

# PEMSEA in Action

PEMSEA ANNUAL REPORT 2018



WHAT KEPT US BUSY IN 2018

WAYS WE SCALED UP  
ICM EFFORTS

WHO'S ON THE LIST?  
CHECK OUT OUR PARTNERS

HOW WE SPARKED  
INNOVATIONS  
AND CREATIVE IDEAS

PREDICTING POST-2020:  
WHAT THE FUTURE HOLDS

# content



## PEMSEA in Action: PEMSEA Annual Report 2018

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# PEMSEA <sup>in</sup> Action

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Photo by PEMSEA/J. Zaldivar

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THE EAST ASIAN SEAS CONGRESS

#### H I G H L I G H T S

About 1,000 delegates from 19 countries participated in one of the most highly credible and reputable international scientific conferences in the region. See the highlights of the three-day Congress and find out how the delegates are facing the future of the seas of East Asia with renewed confidence, optimism and determination.

#### ON THE COVER

Children from the 3<sup>rd</sup> Karanganyar Primary School in Kemiri District, Tangerang Regency in Indonesia are all smiles after an activity conducted by volunteer group Pesisir Mengajar. The group teaches coastal education and awareness, waste management, environmental protection and personal hygiene, health and nutrition to over 30 primary schools in the Regency.

*Photo courtesy of Pesisir Mengajar.*

#### SPECIAL SECTIONS

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**P**EMSEA celebrated its silver anniversary in 2018, tracing its humble beginnings as a marine pollution demonstration project in 1993 to its current status as a leading international organization promoting the sustainable development of the East Asian Seas region.

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# TO 25 YEARS



**W**hen PEMSEA's first phase was launched in 1993, Integrated Coastal Management (ICM) pilot sites were set up in Xiamen, PR China and Batangas Bay, Philippines. The pilot project, covering around 286 kilometers of coastline, was primarily aimed at preventing and managing marine pollution using the ICM framework. Twenty-five years later, PEMSEA's geographical and functional scope has expanded significantly—covering coastal and ocean governance, and specialized issue areas such as habitat protection and restoration, climate change and disaster risk reduction, water use, pollution reduction, sustainable livelihoods and blue economy. In terms of ICM coverage, PEMSEA now implements ICM initiatives in dozens of sites across East Asia, covering more than 40,000 kilometers of coastline and benefitting tens of millions of people living in coastal and watershed areas.

To commemorate its 25<sup>th</sup> anniversary, PEMSEA hosted a Partnership Night on November 28, 2018 with Executive Director Aimee T. Gonzales welcoming delegates who had been partners of the organization for a long time, as well as new delegates who now belong to the growing PEMSEA network.

In her speech, Ms. Gonzales spoke about PEMSEA's quarter-century achievements as grouped into five categories: (1) incorporating integrated coastal management mechanism in developing national ocean policies and local regulations, (2) demonstrating and testing solutions in several pilot sites, (3) working with partners and capitalizing on each other's strengths in applying integrated management solutions, (4) using transparent and participatory processes in building the above and, most importantly, (5) putting people at the core of the initiatives.

*Check out the succeeding pages for a definitive look at the milestone achievements of PEMSEA's country partners and other collaborators in the last 25 years.*

## 1996

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



## 1997

- Sea use zoning plan adopted by the Municipal Government of Xiamen
- Agreement between littoral countries (Thailand, Malaysia, Indonesia, Singapore) to implement the Malacca Straits Demonstration Project



## 2001

- Manila Bay Coastal Strategy/Declaration signed, October 2001, Manila, Philippines
- Regional Network of Local Governments Implementing ICM (RNLG) established, March 2001, Seoul, RO Korea.



## 2003

- Inaugural East Asian Seas Congress (8-12 December, Putrajaya, Malaysia); hosted by the Ministry of Science, Technology and the Environment of Malaysia with assistance from the Department of Environment Malaysia and Selangor State Government
- 1st Ministerial Forum adopts Putrajaya Declaration of Regional Cooperation for the Sustainable Development of the Seas of East Asia, signed by Brunei, Cambodia, China, DPR Korea, Indonesia, Japan, Malaysia, Philippines, RO Korea, Singapore, Thailand, Vietnam
- Sustainable Development Strategy for the Seas of East Asia (SDS-SEA) approved and initiated

## 1994

- Regional Programme office officially opens 3 June 1994; attended by national delegates, UNDP New York and Manila, IMO London and officials and staff of the Department of Environment and Natural Resources of the Philippines.
- Xiamen (China) and Batangas (Philippines) established as first National ICM Demonstration Projects

## 1990s

### 1993



- GEF/UNDP/IMO Project on Marine Pollution Prevention in the East Asian Seas (MPP-EAS) signed by representatives from IMO, UNDP, Cambodia, China, Philippines, Thailand and Vietnam, 13 November 1993, Xiamen, China. Participating countries: Brunei, Indonesia, Cambodia, China, DPR Korea, Philippines, Singapore, RO Korea, Thailand and Vietnam

### 1995



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

## 2000s

### 2002

- Japan joins PEMSEA



### 2000

- 2nd Phase of PEMSEA funded by the Global Environment Facility, implemented by UNDP and executed by the IMO; Participating countries: Brunei, Indonesia, Cambodia, China, DPR Korea, Philippines, Singapore, RO Korea, Thailand and Vietnam
- National ICM demonstration sites established: Cambodia (Sihanoukville), DPR Korea (Nampho), Thailand (Chonburi), Vietnam (Danang), in addition to existing sites in China (Xiamen) and the Philippines (Batangas)



### 2006



- EAS Congress 2006, 12-16 December, Haikou City, China, hosted by the Haikou City Government, Hainan Province of China and the State Oceanic Administration of China
- Lao PDR and Timor-Leste join PEMSEA as Country Partners and agree to implement the SDS-SEA
- PEMSEA Network of Local Governments for Sustainable Coastal Development (PNLG) Charter signed by 18 local governments

### 2005

- Xiamen International Forum for Coastal Cities (XIFCC) organized and conducted; adopted the "Xiamen Declaration on Coastal Cities-Global Cooperation for Sustainable Development," hosted by Xiamen Municipal Government, together with UNDP, State Oceanic Administration of China and PEMSEA; later transformed into the annual Xiamen World Ocean Week (XWOW)



## 2007

- 1st EAS Partnership Council Meeting, July 2007, Manado, Indonesia; hosted by the Ministry of Environment of Indonesia and the Provincial Government of North Sulawesi
- International Ocean Institute, IUCN Asia Regional Office, Northwest Pacific Action Plan, and Swedish Environment Secretariat for Asia join PEMSEA as Non-Country Partners and sign agreement with PEMSEA supporting SDS-SEA implementation



## 2009

- 3rd EAS Congress, November 2009, Manila, Philippines, hosted by the Department of Environment and Natural Resources Philippines
- 3rd Ministerial Forum adopts 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, November 2009, Manila, Philippines)
- Agreement Recognizing the International Legal Personality of PEMSEA signed by Cambodia, China, DPR Korea, Indonesia, Lao PDR, Philippines, RO Korea and Timor-Leste
- World Bank signs MOU with PEMSEA as sponsoring agency, covering support for initiatives related to land-based pollution reduction, ICOM/governance, climate change adaptation and public-private partnership , 25 November 2009, Manila, Philippines



## 2013

- Ratification of the Headquarters Agreement by the Philippines



## 2015

- Establishment of China-PEMSEA Sustainable Coastal Management Cooperation Center
- 5th EAS Congress, November 2015, Danang, Vietnam, launching the PEMSEA Network of Learning Centers, SDS-SEA 2015 and signing of the Danang Compact at the 5th Ministerial Forum



## 2018



## 2017

- PEMSEA participated in UN Ocean Conference for implementation of Sustainable Development Goal 14 (SDG 14). 5-9 June 2017, New York, USA

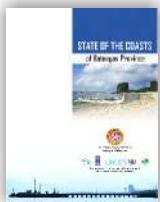


## 2010s



## 2008

- 1st State of the Coasts Report published (Batangas Province, Philippines)
- Centre for Marine Environmental Research and Innovative Technology (MERIT) Hong Kong designated as the first PEMSEA Regional Center of Excellence
- Philippine Supreme Court Decision issued requiring 14 agencies in the Philippines to implement the Operational Plan for the Manila Bay Coastal Strategy (OPMBCS)



## 2011

- Dongying Declaration on Building a Blue Economy through ICM adopted during the 10th PNLG Forum, July 2011, Dongying, China



## 2010

- Global Environmental Facility recognizes 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, October 2010, Manila, Philippines. Attending regional programmes and organizations include ADB, FAO, UNEP, World Bank, UNDP and UNIDO, along with Country Partners

## 2012

- 4th EAS Congress, July 2012, Changwon City, RO Korea, hosted by the City Government of Changwon and Ministry of Land, Transport and Maritime Affairs of RO Korea
- Port Safety, Health and Environmental Management (PSHEM) Code and Recognition System launched at the Yeosu Expo, July 2012



## 2014



- Initiated GEF/World Bank project on development of a regional platform for knowledge management and facilitating investment in blue economy

## 2016



- PNLG Forum, November 2016, Ansan City RO Korea adopts PNLG Strategic Action Plan 2016-2021

## CAMBODIA

The country successfully implemented ICM in 100% of its coastline starting in 2001, with the Municipality of Sihanoukville (now Preah Sihanouk Province) covering a coastline length of 175.81 km, which is 40% of the country's 435-km coastline. Preah Sihanoukville received ICM System Certification from PEMSEA in 2015. In 2016, motivated by the socioeconomic and environmental gains from the effective management of Preah Sihanouk, the remaining three coastal provinces in the country (Kampot, Kep and Koh Kong) started

implementing their own provincial ICM programs. Other sustainable efforts by the Royal Government of Cambodia include the: (1) implementation of the Gulf of Thailand (GOT) Regional Framework Programme for Oil Spill Preparedness and Response; (2) implementation of the Port Safety Health and Environmental Management Systems in Phnom Penh and Sihanoukville Autonomous Ports, which are scheduled for certification in 2019; (3) preparation of Cambodia's State of the Ocean and Coasts Report; and (4) development of on-the-ground activities addressing climate change and disaster risk reduction, habitat protection and restoration, water use and supply management, and pollution reduction and waste management under the broader ICM management framework of coastal provinces.



Photo by Sihanoukville Autonomous Port, Cambodia

## CHINA

In 2002, the country issued a national mechanism to guarantee the implementation of ICM across China. Xiamen Municipality, Dongying City, Lianyungang City, Haikou City, Quanzhou Municipality, and Fangchenggang City received their ICM System Certification in 2015. The Law of the People's Republic of China (PRC) on the Administration of the Use of Sea Areas mandates the collection and utilization system of sea-use payment, and the establishment of a sea area functional zoning system and the ecological red line system. Under these key systems, ecological restoration projects were launched nationwide through the "Blue Bay," "Ecological Islands" and "Planting of Mangroves in the South and Tamarisks in the North" projects. In November 2017, the Master Plan of Guangdong Province on Coastal Integrated Protection and Utilization was issued by the State Oceanic Administration of PRC together with the People's Government of Guangdong Province, marking the first ever provincial ICM master plan in China.



Photo by China PEMSEA Sustainable Coastal Management Cooperation Center (CPC)

The country also introduced a new concept, the "Bay Chief System," which centered on clarifying the responsibilities of local governments on every level of marine environmental protection. The Bay Chief System is now implemented in Lianyungang City.



## DPR KOREA

The history of ICM in DPR Korea can be traced back to 1993 when the country joined the first phase of PEMSEA's GEF-funded project. When the second phase started in 1999, DPR Korea designated Nampho as an ICM demonstration site. During the project's implementation, the ICM capacity of local governments was enhanced in the following areas: treatment of sewage and wastewater,

improvement of the drinking water supply, and decreasing marine pollution in Nampho's coastal area. The success of the Nampho ICM demonstration project proved that scaling up ICM across the entire country would be beneficial to the people's welfare and livelihood, as well as the environment. Following the model case of Nampho and guided by the National ICM Programme, Wonsan—the largest city in the East Sea area of DPR Korea—was designated as an ICM site in 2015. Aside from the two ICM sites, plans to scale up ICM in DPR Korea will include establishing a National ICM Coordinating Committee at the central level to ensure the efficient and effective implementation of programs at the national and local levels. The Committee will approve all ICM-related work in DPR Korea including work plans, budgets and project outputs.



Photo by General Bureau for Cooperation with International Organizations (GBCIO)

## INDONESIA

Indonesia's history of implementing marine and coastal management programs and projects since the 1990s contributed to the development and implementation of critical environmental and ocean-related policies, legislations, plans and programs. They include the following: (1) Law No. 23/2009 on environmental protection and management that promotes environmentally sustainable development; (2) Law No. 27/2007 (amended through Law No. 1/2014) in conjunction with Law No. 23/2014 on regional governance that mandates provincial governments to prepare ICM strategic plans and zoning plans; (3) Law on the Sea (No. 32/2014) that regulates operations at sea in accordance with marine provisions and international law, sustainability and national security; and (4) Indonesian Ocean Policy enacted

through Presidential Regulation No. 16/2017 that guides implementation and coordination of maritime-related policies and programs across agencies toward a common vision of Indonesia as a strong maritime nation. In the 2018 Our Ocean Conference held in Bali, President Joko Widodo announced that Indonesia has met its target of conserving 20 million hectares of marine areas two years ahead of the target. New commitments were made in relation to enhancing maritime security, MPA management effectiveness, sustainable fisheries, marine pollution especially marine debris management, sustainable blue economy, and climate change adaptation. In the 2018 Fourth Intergovernmental Review Meeting of the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities that was held in Bali, delegates committed to continue efforts to address environmental threats caused by increased nutrients, wastewater, marine litter and microplastics. Presidential Regulation No. 83/2018 declares the National Plan of Action to Combat Marine Debris from 2018 to 2025. To monitor the effectiveness of various coastal and marine pollution prevention programs, the Ministry of Environment and Forestry (MOEF) has been maintaining a national seawater quality database and is developing a marine water quality index. The collaboration with PEMSEA supports the development of local capacities and integrated governance mechanisms to enhance the implementation of national programs and international commitments and targets at the local level.

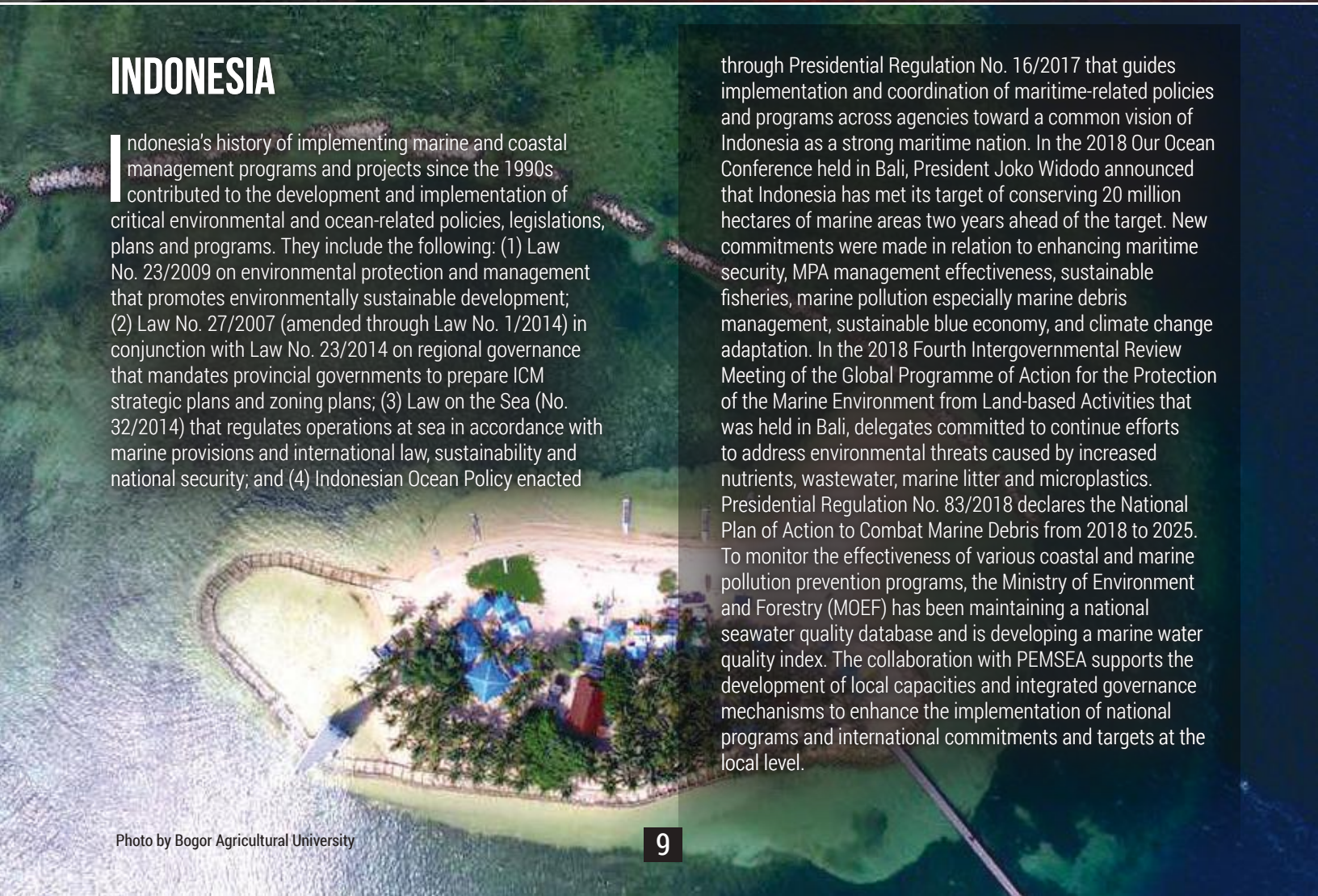


Photo by Bogor Agricultural University

## JAPAN

In 2007, Japan enacted the Basic Act on Ocean Policy as an overarching and cross-cutting policy framework for oceans and coastal areas. The Basic Plan on Ocean Policy was adopted in 2008 and revised in 2013. On May 15, 2018, the Third Basic Plan on Ocean Policy was adopted by the Cabinet. Key principles for ICM underlined in the Act and the Plan are to promote: ICM by considering local characteristics and assisting local governments; ICM in tandem with terrestrial management; ICM in enclosed coastal sea; and coordinating the use of coastal areas.

Since 1958, Japan has adopted a growing body of environmental legislation to tackle its worsening water pollution problems. The country introduced numerical targets for reducing pollutant effluents in designated watershed and coastal areas, with those targets revised every five years since 1984. Significant reductions were

achieved in Tokyo Bay, Ise Bay and Setonaikai adjacent to the megapolis of Tokyo, Nagoya and Osaka. Other sustainable efforts by Japan include coastal spatial planning, adopting local plans on ocean policy and implementing local initiatives for ICM.



