PEMSEA

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A Time of Reflection and Resilience

PEMSEA Annual Report 2020: A Time of Reflection and Resilience

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A Message from the Council Chair and Executive Director

Dear partners, collaborators and friends,

The year 2020 will forever be remembered as one of the most challenging times in modern history due to the COVID-19 global pandemic. For PEMSEA, the events of such a disruptive year have forced us to reflect, review and recalibrate our actions, as well as address the undeniable link between ocean health and human health.

While COVID-19 slowed down our work and affected our outputs, we continued to deliver on our commitments, particularly for the **GEF/UNDP/PEMSEA Scaling Up the Implementation of the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA)** Project. After six years, the Project has reached a productive conclusion. Its noteworthy achievements include establishing a country-owned regional mechanism; developing innovative knowledge products and services; strengthening National Ocean Policies and institutional support; expanding integrated coastal management (ICM) coverage in the region and replicating ICM tools, approaches and good practices; creating a regional knowledge sharing platform for ecosystems management; and contributing to global learning. This is a testament to PEMSEA's resilience and ability to adapt to the complex and uncertain situation of COVID-19 through partnerships and collaboration with various stakeholders.

The next two years will be crucial towards sustaining the gains from the SDS-SEA, and how countries in the East Asian Seas (EAS) region will continue to contribute towards the SDS-SEA Implementation Plan ending in 2022, and fulfill its commitments towards the UN SDGs and other international commitments. We are confident that with everyone's support and cooperation, we will achieve our goals.

PEMSEA also calls on its Country Partners, Non-Country Partners and other donors to support the organization's goal towards financial sustainability. We need to capture opportunities on the programmatic side, and solicit support for initiatives that would help us continue our work post-COVID. Sustainable and inclusive economic development based on ocean resources or the Blue Economy, for example, has been highlighted as a key ingredient for providing countries with the means to build a better normal.

In a year of many changes, PEMSEA's ability to rapidly pivot in the new normal was shown through our efforts to push through by means of remote work and the use of online platforms and digital tools. Looking towards 2021, we are committed to pursuing more initiatives to combat climate change, address marine litter and restore marine habitats. The upcoming **East Asian Seas Congress** hosted by the Royal Government of Cambodia on 1-2 December 2021 will also be an opportunity to highlight our best work, celebrate our partnerships, and forge the new EAS roadmap on coasts and oceans.

From reflection to resilience to recovery—these stages have defined our 2020. Together, we have emerged stronger and we thank all of you for holding steadfast to our commitment for the Seas of East Asia.

Arief Yuwono
PEMSEA Council Chair

Aimee T. Gonzales
PEMSEA Executive Director

Photo by PEMSEA/E. Seastre

SDS-SEA: Success Stories and Sustainability in a year like no other

Delivering on our commitments and supporting our partner countries in unprecedented times defined PEMSEA's efforts in 2020 to review and recalibrate its action plan for the GEF/UNDP/PEMSEA Scaling Up the Implementation of the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA). The six-year project (2014-2020) aims to catalyze actions and investments at the regional, national and local levels to rehabilitate and sustain coastal and marine ecosystem services and build a sustainable coastal and ocean-based blue economy in the East Asian region. Participating countries include the governments of Cambodia, PR China, Indonesia, Lao PDR, Philippines, Thailand, Timor-Leste and Viet Nam with Japan, RO Korea and Singapore participating on a cost-sharing basis.

Built on a strong partnership network, project participants include 44 local governments in 8 countries, 51 members of the PEMSEA Network of Local Governments (PNLG) in 10 countries, 16 ICM Learning Centers in 7 countries, 4 Regional Centers of Excellence (RCOE) in 4 countries, 7 port authorities in 3 countries, donor organizations, the private sector, non-government and community-based organizations, and the beneficiary communities.

In scaling up Integrated Coastal Management (ICM) implementation, the SDS-SEA Project covers three components: (1) partnerships in coastal and ocean governance; (2) healthy and resilient marine and coastal ecosystems; and (3) knowledge platform for building a sustainable ocean-based blue economy. It is supported by 10 outcomes with activities and initiatives that involve a wide range of partners and stakeholders at the local, national, subregional, regional and international levels.

Ending on December 2020, the SDS-SEA Project has delivered significant accomplishments, thanks to the strong engagement and support from PEMSEA's Country and Non-Country Partners and various collaborators. This was particularly evident in the amount of co-financing that has been generated under the Project, amounting to more than USD 362 million and exceeding the committed co-financing of USD 157 million.

Photo by PEMSEA/J. Singlador

Overall Project Accomplishments

After six years, the GEF/UNDP/PEMSEA Scaling Up the Implementation of the SDS-SEA Project has reached a productive conclusion.

