ensure a smooth transition and ongoing collaboration.



MOU signing between PRF and IPB University for the hosting of the PNLC Secretariat.



PNLC Secretariat office in CCMRS, IPB University in Indonesia.

"PNLC aims to contribute not only in developing ideas but also in developing instruments, methodologies, and capacities for the community and the institutions in East Asian Seas region. I hope that PNLC's contribution will have a significant impact in addressing the problems facing the coastal and marine areas in the region."

> **Dr. Yonvitner** PNLC President



Photo by PEMSEA/J. Castillo

The 3rd PNLC General Assembly, held in Seoul, Republic of Korea on November 2, 2023, marked another significant milestone for the network. During the meeting, four new members signed the PNLC Charter: Ocean College, Zhejiang University, China; Prince of Songkla University, Thailand; Udayana University, Indonesia; and Diponegoro University, Indonesia. This brings the total number of PNLC Charter members to 19, with two additional members currently undergoing the review process, demonstrating the growing recognition of the network's value and impact.

The General Assembly also focused on strategic planning and collaboration, with discussions on the development of thematic working groups to facilitate joint research, capacity building, and knowledge sharing in key areas such as ICM and Sustainable Coastal Development, Biodiversity and Habitat Management, Climate Change Adaptation and Disaster Risk Reduction, and Marine Pollution Management. The finalization of the PNLC sustainability plan, operational plan for 2023-2024, and the transition plan for the Secretariat further strengthened the network's foundations for long-term growth and impact.

As the PNLC continues to expand and deepen its collaborations, it is wellpositioned to make significant contributions to the sustainable development of coasts and oceans in the East Asian Seas region, supporting the goals of the PEMSEA network and the SDS-SEA.



New PNLC members were recognized and officially welcomed during the 3rd PNLC General Assembly in Seoul, RO Korea.



2023 PEMSEA Network of Local Governments (PNLG) Forum: Developing Coastal Cities, Fostering Blue Partnership

The PEMSEA Network of Local Governments (PNLG) convened its 2023 Annual Forum in November through a four-day event in Xiamen, China, bringing over 130 participants across 23 members from 7 countries to share best practices on ICM, explore blue economy opportunities, and identify areas to strengthen regional collaboration. The Forum was a key activity during the Xiamen World Ocean Week, whose theme centered on Building Blue Partnerships to Advance Sustainable Development.

The General Assembly opened with PEMSEA Chair Emeritus Dr. Chua Thia-Eng emphasizing the critical role of local governments in ICM implementation to mobilizing multi-stakeholder resources to achieve development targets. The PRF also presented key results from the initial monitoring phase of PNLG's SAP 2022-2030. While 38% of regular members submitted



Mr. Zeng Dongsheng, Director-General of Xiamen Municipal Bureau of Ocean Development and Secretary-General of the PNLG Secretariat, delivered the welcome remarks for the PNLG Forum.

progress reports indicating management interventions for ICM and SDG14 are in place, varying implementation levels mean further scaling up of capacities is required to fully meet targets.

The event featured two workshop sessions. The first session on "Addressing the Twin Targets of Reducing Marine Pollution and Protecting and Restoring Ecosystems under the SDG 14 Framework" covered integrated strategies pursued by local governments to jointly address habitat restoration and climate resilience goals. For instance, Guimaras Province, Philippines expanded its marine protected area coverage significantly through ICM mainstreaming and establishing partnerships from national, community, and non-government entities to boost conservation outcomes. China also showcased case studies on ecosystembased disaster risk reduction approaches combining coastal reforestation and seawall ecological rehabilitation to enhance climate resilience and biodiversity conservation.

The second session on "Developing the Blue Economy of Coastal Cities in a New Era" highlighted local innovations to enable sustainable blue economic growth, such as the key role of international cooperation in marine spatial planning to promote blue partnership amongst coastal cities, ensuring sustainable utilization of marine products such as seaweed through comprehensive business and ecological assessments, and empowering communities through initiatives that promote coastal and ocean literacy and ownership of managing coastal resources citizen science, eco-tourism and alternative livelihoods.

The Forum culminated with a field visit to immerse in Xiamen's ICM practices showcasing achievements in habitat rehabilitation and restoration firsthand through the Wuyuan Bay wetland park and preservation area.