Photo by the Ministry of the Environment, Japan



Photo by PEMSEA/D. Padayao

## LAO PDR

In an effort to lay down the mechanism for improved watershed management, the Government of Lao PDR passed and approved its updated Water and Water Resources Law during its National Assembly in May 2017. The law covers the comprehensive management of the country's water resources, mitigation of potential water-related disasters and management of wastewater discharges. Another significant achievement of Lao PDR is the integrated management of the Sedone River Basin, one of the 10 priority river basins for Integrated River Basin Management (IRBM) implementation in the country. Since 2008, Lao PDR and PEMSEA have been working together to develop the Sedone River Basin Profile and adopt the Sedone River Basin Sustainable Development Strategy. The partnership continues with the implementation of the SDS-SEA Scaling Up Project in Lao PDR focusing on the: development of the National River Basin Strategy to 2030; the National Guideline for Water Resources Use Fee; the national IRBM demonstration site in Houay Pail, Saravan Province; and the implementation of the Sedone River Basin Sustainable Development Strategy including management plans for the country's three sub-basins (Houay Champi, Houay Pail and Houa Sedone).



Photo by Port of Tanjung Pelepas, Malaysia

## MALAYSIA

An ICM approach was adopted by the country in 2001 due to the effects of population growth and excessive use of the resources of its coastline. Klang, being one of the oldest towns in Malaysia, was already a bustling center of commerce and has become a major international port. In just 15 years, ICM coverage has expanded to include the entire 291-km coastline of Selangor. The Port Klang Coastal Strategy was formulated and adopted by the Selangor State Government in 2007 as part of the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA). ICM programs in Malaysia also included the implementation of the Integrated Coastal Use Zoning Plans (ICUZP), which started in 2001 in Port Klang and consisted of two districts namely, Klang and Kuala Langat. It was then replicated and extended to three other districts: Kuala Selangor, Sabak Bernam (Northern Selangor) and Sepang. Another success is the implementation of the Port Safety, Health and Environmental Management System (PSHEMS) by the Port of Tanjung Pelepas with technical assistance provided by PEMSEA. This meant encouraging the ports in Malaysia to facilitate the continuing improvement of their management systems. In 2006, a PEMSEA PSHEMS Level 1 Certificate was issued to the Port of Tanjung Pelepas.

## PHILIPPINES

The issuance of Executive Order (EO) 533 on June 6, 2006 adopting ICM as the policy framework for the sustainable development of the coastal and marine environment and resources is considered a significant milestone in the long history of coastal management in the Philippines. An ICM Bill filed at the Senate and House of Representatives, which captures the provisions of the EO, aims to institutionalize ICM through the enactment of the Bill into the ICM Act. In 2013, PEMSEA Resource Facility assisted the Department of Environment and Natural Resources (DENR) in drafting a National ICM Program for Sustainable Development

of the Coastal and Marine Environment and Resources of the Philippines, as mandated by EO 533. The program targeted developing and implementing effective ICM programs in partnership with local governments, covering more than 20% of the country's coastline over the next five years. In 2015, the Philippine Government signed the Da Nang Compact along with 10 other East Asian countries, committing to scale up ICM to cover 25% of the regional coastline. In the same year, the provinces of Batangas, Bataan, Cavite and Guimaras received their ICM System Certification. An independent Third-Party Assessment (TPA) was conducted in 2017 to objectively evaluate ICM program coverage in the country, to benchmark the ICM processes and controls that have been established in selected provinces and municipalities against the requirements of PEMSEA's ICM Code, and to provide guidance on the standardization, streamlining and strengthening of the national ICM program. The results of the TPA have confirmed the Philippines' achievement in scaling up ICM where the assessment of 32 coastal provinces (out of 64) covered an estimated coastline of 9,747 km or 26.85% of the Philippine coastline.

With a view of promoting convergence and collaboration among concerned agencies and related programs at various scales, the Philippines through DENR has established partnerships for: (1) the joint protection of the Sulu-Sulawesi Marine Ecoregion with Indonesia and Malaysia in partnership with GIZ; (2) collaboration with the University of the Philippines Marine Science Institute for the Philippine Rise Initiative; (3) implementing the GEF/UNDP SMARTSeas Project; (4) the multilateral partnership for the Coral Triangle Initiative; and (5) managing Key Biodiversity Areas of Southeast Asia in partnership with the ASEAN Center for Biodiversity. Through EO 510, the DENR has developed the Integrated River Basin Development and Management Framework, which provides the blueprint for protecting the country's priority river basins by reducing pollution and ensuring the sustainable supply of clean and safe water for all.

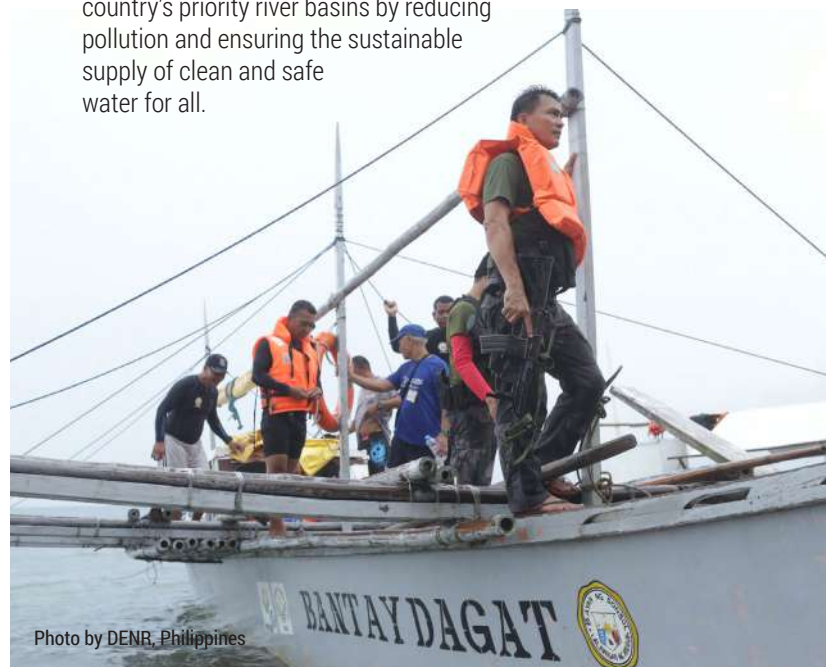


Photo by DENR, Philippines



## RO KOREA

Photo by KOEM, RO Korea

In order to prevent reckless development and conflicts over marine space, the Ministry of Oceans and Fisheries (MOF) of RO Korea has enforced the “Marine Spatial Planning and Management Act” since April 2019. The marine spatial planning system in the country is the legacy of “Integrated Coastal Planning and Management,” which has been initiated and implemented since 1999. The Marine Spatial Planning

of RO Korea functions through two planning systems: (1) the “National Marine Spatial Strategic Plan” with a period of 10 years and (2) the “Regional Marine Spatial Management Plan” with marine use zoning scheme. The regional management plans, which will be established by local governments, allocate marine spaces for major nine activities based on scientific spatial assessment and stakeholder consultation: (1) fishing and mariculture; (2) mining & mineral resources development; (3) energy development; (4) ocean tourism; (5) environment & ecosystem management; (6) research & education; (7) ports & navigation; (8) military security; and (9) safety management. ROK MOF plans to establish the “Integrated Marine Spatial Information Platform” by 2022, which integrates various marine spatial data and information produced and distributed by different agencies. It also plans to establish a supporting agency to carry out marine spatial assessment, technical review of draft regional plans, spatial data and information management, technical support for local governments, education and public outreach, international cooperation, and other related matters.



Photo by MCAP, Singapore

## SINGAPORE

Since 2009, the country has been implementing Integrated Urban Coastal Management (IUCM) based on the Integrated Coastal Management framework advocated by PEMSEA, which takes into account Singapore’s unique urban context. The IUCM has four guiding principles: (1) proactive planning and management by optimizing the use of coastal resources and spaces in a sustainable manner;

(2) a Whole-of-Government approach to ensure consultative planning and coordination of policies in coastal and marine land use and planning; (3) active partnerships through community engagement and public awareness programs; and (4) science-based management through research, monitoring, habitat restoration and enhancement programs. Singapore’s marine conservation and management strategies are also captured under the Marine Conservation Action Plan (MCAP)—an evolving plan grounded in science to meet the current and future conservation needs of Singapore’s coastal and marine environment. In 2018, Singapore celebrated 25 years of partnership building with the community in nature conservation. The first community stewardship initiative began with a ground-up project in 1993. Over time, many programs have been initiated, involving more than 40,000 volunteers, citizen scientists, nature advocacy groups, academics and others.

## THAILAND

Thailand's paradigm of sustainable development dates back to the 1970s when the late King Bhumibol Adulyadej introduced the Sufficiency Economy Philosophy (SEP), which promotes moderate and prudent living, self-reliance, community empowerment, and human development at all levels in order to reduce social inequalities, promote resilience, ensure a balanced way of life, and



Photo by O. Pidvalnyi

minimize impacts on the environment. This philosophy, which aligns well with the SDGs, guides policy and decision-making in the country at all levels. Thailand's previous national plans, the current 20-year National Strategy Framework and the 12th National Economic and Social Development Plan (2017-2021) incorporate the SEP and SDGs, enabling their implementation across all government programs. For managing the country's 3,148 km coastline, Thailand has developed and implemented key policies, legislations and programs promoting integrated management of marine and coastal resources. In particular, the Law on Promotion of Marine and Coastal Resources Management (BE 2558/2015) mandated the establishment of inter-agency and multi-sectoral coordinating mechanisms and development of strategic plans for marine and coastal resources management at the national and provincial levels. The National Marine Interest Act, which promotes marine spatial planning for all coastal provinces, was approved in March 2019. Thailand is currently collaborating with PEMSEA to: (1) scale up ICM approaches and good practices from the National ICM Demonstration Site in Chonburi Province (which received ICM System Certification in 2015) to the provinces of Chantaburi, Rayong and Trat, in support of BE 2558/2015; (2) implement the Framework Programme for Joint Oil Spill Preparedness and Response in the Gulf of Thailand (with Vietnam and Cambodia) for strengthening the sub-regional and their respective national oil spill response mechanisms; and (3) scale up the Port Safety Health and Environmental Management Systems (PSHEMS) in Bangkok Port and Laem Chabang Port.



Photo by PEMSEA/J. Zaldivar

## TIMOR-LESTE

As an island state, the coastal and marine areas are indispensable to the sustainable development of Timor-Leste and the welfare of its people. Since its establishment as a sovereign state in 2002, the country has made considerable advances in the process of nation-building and natural resource management. Guided by the National Strategic Development Plan (SDP) 2011-2030, key

policies, legislations and plans have been developed and implemented to address national priorities and international commitments for sustainably managing fisheries, food security, biodiversity, water resources, pollution, climate change and disaster risks, and maritime affairs. A roadmap for aligning the implementation of the SDP and UN SDGs has been prepared. In 2017, with the support of PEMSEA Resource Facility, a National Oceans Policy (NOP) was formulated through a transparent and participatory process to provide an overarching and integrated framework for managing the country's marine and coastal resources. The policy, which is undergoing government review, specified ICM as among the key strategies for implementing the NOP and the SDGs at the local level. PEMSEA is currently assisting the municipalities of Dili, Manatuto and Liquiçá in developing and implementing ICM programs, which also help develop

local capacities in support of ongoing government decentralization.

In the areas of habitat protection and biodiversity conservation, the Nino Konis Santana Marine National Park, the first in the country, was declared in 2007. The park conserves 123,000 hectares of land and seascapes, which are home to nationally and globally significant species and habitats, including 55,600 hectares of the Coral Triangle. Two community-based MPAs have been officially established through Ministerial Orders in the municipalities of Dili and Bobonaro. Other locally managed marine areas are being established in various parts of the country through the customary law called Tara Bandu, a tool used by traditional leaders to build consensus in the community on how to protect their environment and natural resources, prohibit unsustainable practices, and prevent and resolve disputes. Recognizing its role in local level governance, the government is supporting this traditional ecological practice and its incorporation into the country's legal system.

## VIET NAM

In 2008, the country established the Viet Nam Administration of Seas and Islands (VASI) under the Ministry of Natural Resources and Environment to perform advisory and technical support for the integrated and unified state management of its seas and islands. In 2017, a National ICM Coordinating Committee and National ICM Coordinating Office were established to oversee and coordinate the implementation of Viet Nam's National ICM Strategy and National ICM Action Plan (NAP). The goal was to scale up ICM good practices to cover 100% of Viet Nam's coastline. Da Nang City, a national ICM demonstration site and working model for ICM in Viet Nam since 2000, has provided practical experiences and lessons to support ICM scaling up. The City of Da Nang, Province of Thua Thien Hue, and Province of Quang Nam received ICM System Certification in 2015. To date, 14 provinces are under the NAP and SDS-SEA Project, covering close to 70% of Viet Nam's coastline with ICM. The country has also supported various legislation to strengthen efforts for the integrated management of its seas and islands. Among them are the approval of the National ICM Program in the Northern and Central Coastal Region of Viet Nam towards 2010 and Vision to 2015; approval of the National ICM Strategy to 2020 with Vision to 2030 and National ICM Action Plan to 2020; passing of the Law on Marine and Island Resources and Environment; and the approval of the Strategy for Sustainable Development of Viet Nam's Marine Economy to 2030 and Vision to 2045, which stipulates measures for transforming Viet Nam into a strong coastal nation.



# A MESSAGE

Dear partners, collaborators and friends,

Each year as we develop our Annual Report, we seek to tell the compelling stories behind our accomplishments in the region, reflect on the challenges we faced, and assess our plans for the future. The year 2018 was particularly special, since we not only marked two significant milestones—PEMSEA’s 25<sup>th</sup> anniversary and the holding of the East Asian Seas Congress in the Philippines—but we also saw our country partners commit to intensify the implementation of our shared regional strategy, the Sustainable Development Strategy for the Seas of East Asia, and pledge to support the sustainability of the PEMSEA Resource Facility beyond 2019 through the Iloilo Ministerial Declaration.

It was a busy year as 2018 saw us continuing to transform international commitments and national priorities into practical on-the-ground solutions that help drive the development of new or strengthen existing national policies and strategies in support of upscaling and replication. The past year also saw us renew partnerships while developing new ones in promoting coastal and marine biodiversity, investing in the blue economy, and joining alliances to address the global problem of marine pollution, plastics and microplastics.

At the EAS Congress, we were also eager to see the next generation of innovative ideas and their practical applications: from the use of satellite data for marine spatial planning, to harnessing ocean energy as a source of clean and renewable energy for the future, and building capacity for “blue communities” that are able to support the health, food security and livelihoods of people.

We take this opportunity to thank the outgoing members of the Executive Committee (August 1, 2016–July 31, 2019) who served us well during the period of transition. We also welcome the new set of Executive Committee members to be led by Pak Arief Yuwono (August 1, 2019–July 31, 2021). As we look to the years ahead, we encourage and urge the Partnership Council officers and members to ride on the momentum of the activities that defined our efforts in 2018.



Photo by DENR

## FROM THE COUNCIL CHAIR AND EXECUTIVE DIRECTOR



Photo by PEMSEA/J. Castillo

We also need to expand our strategy and approaches by adapting, applying and availing of the best science, innovation, investment, technology and the arts. The future of PEMSEA lies in our hands—from ensuring our sustainability with a blue economy mindset, replicating and upscaling integrated management solutions with integrated coastal management as base, and fostering coastal and marine investment initiatives that will secure a healthy and sustainable Seas of East Asia.

Thank you for partnering with us on this exciting journey.

Sincerely,

**Antonio La Viña**  
Council Chair  
East Asian Seas Partnership Council

**Aimee Gonzales**  
Executive Director  
PEMSEA



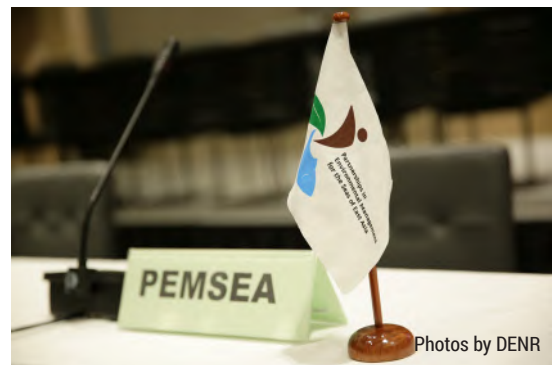


# WHAT KEPT US BUSY IN 2018

If we could describe 2018 in one word, it would be *intense*. For PEMSEA, it was a hectic year of consistent high points, accelerated actions and valuable lessons learned. The year that underscored the organization's continuing mission of HOPE (Healthy Oceans, People and Economies) across the Seas of East Asia, but with a more determined focus on implementing concrete actions borne out of its decades-long history of integrated management solutions and partnerships.

Several milestones marked 2018, most notably PEMSEA's celebration of its 25th anniversary and the successful conduct of the international East Asian Seas (EAS) Congress, which was hosted by the Government of the Philippines. The year also saw PEMSEA in action in terms of demonstrating how actions in the local, national and EAS region are contributing to the United Nations Sustainable Development Goals (UNSDGs).

Key themes that emerged from last year included the strengthening of the SDS-SEA's (Sustainable Development Strategy for the Seas of East Asia) implementation amongst PEMSEA partners, collaborators and other stakeholders through a more participatory planning process towards integrated coastal management or ICM; the need for a blue economy and sustained investment in marine initiatives; and marine plastics taking front and center of the global discourse on ocean pollution.



In retrospect, what does this all mean? Quite simply, that the work in keeping the sustainable development of the world's oceans and coasts remains a continuing and evolving process. In this report, we chronicle and celebrate the many achievements of PEMSEA and its partners in 2018 as we move from strength to strength for a stronger, smarter and more resilient East Asian Seas.







# EAS EAST ASIAN SEAS CONGRESS 2018

It was a year and a half of thorough planning, meticulous coordination and countless meetings that defined the level of preparation it took for PEMSEA and the Philippine Department of Environment and Natural Resources (DENR) to organize the highly anticipated 2018 East Asian Seas (EAS) Congress. Widely recognized as one of the biggest and most credible international gatherings of environmental advocates and scientific experts on oceans and coasts, the EAS Congress was held on November 27 to 30, 2018 at the Iloilo Convention Center in Iloilo City, Philippines.

This is the second time that the Philippines, through the DENR, hosted the Congress in collaboration with the United Nations Development Programme (UNDP), Global Environment Facility (GEF) and PEMSEA. The 2018 Congress was closely organized with the host provincial and city governments of Guimaras and Iloilo.

Some 1,000 local and international delegates from 19 countries attended the three-day conference, a triennial event that served as a platform for dialogue, knowledge-exchange, strategic action, partnership building and cooperation in support of the region's common vision of sustainable development of the Seas of East Asia. The theme for the 2018 EAS Congress was "25 Years of Partnerships for Healthy Oceans, People and Economies: Moving as One with the Global Ocean Agenda."

During the opening ceremony, DENR Secretary Roy Cimatu emphasized the importance of the event to the Philippines and the East Asian Seas region, and recognized PEMSEA's efforts in promoting ICM and its contribution to achieving local, national, regional and global targets for sustainable development.



"We need strong resolve and decisive action to move forward. Knowing environmental issues are multidisciplinary, cross-sectoral and transboundary in nature, acting separately will only lead to complex problems that are very difficult for individual countries to solve," said Cimatu.

In his plenary discussion, H.E. Aladdin Rillo, Deputy Secretary-General of ASEAN Economic Community, called for every country in the region to embark on sustainable activities and partner with each other to address the problem. He stressed, "The growth of ocean economy can easily be achieved if we work together."