Under Component 1, a major accomplishment was the establishment of a self-sustaining, country-owned regional mechanism.

Under Component 2, the Project has exceeded its 20 percent (45,000 km) ICM target coverage with about 86,284.9 km or 40.4 percent of the region's coastline under ICM at the end of 2020.

Under Component 3, an estimated 7,000 participants have benefited from various capacity building initiatives.

COMPONENT 1:

- Self-sustaining, country-owned mechanism.
- Country contributions from PEMSEA partners.
- Hosting of PEMSEA Resource Facility by Philippine government.
- Completion of **10 National State of Oceans and Coasts (NSOC) Reports.**

This included voluntary country contributions from China, Japan, Philippines, RO Korea, Singapore and Timor-Leste and the development of innovative products and services to generate new revenue streams to augment the voluntary contributions; continued commitment by the Government of the Philippines to host the PEMSEA Resource Facility (PRF); co-hosting by Country Partners of key PEMSEA events and activities; partnership agreements with Non-Country Partners and collaborators in support of SDS-SEA implementation; engaging the private sector in blue economy development and ICM program implementation; establishing innovative investment mechanisms that support SDS-SEA implementation, including identifying business cases and developing pilot investment cases and continuing development of new projects for multilateral and bilateral donor funding; the development and initiation of national and ocean policies and review of sectoral legislations in line with ICM and SDS-SEA; and the completion of regional and national State of Oceans and Coasts (SOC) reports with examples of countries' implementation of the Blue Economy.

COMPONENT 2:

- **86,284.9 km** or **40.4%** of region's coastline under ICM.
- Initiatives on biodiversity, habitat protection, pollution reduction, sustainable fisheries and livelihood.
- Implementation of Port Safety Health and Environmental Management Systems.
- Development of guidelines on Use of Chemical Dispersants in Oil Spills in the Gulf of Thailand.

Countries also reported on their various initiatives to address key issues related to biodiversity and habitat protection and management, pollution reduction, sustainable fisheries and livelihood, and natural and man-made hazards. Several ports in the region have also continued to implement the Port Safety, Health, Environmental Management System (PSHEMS), while the three littoral countries in the Gulf of Thailand (GOT) have made significant developments in strengthening contingency planning at subregional, national and local levels and in harmonizing the response strategies through the Environmental Sensitivity Index mapping and development of the Subregional Guidelines for Use of Chemical Dispersants in Oil Spills in support of the implementation of the GOT Strategic Action Plan 2017-2021.

COMPONENT 3:

- **7,000 participants** in capacity building initiatives.
- 350 pieces of knowledge products generated.
- Establishment of SEA Knowledge Bank online knowledge platform.
- Expansion of PNLC, PNLG, RCOEs.

SEA Knowledge Bank

In six years, close to 350 pieces of knowledge products were generated, and an online knowledge platform (SEA Knowledge Bank) was established as a regional knowledge hub for coastal and ocean governance and blue economy. Various networks have also expanded including the PEMSEA Network of Learning Centers (PNLC), PEMSEA Network of Local Governments (PNLG), and the Regional Centers of Excellence (RCOEs). The Project has also provided PEMSEA the opportunity to participate and co-organize a number of key global and regional learning events, particularly the UN Sustainable Development Goals (UN SDG) conference, ASEAN and International Waters conferences and IW: LEARN regional workshops to share knowledge and accomplishments on ICM scaling up and investments on sustainable coastal and ocean development.

Photo by PEMSEA/J.M. Penaflorida

Country Highlights and Continuing Support to SDS-SEA Implementation

On December 18, 2020, the Final Project Steering Committee Meeting of the **GEF/UNDP/PEMSEA Scaling Up the Implementation of the SDS-SEA Project** was conducted virtually due to travel restrictions brought about by the COVID-19 pandemic. The meeting focused on the key achievements of the Project from 2014 to 2020, the initial findings, assessment and recommendations from the ongoing project terminal review, and the work plan for the completion of the Project's operational and financial closure.

A series of online and face-to-face national end-of-project forums were also held during the year, with the various stakeholders from the participating countries sharing and consolidating their best practices on SDS-SEA and ICM implementation, the replication of the most effective tools and approaches on the ground in support of the continuing expansion of ICM coverage in the region. The national forums were held in August (Thailand); September (Cambodia, China); October (Lao PDR); November (Indonesia); and December (Philippines, Timor-Leste, Viet Nam).