Overall, the forum fostered regional knowledge exchange on localizing international agreements while aligning on ICM's instrumental value in pursuing healthy, resilient, and sustainable coasts and communities.



PNLG members discussed their current projects and good practices in promoting ocean health and blue economy.
Safeguarding Guimaras Island's Life Below Water through Habitat Conservation and Marine Litter Prevention

The island province of Guimaras has embraced ICM as a strategy to balance economic development and preservation of its marine ecosystems. An oil spill disaster in 2006 spurred Guimaras to implement an ICM program to cohesively address multiple challenges in habitat conservation and marine litter that the province was facing. Two years after, Guimaras became a member of the PEMSEA network.

This catalyzed habitat restoration efforts including expanding MPAs from four to 12 through extensive partnerships with the national government and nongovernment organizations, and supporting local fishing groups to promote mangrove rehabilitation. Partnerships with organizations like KOICA, UNDP-GEF, and ProCoast advanced capacity-building, facilities development, and designation of Taklong Island Marine Reserve as a nationally-protected area and learning center. Ongoing initiatives align with SDG 14, from water quality monitoring and aquaculture regulation to reduce pollution, to plastic waste reduction schemes. In 2022. Guimaras was certified at ICM Level II by PEMSEA, recognizing two decades of coastal management. While vulnerable as an island ecosystem, Guimaras remains committed through ICM to nurture its ecosystems and blue economy assets to become the agri-eco tourism capital of Western Visayas. The province's journey illustrates that adversity can catalyze environmental resilience, through patient coalition-building, participatory science and policy, and scaling community-based solutions. See a video of Guimaras's efforts here.



Supporting ICM Scaling Up in China through ICMS Certification

In 2023, the China-PEMSEA Center (CPC) continued to support the scaling up of ICM in China by conducting ICMS certification training and audits for potential ICM demonstration sites. With the support of the Ministry of Natural Resources (MNR) of China and PEMSEA, CPC established a Chinese ICM System Certification Audit Team, comprising leading auditors from the First Institute of Oceanography and the National Center of Ocean Standards and Metrology.

CPC launched ICM System Certification Level 1 for Changyi City, Shandong Province, and Level 2 for Quanzhou, Fujian Province. Changyi City, an active ICM demonstration site, has been committed to the ecological protection and restoration of coastal areas and the construction of protected areas. The Chinese ICMS Certification Audit Team conducted an online audit workshop for Changyi's Level 1 Certification on October 8, 2022.

Quanzhou, having achieved ICMS Level 1 Re-certification in 2020, sought to pursue a higher level of ICM system. CPC staff visited Quanzhou and conducted a hybrid ICM System Level 2 Certification Audit Workshop from October 12 to 14. The audit team reviewed Quanzhou's ICM Manual and conducted site visits to assess their ICM implementation. Based on the audit results, Quanzhou is preliminarily recommended for ICM System Level 2 certification, pending PEMSEA's approval.





CHAPTER 5 Knowledge Management/ Sharing

The Rise of Blue Carbon Credits: A learning exchange on the blue carbon initiatives in the East Asian Seas



In line with the World Ocean Day celebration, PEMSEA hosted an online regional learning event to share the practices and learnings on blue carbon in East Asia and emphasized the importance of having a standard blue carbon accounting method. Four countries including China, Indonesia, Korea, and the Philippines shared their on-going initiatives on blue carbon last June 27, 2023. Over 130 online participants tuned in and engaged with the speakers and panelists during the open forum. Guest experts shared the existing guidelines and tools in accounting blue carbon in their respective countries. In the panel discussion, Dr. Francesco Ricciardi, Senior Environment Specialist of Asian Development Bank, said that a standard blue carbon accounting method can help calculate investment return and can encourage more funding institutions to invest in the blue carbon market. Meanwhile, Dr. Siti Maryam Yaakub, Director of International Blue Carbon Institute of Conservation International,



explained the science on how countries can tap the maximum potential of blue carbon. She also shared their work on establishing a blue carbon global network.