It was in this context that participants shared their experiences, processed new insights and knowledge, assessed challenges and opportunities, and identified actions to further strengthen the implementation of the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA), a common framework for action and cooperation for sustainable development in the region.

The three-day event featured Ocean Talk (a series of plenary sessions) combined with SEA Exchange (dialogues with partners), Partnership Hubs (partner-led side events), a Youth Forum, and PEMSEA Network of Local Governments (PNLG) Forum that culminated in a Ministerial Forum on the final day of the Congress. An international exhibition was also organized as a showcase of innovation and progress in meeting SDG 14 and SDS-SEA implementation. On the last day of the Congress, a field visit was conducted in the island province of Guimaras, a PEMSEA ICM site.



The 2018 EAS Congress ended on a high note, amidst an atmosphere of confidence, optimism and determination among the participants. During the closing ceremony held on November 29, ministers from PEMSEA partner countries came together to sign the Iloilo Declaration, committing to intensifying their actions to save our coasts and oceans.

In his closing statement, PEMSEA Chair Emeritus Dr. Chua Thia-Eng emphasized the need for a “strong political will” and reminded the participants that it was “time to move forward and put into action everything that has been tackled, proposed and learned during the Congress.” Dr. Chua also provided a summary of recommendations reached over the past three days:

- 1) SDS-SEA provides a powerful overarching framework for approaches to address the SDGs;
- 2) Integrated Coastal Management (ICM) has been demonstrated and validated as a successful approach to sustainable coastal development over the 25 years of PEMSEA activity;
- 3) ICM is an inclusive and participatory approach for the areas it is practiced in; and
- 4) The State of the Oceans and Coasts (SOC) reporting system has been validated as a useful planning and assessment tool.

United Nations Special Envoy for the Oceans Ambassador Peter Thomson sent a special video message to the conference. He underscored the importance of giving particular attention to the connection between land-based activities and that of the oceans.

He also urged the participants to not be weighed down by the issues discussed but, rather, be energized by the solutions offered by the EAS Congress.

Meanwhile, Secretary Ernesto Pernia of the National Economic and Development Authority (NEDA) delivered a message on behalf of Philippine President Rodrigo Duterte. The President said that “given the shared and transboundary nature of our water resources, we need to be united in the conservation and sustainable use of our seas.” He added that, on the part of the national government, the Philippine Development Plan 2017-2022 “adopts aggressive strategies to rehabilitate and restore degraded natural resources, and protect fragile ecosystems while improving the welfare of resource-dependent communities. Ensuring ecological integrity and a healthy environment remains a bedrock strategy that will also support the growth of other sectors.”

As a final act before the closing of the EAS Congress 2018, the flag handover ceremony saw the EAS Congress flag passed by DENR Undersecretary Rodolfo Garcia to Hon. Vann Monyneath, Deputy Secretary General of the National Council for Sustainable Development, Ministry of Environment of Cambodia. PEMSEA officially announced that the Government of Cambodia will host the 2021 EAS Congress.

The congress proceedings are free and downloadable from the 2018 EAS Congress website at [www.eascongress2018.pemsea.org](http://www.eascongress2018.pemsea.org).

*Highlights from the 2018 EAS Congress:*



Photos by DENR



# 6<sup>TH</sup> MINISTERIAL FORUM AND ILOILO DECLARATION

In a monumental public display of solidarity and commitment, ministers and senior government officials from 11 countries in the East Asian Seas region attended the Sixth Ministerial Forum, a triennial event that provides a venue for high level policy discussion of key issues pertaining to promoting stronger regional cooperation and fulfillment of their respective countries' regional and international commitments for sustainable development and blue economy growth.



Photo by DENR

Held on November 29, 2018 at the Courtyard by Marriott in Iloilo City, Philippines, the 11 countries were: Cambodia, China, DPR Korea, Indonesia, Japan, Lao PDR, Philippines, RO Korea, Singapore, Timor-Leste and Viet Nam. Representatives from 14 PEMSEA Non-Country Partners were present as observers together with the Executive Committee of the East Asian Seas Partnership Council, representatives from PEMSEA's sponsoring agencies, the GEF and UNDP, and other observers from PEMSEA collaborators.

Highlights of the Sixth Ministerial Forum included the: (1) presentation of the key results of the Regional and National State of the Oceans and Coasts (SOC) reports on Blue Economy; (2) delivery of individual country statements highlighting each country's outlook, plans and initiatives related to the implementation of the SDS-SEA in line with the UN Sustainable Development Goals; and (3) signing of the Iloilo Ministerial Declaration on the East Asian Region Moving as One to Secure Healthy Oceans, People and Economies.



The Ministers and senior government representatives from PEMSEA's Country Partners declared the following common understanding and shared beliefs:

- Shared commitments for the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA)
- Value and significant contribution of coastal and marine ecosystems and services
- Need to transform PEMSEA into a self-sustaining regional organization
- Acknowledge with pride PEMSEA's pioneering work to develop best practices in the design and implementation of Integrated Coastal Management (ICM)
- Support the region in the effective implementation of the SDS-SEA as it aligns with the UN Sustainable Development Goals (SDGs) and other international/regional commitments
- Encourage the region to move towards a blue economy and the sustainable development of its coasts and oceans

The Ministers then proceeded to formalize and sign the Iloilo Declaration, which outlines the following commitments:

- Achieve remaining targets under the Da Nang Compact by 2021
- Regularly update their respective State of the Oceans and Coasts Report (SOC)
- Provide voluntary country contributions to PEMSEA operations beyond 2019
- Support transition to blue economy investments at the national and local level
- Reduce or prevent marine pollution of all kinds
- Implement policies and programs for the sustainable management of coastal tourism destinations
- Implement adaptation and mitigation strategies to respond to climate change

The Forum was organized to build upon the agreements made in earlier Ministerial Forums as embodied in the: (1) 2003 Putrajaya Declaration, adopting the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA) as a platform for regional cooperation in coastal and ocean governance; (2) 2006 Haikou Partnership Agreement, setting targets for integrated coastal management (ICM) and national marine and coastal policy; (3) 2009 Manila Declaration, resolving to strengthen integrated coastal management as an effective management framework and a systematic approach to achieve sustainable development and climate change adaptation goals in the region; (4) 2012 Changwon Declaration, enabling the development of blue economy in the region through strengthened support for SDS-SEA implementation; and (5) 2015 Da Nang Compact, adopting post-2015 strategic targets as key indicators of progress in implementing the SDS-SEA over the next five years.

The 2018 Ministerial Forum also saw the presentation of the Regional and National State of Oceans and Coasts which were developed under the theme 'State of the Oceans and Coasts 2018: Blue Economy Growth in the East Asian Seas Region'. The Executive Summary of the Regional SOC Report that was disseminated captured the blue economy initiatives and initial estimates of the aforementioned countries' ocean economies, measured as the sum of the economic activities of ocean based and ocean related industries, together with the natural asset and marine ecosystem goods and services upon which these industries depend and people rely on for food, income, livelihood, recreation, shoreline protection and climate regulations, among others. The reports are free and downloadable from the PEMSEA website at [www.pemsea.org](http://www.pemsea.org).



H I G H L I G H T S

# MINISTERIAL STATEMENTS

Photos by DENR



*"Cambodia has recently embarked on the review of policies, legislation, institutional mechanisms, programs and projects relevant to sustainable coastal and marine development to allow us to fully understand what needs to be improved and/or strengthened to advance our goals and in support of the implementation of the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA)."*

**Hon. Vann Monyneath**  
Deputy Secretary General,  
National Council for Sustainable  
Development, Ministry of Environment,  
Cambodia



*"China stands ready to enhance collaboration with the countries in the region to better understand, utilize, and conserve our oceans, as well as to confront the challenges of ocean and coastal sustainable development, with the aim of contributing to the realization of regional sustainable development goals."*

**Hon. Zhang Zhi**  
Director General for International  
Cooperation, Ministry of Natural  
Resources, PR China



*"We hope that PEMSEA will be with us and will continue its support in strengthening national and local capacity for the sustainable development and management of our rivers in Laos."*

**Hon. Xayaveth Vixay**  
Director General,  
Ministry of Natural Resources  
and Environment,  
Lao PDR



*"Based on our extensive and successful experiences and technologies in marine litter management, the government of RO Korea welcomes the collaboration with PEMSEA countries in combating marine litter."*

**Hon. Junkwon Park**  
Commissioner,  
Korea Maritime Safety Tribunal,  
Ministry of Oceans and Fisheries,  
RO Korea



*"Our partnership has provided a platform for voices to be heard at the global setting. It is only through these linkages and interconnectivities that we can save the communities in our region and around the globe in the midst of challenges we face on biodiversity conservation and our vulnerability to climate change and natural disasters."*

**Hon. Analiza Rebuella-Teh**  
Undersecretary,  
Climate Change Service and Mining  
Concerns, Department of Environment  
and Natural Resources, Philippines





*"In the DPRK, a maritime country surrounded by the sea on three sides, the management of coasts and territorial waters is closely related with the building of an economic power. Integrated Coastal Management, which systematizes the methods for the sustainable development of environment and natural resources on the coasts and in the seas, helps the DPRK conduct the active management of the coasts in an integrated way."*

**Hon. Ri Myong San**

Vice Minister,  
Minister of External Economic Relations,  
DPR Korea



*"Facing such coastal and sea problems, we see that cooperation among countries in the East Asian Seas is a good opportunity for capacity building and knowledge transfer in the context of sustainability of coastal and marine development on the East Asian Seas region. We view that the Sustainable Development Strategy for the Seas of East Asia can continue to be implemented and updated to achieve Healthy Oceans, People and Economies as the theme of the conference this year."*

**Hon. M. R. Karliansyah**

Director General, Environmental Pollution  
and Degradation Control, Ministry of  
Environment and Forestry, Indonesia



*"Promotion of industrial use of the ocean and maintenance and preservation of the marine environment are defined as fundamental policies of this Plan. This means that our ocean policy is in line with the principle and the direction of SDS-SEA."*

**Hon. Hiroyuki Masuda**

Deputy-Minister for Technical Affairs,  
Ministry of Land, Infrastructure,  
Transport and Tourism,  
Japan



*"We recognize that PEMSEA has been working closely with its partners to contribute to the sustainable development and management of the region's marine and coastal resources. More can be done. We are confident that the expertise and capacities that PEMSEA has helped to build up will continue to make a positive impact."*

**Hon. Amy Khor**

Senior Minister of State,  
Ministry of the Environment and  
Water Resources, Singapore



*"I would like to re-emphasize that the Government of Timor-Leste has strong commitment to support the implementation of the SDS-SEA in the region. We believe that with all our efforts and hard work, we will be continuing to preserve the habitat and marine ecosystems for the availability of fish and other services from the sea for present and future generations, especially for Timor-Leste and the PEMSEA member countries."*

**Hon. Cesar Jose da Cruz**

Secretary-General,  
Ministry of Agriculture and Fisheries,  
Timor-Leste



*"In order to facilitate the successful implementation of the SDS-SEA and ICM, we know very well that it is necessary for us to complete the legal system, establish the management and coordination mechanism at the national and local levels, facilitate information and experience sharing, document the lessons learned and also learn from the experiences from countries in the region and other geographic regions of the world."*

**Hon. Vu Si Tuan**

Deputy Administrator,  
Viet Nam Administration of Seas and  
Islands, Ministry of Natural Resources  
and Environment, Viet Nam



# PEMSEA NETWORK OF LEARNING CENTERS (PNLC)

**T**here is a growing consensus that higher education institutions play a pivotal role towards the sustainable development of the coasts and seas through their core activities in education, research, governance and external leadership. Recognizing the role of schools and the youth in implementing UN SDG 14 (Life Below Water) and other related ocean and coastal goals, PEMSEA’s capacity development strategies have always included a strong focus on mobilizing universities and research institutes.

These learning institutions are instrumental in increasing technical support available on the ground as they provide scientific input and expert advice on focus issues throughout the various phases of the ICM cycle as well as build capacity and skills to replicate and scale up ICM practice in the region. During a forum held last November 28, 2018 at the EAS Congress, officials from over 10 of the region’s top universities shared, discussed and committed their support for strengthening ICM Learning Centers (ICM LCs) through joint initiatives under the wider umbrella of the PEMSEA Network of Learning Centers (PNLC).

Opening the session was Dr. Luky Adrianto, Dean of the Faculty of Fisheries and Marine Science of Bogor Agricultural University of Indonesia, who highlighted the importance of building networks among the universities to realize the long-term implementation and meet the targets of SDG 14. In response, Dr. Nestor Yunque, Vice President for Administration of the University of the Philippines, explored the role of the university to live by three functions: to teach, to conduct research and to do an extension service that contributes directly to marine conservation efforts. He added that universities can also be a driving force to bring together different sectors—local communities, local and national government agencies, international government organizations, research funding agencies, private sector and civic groups—for a common interest.



Photos by DENR

PEMSEA's role in capacity building in the region follows a strategic approach in providing technical assistance and scientific expertise in the sites by mobilizing higher education institutions as ICM Learning Centers. The goal is to build, create and maintain a critical mass of ICM practitioners on the ground. The PNLC, as a network of ICM LCs working towards the sustainable development of our oceans and coasts, provides a platform for knowledge exchange to further address the capacity gaps in supporting the implementation of the UN SDGs.

At the end of the session, the ICM LC representatives were asked to express their commitment to the following initiatives:

1. **Training Programmes and Course Materials.** PEMSEA is heading the development and certification of training manuals that can be used and adopted by the ICM LCs in their local context. The ICM LCs were encouraged to work on the local adoption and translation into local languages of these certified materials such as the recently published ICM Training Manual.
2. **Research Development and Knowledge Sharing.** The ICM LCs were asked to identify their common areas of interest in research and explore mechanisms for joint proposal development as well as for sharing knowledge and best practices more efficiently.
3. **Postgraduate Curriculum Development and Innovative Learning Delivery Modules.** Initiatives under this group aim to lead initiatives on joint curriculum development to integrate ICM skills into postgraduate courses,



curricula and programs, along with the development of a transdisciplinary curriculum offered in various modes through e-learning such as massive open online courses (MOOCs) focusing on postgraduate level ICM courses.

A closed-door planning workshop soon followed. Burapha University was elected as the new Chair and Xiamen University as Co-Chair for 2019-2021. There were three break-out discussions on curriculum development, research development and training development. In the discussions, various proposals were generated, such as the development of a credit sharing scheme and ICM training program between PNLC and PNLC, the development of manuals on climate change and disaster risk reduction, and research development on plastic and marine pollution, carbon sequestration through coastal ecosystems, and impacts of sea level rise.

Capping the activities for the PNLC session was the induction of two universities in Indonesia (Diponegoro University and Udayana University) and one university in the Philippines (Cavite State University) as newly designated ICM Learning Centers.



# PEMSEA NETWORK OF LOCAL GOVERNMENTS (PNLG) FORUM



Photos by DENR

Cross-cutting collaboration among local governments who are working towards the successful implementation of ICM programs and addressing aspects of sustainable development were at the center of discussions during the 2018 PEMSEA Network of Local Governments (PNLG) Forum held during the EAS Congress. Over 30 local governments across nine countries in the East Asian Seas region attended the forum, which served as a venue for exchanging information and experiences in ICM practices among member local governments.

Guimaras Province in the Philippines served as the host of the 2018 PNLG Forum. Its governor, Samuel Gumarin, proudly shared that Guimaras is the first province in the Philippines with an adopted ICM Ordinance and the first among the PNLG members that was able to complete a second State of the Coasts report.

The PNLG members affirmed their commitment to achieving the UN Sustainable Development Goals through integrated coastal management. Recognizing that local governments are at the forefront of coastal and marine management and conservation, the PNLG came together to discuss how they are to move forward as a network in deepening the impacts of ICM in their respective localities and beyond. A recurring point was made throughout the forum that it is not enough to simply have a system in place; each local government must also continue delivering good results from ICM.

During the forum, PEMSEA presented the State of the Coasts, an indicator-based reporting system that assesses and measures the results and impacts of policy and management interventions that address aspects of sustainable development. Similarly, PEMSEA encouraged PNLG members to implement the ICM Code to enhance their ICM practices, which would result in improved governance and sustainable development and management of the coastal areas.

The ICM Manager Certification Program and the Sustainable Business Awards were also discussed. The former invites ICM practitioners to apply for certification that will validate and, at the same time, showcase their level of expertise in ICM. On the other hand, the Sustainable Business Award can be given to any business entity that has helped a local government implement ICM.

The PNLG Forum concluded with the election of new officers and the induction of new PNLG members. Noraini Binti Roslan, Kuala Selangor District Council President, was re-elected as PNLG President while Preah Sihanouk Vice Governor Kong Vitanak was elected as PNLG Vice President for the next three years. The local governments of Jinjiang, China and Bontang, Indonesia were welcomed to the PNLG, which now has 50 local government members from 10 countries.

The PNLG is the first of its kind in the East Asian Seas region. It is recognized as one of the major driving forces in realizing the goals of the SDS-SEA in its goal to cover 25% of the regional coastline with ICM programs by the year 2021. Officially founded in December 2006 in Haikou, PR China, the PNLG has made major contributions to SDS-SEA implementation and serves as an effective voice of local governments.



Photo by PEMSEA/J. Zaldivar, J. Lau Wang



THE EAST ASIAN SEAS CONGRESS H I G H L I G H T S

# PEMSEA YOUTH PROGRAMME AND PEMSEA NETWORK OF YOUNG LEADERS (PNYL)

**C**onnected to each other like never before, and wielding a growing influence on issues surrounding sustainable development, today's youth have the potential and capacity to become agents of change for our shared oceans.

In November 2018, some 70 young leaders from Cambodia, China, Indonesia, Japan, Lao PDR, Malaysia, Philippines, RO Korea, Singapore, Thailand, Timor-Leste and Viet Nam converged in Iloilo City, Philippines to take part in the EAS Congress. Happening alongside the Congress was the 5th EAS Youth Forum (YF5), a special event that aimed to enhance the youth's understanding of the environment and highlight the role they can play in sustainable development and the global ocean agenda.

Themed "Moving as One with the Global Ocean Agenda: Active and Engaged Youth in the EAS Region," the event featured peer-to-peer learning discussions, team-building and creative workshops designed to empower the next generation of young champions for the oceans and coasts. The 5th EAS Youth Forum also saw the launch of the PEMSEA Youth Programme and the election of the first batch of PEMSEA Network of Young Leaders (PNYL) Council.



Photos by DENR



Photo by DENR

The young leaders interacted with and listened to daily plenary talks given by global leaders and professionals in coastal and ocean management, conducted a field visit to the island province of Guimaras and participated in an outreach learning activity with a number of local grade school students.

PEMSEA has been engaging the youth in the EAS region through the triennial EAS Youth Forum since 2006 and via the Youth Grants Programme since 2016. Because of these engagements, more than 200 youth were able to enhance their potential in pursuing their respective initiatives for the seas of East Asia. Through the PEMSEA Youth Programme, young leaders can enhance their skills and professional development to become effective ICM practitioners, supported by the PEMSEA ICM sites and the PEMSEA Network of Learning Centers (PNLC).