Here are the key highlights of our Country Partners' most impactful work for the SDS-SEA Project, and how they collectively contributed to mainstreaming and scaling up their ICM programs to achieve our shared vision for healthy oceans, people and economies. The countries also reiterated their continuing commitment to support PEMSEA and the SDS-SEA.

CAMBODIA

ICM scaling up activities have contributed to Cambodia achieving 440 km of its coastline with 100 % ICM coverage. ICM coverage in the four provinces (Preah Sihanouk-119 km, Kampot-66.5 km, Kep-26.5 km, and Koh Kong-230 km) has strengthened the country's governance in addressing specific management concerns in the coastal and marine areas. Other notable accomplishments include: the publication of the National Report on the State of Oceans and Coasts of Cambodia; development of a White Paper that provides recommendations for harmonizing national policies and legislation and strengthening of institutional mechanisms for the sustainable development and management of coastal and marine areas; a National Guideline on the Use of Dispersants and Contingency Plan for Oil Spills; completion of Sihanoukville's pollution loading assessment report and continuing operationalization of its environmental laboratory; addressing saltwater intrusion through mangrove protection in Kep province; initiation of community-based solid waste management in Peam Krasop village in Koh Kong province; and development of Coastal Use Zoning Plan of Kampot Province that can be replicated to other areas; mobilization of other sources of funding for environmental conservation through the application of user fees for tourists and engaging other partners; conduct of, and participation to various local and international trainings; and the demarcation of protected area boundaries and implementation of regulations on illegal settlements.

> ***"PEMSEA's partnership with MOE has also contributed to leveraging new partnerships and additional funding to address emerging problems in the country such as plastic waste management. With support from the Government of Sweden and UNDP, a circular economy strategy and action plan was developed. The Government of Japan and UNDP also signed a USD 3 Million agreement with Cambodia to address marine pollution."***

Photo by Sihanoukville PMO

Recommendations for post project actions include the continuing technical and financial support by GEF/UNDP for the remaining ICM activities; and continued collaboration with PEMSEA on capacity building and awareness raising, and expanding regional cooperation on the implementation of the contingency plan and oil spill response. At the national and sub-national level, it is recommended that important documents such as the National Report on State of Oceans and Coasts of Cambodia, White Paper, National Contingency Plan, and National Guideline for the Use of Dispersants, as well as the local State of Oceans and Coasts Reports (SOCs) should be translated into concrete implementation plans.

Lessons to develop robust institutional and management arrangements and address weak or lack of technical capacity at the subnational levels were also identified. These include providing targeted capacity building and using external service providers for technical advice and support in capacity strengthening of national and local personnel, and formulation and strengthening of community groups in support of the implementation of coastal and marine management activities. Practical management arrangements need to be prepared at the onset and securing the full commitment of national and local governments, partners and relevant stakeholders.

On behalf of Cambodia, **Mr. Long Rithirak, Deputy Director General of the Ministry of Environment (MOE)**, expressed his appreciation for the support extended to Cambodia under the different phases of the SDS-SEA Project. In particular, he underscored the: (a) 100% coastline coverage of ICM program implementation covering the 4 coastal provinces in the country; (b) the trust built with various sectors and stakeholders under the common and integrated framework of PEMSEA; and (c) the strong coordination established with the Gulf of Thailand countries on oil spill preparedness and response. PEMSEA's partnership with MOE has also contributed to leveraging new partnerships and additional funding to address emerging problems in the country such as plastic waste management.

With support from the Government of Sweden and UNDP, a circular economy strategy and action plan was developed. The Government of Japan and UNDP also signed a USD 3 Million agreement with Cambodia to address marine pollution. Mr. Long also emphasized MOE's assurance together with relevant ministries in the country on the continued implementation of the National Strategic Plan on Green Growth, the National Plan on Biodiversity, and Climate Change as part of their continuing commitment to the implementation of the SDS SEA and other international commitments.

Photo by PEMSEA/B. Rafael

PR CHINA

China's scaled up efforts for the SDS-SEA has translated to 10,457.49 km or 58.1 % of its 18,000 km coastline now covered under ICM. After more than 20 years of experience in ICM implementation under the auspices of PEMSEA, China has integrated the ICM concept and ecosystem-based management principles into the policy and planning processes at all levels of governance. This has resulted to a strong buy-in particularly among local governments and local stakeholders, which is manifested in the increase in the number of ICM sites from 1 to the current 22 sites.