"Blue carbon systems provide a very good example of how science and policy can make progress by mutually informing and supporting each other. As a matter of fact, blue carbon is now included as one of the targeted actions in Nationally Determined Contributions," said Aimee T. Gonzales, Executive Director of PEMSEA, during her opening message. Among the speakers were Dr. Maria Lourdes San Diego-McGlone of University of the Philippines Marine Science Institute, Dr. Andreas Hutahaean, Indonesia National Focal Point – Blue Economy in Indian Ocean Rim Association, Dr. Guangcheng Chen of Third Institute of Oceanography in China, and Dr. Sukhui Lee of KOEM.

Accelerating plastic reduction actions with citizen science

Partners of the East Asian Seas Initiative for Clean Oceans (EASICO) convened for a workshop on "Enhancing Scientific Capacity for Accelerating Actions Toward Plastic Reduction," hosted by GreenHub in Ha Noi, Viet Nam in May 2023. The workshop brought together local practitioners and international experts from Indonesia, Philippines, and RO Korea, and shared their knowledge, experiences, and best practices in plastic waste management.

The workshop covered various topics, including connecting participants and building a stakeholder ecosystem, the status of marine debris surveys and monitoring applying the Citizen Science Approach, sharing good practices, and mobilizing resources for activities related to marine debris and plastic pollution. Presentations were given by local experts and EASICO members, providing diverse perspectives on Vietnamese policies and different monitoring management practices from various countries.

The main focus of the workshop was on capacity building and perspective exchange on policy implementation, data collection, supporting the development of plastic wasterelated policies, education, community outreach, and addressing important research questions. Participants engaged in theoretical discussions, information exchange, and a field trip to gain practical experience in monitoring practices.

Throughout the three-day workshop, participation and engagement were encouraged through warm-up activities, group discussions, and sharing sessions. Participants were divided into five groups to present freely on marine litter using discussion materials and supplementary materials provided by the facilitators. This approach facilitated networking, information exchange, and the opportunity to gain different perspectives on the same topic.

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From ASEAN-wide Innovation Challenge to Regional Policy Cooperation

The 15th East Asian Seas Partnership Council was organized on July 26-27, 2023 in Ha Noi, Viet Nam, back-to-back with the Ending Plastic Pollution Innovation Challenge (EPPIC) Project of UNDP Viet Nam, supported by the Royal Norwegian Government. During the workshop on regional cooperation towards the global treaty on plastic pollution, EPPIC participating countries including Cambodia, Lao PDR, Philippines, and Viet Nam shared their on-going efforts in tackling plastic pollution. The workshop also served as a knowledge-sharing venue among countries in the region in addressing issues such as the role of the informal waste sector in promoting circular economy and identifying and mobilizing financial flows to end plastic pollution.



The EPPIC Project organised a workshop during the 15th East Asian Seas Partnership Council meeting to seek input and priorities of the East Asian Seas countries on tackling marine litter and promoting circular economy in the region.

PRF in the regional and global arena

PEMSEA and its partners, as leaders in sustainable coastal and marine development in the East Asian Seas, have consistently participated in key global and regional events to share the partnership's work through various means, including engaging in international policy discussions, serving as keynote speakers and panelists, and showcasing PEMSEA's achievements through diverse knowledge-sharing platforms.



On climate change

- Participated in the <u>Annual Dialogue of</u> <u>the International Platform of Blue Carbon</u> (IPBC) in Paris, France, and shared the status and opportunities for blue carbon in the East Asian Seas region with over 80 participants from 21 countries
- Discussed PEMSEA's Blue Carbon Agenda for the EAS region during the Blue Carbon Regional Symposium of the Blue Comprehensive Assessment and Conservation of Blue Carbon Ecosystems and Their Services in the Coral Triangle (BlueCARES) Project in Manila, Philippines, organized by the University of the Philippines Diliman and the Japan International Cooperation Agency (JICA)
- Served as panel moderator during the Regional Conference: Seizing Opportunities for Green Shipping in Asia and the Pacific in Manila Philippines, discussing regional perspectives and priorities in n the current negotiations of the IMO Strategy on the reduction of greenhouse gas emissions from ships and its regulatory framework