There are continuing efforts to sustain the youth programme since there is no other youth initiative in the region that is focused on oceans and coasts. During the election of the first batch of PEMSEA Network of Young Leaders Council, the young leaders pledged to carry out the Youth Programme's policy, advocacy and campaigns in coordination with the PEMSEA Resource Facility (PRF).



# OCEAN LEGENDS AWARD

**P**EMSEA established the Ocean Legends Award to honor individuals who have made outstanding contributions to marine and sustainable development initiatives in the areas of research, administration and promotion of coastal and marine science, technology and systems in the East Asia Region. The honor was given to Dr. Chua Thia-Eng and Dr. Angel Alcalá.

Dr. Chua was honored as the “Integrated Coastal Management Guru of the East Asian Region.” He was recognized for his 30 years of expertise in promoting ICM as the framework and approach for achieving the sustainable development of coastal and marine areas and resources. Dr. Chua’s work with various stakeholders and cooperation amongst East Asian countries led to the adoption of the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA)—a package of applicable principles, relevant existing regional and international action programs, agreements, instruments and implementation approaches for achieving the sustainable development of the Seas of East Asia.

Dr. Alcalá, known as the “Father of Marine Protected Areas in the Philippines,” was recognized for his efforts in helping establish marine protected areas (MPAs) in the country. His visionary effort to establish the Sumilon Marine Reserve in southern Cebu in 1974



Photo by DENR

and the Apo Marine Reserve in southern Negros in 1982 paved the way for the establishment of a dozen similar marine reserves in the Bohol Sea. His work with various government agencies, local government units, NGOs and community-based organizations strengthened the management of 60 “no-take” marine reserves in central and southern Philippines and led to the establishment of more than 70 national MPAs and 1,500 locally established and managed MPAs. Dr. Alcalá is also credited for initiating the DENR’s flagship Coastal Environment Program. It was during his term as DENR Secretary that PEMSEA, in its early years as a regional marine pollution project, started holding office at the DENR compound.

Mr. Stephen Adrian Ross, former PEMSEA Executive Director of four years, was given a special citation in recognition of his exceptional contribution in partnership building with national and local governments, international, financial and non-government organizations, the corporate sector, and universities and learning centers in the East Asian Region. As one of the founding members of PEMSEA as a regional organization, he provided the guidance and leadership in moving PEMSEA towards becoming a full-fledged self-reliant organization.





Photo by DENR



H I G H L I G H T S

## GULF OF THAILAND (GOT)

**A** special session held during the second day of the 2018 EAS Congress was the “Gulf of Thailand Workshop on National Guidelines on Use of Dispersants and Oil Spill Contingency Planning at the Sub-regional Level.” There, the national contact points (NCPs) of the Gulf of Thailand Cooperation on Oil Spill Preparedness and Response finalized the sub-regional oil spill contingency plan for the Gulf of Thailand. The NCPs agreed that the plan will be adopted by the GOT participating countries—Cambodia, Thailand and Viet Nam—in the next Annual National Contact Points Meeting scheduled in November 2019 in Cambodia.

The Sub-regional Plan applies to oil spill incidents in the Gulf of Thailand region where incidents may affect only one country but the magnitude of the spill is such that the incident requires assistance from another country. It is primarily intended to provide a procedure to enhance the capability of the participating countries to respond to oil spills that may be beyond their individual capabilities.

Major oil spill incidents that are likely to require the Sub-regional Plan include accidents involving ships, sea ports, oil handling facilities and offshore units undertaking drilling or production activities. Shipping accidents most likely to cause big spills are collisions and groundings.

During the workshop, the NCPs presented their completed and updated national guidelines on dispersant use to review and harmonize policies and procedures including the list of dispersants to be used in the three countries to ensure prompt response to transboundary oil spill incidents. The workshop recommended that GOT countries should explore developing a map for dispersant use zones in the Gulf of Thailand sub-region.

In January 2006, PEMSEA initiated the signing of a Joint Statement on Partnership in Oil Spill Preparedness and Response Cooperation (OPRC) in the Gulf of Thailand by Cambodia, Thailand and Viet Nam. The Joint Statement contains a tripartite intergovernmental agreement that commits participating countries to mutual support and assistance in combating oil spills in the Gulf of Thailand region. The GOT cooperation is now a model for sub-regional arrangement in oil spill preparedness and response.

# WAYS WE SCALED UP ICM EFFORTS

**M**any coastal management issues cut across sectors. The conventional sectoral management approach, which addresses these challenges separately on a sector by sector basis, is typically not sufficient for solving complex issues in coastal areas. The integrated coastal management (ICM) system calls for cross-sectoral collaboration and partnerships between countries, national and local governments and various stakeholders to promote sustainable coastal development.



Photo by PEMSEA/K. Pacete

ICM facilitates the integrated application of relevant policies and plans, institutional arrangements, legislations, capacity development, financing mechanisms and management programs at various scales, i.e., regional, national and local, to achieve sustainability.

Seeing through the lens of how ICM can positively affect the millions of lives who depend on the seas of East Asia from an environmental, social and economic standpoint, PEMSEA has long supported ICM as a practical framework and process that local governments, in particular, can utilize to achieve their sustainable development targets.

For the past 25 years, PEMSEA's efforts to create synergy via multi-sectoral cooperation and partnerships through the ICM approach has resulted in improved coastal and ocean governance and the successful implementation of management programs focusing on pollution reduction and waste management; food security and livelihood management; water use and supply management; habitat protection, restoration and management; and natural and man-made hazard prevention and management.

From 1994 to 2014, PEMSEA established ICM sites in 26 locations. Since then, efforts to sustain, scale-up and replicate ICM beyond its initial pilot phase have been successful. In 2015, PEMSEA's partner countries began expanding to 31 additional sites around the region, in collaboration with local governments. PEMSEA partners are now targeting to cover 25% of the region's coastline under ICM by 2021.

# ACCELERATION OF ACTIVITIES

In 2018, PEMSEA saw an acceleration of its activities through its multi-country ICM efforts, fueling the expansion of ICM implementation functionally and geographically. From rolling out inception workshops to ICM certification systems, to introducing various knowledge products and new reports, PEMSEA indeed scaled up its on-the-ground initiatives from local, to national and on to the regional level using ICM.

In **Thailand**, a National Inception Workshop for the GEF/UNDP/PEMSEA Project on Scaling Up the Implementation of the SDS-SEA was conducted in Rayong Province on January 2018. Co-organized by the Department of Marine and Coastal Resources (DMCR) and PEMSEA with support from the PEMSEA ICM Learning Center in Burapha University (PNLC-BUU), the workshop confirmed the participation of the four provinces of Chonburi, Chantaburi, Rayong and Trat as ICM Learning Sites to demonstrate the application of the ICM framework and approach in addressing priority concerns in coastal areas. Priority issues, pilot sites, work plans, and arrangements in line with mechanisms for implementing the Promotion of Marine and Coastal Resources Management

Act (BE 2558/2015) were discussed and confirmed in subsequent on-site stakeholder consultations until mid-2018. To facilitate project initiation, SDS-SEA and ICM orientation was conducted for key officials of the four provinces, pilot sites and DMCR in November 2018, in conjunction with the EAS Congress and PNLC Forum 2018. On December 2018 to January 2019, the SDS-SEA/ICM projects in the four provinces were approved by their respective Provincial Marine and Coastal Resources Committees chaired by the Governor with the respective Provincial Office of Marine and Coastal Resources Management assigned to oversee project implementation. The PNLC-BUU, with support from the PEMSEA ICM Learning Center in Prince of Songkla University (PSU), will be facilitating ICM planning and development, capacity building and technical support for the four provinces. Baseline assessments were initiated, covering the following focus issues and pilot sites.

- **Chonburi Province** - Disaster risk reduction and management and climate change adaptation, including coastal erosion management and oil spill preparedness and response; and integrated land and sea-use planning in Koh Sichang Municipality to address multiple use conflicts and natural and man-made hazards;
- **Rayong Province** - Integrated solid waste management in the subdistricts of Taphong, Ban Pae and Klang, municipalities of Neung Phra, Muang Rayong and Ban Pae, and Khao Laem Ya-Mu Ko Samet National Park;



**THAILAND**

Photo by Burapha University



TIMOR-LESTE

Photo by PEMSEA/J. Zaldivar



INDONESIA

- **Chantaburi Province** - Habitat rehabilitation and marine resource conservation in the subdistricts of Bangkrachai, Koh Proet Khlong Kut and Pak Nam Laem Sing; and
- **Trat Province** - Sustainable fisheries management in the subdistricts of Mairut and Laem Klat.

Each province will be demonstrating how ICM approaches and processes can enhance the effectiveness of developing and implementing management plans to address their focus areas.

In 2018, the National Oceans Policy (NOP) for **Timor-Leste** continued to be promoted to the government and various development partners as a framework for consolidating government, sectoral and donor/partner-supported initiatives related to the coasts and oceans. Consultations were also initiated on the development of the NOP Implementation Plan. To demonstrate local implementation of the policy, the municipalities of Dili, Manatuto and Liquiçá—through their inter-agency ICM Task Teams, with support from the Ministry of Agriculture and Fisheries (MAF) and PEMSEA ICM Learning Centers at the National University of Timor-Leste (UNTL) and Oriental University of Timor-Leste (UNITAL)—held stakeholder consultations for the preparation of coastal strategies and implementation plans, which will promote a coordinated approach among governments, communities and various partners in addressing priority issues in their respective coastal areas. On-the-ground ICM implementation is being demonstrated in the following pilot sites:

- **Maabat Village, Manatuto:** Preparation of integrated plan for habitat rehabilitation, sustainable fisheries and alternative livelihood development, including consultations on strengthening institutional mechanisms for a locally managed marine area in Lamsana (LMMA) established through Tara Bandu; and joint development of a project funded by Lighthouse Foundation with the NGO Blue Ventures to support local training and implementation of mangrove rehabilitation, mudcrab culture and participatory monitoring of local fisheries in Lamsana.
- **Vaviquinia Village, Liquiçá:** Preparation of integrated plan addressing disaster and climate change risks, sustainable fisheries and alternative livelihoods. Mangrove rehabilitation has been done in collaboration with various partners to prevent coastal erosion and to minimize impacts of flooding during rainy season and extreme high tide events. Priorities for improving capacity for nearshore fisheries and alternative livelihood development have been identified.
- **Atauro Island, Dili Municipality:** Baseline assessment of the Atauro-Vila MPA using the MPA management effectiveness tracking tool (METT) showed various areas of improvement. Consultations are ongoing with Conservation International (CI) and organizations working in the area to harmonize efforts towards improving the METT rating. Mangrove rehabilitation has been done in other areas of Dili under the UNDP Project on Building Coastal Resilience in Timor-Leste.



Photo by Bogor Agricultural University



LAO PDR

Photo by Department of Water Resources

In **Indonesia**, in accordance with laws on environmental protection and management, management of coastal zones and small islands, and regional governance, 18 out of 34 provinces in Indonesia have adopted ICM zoning plans while local governments have developed their respective environmental programs. The SDS-SEA Project supports selected local areas in Indonesia in strengthening ICM governance mechanisms and demonstrating applications of ICM in addressing priority issues in pilot sites. Under the coordination of the Ministry of Environment and Forestry (MOEF), and with technical support from PEMSEA ICM Learning Centers in Bogor Agricultural University, Udayana University and Diponegoro University, activities in 2018 included high-level ICM Forums, technical workshops and collaborative meetings in Bontang City, Tangerang Regency, East Lombok Regency, Sukabumi Regency, Semarang City and Bali Province, which engaged local chief executives, provincial governments and relevant agencies, and provided a platform for a better understanding of ICM, its applications for improving local governance and environmental and resource management, and processes for harmonizing provincial and local implementation. Through the preparation of local State of the Coasts reports and risk/vulnerability assessments, priority areas for improvement in each site were identified.

Local government initiatives in implementing their respective ICM programs included the following:

- **Sukabumi** – Mangrove rehabilitation, coral restoration, sea turtle conservation, waste management, livelihood development and community empowerment in support

of the Ciletuh-Palabuhanratu Geopark, which was designated in April 2018 as a UNESCO Global Geopark.

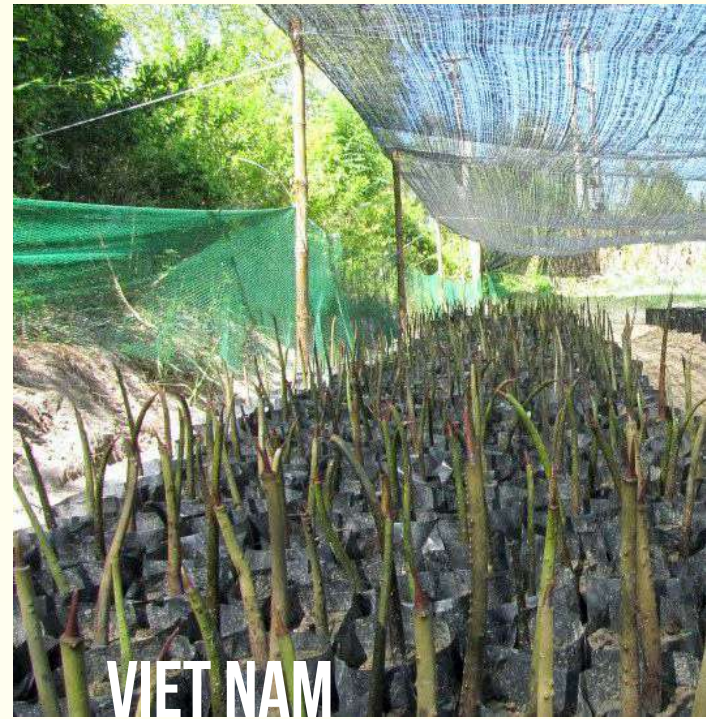
- **Tangerang** – Gerbang Mapan (local ICM Program) was updated and included in the regency's medium-term development plan for 2019-2024; mangrove rehabilitation plan prepared for the 148-hectare Tangerang Mangrove Center; and mangrove reforestation with youth and corporate partners.
- **Bontang City** – Coordination with the Provincial Government of East Kalimantan on establishing a management unit for the MPA in Bontang and implementing a marine conservation program.
- **East Lombok** – Training and technical extension conducted to support fisheries and livelihood improvement for coastal communities in Jor Bay.
- **Semarang** – Waste management program implemented with community recognition/incentive system in collaboration with a corporate partner.
- **Bali** - Waste management program launched through the Sakenan Charter Declaration, promoting use of traditional structures and laws to reduce marine litter.

**A** signed contract for SDS-SEA implementation and a kick-off meeting for activities at the national level highlighted ICM activities for **Lao PDR** last year. On November 7-8, 2018, the country's Department of Water



**CAMBODIA**

Photo by Kampot Provincial Government



**VIET NAM**

Resources (DWR), the Australian Department of Foreign Affairs and Trade (DFAT) and PEMSEA held a consultation workshop on a draft of the National Strategy on Integrated Water Resource Management 2030. The key objective of the workshop was to seek comments and advice from stakeholders on the strategy including: a) the structure of the draft of the National Strategy on Integrated Water Resource Management; b) lessons learned on integrated water resources and strategy on river basin management; c) preliminary assessment studies of surface water resources; and d) strategies and policies related to water management from relevant sectors.

In **Cambodia**, a review of policies, legislation and institutional mechanisms marked the list of activities held at the national level—foremost of which was a consultation workshop on “Updated White Paper, Strategy and Work Program for Coastal and Marine Sustainable Development in Cambodia” held on November 1, 2018. The main objective of the workshop was to present the progress of updating the white paper and steps towards implementing SDS-SEA in Cambodia, as well as solicit comments and promote an interactive discussion amongst the various stakeholders. Building on the previous version of the white paper formally adopted by the National Working Group on SDS-SEA in 2008, the updated white paper proposed broad strategies as well as a detailed formulation of a national SDS-SEA policy that Cambodia will implement in the next five years (2019-2023). At the local level, efforts were concentrated on the enhanced protection of the country’s coastal and marine resources,

particularly Koh Rong Island. Through a Sub-Decree from the Ministry of Environment, Koh Rong Island was established as the first Marine National Park in Cambodia. Declaring it as a marine national park is expected to attract more tourists, and conservation efforts will now also cover land protection and not just the sea. The year 2018 also saw the drafting of the State of the Coasts Report for Kep Province, one of the four PEMSEA ICM sites in Cambodia.

In **Viet Nam**, a national consultation workshop was convened as one of the side events of the 6th GEF General Assembly in Da Nang City to discuss the implementation of the SDS-SEA Project. The workshop was attended by representatives from national agencies (e.g., VASI, MONRE, MARD), international organizations (e.g., IUCN, UNIDO, ADB, World Bank, UNEP) and six priority provinces (e.g., Da Nang, Haiphong, Quang Nam, Quang Ninh, Soc Trang and Thua Thien Hue). The workshop highlighted Viet Nam’s achievements in national coastal and ocean policy development and institutional arrangements, which directly contribute to SDS-SEA implementation. Some useful points from the discussions for consideration in project implementation included the adoption of the State of the Coasts reporting; data and information sharing mechanism; raising advocacy for ICM; addressing marine plastics pollution; mainstreaming ICM into the planning processes of the national and local governments; opportunities provided by the Law on Marine and Islands Resources and Environment; and educating high level officials on ICM and sustainable development. Consultations with the six priority



Photo by Quang Nam DONRE



Photo by DENR

ICM sites were conducted in September 2018 to discuss the necessary actions in line with the recommendations from the national consultation workshop in June 2018 to deliver the outputs under the SDS-SEA Project.

In the **Philippines**, as part of DENR and PEMSEA's commitment to support the passage of the ICM Bill into law, a series of meetings was organized involving the Special Committee on Ecology and Climate Change of the House of Representatives to discuss the provisions of the ICM Bill. During the Committee hearing in February 2018, position papers submitted by various agencies and stakeholders indicated their full support for the Bill. A writeshop was organized by DENR in May 2018 to further refine the provisions of the ICM Bill in response to concerns raised during the Committee hearings.

2018 saw the initiation of the development of the Manila Bay Sustainable Development Master Plan (MBSDMP) under the auspices of the National Economic and Development Authority with support from the Netherlands Government. The MBSDMP is envisioned to guide decision-makers in the assessment and approval of programs, activities, and projects for implementation in Manila Bay and in adjacent areas with significant influence on the bay. PEMSEA is represented in the Technical Committee, comprising of various stakeholders, to review the outputs of the Study Team assigned to develop the master plan.