China received a highly satisfactory rating for all project outcomes during the terminal evaluation, having implemented all of the necessary activities to achieve the end of project targets. ICM implementation in the 22 sites is supported by national policies, laws and regulations pertaining to the sustainable development of the country's coastal and marine environment (e.g., revised Marine Environmental Protection Law, Law on the Administration on the Use of Sea Areas) that were adopted by the national government, in addition to the institutional reforms that were pursued (e.g., creation of the Ministry of Natural Resources) to strengthen ocean and coastal governance. The establishment of the China PEMSEA Sustainable Coastal Management Cooperation Center (CPC) in 2014 that serves as the technical arm in project coordination and reporting between the national government, local governments and PRF, has been considered as a very effective mechanism that contributed to achieving the project objectives and outcomes. The continuing operation of CPC beyond the project's life has been secured with the signing the Memorandum of Agreement between PRF and MNR.

> ***"With the concept of ICM already integrated into the policy and program planning of China at all levels, this ensures the continued implementation of ICM in the country even after the end of the current GEF/UNDP/PEMSEA Project."***

Photo by PEMSEA/NSOC China

The various management programs that were implemented in the ICM sites that received direct support from the project have contributed to strengthening the protection and restoration of critical coastal habitats and marine environment, including the maintenance and enhancement of the quality of coastal waters, in promoting equitable and sustainable fisheries and conservation of fish stocks and climate change adaptation and disaster risk reduction.

The restoration of 27 hectares of Chinese Tamarix (*Tamarix chinensis*) in Changyi Special Marine Ecological Protected Area and the rehabilitation of the coastal wetlands in Daling River Estuary in Liaoning with 3 local vegetation species, including an assessment of the social, ecological and environmental benefits of the rehabilitated wetlands have been completed. Strengthening the management effectiveness of MPAs in Nanji Islands, Dongying, Quanzhou, Fangchenggang and Yangjiang covering 451,780 hectares of coastal waters with more than 10 percent increase in METT ratings against the baselines have been achieved. The benefits of the ecosystem approach to fisheries management covering 82,000 hectares of critical fishing ground have been demonstrated in Haizhou Bay in Lianyungang City, in addition to the implementation of conservation livelihood programs in Fangchenggang. In Dongying, options for emergency preparedness and response have been identified including the completion of cost-benefit analysis of identified hazards. In Sanya, the application of marine ecological GDP accounting to determine the economic contribution of marine ecosystems (e.g., corals, mangroves and sandy beach) and the trade-offs between economic development (e.g., tourism, shipping) and ecosystem degradation has generated important policy recommendations to the local government, including the application of the tool in other areas. Case studies on blue economy focusing on the application of science and technology innovation in building blue economic zones in Qingdao; renewable energy production in Rudong; construction and development of marine ranching in Dongying and integrated management of Yellow River estuary to reinforce the importance of blue economy development have been completed.

The National Blue Bay Remediation Plan which aims to rehabilitate and restore ecologically damaged coastal wetlands, shorelines and islands included actions for integrated planning and legislative measures for ICM. Under the Plan, in addition to the Ecological Redline Policy of the government, it is expected that ICM implementation will continue to expand to cover the entire coast of China.

China has also made significant advances in ICM Code implementation with Dongying and Xiamen receiving Level 2 ICM System recognition and Fanchenggang, Lianyungang, and Quanzhou re-certified for Level 1 ICM system recognition. More importantly, China has established a core team of ICM auditors who are capable of conducting training and auditing of the ICMS of local governments. Through MNR's support and coordination by CPC, expanding the application of the ICM Code to other coastal cities and municipalities of China is being planned.

Some recommendations post project include further developments in the areas of blue economy emulating Xiamen, Qingdao, Rudong, Hainan and Dongying's experiences in developing their respective Blue Economy Development Plans, adaptation to climate change, conservation and remediation of coastal biodiversity and ecosystems in support of the Blue Bay program and Ecological Redline Policy with GEF/UNDP's continued support. The terminal evaluation also recommended the establishment of a regular monitoring, evaluation and reporting at the regional level and contributing to the UN regular process for Global Reporting and Assessment of the State of the Marine Environment.

The Project's terminal review found that the SDS-SEA's design meets the needs of China, but recommends continued support from PEMSEA Resource Facility, UNDP and GEF to sustain the established mechanism, not only in China but also in the region.

On behalf of China, **Ms. Heyun Xu, Division Director of the Department of International Cooperation, Ministry of Natural Resources**, expressed China's continued support to PEMSEA's sustainability and thanked the GEF, UNDP, other PEMSEA Partners and the PRF for their support in the implementation of the SDS-SEA. Ms. Xu emphasized that ICM is a deeply rooted concept in the country, having been implemented in China under the four phases of the PEMSEA project. With the concept of ICM already integrated into the policy and program planning of China at all levels, this ensures the continued implementation of ICM in the country even after the end of the current GEF/UNDP/PEMSEA Project.