- Joined the Sustainable Ocean Initiative (SOI) Regional Capacity-Building Workshop for East, South, and Southeast Asia in Seoul, RO Korea to discuss the regional state of oceans and coasts in the EAS region with emphasis on environment and biodiversity issues together with other regional organizations and PEMSEA NCPs such as the Coordinating Body on the Seas of East Asia (COBSEA), Northwest Pacific Action Plan (NOWPAP), and ACB
- Joined the Virtual Intersessional Workshop of the Sustainable Ocean Initiative Global Dialogue with Regional Seas Organizations and Regional Fishery Bodies to discuss regional collaboration on the context of recent developments, such as the adoption of the Kunming-Montreal Global Biodiversity Framework and the High Seas Treaty



On blue economy

- Presented relevant updates on coastal and marine initiatives in the EAS region during the 24th Meeting of the ASEAN Working Group on Coastal and Marine Environment (AWGCME) in Bali, Indonesia
- Took part in the Regional Consultation on the Protection of the Marine Environment to Support the ASEAN Blue Economy in Singapore



 Co-hosted an online Asia Regional Forum for the Pre-Intergovernmental Negotiating Committee 2 (INC-2) with the World Wild Fund for Nature (WWF) to support and assist Member States especially in Asia and the Pacific in the lead up to the second session of the Intergovernmental Negotiating Committee (INC2) pursuant to UNEA 5.2 Resolution 5/14: End plastic pollution: towards an international legally binding instrument

 Engaged in the 3rd Regional Ocean Policy Dialogue on Marine Plastic Pollution in Southeast Asia in Bali, Indonesia



- Shared ATSEA-2's efforts in strengthening MPAs and establishing a regional MPA Network for the Arafura and Timor Seas during the 5th International Marine Protected Areas Congress (IMPAC5) in Vancouver Canada
- Presented the PEMSEA's Blue Carbon Program during the International Workshop on Eel grass and Blue Carbon 2023 in Tokyo, Japan and discussed JBlue and blue carbon programs, accounting methodologies and national and local governance and stakeholder engagement on blue carbon programs in other regions and countries

Looking Ahead in the Next Decade of Partnerships

Blue Synergy at the East Asian Seas Congress 2024



The East Asian Seas Congress 2024, in collaboration with World Ocean Week, is co-hosted by PEMSEA, Ministry of Natural Resources of China and the Xiamen Municipal People's Government.

This year's theme "**Blue Synergy for a Shared Future: One Sustainable and Resilient Ocean"** resonates strongly with the vision and approaches of the SDS-SEA. It gives emphasis on harnessing collective synergies across governments, organizations, and local communities to Blue Synergy for a Shared Future: One Sustainable and Resilient Ocean 6-8 NOVEMBER 2024 • XIAMEN CITY, CHINA

secure the sustainability and resilience of our shared ocean resource.

The EAS Congress will assess progress made and challenges faced in actualizing regional targets and global commitments, as it looks ahead at pathways for building greater collective action through cooperation, coordination and knowledge exchange amongst various stakeholder groups to secure a sustainable and resilient ocean for a shared future. The EAS Congress 2024 aims to:

- PROMOTE knowledge sharing among its partners and collaborators on the various initiatives to address current and emerging issues and solutions on coastal and ocean development and management;
- HIGHLIGHT scaling up ocean actions through strengthening partnerships. enhancing good practices, exploring

innovations and investments, and ensuring that the coastal and ocean communities will thrive amidst the challenges and threats of pollution, biodiversity loss and climate change; and

• **SERVE** as reporting and planning mechanism on the implementation of the shared SDS-SEA.

The following outputs and outcomes are expected to be delivered by the Congress:

- Reaffirmation of the EAS Partnership through synergistic actions and strategic partnerships to be reflected in the 8th Ministerial Declaration.
- Commitment to implement SDS-SEA 2023-2027 which serves as a regional framework and captures country and non -country partners priorities on ICM scaling up, biodiversity conservation and fisheries management, climate change adaptation and disaster risks reduction, pollution reduction, waste management and water use management and blue investments and green recovery.
- Demonstration of positive solutions, cases and lessons in implementing SDS-SEA through integrated management solutions and collaborative actions at the regional, national and local levels.
- Launch of the SORB Guidelines with reports of priority river basins of ASEAN member states.

- Post pandemic plans, lessons, and opportunities to accelerate the implementation of Blue Economy in key EAS countries, including the launch of the Philippine National State of the Ocean and Coasts
- Launch of the Regional Blue Carbon Program in the EAS region Launch of the baseline reports on marine plastics pollution management in 6 local governments in the Philippines and 4 local governments in Timor Leste
- Youth Call to Action

Key components of the EAS Congress include the Ministerial Forum. International Conference, Exhibition, and the general assemblies of PNLG and PNLC.