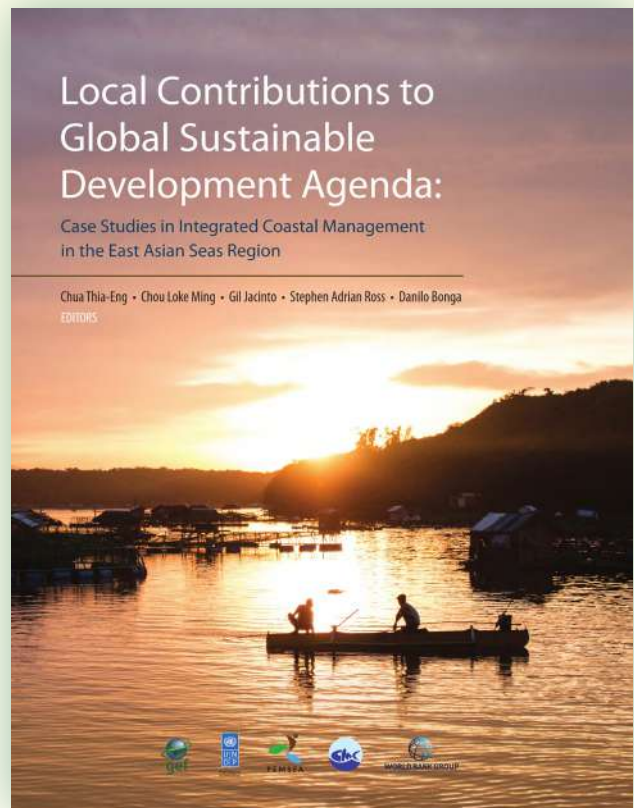
Some local level activities undertaken in 2018 in the Philippines involved work in the following areas:

- **Guimaras:** Scientific support in the conduct of coral reef assessment and monitoring of two marine protected areas or MPAs (Tumalintinan Point Fish Sanctuary and Pamanculan Fish Sanctuary), with support from the University of the Philippines Visayas.
- **Macajalar Bay:** An ICM Plan was adopted by the Macajalar Bay Development Alliance. The Macajalar Bay Vulnerability Assessment was conducted using the Integrated Coastal Sensitivity, Exposure and Adaptive Capacity for Climate Change (ICSEA-C-Change) Tool.
- **Cavite:** A groundbreaking ceremony was held for the Cavite Water Testing Laboratory on June 21, 2018 at the Cavite State University, Indang campus.
- **Bataan:** The National Resilience Council's LGU Resilience Program launched with Bataan as one of the pilot sites. The GEF video on Protecting Our Oceans and Coasts included Bataan's ICM story.
- **Batangas:** A biophysical assessment of 21 MPAs was conducted by Batangas Province with support from Malampaya Foundation.
- **Romblon:** Assessment and mapping of coral reefs for potential ecotourism and livelihood opportunities were completed in May 2018 with support from DENR and Romblon State University.

# LOCAL CONTRIBUTIONS TO GLOBAL SUSTAINABLE DEVELOPMENT AGENDA: CASE STUDIES IN INTEGRATED COASTAL MANAGEMENT IN THE EAST ASIAN SEAS REGION

The 25<sup>th</sup> anniversary publication of Partnerships in Environmental Management for the Seas of East Asia (PEMSEA) highlights the sustainable coastal development efforts of PEMSEA partners over the past quarter century. The multi-sector, interdisciplinary approach applied in the design and implementation of integrated coastal management (ICM) programs in East Asia has generated a wealth of knowledge and experiences in policy and functional integration that cut across coastal use sectors, disciplines, levels of government, and stakeholders, as well as spatial and temporal scales.

In 2012, a call to secure renewed political commitment for sustainable development was expressed in the Rio+20 document, “The Future We Want.” Subsequently, in 2015, the Sustainable Development Goals were adopted by the United Nations, providing 17 goals and 169 targets to guide actions globally in key areas where government, private sector, and citizens alike are required to invest to transform economies and prosper within the social and ecological boundaries of the planet.



Consistent with these political commitments, the ICM system evolved throughout the East Asian Seas region. In many cases, ICM working models were well ahead of concepts, mechanisms, and methodologies being discussed in the international arena. Tractable outcomes were achieved through ICM system applications that supported approaches in ecosystem-based management, spatial planning, governance and public administration, systems science, and leadership development.

This 566-page publication seeks to provide the reader with:

- A comprehensive discussion of the ICM system backed by 47 case studies;
- A series of case studies written by local leaders, managers and practitioners, natural and social scientists, academicians, private sector, and partners from nongovernment organizations;
- Good practices and lessons learned to support replication and scaling up of ICM in the region; and
- An operational modality that other regions of the world can consider adopting and applying.

The editors Dr. Chua Thia-Eng, Chou Loke Ming, Gil Jacinto, Stephen Adrian Ross, and Danilo Bonga launched the book during the 2018 EAS Congress Partnership Night. The book is free and downloadable from the PEMSEA website at [www.pemsea.org](http://www.pemsea.org).



Photo by DENR



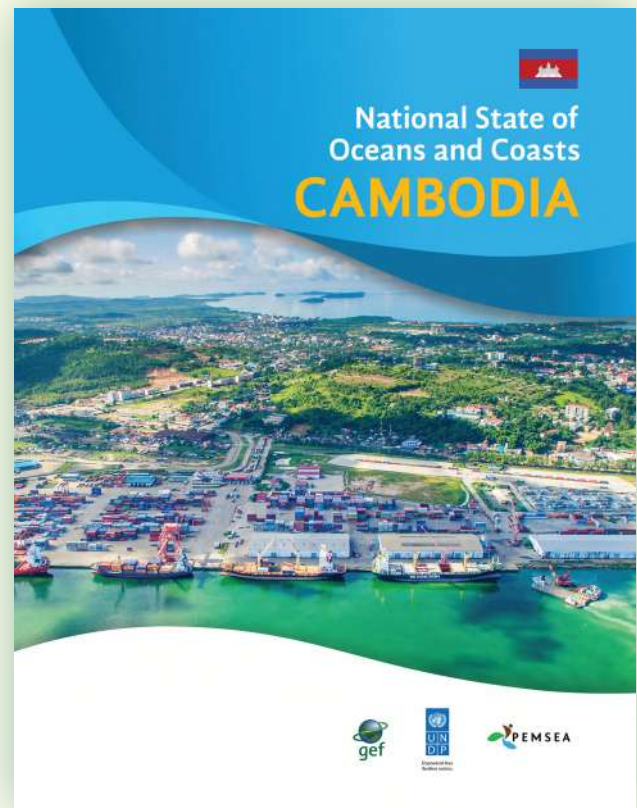
# REGIONAL AND NATIONAL STATE OF THE COASTS (SOC) REPORTS

The Regional and National State of the Coasts Reports emphasize the contribution of the ocean economy to national economies and welfare. They aim to provide a mechanism to monitor ocean health, investment and net returns from ocean economic activities, and the outcomes of policies and governance.

- An initial estimate of the ocean economy of 10 countries in the EAS region is around **US\$1.4 trillion** in value added in 2015.
- Around 50 million people are employed in ocean industries.
- The ocean also generates services that are not usually quantified in the national income accounts. For eight countries, the total estimated value of coastal and marine ecosystems is around **US\$681 billion**.

To ensure the long-term potential of oceans, countries in the EAS Region are moving away from the traditional ocean economy and business-as-usual approach. Blue economy is driving habitat and biodiversity conservation, pollution reduction, and climate resiliency as people and industries recognize their reliance on healthy oceans. Climate-smart aquaculture for food security, ecotourism for livelihood, and green ports for climate action are transforming the ocean economy. Innovations and emerging industries are taking place: ocean energy for renewable energy, desalination and treated wastewater for water security, and marine biotechnology for new medicines. The SOC Reports highlight these blue economy initiatives and lessons learned from them.

Presented at the 2018 EAS Congress were the national SOC Reports of Cambodia, China, Indonesia, Japan, Malaysia, Philippines, RO Korea, Singapore, Thailand, Timor-Leste and



Viet Nam developed in collaboration with various partners and stakeholders. Meanwhile, the Regional SOC Report highlighted the shared resources in large marine ecosystems or LMEs, transboundary issues and benefits derived from shared or co-management among countries.

The second SOC Report of Guimaras Province in the Philippines was also launched at the 2018 EAS Congress. Similar to the national and regional reports, local SOC reports are part of the monitoring, evaluation and reporting mechanism of ICM sites across the region. Guimaras Province is the first site to produce a second local SOC Report. The provinces of Batangas, Bataan and Cavite in the Philippines, cities of Ansan and Masan in Korea, and municipality of Dongying in China have also produced local SOC reports in the past years.

The reports are free and downloadable from the PEMSEA website at [www.pemsea.org](http://www.pemsea.org).

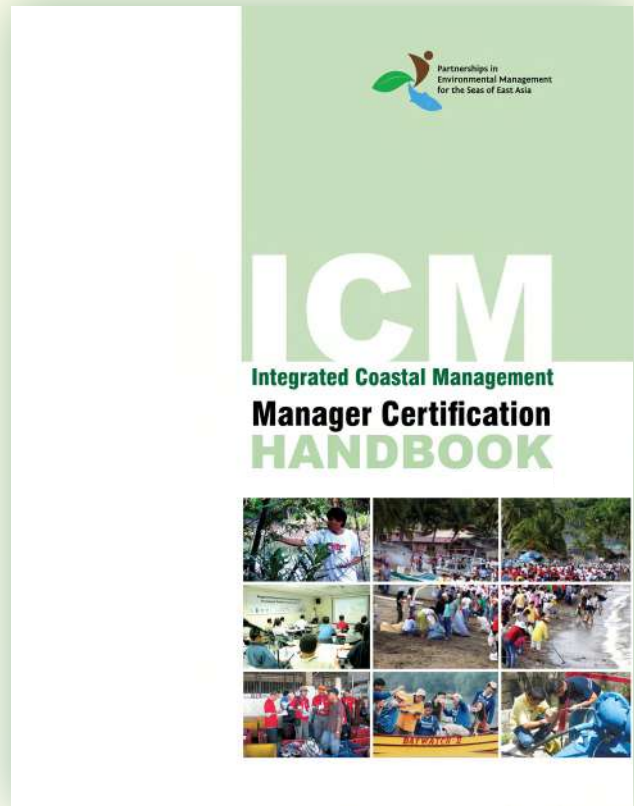
# ICM MANAGER CERTIFICATION PROGRAM AND SUSTAINABLE BUSINESS AWARDS

Two important initiatives were launched during the PEMSEA Network of Local Governments (PNLG) Forum held during the 2018 EAS Congress: the ICM Manager Certification Program and the Sustainable Business Awards.

Developed by PEMSEA, the ICM Manager Certification Program aims to promote high standards of competence, professional growth and ethical conduct in the practice of integrated coastal and ocean governance, directly supporting the commitments made by the countries in the implementation of the SDS-SEA. It is also envisioned as an incentive for ICM managers and practitioners to evolve as professionals in the field of ICM, as well as provide recognition for the skills and services they render to coastal communities, national and local governments. PEMSEA is initiating the testing and piloting of the program's implementation among PEMSEA partner countries in the region.

As part of the development and implementation of the program, PEMSEA has prepared an ICM Manager Certification Program Handbook that defines the criteria and procedures of the selection process based on internationally accepted standards for certification. The conduct and testing of the certification and training process will then be rolled out with the participation of selected ICM managers of local governments with an established ICM system. The results of the testing will be reported to the EAS Partnership Council. Three levels of ICM Manager Certification have been identified:

- Level 1:** Mastery of the first order of ICM governance, program development and management, tools and structural arrangements;
- Level 2:** Mastery of second order governance that looks at more complex and varied relationships and interactions; partnerships and leverages; and power structures in the context of scaling up ocean and coastal governance; and
- Level 3:** Mastery of metagovernance. A higher level of management that looks at reforms in policy development.



The ICM Manager Certification Criteria will serve as a guide in the application, selection and certification of the ICM Manager. Applicants will be shortlisted and evaluated using the established criteria as defined in the checklist.

For corporations and the private sector who are operating their businesses in a sustainable and socially responsible manner, PEMSEA is recognizing their corporate social responsibility (CSR) efforts via the Sustainable Business Awards Program. The program is designed to encourage multinational and national corporations to integrate social and environmental responsibility into their organizational strategies, programs and practices. It also aims to facilitate the replication of scaling up governance and management capacities in the sustainable development of marine and coastal resources among local government and communities of the East Asian Seas region.

The principal objectives of the PEMSEA Sustainable Business Awards program are as follows:

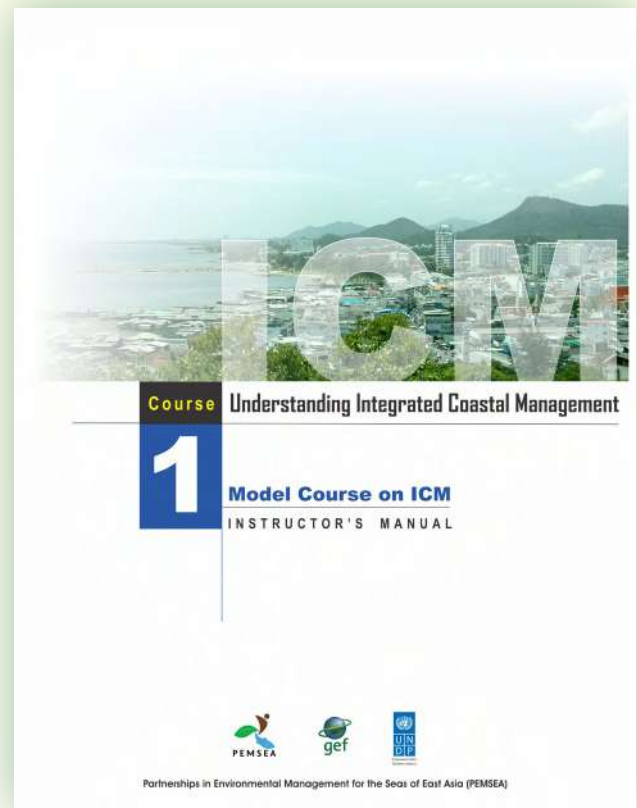
- a. to scale up partnerships between multinational and national corporations, private sector and industry and local governments and communities for the sustainable development of marine and coastal resources;

# ICM TRAINING MANUAL COURSE

Scaling up integrated coastal management efforts requires a significant number of ICM practitioners and experts. To address this need, PEMSEA promotes ICM trainings guided by its on-the-ground experience, developing capacity at local, national and regional levels. To date, PEMSEA trainings have benefitted over 5,000 people.

This experience has led to the development of ICM Training Model courses. Primarily aimed at assisting participating countries in their national ICM scaling up programs, these courses facilitate the exchange and transfer of knowledge and skills on ICM practices, tools and methodologies.

The model course on Understanding Integrated Coastal Management provides a guide to quickly assess the requirements for developing an ICM program by explaining the State of the Coasts Reporting tool and the ICM Code of Good Practice. The learning from this course is useful and applicable to local government planners, government technical staff, coastal and marine management officers, professionals from disciplines related to coastal and ocean management, environmentalists, NGOs and students. It is designed to be completed in a continuous and intensive five-day session and includes lectures, discussions, learning and workshop activities, video showing, case/research analysis and a field/site visit.



The ICM Training Manual Course will provide teachers and trainers with the tools and understanding to pass on ICM knowledge to others. It includes a detailed schedule for the course, preparation guidelines before the course, activities within the course, and guide for assessing the outcome of the course. Materials provided also include detailed case studies from previous ICM implementation programs PEMSEA has been involved in.

- b. to translate global principles in social responsibility into on-the-ground actions through ICM implementation;
- c. to incentivize increased corporate participation in ICM programs; and
- d. to distill good practices in sustainable business that are evolving in PEMSEA ICM sites and other projects, and to disseminate them for the benefit of other coastal areas in the region.

The awards will have three main categories, namely: 1) Integrated Coastal Management (ICM) Governance; 2) Sustainable Development Projects; and 3) Company/ Corporate Inhouse Environmental Sustainability Programs.

A PEMSEA Sustainable Business Awards Handbook has been drafted as a guide to formally evaluate and acknowledge the contributions of corporations and private sector entities towards ICM program implementation and sustainable development.

# BEAT THE LEARNING BLUES: HERE'S HOW KIDS ARE GETTING EXCITED ABOUT BIODIVERSITY AND SUSTAINABILITY



Photos by DENR



The energy was unmistakable as the kids started gathering at the conference hall. Clad in their school uniforms while some were in white shirts and jeans, the children were giddy with excitement and anticipation. This was, after all, a break from the classroom and the chance to learn something new while having fun. The interactive event was an outreach program called *Dalaw-Turo* (Visit and Teach), an activity of the Fifth EAS Youth Forum (YF5) during the 2018 East Asian Seas Congress in Iloilo City, Philippines.

*Dalaw-Turo* was launched in 1989 by the Philippines' Department of Environment and Natural Resources-Biodiversity Management Bureau (DENR-BMB) as a nonconventional information and education tool for



Photos by DENR

mainstreaming biodiversity conservation into non-formal learning processes. It takes a participatory approach to biodiversity education through a series of activities ranging from creative workshops to exhibits, skits, games and ecological tours, and is complemented by lectures and an open forum to address relevant issues and concerns.

YF5 youth delegates visited some fifty Grade 5 and 6 students from the West Visayas State University and the Central Philippine University. The one-day activity was led by DENR Youth Facilitators. The fun began as the youth delegates and students were divided into five groups: *Bakauan* (mangroves), *Laot* (open sea), *Tangrib* (coral reef), *Lusay* (sea grass), and *Baybayin* (shore). Each group was comprised of 10 grade school students and 14 youth delegates.

The first activity, *Web of Life: Healthy Habitats and Biodiversity*, aimed to educate the participants on the value of biodiversity and the interconnectedness of ecosystems and the environment. The mechanics were simple: each student was given a photo that represented a particular group of wildlife or an environmental object. They had to identify another person from the group whose photo represented something they were connected to, and a string was then used to physically represent the connection. At the end of the activity, a web of string was formed. Group leaders then asked the students regarding their observations during the activity and

demonstrated the effect of losing one part of the web by having them release their hold on the rope—leading to a collapse. The key takeaway here? Everything is interconnected.

To help students make the link between wildlife representations in media and biodiversity in real life, and to educate them on the impacts of plastic pollution to wildlife survival, the activity *Behind the Scenes: Marine Plastics* was conducted. The participants were shown photos of cartoon characters and were asked to match them with photos of the real-life species the characters were based on. Bonus points were given to those able to name the animal in question. After the photos were matched, a group discussion followed that helped the kids appreciate the species—that they are real, not just cartoon characters—and what they can do to protect them. It was emphasized that, for the animals to thrive, their habitat should be clean and free of debris like plastics. The children then understood that we need to be mindful of where we throw our garbage especially plastics so they don't end up in the coasts and oceans and get eaten by fish and other sea creatures.

Capping the busy day were the delegates and students committing to reducing plastic use and caring for the environment as they stamped their hand prints on a white linen cloth that held the message "Youth for the Ocean."

Kids teaching kids to care for the environment? *Dalaw-Turo* is proof positive it can be done!

# PEMSEA TRAINEES TELL-ALL: MISSING SPICY FOOD, TRAVELING IN TRAFFIC, AND UNDERSTANDING ICM



(L-R) Adithyar Rachman, Xiaotong "Shirley" Zhu, Arry Susilo Wardhani, Bounleay Nanthavong and Souksamlane Songkham joined the PEMSEA Traineeship Programme at the PEMSEA Resource Facility from September to December 2018.

“I miss chili after one month in the Philippines,” said Arry Susilo Wardhani of Indonesia. “Since my country is near to the Philippines, I thought there must be a lot of similarities in food and ingredients. The food is similar to what we have in Indonesia, but most of them are not spicy!” Arry added with a smile.

Adjusting to the local food, comparing transportation costs (the fare here is cheaper than in Laos, said one trainee) and experiencing traffic jams were all part of the cultural experience five trainees from China, Indonesia and Lao PDR went through as part of PEMSEA’s Traineeship Programme. The programme is intended to strengthen regional partnerships, and supports capacity and knowledge building of the young generation of ICM practitioners on integrated coastal management in the region.