Photo by PEMSEA

INDONESIA

At least 52.8% or 50,223.40 km of Indonesia's coastline is now covered by ICM. At the national level, the country's commitment to help sustain SDS-SEA implementation and PEMSEA initiatives is evident in the ongoing process to ratify the Agreement Recognizing the International Legal Personality of PEMSEA, which will provide a legal basis for Indonesia to further strengthen coordination to support SDS-SEA implementation and to provide voluntary funding contributions to PEMSEA. In coordination with the Ministry of Environment and Forestry and other relevant ministries, the Ministry of Foreign Affairs of Indonesia has submitted a letter to the Indonesian President requesting for the preparation of a Presidential Regulation to ratify the agreement, which is currently awaiting the President's approval. The 5-year Indonesia SDS-SEA/ ICM Implementation Plan has also been incorporated into the National Medium-Term Development Plan (RPJMN 2020-2024) under Presidential Decree No. 18/2020.

Indonesia also highlighted the strong involvement of ICM Learning Centers in training and mentoring local governments and community groups, and the strong commitment of the regional heads in the implementation of ICM in the local sites. The multi-sectoral ICM coordinating mechanisms established through the project enhanced the efficiency of coordination among various stakeholders although continuous ICM awareness and capacity building of local officials and implementers is necessary in view of regular rotations and frequent changes in government officials. Indonesia also underscored the importance of capacity building and technical studies supported by the project in improving ICM policy and planning, including incorporating climate change considerations in local plans, supporting priority setting, and improving collaborations in developing and implementing various programs.

> ***"Indonesia is and will remain on board as part of the network of cooperation under the PEMSEA framework. Through integrated management solutions, we will be able to continue working towards sustainable and resilient coasts and oceans for the region."***

Photo by MOEF

Pollution reduction programs in Cipalabuhan and Cipanyairan Rivers in Sukabumi and Badung River in Denpasar City in Bali, implemented in collaboration with various partners, contributed to the achievement of local government performance in improving the environmental quality index targeted in development planning. A 5-year Integrated Environment Monitoring Program was also developed in Sukabumi which brought together key agencies and institutions to improve the efficiency and effectiveness of monitoring efforts in the regency. In Tangerang Regency, improved priority setting and coordination mechanisms in implementing their coastal community empowerment program enabled them to focus efforts in developing learning sites for mangrove rehabilitation, ecotourism and alternative livelihoods in four villages, in collaboration with various partners. In Semarang City, the community-based waste management program linked with incentives to support alternative livelihood development for women's groups was recommended for scaling up in line with the city's master plan.

With the change of marine management authority from the regency/city to the province due to Law 23/2014 on Regional Governance (effective 2017), the ICM sites focusing on MPAs (Buleleng and Klungkung regencies in Bali and Bontang City), marine turtle conservation (Sukabumi Regency), and sustainable fisheries (East Lombok Regency) had to work closely with representatives from their respective provinces in order to ensure that provincial policies taken will be in line with the regency/city policies and priorities. Through such close coordination between the local and provincial governments, in March 2020, the Governor of East Kalimantan Province issued Decree No. 523/K.249/2020 recognizing the MPA in Bontang and incorporating it in the provincial ICM Zoning Plan. The Governor also endorsed the legalization of the MPA in Bontang to the Minister of Fisheries and Maritime Affairs.

Other recommendations for the Project at the local and national level include ensuring that the SDS-SEA program is incorporated into the Ocean Policy Action Plan 2021-2025 that is currently being drafted and coordinated by the Maritime Coordinating Ministry; maintaining coordination with the Foreign Ministry and the Cabinet Secretariat to obtain Presidential approval recognizing PEMSEA as a regional coordination mechanism and allocate funding to sustain its operations; and promoting the SDS-SEA Project in Indonesia's national development and planning forum which is held annually.

In terms of lessons learned, the National State of Oceans and Coasts (NSOC) and local State of the Coast (SOC) reports provided good basis for determining national and local priorities and needs; and the SDS-SEA/ICM Project implementation involving several agencies in the ICM sites was more beneficial under the coordination of the local Planning and Development Agency (BAPPEDA) as it has the mandate to coordinate various development activities including budget allocation. The terminal evaluation report emphasized that BAPPEDA can make it easier to mainstream policies at the regional level (i.e., Indonesia's Regional Medium Term Development Plan), and provide inputs to regional leaders in realizing their commitment to the implementation and sustainability of ICM programs.

On behalf of Indonesia, **Mr. Dida Migfar Ridha of the Ministry of Environment and Forestry (MoEF)**, congratulated all the stakeholders for the successful implementation of the Project and acknowledged their tireless work to ensure the effective delivery of the project targets.