For partnership inquiry: eas.congress@pemsea.org For more information, inquiries and details of registration, please visit: https://bit.ly/eas2024



In the pipeline

For 2024 onwards, PEMSEA is expecting a number of multi-year, multi-country projects, and services on various areas such as biodiversity conservation, climate change mitigation and adaptation, pollution reduction, and waste management.

Strengthening MPA management through integrated coastal management

PEMSEA is looking forward to work with ACB, one of our non-country partners, to implement the UNDP/GEF project entitled 'Effectively Managing Networks of Marine Protected Areas in Large Marine Ecosystems in the ASEAN region (ASEAN ENMAPs). The objective of the Project is to develop and improve the management of networks of MPAs in the ASEAN region for the conservation of globally significant biodiversity and support for sustainable fisheries and other ecosystem goods and services.

Effective management of marine ecosystems requires integrated approaches, including covering areas that are under protection, e.g., MPAs and production seascapes, such as fisheries management areas and developing coastal areas for tourism, infrastructure and trade. PEMSEA will work with ACB in strengthening and implementing integrated management approaches by providing strategic guidance and capacity building and facilitating linkages between integrated coastal management and marine spatial planning and provide mentoring opportunities to ENMAPS project participating countries, namely: Indonesia, the Philippines and Thailand. The project is a great opportunity for PRF and the PNLC to continue to scale up ICM practice and use it as a framework to meaningfully engage with MPAs and expand the scope for inclusion of MPA networks and associated marine corridors.

The ICM work will be carried out to strengthen and implement existing coastal and marine governance and management in the following areas:



Reducing maritime transport emissions to help secure climate mitigation goals

A regional initiative to promote green marine transport in the region is set to sail in 2024 with the approval of the €9M from the Government of the Republic of Germany to IMO/PEMSEA project entitled Reducing Maritime Transport Emissions in East and Southeast Asian Countries (Blue Solutions).

Maritime transport, including the operation of ships, ports and trucks is a significant source of greenhouse gases and other pollutants. Around 90% of traded goods are carried by sea and 60% of these pass through the ports of Asia.

The Blue Solutions Project aims to assist South East Asian countries to transform their maritime transport sector to a lowcarbon future in line with national and regional greenhouse gas (GHG) priorities and international commitments, including the IMO GHG Strategy and the UN SDGs. Actions towards this include capacity building, support in developing strategies, national action plans, and demonstrating technology solutions for reducing GHG emissions from ships, within ports, and from hinterland transport.

Project participating countries include Cambodia, Indonesia, Malaysia, the Philippines, Thailand, and Vietnam and will also work with China, Japan, RO Korea, and Singapore as knowledge partner countries who will be tapped to provide technical and technology advice and assistance as well as capacity development for the ASEAN partners, since these four countries have implemented plans and actions on decarbonization of the maritime sector.

Managing invasive species and biofouling to contribute to pollution reduction, climate, and biodiversity goals

With 40% of the international trade through shipping passing through the East Asian Seas, this exposes the region's marine ecosystems to invasive aquatic species attached to ship hulls. Building on the IMO-PEMSEA collaboration achieved under the GloFouling Partnerships Project, notably the development of a regional strategy and action plan on biofouling management, the region requires a more ambitious intervention in terms of a) fulfilling new capacity needs and priorities to include marine protected areas and latest developments in the field of ships' biofouling management, b) supporting more countries from the region to streamline preparedness, and c) supporting the implementation of activities and initiatives as set out in the regional and national action plans.