The trainees, who interned at the PEMSEA Resource Facility in the Philippines from September to December 2018, were promising junior officers from country/local government PEMSEA partners. They are Adithyar Rachman, from the Tangerang Regional Development Planning Agency (Indonesia); Arry Susilo Wardhani, from the Environmental Agency of Semarang City (Indonesia); Bounleay Nanthavong, from the Department of Environment and Natural Resources, Sekong Province (Lao PDR); Souksamlane Songkham, from the Department of Water Resources, MONRE (Lao PDR); and Xiaotong “Shirley” Zhu, from the China PEMSEA Sustainable Coastal Management Cooperation Center (CPC).

To learn more about ICM, the trainees were exposed to a mix of lectures and field visits. In Cavite City, they joined an ICM orientation at Cavite State University and visited the Pawikan Conservation Center in Naic, Imus Ecology Center and the Disaster Response Command Center in the Municipality of Carmona. In Quezon City, they went to Holy Spirit's Material Recovery Facility to learn about the solid waste management program initiated and supported by the community.

In Marikina City, the trainees learned about river management from the River Parks Authority and the City Environmental Management Office (CEMO). While visiting Angat Dam in



Photo by PEMSEA

Bulacan, they met with the Angat Watershed Area Team (AWAT) and the National Power Corporation (NPC), who discussed the dam's watershed ecosystem and management, coordination mechanisms with different government agencies, working with the indigenous peoples living around the area, and the dam's water use and allocation.

Finally, a field visit to the Pasig River, guided by the Pasig River Rehabilitation Commission (PRRC), informed the trainees about ongoing efforts to rehabilitate and revive the "dead" river to its former pristine state. The trainees also supported preparations leading up to the EAS Congress and assisted the PRF and their country delegations during the EAS Congress. Four of them also attended the pre-Congress training on satellite data and marine applications.

Back in the office, the trainees were exposed to program management as they dealt with day-to-day dynamics in the office. They learned various aspects of ICM and exchanged and learned about good practices from other sites. Each trainee was then tasked to present their own ICM action plan modules and explain how to best implement ICM in their home countries. The trainees shared their future plans as such:

Adithyar: "I will assist my colleagues in the monitoring and evaluation of the ICM program through SOC reporting, which provides the status and conditions of the marine and coastal environment in my country. We will look into the upscaling of ICM implementation in Tangerang Regency, and support local regulations and public awareness as necessary."

Bounleay: "My plan is to facilitate and provide technical assistance in the implementation of the IRBM scaling up program in Sedone River Basin through capacity building, conduct of stakeholders' consultations, development and implementation of on-the-ground projects, and public awareness and community mobilization activities in cooperation with relevant agencies, technical specialists and work groups."

Souksamlane: "For the Sedone River Basin program, I will help organize and facilitate the meeting of the IRBM Program Coordinating Committee, Program Management Office, Task Teams and Technical Working Groups, and related meetings with other stakeholders."

Arry: "For Semarang City, the next plan will be to report the result of the traineeship and the considerations for ICM implementation to my supervisor and to the head of the Environmental Agency of Semarang City. I will also help facilitate coordination among interrelated parties to inform them about ICM in Semarang to get inputs from the different sectors. We will also look into starting the waste management programs in the pilot sites."

PEMSEA also introduced the trainees to how they can get more information on ICM through the SEA Knowledge Bank (SEAKB). "Being a trainee has turned me into a student again," said Shirley Zhu from China. "I learned not only about the history of PEMSEA, the development of SDS-SEA, and the various ICM cases, but also the sharing of knowledge and friendship with my fellow trainees. I read a lot of the published case studies in PRF as part of my mission to finish a river estuary rehabilitation case study, and shared some of my own experience and understanding with the other trainees."

Shirley added that her fellow trainees also shared their own stories of working with pollution control in the Mekong River and mangrove planting. "I will miss chatting with my trainee friends as we head back home," she said.

"This experience was, without a doubt, one of the best that I've ever had," said Adithyar Rachman of Indonesia. "Before the traineeship, my knowledge about coastal management was minimal, I knew nothing at all. Throughout the traineeship, I have learned a lot of things especially on ICM. One of the potential applications I learned that can be implemented in the Tangerang Regency local government is how eco bricks can be made out of plastic. I also learned about solid waste management. More importantly, I learned how to be more dedicated at work, like the people from Marikina and the Pasig River Rehabilitation Commission and, of course, the PEMSEA Resource Facility."

# WHO'S ON THE LIST? CHECK OUT OUR PARTNERS

Working together with a diverse network of partners towards the sustainable development of the seas of East Asia offers a richer perspective on multi-stakeholder collaboration, which is crucial to meeting the UN Sustainable Development Goals (SDGs). Partners are able to share expertise and technologies, and can effectively mobilize people and financial resources to achieve greater impact, scale and replicability.



Photo by PEMSEA/J. Eugenio

The United Nations Conference on Trade and Development (UNCTAD) World Investment Report 2014 cites a US\$2.5 trillion gap in investments required to meet the SDGs, and it is not likely that all of this financing will come from government or donor support. To this end, private sector investment has been recognized as a key to redirecting billions of dollars of capital towards sustainable blue economy investments in the region.

Conservation projects in East Asia face many challenges, with stable access to capital as the biggest obstacle to long-term viability. The region is extremely important in terms of conservation investment given its huge population and significant coastal ecosystems. For PEMSEA's partners, the chance to pursue financial opportunities while saving our oceans and coasts highlights the need for strategic

partnerships that start with a clear understanding of the needs and objectives from both sides.

PEMSEA has been working on building the foundations for blue economy investment in East Asia for many years. The approach has been based on the evolving landscape and needs of its partners. It has been rewarding to see the recent acceleration of interest and growing momentum around investment balanced with the socio-economic needs of our local partners. We are excited to be a part of the movement as a regional intermediary, convener and technical advisor for enabling blue economy investment.

In the meantime, we present our regional and global partners whose areas of expertise are helping PEMSEA develop a pipeline of projects with viable models for environmental and social benefits, alongside investor returns.



## REDUCING POLLUTION VIA IRBM IN ASEAN COUNTRIES

The **United Nations Development Programme (UNDP)**, together with the **Global Environment Facility (GEF)** and **Association of Southeast Asian Nations (ASEAN)**, developed a full project document on reducing pollution in the seas of East Asia through the implementation of IRBM (Integrated River Basin Management) in seven participating countries, namely: Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines and Viet Nam.



Photo by PEMSEA

Upon the project document's completion, a Regional Validation Workshop was held in the Philippines last May 2018 with the following objectives: (1) present and discuss each country's National Pilot Proposal; (2) discuss the Regional Project Document and its components and workplan; (3) validate the final draft of national components in relation to the Full Project Document; and (4) discuss the status and next steps for the finalization of the Full Project Document.

The proposed UNDP/GEF funded project seeks to improve integrated water resources management (IWRM), reduce pollution loads from nutrients and other land-based activities, sustain freshwater environmental flows to coastal waters through a source-to-sea continuum approach, reduce climate vulnerability through demonstrations and replications, and plan and strengthen IRBM in the seven countries.

## WASTEWATER MANAGEMENT AND RESOURCE RECOVERY OPPORTUNITIES: INDONESIA, THE PHILIPPINES AND VIET NAM



Investing in wastewater treatment facilities has been shown to be profitable. While recognized as a significant source of greenhouse gas (GHG) emissions estimated at roughly 3% of the total globally, there is a business opportunity in wastewater. It is possible to convert wastewater treatment facilities into resource factories, producing potable water, energy from biogas, fertilizers and even bio-polymers. Technologies are now also commercially available to meet higher water quality requirements, with a growing public acceptance of water reuse.

PEMSEA partnered with **ARCOWA**, an advisory firm based in Switzerland, to help accelerate the investment in advanced wastewater treatment and resource recovery, thereby addressing a number of wastewater-related SDGs. Focusing on Indonesia, the Philippines and Viet Nam, the project included country-level diagnostics for wastewater and resource recovery, long-list scoping of potential opportunities and initial development of pre-feasibility studies.

Sample case studies uncovered through the assessment included Del Monte Philippines in Cagayan de Oro, where treated wastewater from pineapple production powers the operations of the cannery and plant—saving Del Monte

25% in annual power consumption and 9% in annual fuel costs, as well as reducing waste and carbon emissions. Phu My Hung, a new high-quality urban development in Ho Chi Minh City, Viet Nam, uses a separate sewerage system connecting over 90% of households. The treated wastewater is reused to irrigate green spaces and landscaping, and the sludge is used to fertilize green areas. A third example, energy plant PT Austindo Aufwind New Energy located in East Belitung, Indonesia, utilizes its palm oil mill effluent to produce 1.8MW of energy, supplying 2,000 households with electricity through a long-term power purchase agreement with the State Electricity Company.

In 2018, PEMSEA published reports on the three countries as a way to improve understanding of the urban and industrial wastewater sector and analyze opportunities to invest in wastewater treatment and resource recovery as an initial step in the potential mobilization of public and private investments. Overall conclusions from the project were that the technology is available and ready to be applied, but costs versus returns must be carefully analyzed.

## NEW LETTER OF COOPERATION WITH ACB

On September 4, 2018, PEMSEA and the **ASEAN Center for Biodiversity (ACB)** renewed its decade-old partnership through the signing of a new Letter of Cooperation (LoC). The ACB is an intergovernmental and international regional center of excellence of the Association of Southeast Asian Nations (ASEAN). It aims to create, promote, and develop links with the public, private sector, civil society, international development institutions and the donor community for the sustainable use of biodiversity.

The LoC, which will remain in effect for three years, covers several cooperative activities between the two organizations through the implementation of the SDS-SEA and ASEAN 2025: Forging Ahead Together (ASEAN 2025).

## PEMSEA JOINS THE 6<sup>TH</sup> GLOBAL ENVIRONMENT FACILITY (GEF) ASSEMBLY

PEMSEA took part in the 6th GEF Assembly in Da Nang, Viet Nam in June 2018. The organization has a strong relationship with the **Global Environment Facility** which, together with UNDP, has provided generous support to PEMSEA since the beginning. The GEF Assembly is the governing body of the GEF and meets every four years.

As part of the assembly, PEMSEA assisted the Vietnam Administration of Seas and Islands (VASI) in hosting a workshop on “Current Developments, Strategic Direction and Support for Sustainable Development of Vietnam’s Coasts.” The workshop covered two projects: a) the framework program “Reducing Pollution and Rebuilding Degraded Marine Resources in the East Asian Seas Through Implementation of Intergovernmental Agreements and Catalyzed Investments” and b) the “Scaling Up the Implementation of the Sustainable Development Strategy for the Seas of East Asia in Viet Nam (2015-2019),” which aims to rehabilitate and sustain coastal and marine ecosystem services and build a sustainable



Photo by PEMSEA

coastal and ocean-based economy by assisting Viet Nam’s national ICM strategy.

An important topic of discussion during the assembly was that of marine plastics. PEMSEA and its partner countries used the conference as a platform to discuss ways to tackle this transboundary issue. Discussions on regional action to tackle plastic pollution were held with UN Special Envoy for the Ocean Mr. Peter Thomson, World Resources Institute/ Friend of the Ocean’s Mr. Kristian Teleki, and officials of the GEF, among others. Solving the problem of marine plastics is now seen as critical for success in reaching the aims of SDG 14: Life Below Water.

Aiming to promote the conservation and sustainable management of marine and coastal resources in the East Asian Seas region, PEMSEA and ACB will jointly develop and implement:

- national and local capacity building activities to help achieve the Aichi Biodiversity Targets and the UN SDGs;
- information exchange and knowledge transfer among partners; and
- new projects for the conservation and management of key coastal marine habitats and ecosystems.

In the ASEAN region alone, some 170,000 kilometers of coasts and oceans provide various goods and services essential to supporting the livelihoods and food for a growing population. It also provides access to and availability of fresh water, carbon sequestration and storage, climate regulation, soil protection and cultural services.

PEMSEA and ACB are collaborating on a number of projects, including: a) participation at the 2018 EAS Congress via an exhibition and workshop under the theme of coastal



resilience and implementing Aichi Biodiversity Target 11 and UN SDG 14; b) information and knowledge sharing utilizing PEMSEA's Seas of East Asia Knowledge Bank (SEAKB); c) developing a joint project on marine litter; and d) identifying and working on other cooperative activities to implement the SDS-SEA 2018-2022 Plan and ASEAN 2025.

## REDUCING OCEAN PLASTIC WITH CIRCULATE CAPITAL AND CLOSED LOOP PARTNERS

Ocean plastic presents an enormous challenge in Asia. According to research by the Ocean Conservancy, a 45% improvement in plastic leakage is possible by improving waste management and recycling in China,



Indonesia, Viet Nam, the Philippines and Thailand. PEMSEA is working with **Closed Loop Partners** and its investment arm, **Circulate Capital**, to address this problem.

In March 2018, Closed Loop Partners announced that corporate leaders Kimberly-Clark, The Coca-Cola Company and The Dow Chemical Company and PEMSEA were the latest partners to join Closed Loop Ocean, an initiative to develop a new funding mechanism to prevent plastic waste from leaking into the world's oceans. PEMSEA is the first intergovernmental organization to formally join the initiative.

Since then, Closed Loop Ocean narrowed down its geographic focus, defined investment criteria, built its network of partners and began to identify potential investments in the areas of waste management and recycling solutions in Southeast Asia.

According to Rob Kaplan, the founder and CEO of Circulate Capital, "Solving the problem of ocean-bound plastics will require significant investment and partnership from brands and supply chain leaders. Partnership with our coalition of companies who have operations in these markets and with PEMSEA, a regional intergovernmental body with local knowledge

and experience in South East Asia, will help us bring in additional investors, understand the local market and supply chain dynamics and develop an investment strategy that unlocks the key bottlenecks holding back the recycling system in South East Asia and India.”

Circulate Capital is a new investment management firm dedicated to financing companies, projects and infrastructure seeking capital to accelerate solutions to the ocean plastic problem. The firm will invest in partnership with Asian-based entities in the solid waste management and recycling sector initially in Indonesia, with a plan to work in other Southeast Asian countries. PEMSEA is working closely with Circulate Capital as a regional partner and member of its steering committee.

## CAVITE STATE UNIVERSITY JOINS PNLC



Photo by DENR

In the Philippines, **Cavite State University (CvSU)** was formally accepted and designated as the newest member of the PEMSEA Network of Learning Centers (PNLC). The university has nine satellite campuses, four of which are located in coastal local government units. A PEMSEA Review Committee approved CvSU’s application as an ICM Learning Center following its extensive engagement in addressing ICM and other water-related issues in the province of Cavite.

## WORKING WITH STATE-OF-THE-ART SATELLITE DATA FOR MARINE APPLICATIONS

Satellite data provides information on the marine environment that can be used for many applications. The most modern generation of satellites offers improvements in spatial and temporal resolution as well as a constantly evolving suite of products.

During the 2018 East Asian Seas Congress, participants from nine countries, including representatives from the PEMSEA Network of Learning Centers, joined the training course “Accessing and Working with State-of-the-Art Satellite Data for Marine Applications” at the University of the Philippines Visayas. The training was organized by **Plymouth Marine Laboratory (PML)** in collaboration with PEMSEA and UP Visayas. PML undertakes leading international research to respond to societal needs and promote stewardship of the world’s oceans. It is concerned with increasing knowledge and understanding of the marine environment and designing tools and evidence-based solutions for its practical management.

The two-day training course was an opportunity to learn about data available from Copernicus and other relevant Earth observation programs and to develop workflows for

CvSU’s collaborative activities in support of ICM include:

- signing a tripartite Memorandum of Agreement (MOA) between PEMSEA, CvSU and the Provincial Government of Cavite during the 1<sup>st</sup> Cavite Water Summit in August 2015. The 2<sup>nd</sup> Cavite Water Summit was held in November 2017;
- hosting the Integrated Information Management System (IIMS);
- membership in the State of the Coasts Technical Working Group; and
- conducting studies on water resources management and other capacity development and support programs.

The university’s hosting of the 1<sup>st</sup> Cavite Water Summit was also instrumental in the signing of the Cavite Water Declaration through which they committed to providing

using data from the EUMETSAT Copernicus Marine Data Stream using the Sentinel Applications Platform (SNAP) software and Python programming.

Data from the European Union Copernicus program is open and free for everyone to use however they wish. The program has an operational focus, with satellite constellations offering continuity of service for the foreseeable future. There is a growing availability of open source tools that can be used to work with this data.



Photo by Chimerographic

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technical inputs and workshop facilitation on identified targets. A MOA signing and groundbreaking ceremony for hosting the Cavite Water Testing Laboratory was also conducted last June 2018.

As part of the PNLCC, CvSU agrees to undertake the following activities under a MOA it signed with PEMSEA: (1) serve as a repository of information and technologies that would aid national and local governments, ICM practitioners and other stakeholders in implementing the SDS-SEA; (2) establish a core team of ICM trainers; (3) mobilize the core ICM team for training and other capacity building activities; (4) conduct research and provide technical support in coastal and marine resource management; and (5) provide updated information on activities that would showcase their contribution to sustainable marine and coastal management at the local and national levels.

## WORKING WITH CLME+



Photo by PEMSEA/M.G. Vergara

The region of the **Caribbean and North Brazil Shelf Large Marine Ecosystems (the CLME+ region)** is one of the most geopolitically diverse and complex set of LMEs or large marine ecosystems in the world. The CLME+ is comprised of 26 independent states and is home to some 100 million people. Its rich marine environment is important for fishing, shipping, global tourism and the oil and gas industries. In the past years, however, the CLME+ region has been impacted by habitat degradation, unsustainable fisheries practices and pollution—thereby jeopardizing its chances for sustainable blue growth.

PEMSEA is working on an inter-collaborative opportunity program with CLME+, in conjunction with a knowledge exchange program that will be funded by the International Waters Learning Exchange and Resource Network (IW:LEARN). IW:LEARN is a GEF project implemented by the UNDP and United Nations Environment Program (UNEP) and executed by the Intergovernmental Oceanographic Commission of UNESCO.

CLME+ is looking to explore the replication or adaptation of PEMSEA's innovative partnership approach to ocean governance in the region. CLME+ is interested in learning about PEMSEA's governance rationale, framework and processes; its roles and responsibilities in the coordination and implementation of the regional SDS-SEA strategy; the technical, certification, investment and knowledge sharing services that PEMSEA has created to support and enhance national and local governments; and the sustainable financing strategy and process that PEMSEA is implementing to support the implementation of the SDS-SEA.

PEMSEA sees linking with CLME+ as an excellent opportunity to share its learnings over the past 25 years and possibly transfer some of its innovative strategies, tools, skills and approaches to another region. A meeting between CLME+ and PEMSEA is expected to commence in the third quarter of 2019.



# OTHER NON COUNTRY PARTNERS



**IUCN (International Union for Conservation of Nature)** – IUCN developed programs for enhancing the resilience of coastal communities by promoting sharing of knowledge and best practices. Together with FIO, PEMSEA and UNDP, IUCN convened a session on exploring new initiatives and solutions to enhance local actions against plastic pollution. IUCN is looking to focus on blue carbon and marine pollution in Thailand and Viet Nam, in collaboration with PEMSEA on ICM and private sector engagement.