Mr. Ridha indicated that for Indonesia, the SDS-SEA implementation is a package of applicable principles of existing national, regional and international programs and instruments, as well as an implementation approach to achieve sustainable development of the East Asian Seas. Mr. Ridha reaffirmed that Indonesia is and will remain on board as part of the network of cooperation under the PEMSEA framework. Through integrated management solutions, Mr. Ridha believes that the region will be able to continue working towards sustainable and resilient coasts and oceans for the region.

Photo by H. Mahardika

LAO PDR

The implementation of the SDS-SEA Scaling Up Project in Lao PDR focuses on the demonstration of the integrated river basin management approach. Some of the country's key accomplishments include: the development of a National Guideline on Water Resources Fee; promotion of the implementation of the updated Law on Water and Water Resources that was enacted in 2017; development of the Strategy on National Water and Water Resource Management; development and approval of 3 sub-river basin management plans in the southern provinces of Lao; and the monitoring of water quality and quantity of the subriver basins in Sedone. At the time of the Terminal Evaluation, project targets in Lao are already at 95 percent completion. Despite the Project's small budget, the high level of engagement from stakeholders at the local and national levels contributed to the numerous activities implemented, and support for the enforcement of laws and regulations.

At the government level, recommendations for the Project include a call for the Department of Water Resources-Ministry of Natural Resources and the Environment (DWR-MONRE) to support local authorities to disseminate the Water and Water Resources Law to other Mekong tributary basins. Additionally, the Guideline on Water Resources Fee should be reviewed and adopted after a two-year time frame, with the provincial and district authorities intensively following up the village activities to ensure optimum usage of the fund.

> ***"The Project was able to contribute in enhancing integrated river basin management in Sedone covering three provinces (Champasack, Saravanne, and Sekong) in the southern part of Lao PDR. Several key outputs, including the adoption of the Water Resources Law, improvement in river basin management, enhancement of technical capacities on water resource and use management, and most importantly, the strong engagement and involvement of the community and local authorities in the implementation."***

Photo by Lao PDR

In terms of implementation approach and arrangements, lessons learned include the challenge of working with a large number of partners, and the need for more time for coordination. This caused some delays at the start of the Project. However, working with the same line ministry somehow eased the tasks of coordination and communication, as well as the prioritization of the needs of local authorities and their communities.

On behalf of **Lao PDR, Mr. Phonexay Simmalavong, Deputy Director-General of the Department of Water Resources, Ministry of Natural Resources and Environment (MONRE)**, emphasized the good and proactive synergy that has been established between PEMSEA and Lao PDR since it became an official PEMSEA Country Partner in 2008. At the national and policy level, Mr. Simmalavong reiterated that the Project was able to contribute in enhancing integrated river basin management in Sedone covering three provinces (Champasack, Saravanne, and Sekong) in the southern part of Lao PDR. He also cited several key outputs, including the adoption of the Water Resources Law, improvement in river basin management, enhancement of technical capacities on water resource and use management, and most importantly, the strong engagement and involvement of the community and local authorities in the implementation. Mr. Simmalavong expressed his country's gratitude to UNDP, GEF, the PRF and various partners for their support, and confirmed Lao PDR's commitment to the continued implementation of the SDS-SEA.

Photo by PEMSEA/D. Padayao

PHILIPPINES

Scaling up ICM in the Philippines has covered 26.9% or 9,744 km of the country's coastline. The coverage is significant for an archipelagic country with a long coastline. Having been exposed to various coastal resources and ICM-related programs involving various partners and collaborators in the past decades, project implementation in the Philippines was built on partnerships to facilitate complementation and synergy with other related initiatives and projects at the national and local levels.

Key achievements in the country include the significant contribution of the Philippine Government in the ratification of the Host Country Agreement in 2015 and the renewal of the hosting agreement in 2017 providing office building and amenities to PRF for the next 25 years. The project also witnessed the continuing recognition among the legislators of the importance of ICM where technical support was provided by the project in the review of the ICM Bill that was filed at the 17th and 18th Congresses. The Philippines also affirmed its continuing commitment to provide a venue for various stakeholders, partners and collaborators, to share knowledge and report on the progress of the SDS-SEA programmes and projects by hosting the 2018 EAS Congress (EASC), nine years after hosting the EASC in 2009. The development of the National State of Oceans and Coasts report with blue economy theme, which is a collaborative effort of the various government agencies, academe, non-government organizations, development partners, and private individuals, has given us a glimpse of the value of the coasts and oceans of the country in terms of the ocean economy, health and status of the coastal and marine resources, and the socioeconomic importance of these resources, as well as supporting government policies and plans, and blue economy initiatives.