Fostering blue economy development in the Arafura Timor Seas

With the imminent conclusion of ATSEA-2 project with expected outcomes of an approved regional strategic action plan and regional governance mechanism in 2024, the phase three of ATSEA is currently being developed to support sustainable, inclusive, and resilient blue economy development in the ATS. The third phase is expected to accelerate the achievement of the ATS' program priorities, leveraging the results through transformative transboundary actions in the ATS region with the following strategies:

- Application of the 'source to sea' approach and circular economy to reduce marine debris from land-based sources and fisheries
- Reduction of IUU fishing in small scale fisheries
- Protection and restoration of critical habitats to manage threats to endangered and threatened population of species
- Adoption of regional cooperation framework agreement on oil spill risk mitigation and disaster preparedness

- Strengthening of climate resilience and provision of sustainable livelihoods in fisheries and marine protected areas through the implementation of EAFM and the Fisheries Improvement Project (FIP) for economically important fisheries: red snapper and shrimp fisheries in the region
- Mainstreaming of gender equality and social inclusion to ensure women and vulnerable groups are empowered and represented in governance and decision making processes and provided equal access to resources and benefits
- Sustainable financing and transformative investments on the agreed priority issues in pursuit of sustainable, inclusive and resilient blue economy



CHAPTER 7 Overview of the audited financial statements of the PRF

Summary of 2023 Audited Financial Statement

Total revenues received by the PEMSEA Resource Facility in 2023 amounted to US\$3.1M compared to the US\$2.5M generated in 2022. This is largely due to two additional projects launched in 2023, namely the UNDP/ GEF/ASEAN project entitled 'Reducing Pollution and Preserving Environmental Flows in the East Asian Seas through the Implementation of Integrated River Basin Management (IRBM) in ASEAN Countries, or IRBM Project and the RoK ODA funded project entitled 'Reducing Marine Plastics in the East Asian Seas Region.'

These two projects alongside existing multilateral and other grants from international development agencies represented 50.45% of the total revenues in 2023. The rest of the revenues came from country partner contributions and grants amounting to 44% and PRF services of 5%. Revenue from services were obtained from technical services performed by PRF during the year which increased more than 50% compared to 2022.

Total expenditures for 2023 amounted to US\$2.7M with direct project costs, such as personnel, external consultancies, training, workshops and travels etc. taking up the bulk of expenses at 85%, indirect project costs at 7% and administrative costs of 3%. PEMSEA is grateful for the in kind contribution provided by the Philippine government as host of the secretariat which covered 7% of PRF's administrative costs.

Overall, PEMSEA demonstrated a positive and healthy financial status in CY 2023.



ASSETS	31 December	
	2023	2022
CURRENT ASSETS		
Cash	3,359,740	2,966,337
Receivable	26,353	42,571
Total current assets	3,386,093	3,008,908
NON CURRENT ASSETS		
FA at Fair value	52,197	56,611
Property & Equipment - net	25,669	5,603
Other non-current assets	27,422	10,493
Total non-current assets	105,288	72,707
TOTAL ASSETS	3,491,381	3,081,615

Statement of Financial Position (in US\$)

LIABILITIES AND FUND BALANCE

CURRENT LIABILITIES		
Accounts Payable and Accrued Expenses	343,399	274,424
Deferred Grant	1,381,556	1,116,962
Total current liabilities	1,724,955	1,391,386
NON CURRENT LIABILITIES		
Defined contribution liability	179,870	141,877
Retirement benefit obligation	49,146	64,855
Total non-current liabilities	229,016	206,732
TOTAL LIABILITIES	1,953,971	1,598,118
EQUITY		
Fund Balance	1,515,016	1,442,791
Employee benefit reserve	40,631	54,529
Fair value reserve	(18,237)	(13,823)
Total equity	1,537,410	1,483,497
TOTAL LIABILITIES AND EQUITY	3,491,381	3,081,615

Statement of Receipts and Expenses (in US\$)

	31 December	
ASSETS	2023	2022
RECEIPTS		
Government Contributions and grants	1,384,682	773,162
Multilaterals and other grants	1,582,622	1,652,177
PEMSEA services	169,836	84,570
TOTAL RECEIPTS	3,137,140	2,509,909
EXPENSES		
DIRECT PROJECT EXPENSES		
Personnel	989,991	449,507
Consultancy	280,966	759,891
Subcontract	519,123	527,622
Travel and meeting	169,388	121,986
Training	489,198	199,600
Other direct costs	147,857	57,043
Total direct project expenses	2,596,523	2,115,649
INDIRECT PROJECT EXPENSES		
Personnel	122,996	77,021
Travel and meeting	12,928	4,408
Depreciation	2,848	1,205
Overhead	43,417	17,882
Total indirect project expenses	182,189	100,516
ADMINISTRATIVE COST		
Personnel	64,641	24,706
Consultancy	18,974	20,953
Travel and meeting		
Depreciation	1,549	2,978
Overhead	201,039	211,112
Total administrative cost	286,203	259,749
TOTAL EXPENSES	3,064,915	2,475,914
EXCESS (DEFICIENCY) OF RECEIPTS OVER EXPENSES	72,225	33,995
OTHER COMPREHENSIVE LOSS Items that will not be reclassified subsequently to receipts or expenses		
Remeasurements gain/loss on retirement benefit obligation	(13,898)	29,405
Fair value loss on FA at FVOCI	(4,414)	(7,141)
TOTAL COMPREHENSIVE INCOME	53,913	56,259