**OPRI (The Ocean Policy Research Institute)** – In support of SDS-SEA implementation, OPRI highlighted the progress made by seven ICM model sites in Japan and discussed the development of a guidebook to achieving blue economy for sustainable development. During the EAS Congress, OPRI examined case studies and analyzed critical factors relating to the conservation and sustainable management of coastal and marine resources as well as policy-science interface and stakeholder involvement for blue economy.



**KOEM (Korea Marine Environment Management Corporation)** – Several capacity building activities and projects on marine litter and the sustainable management of coastal and marine environments were conducted by KOEM. Among them were two sessions convened to highlight blue carbon resources and marine litter response measures in the region; the project in some coastal provinces of Viet Nam; and the strengthening and improvement of marine litter response in Indonesia.



**KIOST (Korea Institute of Ocean Science and Technology)** – KIOST will work with PEMSEA on its training and capacity building activities, as well as addressing transboundary issues particularly on marine debris and microplastics. During the EAS Congress, KIOST discussed its initial steps towards conducting research on how to mainstream ocean energy into the power sector.



**MABIK (National Marine Biodiversity Institute of Korea)** – During the 2018 EAS Congress, MABIK convened a session under the Biodiversity and Coastal Management Track entitled “Promoting Biodiversity in the Seas of East Asia” to establish effective networks for conservation and sustainable use of marine biodiversity through collaborations with EAS partners. Dr. Sundo Hwang, MABIK President, provided an overview of MABIK and its mission to engage in collaborative research projects, outreach programs and joint workshops, as well as to establish joint research laboratories with possible partners. MABIK scientists described the facilities of its Institute in RO Korea, and highlighted its current collaborative research with various institutions, including the Institute of Biodiversity Research in Viet Nam.



**NOWPAP (Northwest Pacific Action Plan)** – NOWPAP looked into the role of evolving regional ocean governance in East Asia, highlighting major achievements and lessons learned to continue advancement in assessments, institutional development and mechanisms contributing to good regional governance.



**IPIECA (originally International Petroleum Industry Environmental Conservation Association) & OSR (Oil Spill Response Limited)** – IPIECA, in partnership with Oil Spill Response Limited, convened a session during the EAS Congress that focused on programmes, expertise, good practices and lessons learned in oil spill preparedness and response.



# AND COLLABORATORS



Yellow Sea Large Marine Ecosystem (YSLME)



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



East Asian-Australasian Flyway Partnership



Rare Philippines



SMARTSeas Philippines



First Institute of Oceanography (FIO)



Centre for International Law (CIL-NUS)



Capturing Coral Reef and Related Ecosystem Services (CCRES)



The Biodiversity Finance Initiative (BIOFIN)



International Maritime Organization (IMO)



Wetlands International



China PEMSEA Center



Oceana Philippines



Florida International University



Mangroves for the Future

Other organizations supportive of PEMSEA events and who actively participated during the 2018 EAS Congress were **Yellow Sea Large Marine Ecosystem (YSLME)**, **Intergovernmental Oceanographic Commission Sub-Commission for the Western Pacific (IOC-WESTPAC)**, **Florida International University**, **East Asian-Australasian Flyway Partnership**, **Rare Philippines**, **SMARTSeas Philippines**, **First Institute of Oceanography (FIO)**, **Centre for International Law (CIL-NUS)**, **Capturing Coral Reef and Related Ecosystem Services (CCRES)**, **Biodiversity Finance Initiative (BIOFIN)**, **International Maritime Organization (IMO)**, **Wetlands International**, **China PEMSEA Center**, **Oceana Philippines**, and **Mangroves for the Future**.

# HOW WE SPARKED INNOVATIONS & CREATIVES IDEAS



Photo by PEMSEA/J. Nasol

**A**t the heart of sustainability are big ideas and innovations that strive to push the limits of what can be done to protect the oceans, people and economies of East Asia. In 2018, the East Asian Seas (EAS) Congress provided the perfect backdrop for the exchange and sharing of practical but innovative policies and technologies, good management practices and investment opportunities related to the SDS-SEA's implementation at the regional, national and local levels.

Here's a sample list of PEMSEA collaborators and their ideas for a more resilient and sustainable EAS region:



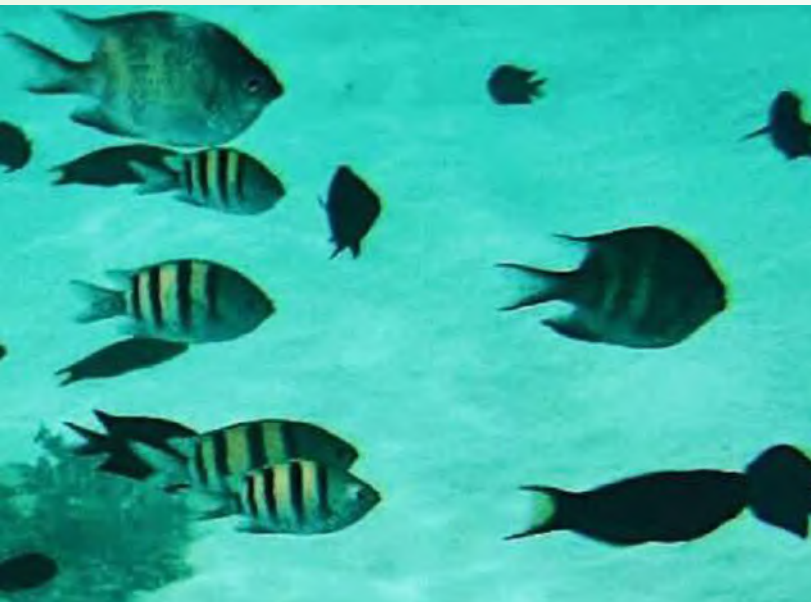
## MARINE LITTER

- **Evoware and the use of seaweed as renewable material**

Indonesia is the world's second biggest plastic waste contributor to the ocean, while five of the six poorest provinces in the country are seaweed producing provinces. Based on this data, social enterprise Evoware (<http://www.evoware.id/>) creates innovative solutions from seaweed to help address the plastic waste issue while contributing to the livelihood of Indonesia's seaweed farmers. Using seaweed as raw material, Evoware's products are eco-friendly, biodegradable and even edible and healthy for the body.



Photo by PEMSEA/B. Recirido II



## MARINE BIODIVERSITY

- **GEF-Small Grants Programme (SGP)-Malaysia and its scalable initiatives**

Transitioning from an NGO to a government program and policy, SGP Malaysia served as local community incubators of innovation and scalable initiatives. They are currently broadening the replication of its best practices through larger projects and with the support of the government. Their scalable initiatives for GEF-7 include: (1) community-based threatened ecosystems and species conservation/community co-management; (2) chemicals and waste management workable SGP model to be incorporated into government policy; (3) social inclusion via youth empowerment; (4) low-carbon energy access benefits/remote rural electrification; and (5) sustainable agriculture and fisheries/food security.

## LAND RECLAMATION

- **Florida International University, Xiamen University, KIOST, East Asian-Australasian Flyway Partnership, UNDP/GEF Yellow Sea Large Marine Ecosystem Phase II Project and the creation of a regional reclamation research and action network program**

In East Asia today, coastal land reclamation is emerging as an attractive option to provision land for real-estate development. But while provisioning new land increases a country's development potential, land reclamation brings irreversible detrimental impacts to the livelihoods of local fishing communities, the marine ecosystem, and globally migrating shorebird populations.

Technological advances have enabled faster, larger-scale reclamation that transforms the marine environment to an unprecedented degree. Land reclamation projects in recent years are particularly driven by the logic of construction and politics, rather than an actual need for land. Land reclamation as "ocean grabbing" demands thoughtful discussion on how to effectively manage and control reclamation practices. Following presentations at the 2018 EAS Congress, a panel discussion explored the possibility of creating a regional reclamation watch program to share knowledge on land reclamation among PEMSEA's member countries. There was a consensus that, as reclamation becomes a profitable business, economic impact assessment alone is not sufficient to assess the real costs and long-term impacts of land reclamation. The session concluded that equity and sustainability, the two main goals of the SDGs, should be the leading principles in evaluating the feasibility of present and future reclamation projects.

## MARINE SPATIAL PLANNING

- **PML Centre for Geospatial Applications and satellite-derived data**

PML accesses the latest marine research and technology for commercial use. Its use of satellite-derived data can aid in marine spatial planning (MSP) in the coastal domain (e.g., water quality, harmful algae blooms awareness), marine protected area (MPA) determination, and as part of maritime situational awareness (e.g., oil spill tracking and illegal, unreported and unregulated fishing activity).

## OCEAN ENERGY

- **KIOST and tidal energy development**

The Korea Institute of Ocean Science and Technology (KIOST) is looking into the prospect of tapping tidal energy as a source of clean and renewable energy for the country by 2030. The plan is to develop a 1.5 GW ocean energy infrastructure, where tidal wave energy will account for 254 MW. The plan consists of the following strategy: (1) expansion of R&D in ocean energy and establishment of test bed; (2) construction of large-scale ocean energy farm; (3) entering the global market and expanding domestic supply; and (4) establishment of

ocean energy certification system and strengthening of policy support. Ocean energy development is underway in Korea, with the construction of the Sihwa Lake Tidal Power Plant (completed in 2011) and the Uldolmok Tidal Current Pilot Power Plant (completed in 2009). The Sihwa project has been found to be beneficial to some extent in terms of improved ecology and reduced environmental impacts such as improved water quality, increase in species diversity index and reduced CO<sub>2</sub> emission. It is estimated that the economic viability of tidal energy could be realized by 2025, but putting in place enabling policies will be necessary between now and 2025.

- **OceanPixel and marine renewable energy**

A Singapore start-up company that spun off from the Nanyang Technological University's (NTU) Energy Research Institute, OceanPixel is currently engaged in ocean energy projects in Singapore, Indonesia and the Philippines. The use of marine renewable energy is increasingly becoming an option, particularly with the use of tidal and wave energy as sources. Currently, marine renewable energy options exist: floating solar and offshore wind (can be feasible) and waves and currents, possibly including ocean thermal energy conversion (OTEC) and salinity gradient. OceanPixel said having market support (e.g., feed-in-tariff) can accelerate the progress of marine renewable energy, on top of having pilot sites, demos and first movers. The gains of marine renewable energy also mean clean electricity, jobs, industries and other benefits towards the progressive development of a blue economy in the region.

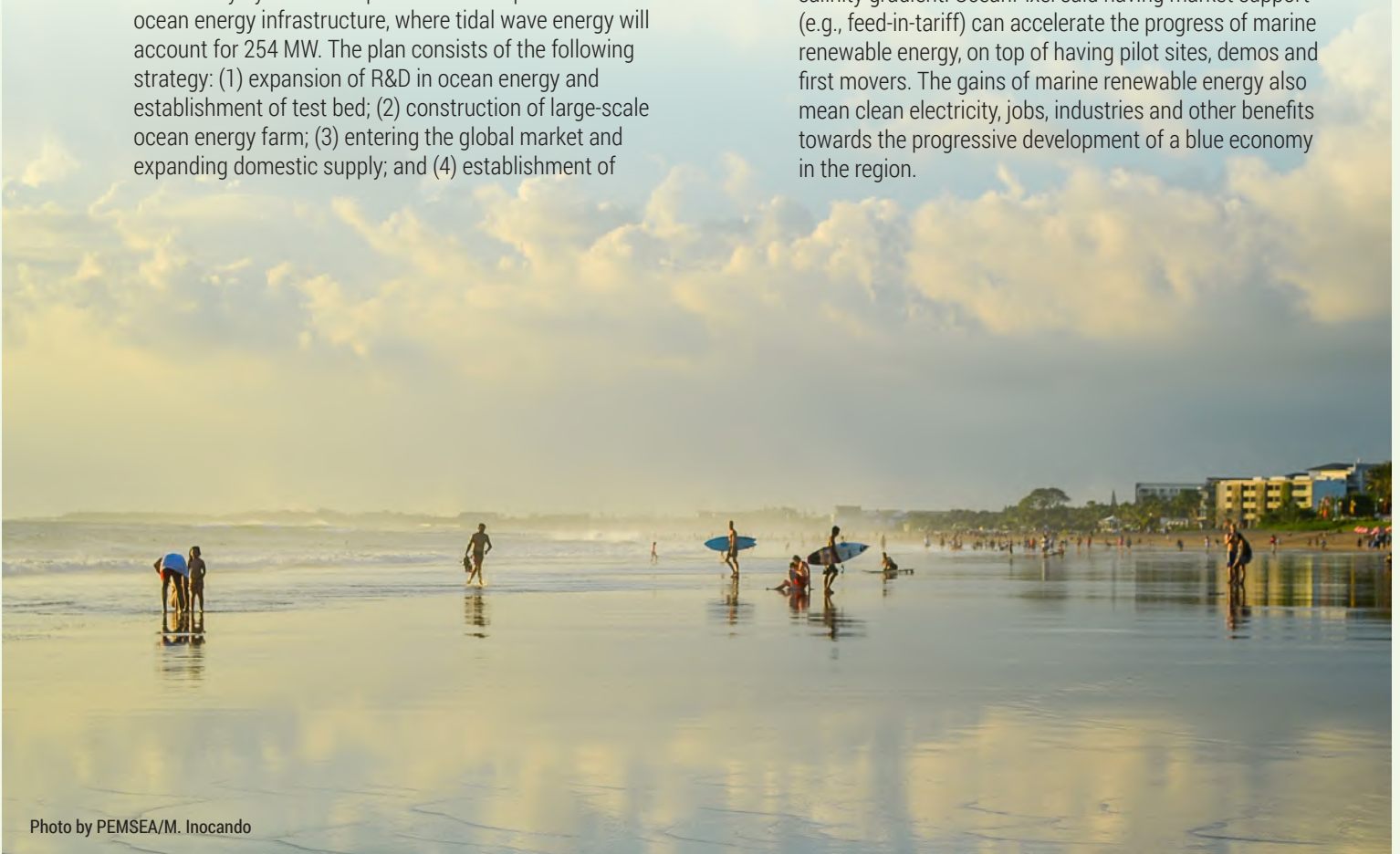


Photo by PEMSEA/M. Inocando



Photo by PEMSEA/D. Sahai

## BLUE COMMUNITIES

- **GCRF and the Blue Communities Programme**

The UK's Global Challenges and Research Fund (GCRF) and its Blue Communities Programme is working on building capability for marine planning in Southeast Asia based on the premise that actively, well-managed marine ecosystems are better able to support the health, well-being, food security and livelihoods of people. GCRF used participatory approaches on research in blue economy development by using Indonesia as a case study in the region. The Taka Bonerate-Kepulauan Selayar (TBKS) Biosphere Reserve was designated by UNESCO as a biosphere reserve in 2015. It has a

high level of biodiversity and coral reefs and is known to host the largest atoll in Southeast Asia and the third largest in the world. The reserve is inhabited by approximately 125,000 people, whose major source of income is fishery. The goals of the study were to: (1) improve the quality and quantity of local products without jeopardizing natural ecosystems; (2) establish sustainable income generation schemes for local communities; (3) promote community awareness and participatory engagement in environmental protection, sustainable livelihood and climate change adaptation; (4) improve hygienic living and equal access to basic resources; and (5) transfer lessons learned for other sites in developing blue communities in wider Indonesia. GCRF hopes to use their analysis to understand the policy and institutional issues that both constrain and enable the TBKS Biosphere Reserve to achieve its goals.

# PREDICTING Post-



# 2020:

# WHAT THE FUTURE HOLDS

**O**n the heels of the celebration of PEMSEA's 25th anniversary, efforts are underway to prepare for the organization's future. On July 2018, PEMSEA organized an Ocean Leadership Roundtable Dialogue that aimed to map out the prospects, outlook and opportunities for the coasts and oceans of the East Asian region beyond 2020. A panel of influential thought leaders led the discussions towards developing ambitious and transformative actions to secure the region's healthy oceans, people and economies.

In a plan called Post-2020: Futures Report and Strategy, PEMSEA is laying the groundwork for responding to regional trends in ocean and coastal governance, and achieving self-sufficiency.

The report identifies **four major trends** that are set to present the region with its biggest challenges post-2020:

1. **Climate change** is projected to magnify through extreme weather events, sea level rise, ocean warming, and ocean acidification and their cascading effects on communities and ecosystems.
2. **Overexploitation of marine resources** is forecasted to be under continuous strain due to increasing demand for seafood and the prevalence of unsustainable fishing practices.
3. **Marine pollution**, among them eutrophication and plastic waste, is forecasted to become a serious threat to the region.
4. **Ocean-based trade and infrastructure** is predicted to accelerate and cause more pressure to marine habitats and coastal resilience.

These trends are evolving within the context of East Asia and are projected to directly affect its oceans and coasts and relevant stakeholders through 2020 and beyond. To address these challenges, the report also analyzes areas of cooperation in **ocean governance, technology** and **private sector engagement and finance** that call for effective and responsive collaboration within the region.



Photo by PEMSEA/S. Hilbourne

POST-2020  
STRATEGIC OBJECTIVE

1

ESTABLISH STRONG  
EXPERTISE AND  
BRAND AWARENESS  
CENTERED ON  
FUTUREPROOFING THE  
SEAS OF EAST ASIA

PEMSEA needs to bolster its expertise and brand awareness specifically towards supporting its partners in effectively managing risks and capitalizing on the opportunities presented by a post-2020 world. This strategy is focused on strengthening PEMSEA's position as the trusted and credible intergovernmental organization for coastal and marine issues in East Asia. PEMSEA will focus on two major thrusts:

**Thrust 1: Strengthen PEMSEA's position as a unique intergovernmental body aligned with the diverse challenges and opportunities facing the EAS.**

In the last decade, PEMSEA has developed an implementation plan for SDS-SEA and organized trainings, conferences and dialogues to develop an enabling environment, share lessons and good practices, and build institutional capacity on ICM planning and policy making. This has resulted in the development of national policies adopting ICM frameworks and the scaling up of ICM implementation across multiple sectors. With the SDS-SEA framework, there is also a sizeable opportunity for guiding and driving blue economy development in the region.

The following actions are recommended under Thrust 1:

- Set clear policy agenda and facilitate tailored dialogues
- Develop dedicated policy working groups and initiatives with country and non-country partners
- Practical institution building with its country and non-country partners
- Conduct targeted marketing and brand awareness campaigns on major trends

It is within this context that PEMSEA assesses its own future and how it can sustain its efforts towards further institutionalizing integrated coastal management while expanding its reach and deepening its collaboration with existing and new partners. **PEMSEA's Post-2020 Strategy** outlines three main strategic objectives to help navigate the organization through a post-2020 world:

1. **Establish strong expertise and brand awareness** centered on futureproofing the Seas of East Asia.
2. **Enhance alignment and partnerships** with PEMSEA's network of stakeholders.
3. **Achieve a diverse and sustainable mix of funding streams** to implement the SDS-SEA and support PEMSEA Resource Facility (PRF) to be self-sustaining.

To operationalize this strategy, PEMSEA will focus on a number of key thrusts and present a prospective list of priority activities for the next five years.