> ***"The Philippines is committed under the Iloilo Ministerial Declaration to provide assistance to PEMSEA for the effective implementation of the SDS-SEA, and to reinforce ICM as an overall approach to address cross-cutting environmental concerns. The DENR will also be working closely with the PEMSEA Resource Facility and other partners for the implementation of PEMSEA's post-COVID-19 strategy and to ensure that resources and investments are allocated to drive changes that link human health and ecosystem health."***

Photo by DENR

At the local level, the 8 ICM sites have also generated good results. In Tablas Island in Romblon Province, an assessment and mapping of coral reefs in 24 sampling sites in 9 municipalities covering 1,795 hectares of coral reefs for potential ecotourism and livelihood opportunities in collaboration with DENR and Romblon State University was conducted. Management Effectiveness Assessment Tool (MEAT) assessments that were conducted for 10 MPAs/Fish Sanctuaries showed an average increase of 13% compared to 2011 results. In Batangas, biophysical assessment of 46 MPAs (1,969.934 hectares) covering coral reefs and mangroves was completed by the Provincial Government Environment and Natural Resources Office in collaboration with Malampaya Foundation. In Guimaras, a 2-year assessment of 2 MPAs in collaboration with the University of the Philippines Visayas have been completed. The two MPAs were previously established with KOICA's support. Oriental Mindoro on the other hand, received awards at the 6th Para El Mar Awards and Recognition (2017) for having the Best MPA Network (Oriental Mindoro MPA and Fishery Law Enforcement Network) and Outstanding Locally Managed MPA (Agsalin Fish Sanctuary). At the 7th Para El Mar Awards and Recognition (2019), Oriental Mindoro bagged the 2nd Runner-up award for Outstanding Locally Managed MPA while the Silonay Mangrove Conservation and Ecopark was awarded 1st Runner-up for the Best Mangrove Area Award given by the Zoological Society of London.

In Macajalar Bay, a bay-wide ICM Plan have been developed and adopted by the Macajalar Bay Development Alliance, including the conduct of social assessment/ social preparation study for livelihood management. An assessment of the sources and distribution of nutrients (nitrogen and phosphorus) in the Batangas Bay Watershed using the Regional Nutrient Fluxes Model (RNFM) have been conducted showing the relative contribution of 8 local government units in the watershed to the N and P loading into Batangas Bay. Assessments of avifauna, mangroves and mangrove-associated aquatic biota, ecosystem services and impacts of tourism in Sasmuan Bangkung Malapad Critical Habitat Area and Sasmuan Pampanga Coastal Wetlands (a potential Ramsar site) in coordination with PGENRO Pampanga, DENR PENRO and DENR R3 and two local universities (Pampanga State Agricultural University and Angeles University Foundation) have also been completed. Worth noting for the Philippines is the allocation of budgets for ICM implementation by the local governments, which ensures continuity of program implementation.

The four PNLG local government members in the Philippines have been awarded ICM Level 2 recognition (Bataan and Batangas) and ICM Level 1 re-certification (Cavite and Guimaras) at the 2020 PNLG Forum.

The terminal evaluation provided recommendations for the national and local governments, GEF, UNDP and the PRF to sustain the gains of the Scaling up SDS SEA Project and PRF's operations for SDS SEA implementation. The evaluation noted the need for capacity building and training on ICM for staff and members of the Protected Area Management Board (PAMB) and the Protected Area Office (PAO) in support of the implementation of DENR-BMB's Coastal and Marine Ecosystems Program. The PEMSEA Resource Facility (PRF) can offer its services and enter into an agreement with the DENR to design and implement ICM training and other capacity building needs of DENR. The Manila Bay Coordinating Office, which is responsible for implementing the Master Plan for Manila Bay may also engage the services of the PRF to conduct an annual monitoring and evaluation of the accomplishments of the inter-agency task force assigned to implement the clean-up of Manila Bay. Other recommendations were for UNDP to continue to engage the services of the PRF for future GEF Projects, and to assist the PRF in securing an endowment fund to sustain PEMSEA's work on ICM.