CHAPTER 8

The PEMSEA Family in 2023

PEMSEA Executive Committee



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Atty. Jonas Leones Co-Chair, EAS PC



Ms. Chen Danhong Chair, Intergovernmental Session, EAS PC



Mr. Le Dai Thang Session, EAS PC



Dr. Keita Furukawa Co-Chair, Intergovernmental Chair, Technical Session Chair, Co-Chair, Technical Session, EAS PC



Dr. Suk-jae Kwon EAS PC

Country Partners



Cambodia

H.E. Thay Chantha, Deputy Secretary General of the National Committee for Cambodian Coastal Management and Development and Concurrent Deputy Director General of the General Directorate of Protected Areas in the Ministry of Environment (MoE)



China

Ms. CHEN Danhong, Deputy Director-General, International Cooperation Department, Ministry of Natural Resources



DPR Korea

Mr. Jong Kwang-Jin, Deputy Director-General, General Bureau for Cooperation with International Organizations



Indonesia

Ir. Sigit Reliantoro, Acting Director-General for Environmental Pollution and Damage Control, Ministry of Environment and Forestry



Japan

Mr. Masahiro Iwatsuki, Vice Director-General, Policy Bureau, Ministry of Land, Infrastructure, Transport and Tourism (MLIT)



Lao PDR

Dr. Inthavy Akkharath, Director-General, Department of Water Resources, Ministry of Natural Resources and Environment



Philippines

Atty. Analiza Rebuelta-Teh, Undersecretary for Finance, Information Systems and Climate Change, Department of Environment and Natural Resources



RO Korea

Mr. Haengnok Oh, Director, Marine Environment Policy Division, Marine Policy Office, Ministry of Oceans and Fisheries (MOF)



Singapore

Mr. Hazri Hassan, Director, International Policy Division, Ministry of Sustainability and the Environment



Timor-Leste

Mr. Acacio Guterres, Director-General of Fishery, Aquaculture and Marine Resources, Ministry of Agriculture and Fisheries



Viet Nam

Ms. Hang Pham Thu, Deputy Director-General, Viet Nam Administration of Seas and Islands (VASI), Ministry of Natural Resources and Environment (MONRE)

Non-Country Partners



ASEAN Centre for Biodiversity (ACB)



Coastal Management Center (CMC)



Conservation International (CI) Philippines Foundation, Inc.



International Center for Environmental Management of Enclosed Coastal Seas (EMECS)



International Ocean Institute (IOI)



Intergovernmental Oceanographic Commission–Sub-Commission for the Western Pacific (IOC-WESTPAC)



International Union for Conservation of Nature and Natural Resources (IUCN)– Asia Regional Office (ARO)

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Korea Environment Institute (KEI)



Korea Institute of Ocean Science and Technology (KIOST)

Korea Marine Environment Management Corporation (KOEM)



Korea Maritime Institute (KMI)

😘 maaine Biodiversity Institute of Korea (MABIK)

Norwegian Institute for Water Research (NIVA)

Northwest Pacific Action Plan (NOWPAP)



Ocean Policy Research Institute of the Sasakawa Peace Foundation (OPRI-SPF)



Oil Spill Response Limited (OSRL)



PEMSEA Network of Local Governments for Sustainable Coastal Development (PNLG)



Plymouth Marine Laboratory (PML)



UNDP/GEF Small Grants Programme (SGP)



UNEP Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities (GPA)

PEMSEA Network of Local Governments (PNLG)



PEMSEA Network of Learning Centers (PNLC)



PEMSEA Resource Facility

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