Photo by DENR



Photo by DENR

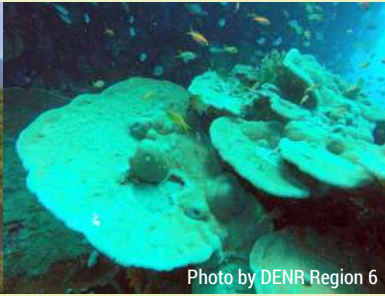


Photo by DENR Region 6



Photo by PEMSEA/G. Dantes

**Thrust 2: Deepen PEMSEA's expertise on ocean governance, technology and private sector engagement to become a leading provider of solutions for sustainable seas.**

In keeping with its mission to serve as the leading provider of solutions for sustainable seas, PEMSEA has taken concrete steps over the last decade to distill ICM into a set of services that can be tailored to the dynamic needs of the region. These fall under the areas of: Advisory and Project Services; Knowledge Services; Certification Services; Facilitation and Secretariat Services; and Investment Services. As the organization looks to a complex future ahead, it needs to continually enhance and increase the sophistication of its expertise and services.

PEMSEA intends to raise its profile and ability as an unmatched provider of solutions for sustainable seas by focusing on three core activities:

- Develop a priority research and development (R&D) agenda
- Build a network of experts based on the trends and opportunity areas
- Publish regular thought leadership pieces



Photo by PEMSEA/J. Alegre

POST-2020  
STRATEGIC OBJECTIVE

2

ENHANCE ALIGNMENT  
AND PARTNERSHIPS  
WITH PEMSEA'S  
NETWORK OF  
STAKEHOLDERS

PEMSEA recognizes that next-generation partnerships will be key to its future success. Having acted as a strong partner to multiple organizations as a means to advance its vision for ICM, PEMSEA is looking to ramp up its ability to harness partnerships as a means to boost its value and self-sufficiency through two major thrusts:

**Thrust 1: Establish anchor partnerships on selected issues across stakeholder segments.**

PEMSEA will pursue the **development of “anchor partnerships”**—high profile partnerships with key players, with operations and funding that align with PEMSEA’s policy and/or R&D agenda to leverage each other’s assets and resources to achieve enhanced impact. Collaborations such as PEMSEA’s partnership with Circulate Capital to support blended finance approaches to marine plastic pollution will help PEMSEA to: (1) develop expertise in emerging innovative partnership, technology and financing approaches; (2) refine existing services and develop new ones; and (3) generate new partnership and funding opportunities through increased brand recognition and referrals. In targeting partnerships, PEMSEA can also build on the national State of Oceans and Coasts reports, or the partnerships being developed under the PEMSEA Investment Services.

**Thrust 2: Develop partnership building expertise and capacity.**

The PRF may consider ramping up the resources behind its partnership-building activities via the **establishment of a Partnership Unit**. A new partnership approach will require increased in-house capacity at the PRF to build, implement and monitor partnerships. While the PRF has a longstanding position for Planning and Partnership Development, this has traditionally been a big role for a single individual. Given its core focus on partnership, the PRF could benefit from a dedicated and systematic focus on partnership development.

POST-2020  
STRATEGIC OBJECTIVE

3

ACHIEVE A DIVERSE  
AND SUSTAINABLE  
MIX OF FUNDING  
STREAMS

PEMSEA’s ambition to drive discourse and lead the promotion of sustainable solutions for East Asia’s oceans and coasts relies on its ability to secure sufficient resources to implement its plans and programs. Moving into and beyond 2020, the organization will be focusing on two main thrusts to achieve a more diverse and sustainable mix of funding for its future:

**Thrust 1: Enhance the implementation of current approaches for self-sufficiency.**

As described in the Third Party Assessment, over the last few years PEMSEA has secured external resources to sustain its operations through the management and implementation of regional projects through strategic partnerships with the United Nations Development Programme, the Global Environment Facility, among others. This track record for effective project development, management and execution should not be underestimated as it is widely in demand in the development industry and sectors with high risk adversity and preference for execution excellence.

Key action points include:

- **Investing in client acquisition and business development.** PEMSEA should consider investing in client acquisition and business development targeting existing clients/partners as well as new ones with similar requirements and interests in PEMSEA’s unique brand of expertise and services. In line with this, PEMSEA will explore the recruitment of dedicated business development specialist(s) and increase the organization’s participation in key global and regional events to actively market its agenda, expertise and approach to next generation ocean partnerships.
- **Establishing a mechanism for sustained partner contributions.** Countries that receive benefits from





Photo by DENR



Photo by DENR

PEMSEA's services need to make their fair contribution, and this minimum amount of financial support is crucial as a recurrent source of core funding. In close coordination with its country partners, PEMSEA will work closely with country partners to achieve their commitments in the Iloilo Declaration and Da Nang Compact through the establishment of a formal plan to secure partner contributions that includes a clear timeline and procedure.

**Thrust 2: Develop new and innovative self-sufficiency approaches and expand current initiatives.**

On top of enhancing the implementation of current modes for self-sufficiency, PEMSEA will pursue new and innovative approaches towards securing funding and resources to complement its base. Identified action points include the following:

- **Joint fundraising activities.** PEMSEA, through its leadership team and the prospective partnership/business development specialist, can explore joint fundraising and business development activities that can include the application for grants or the development of new partnerships and platforms that leverage the organization's expertise and services. For joint fundraising activities, PEMSEA will explore signing agreements with partners to combine efforts and share costs to pursue new business opportunities with new clients.
- **Mobilize a spin-off entity.** PEMSEA will also explore and prototype possible approaches to develop a spin-off entity that will manage more business-oriented or commercially sourced engagements and/or establish a



Photo by PEMSEA/W. Chi Keung

dedicated service facility built from the organization's expertise. This could include permutations where PEMSEA considers prototyping a "think tank" focused on designing, capital raising, and deploying innovative financing for ocean-based innovations. If successful, PEMSEA could consider developing a new partnership with appropriate entities to handoff the formalization of a spin-off entity of this nature. This could be applied to a spin-off facility for certification services, a training academy (e.g. East Asia Seas Academy) or intensive private sector partnership brokering and management service for interested PEMSEA stakeholders.

Pending further refinements and approval of the approaches presented in the Post-2020: Futures Report and Strategy, the activities outlined in the report can be prioritized and paced over a five-year timeframe, taking into consideration requirements and the availability of funds.

# O U R O R G A N I Z A T I O N

## EXECUTIVE COMMITTEE

**Chair:** **Dr. Antonio La Viña**  
Council Chair, East Asian Seas Partnership Council, PEMSEA

**Members:** **Mr. Arief Yuwono**, Council Co-Chair, EAS Partnership Council, PEMSEA  
**Mr. Makoto Harunari**, Technical Session Chair, EAS Partnership Council, PEMSEA  
**Dr. Vu Thanh Ca**, Acting Intergovernmental Session Chair, EAS Partnership Council, PEMSEA  
**Dr. Jae Ryoung Oh**, Technical Session Co-Chair, EAS Partnership Council, PEMSEA

## EAST ASIAN SEAS PARTNERSHIP COUNCIL

### COUNTRY PARTNERS

#### Cambodia

**Mr. Long Rithirak**, Deputy Director General, Ministry of Environment

#### China

**Ms. Chen Yue**, Director-General, International Cooperation Department, State Oceanic Administration (as of October 2018)

**Mr. Wang Antao**, Director, Department of International Cooperation, State Oceanic Administration

#### DPR Korea

**Mr. Kwang-Jin Jong**, Director, General Bureau for Cooperation with International Organizations (GBCIO)

#### Indonesia

**Mr. M. R. Karliansyah**, Director General, Environmental Pollution and Degradation Control,  
Ministry of Environment and Forestry

#### Japan

**Mr. Yasufumi Onishi**, Director, International Ocean Affairs, Ocean Policy Division, Policy Bureau, Ministry of Land,  
Infrastructure, Transport and Tourism

#### RO Korea

**Mr. Jeong-goo Kang**, Director, Marine Environment Policy Division, Marine Policy Office, Ministry of Oceans and Fisheries

#### Lao PDR

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

#### Philippines

**Atty. Analiza Rebueta-Teh**, Undersecretary, Climate Change Service and Mining Concerns,  
Department of Environment and Natural Resources

#### Singapore

**Mr. Hazri Hassan**, Director, International Policy Division, Ministry of Environment and Water Resources

#### Timor-Leste

**Mr. Acacio Guterres**, Director General, Fisheries, Ministry of Agriculture and Fisheries

#### Viet Nam

**Hon. Vu Si Tuan**, Deputy Administrator, Viet Nam Administration of Seas and Islands,  
Ministry of Natural Resources and Environment

**NON-COUNTRY PARTNERS**

ASEAN Centre for Biodiversity (ACB)  
 Coastal Management Center  
 Conservation International (CI) Philippines  
 International Environmental Management of Enclosed Coastal Seas (EMECS)  
 International Ocean Institute (IOI)  
 International Union for Conservation of Nature and Natural Resources (IUCN)–Asia Regional Office (ARO)  
 IOC Sub-Commission for the Western Pacific (IOC/WESTPAC)  
 Korea Environment Institute  
 Korea Institute of Ocean Science and Technology (KIOST)  
 Korea Marine Environment Management Corporation (KOEM)  
 Korea Maritime Institute (KMI)  
 National Marine Biodiversity Institute of Korea (MABIK)  
 Northwest Pacific Action Plan (NOWPAP)  
 The Ocean Policy Research Institute (OPRI)  
 Oil Spill Response (OSR)  
 Plymouth Marine Laboratory  
 PEMSEA Network of Local Governments for Sustainable Coastal Development (PNLG)  
 IPIECA (originally International Petroleum Industry Environmental Conservation Association)  
 UNDP/GEF Small Grants Programme  
 UNDP/GEF Yellow Sea Large Marine Ecosystem (YSLME) Project  
 UNEP Global Programme of Action (UNEP/GPA)

**PEMSEA Resource Facility Staff**

<b>Gonzales, Elma Aimee</b>	Executive Director
<b>Bacay, Jose Gerald</b>	Admin Assistant
<b>Bell, Thomas</b>	Intern
<b>Bermas, Nancy</b>	Senior ICM Specialist/Country Manager (Philippines and Viet Nam)
<b>Bonga, Danilo</b>	Senior Technical Assistant
<b>Bresemann, Nadine</b>	Strategy Development Specialist for Maritime Transport and Port Operations
<b>Cardinal, Renato</b>	Programme Manager
<b>Castillo, John Christian</b>	Graphic Artist
<b>Cabayan, Diwata</b>	Programme Assistant I
<b>Corpuz, Rodante</b>	IT Specialist
<b>Dacaymat, Arsenio</b>	IT Assistant
<b>dela Peña, Mary Anne</b>	Finance Specialist
<b>Diwa, Johanna</b>	Capacity Development Manager
<b>Dulay, Jonel</b>	Senior Graphic Artist
<b>Galang, Janine</b>	Congress Sub-Coordinator
<b>Gallardo, Kathrine Rose</b>	Secretariat Coordinator
<b>Guerrero, Julia Marie</b>	Congress Sub-Coordinator
<b>Gutierrez, Anthony</b>	Driver
<b>Josue, Rachel</b>	HR/Admin Associate
<b>Lau Wang, Jean Isabelle</b>	Manager for Knowledge Platforms (Consultant)
<b>Lee, Jae-Young</b>	Deputy Head, Planning and Partnership Development
<b>Mariano, Marlene</b>	Finance Clerk
<b>Merina, Elsie</b>	Programme Assistant
<b>Narcise, Cristine Ingrid</b>	ICM Specialist/Country Manager (Indonesia, Thailand, and Timor-Leste)
<b>Nepomuceno, Maria Concepcion</b>	Office Assistant
<b>Padayao, Daisy</b>	ICM Specialist/Country Manager (Cambodia and Lao PDR)
<b>Paigao, Almary Joyce</b>	Congress Sub-Coordinator
<b>Pangan, David King</b>	Investment Specialist
<b>Pura, Ma. Concepcion</b>	Congress Sub-Coordinator
<b>Ross, Stephen Adrian</b>	Senior Project Manager, GEF-UNDP Projects (Consultant)
<b>Sison, Regina</b>	Finance Assistant
<b>Vasquez, Vida Isabel</b>	Secretariat Assistant
<b>Villanueva, Michael</b>	Librarian
<b>Whisnant, Ryan</b>	Director of Strategic Initiatives (June 2018, July 2018 – Consultant)
<b>Zaldivar, Jhowilyn</b>	Country Programme Assistant

# F I N A N C I A L S U M M A R Y

## Receipts

Total receipts in 2018 amounted to \$3.1M, which was slightly higher than the \$2.9M generated in 2017. Multilaterals and other grants represented 72% of the total receipts in 2018, the bulk of which came from GEF. Government contributions and grants from country partners are 20% of the total receipts. The gross receipts increased by 6% due to the flow of funds in relation to the 2018 EAS Congress.

The committed funding for 2018 (i.e., deferred grants) amounted to \$915,032, a 20% decrease from 2017.

## Expenses

Expenses in 2018 totaled \$3.7M, a 26% increase from 2017. Project expenses (combined direct and indirect expenses) reached \$3.1M, representing 83% of the total expenses for 2018. The direct expenses for the projects amounted to \$2.7M. Administrative expenses represented 17% of the total expenses for 2018. The 17% can be broken down into: 10% for administrative cost and 7% for in-kind contribution provided by the Philippine Government (for office space and utilities).

The increase in the amount of total expenses for 2018 can be attributed to the increase in the number of consultancy services acquired to assist countries in implementing various projects. Personnel and consultancy expenses amounted to 46% of the total expenses for 2018.

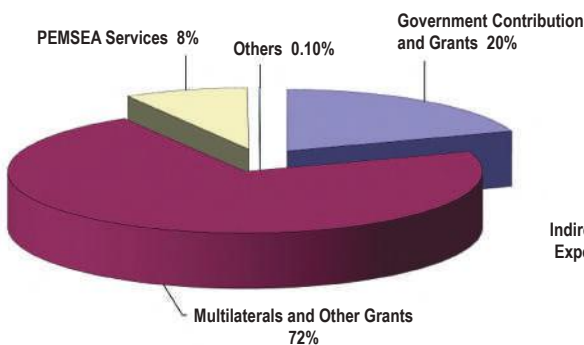
## Total Assets

PEMSEA's total assets decreased by 23% that is mainly attributable to the 23% decrease in cash in 2018 and the 20% decrease in commitments from countries under deferred grant.

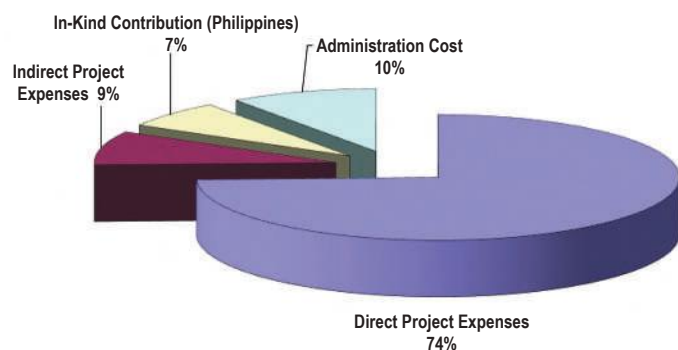
We remain thankful for our partners' continuing support in working together towards the sustainable development of our shared Seas of East Asia.

*International Financial Reporting Standards (IFRS) require us to record receipts in the year the funds are designated for use.*

### 2018 Receipts



### 2018 Expenses



Statement of Financial Position (in US\$)

ASSETS	2018	2017
<b>CURRENT ASSETS</b>		
Cash	2,546,680	3,307,867
Receivable	94,955	169,978
<b>Total current assets</b>	<b>2,641,635</b>	<b>3,477,845</b>
<b>NON CURRENT ASSETS</b>		
FA at Fair value	155,032	
Available for Sale Financial Asset		186,290
Property & Equipment - net	25,952	28,402
Other non-current assets	91,797	82,794
<b>Total non-current assets</b>	<b>272,782</b>	<b>297,486</b>
<b>TOTAL ASSETS</b>	<b>2,914,417</b>	<b>3,775,330</b>
<b>LIABILITIES AND FUND BALANCE</b>		
<b>CURRENT LIABILITIES</b>		
Accounts Payable and Accrued Expenses	366,885	384,906
Deferred Grant	915,032	1,137,990
<b>Total current liabilities</b>	<b>1,281,917</b>	<b>1,522,895</b>
<b>NON CURRENT LIABILITIES</b>		
Defined contribution liability	102,636	82,049
Retirement benefit obligation	35,158	27,941
<b>Total non-current liabilities</b>	<b>137,794</b>	<b>109,990</b>
<b>TOTAL LIABILITIES</b>	<b>1,419,711</b>	<b>1,632,885</b>
<b>EQUITY</b>		
Fund Balance	1,495,703	2,118,011
Employee benefit reserve	3,123	(2,705)
Fair value reserve	(4,120)	27,138
<b>Total equity</b>	<b>1,494,706</b>	<b>2,142,444</b>
<b>TOTAL LIABILITIES AND EQUITY</b>	<b>2,914,417</b>	<b>3,775,330</b>

Statement of Receipts and Expenses (in US\$)

	31 December	
	2018	2017
<b>RECEIPTS</b>		
Government Contributions and grants	619,207	749,317
Multilaterals and other grants	2,247,572	2,140,149
PEMSEA Services	263,116	59,199
Others	3,284	4,977
<b>TOTAL RECEIPTS</b>	<b>3,133,178</b>	<b>2,953,642</b>
<b>EXPENSES</b>		
<b>Direct project expenses</b>		
Personnel	733,521	774,725
Consultancy	408,664	400,178
Subcontract	1,069,745	619,080
Travel and meeting	239,523	151,383
Training	270,790	254,653
Other Direct Costs	71,998	22,608
<b>Total direct project expenses</b>	<b>2,794,241</b>	<b>2,222,627</b>
<b>Indirect project expenses</b>		
Personnel	217,642	253,976
Consultancy	53,171	61,546
Travel and meeting	9,316	29,966
Overhead	49,493	46,714
<b>Total indirect project expenses</b>	<b>329,622</b>	<b>392,202</b>
<b>Administrative cost</b>		
Personnel	87,034	101,564
Consultancy	214,113	18,507
Travel and meeting	68,535	17,236
Overhead	261,942	225,172
<b>Total administrative cost</b>	<b>631,623</b>	<b>362,479</b>
<b>TOTAL EXPENSES</b>	<b>3,755,486</b>	<b>2,977,308</b>
<b>EXCESS (DEFICIENCY) OF RECEIPTS OVER EXPENSES</b>	<b>(622,308)</b>	<b>(23,665)</b>
<b>OTHER COMPREHENSIVE LOSS</b>		
Items that will not be reclassified subsequently to receipts or expenses		
Remeasurements gain/loss on retirement benefit obligation	5,826	15,038
Fair value loss on FA at FVOCI	(31,258)	
Items that maybe subsequently reclassified to receipts or expense		
Fair value gain on AFS FA		31,847
<b>TOTAL COMPREHENSIVE INCOME</b>	<b>(647,740)</b>	<b>23,220</b>







Partnerships in Environmental Management for the Seas of East Asia (PEMSEA) is an intergovernmental organization operating in East Asia to foster and sustain healthy and resilient oceans, coasts, communities and economies across the region. Through integrated coastal management solutions and partnerships, PEMSEA works with local and national governments, international development organizations, companies, investors and research institutions towards the sustainable development of coasts and oceans in East Asia.

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