On lessons learned, it was highlighted that PEMSEA specifically targeted improving the capacity of provincial and local governments, a "bottom-up" approach built on a recognition that this focus is necessary to solve problems that originate at the sub-national level and should be continued for future project implementation. PEMSEA's LGU partners shared that the following elements need to be in place for the successful implementation of ICM: enabling legislation, action plan, coordinating mechanism, financial support, capacity development, stakeholders' participation, and the

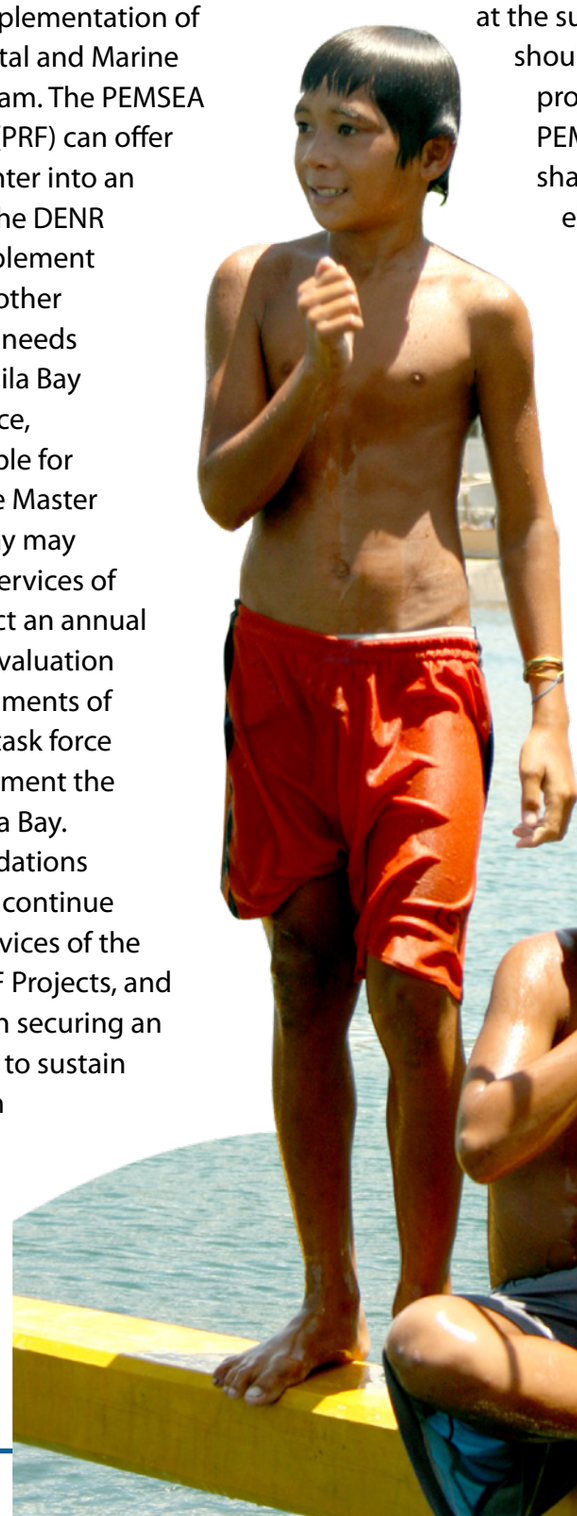

Photo by PEMSEA/J. Castillo

presence of non-government organizations (NGOs), civil society organizations (CSOs) and people's organizations (POs); science and nature-based solution, policy and behavior change should be considered in ICM program formulation; harmonizing the goals and objectives of national and local governments creates synergy and promotes better impacts; the need for partnership between the LGU and the academe, and multisectoral environmental governance; the harmonization of fisheries ordinance and the implementation of joint law enforcement network for LGUs with adjoining municipal waters for a more effective and efficient protection effort; the creation of Seascape Investment Fund for financial sustainability; and the harmonization of ecosystem approach to fisheries management into ICM and the use of science-based approach in the implementation of ICM program lead to more successful results.

On behalf of the Philippines, **Mr. Angelito Fontanilla, Director of the Department of Environment and Natural Resources (DENR)-Foreign Assisted and Special Projects Service**, highlighted the growing recognition on the importance and need for the Project's sustainability. He added that in order to sustain the partnership initiatives, PEMSEA countries should continue to ensure the continuous and steadfast implementation of the SDS-SEA. Mr. Fontanilla reaffirmed the Philippines' commitment under the Iloilo Ministerial Declaration to provide assistance to PEMSEA for the effective implementation of the SDS-SEA, and to reinforce ICM as an overall approach to address cross-cutting environmental concerns. The DENR will also be working closely with the PRF and other partners for the implementation of PEMSEA's post-COVID-19 strategy and to ensure that resources and investments are allocated to drive changes that link human health and ecosystem health. Mr. Fontanilla emphasized the Philippines' commitment as host country to the PEMSEA headquarters under the Host Agency Agreement to further facilitate the continuous and effective operation of the PEMSEA Resource Facility. The Philippines also expressed optimism that the forthcoming East Asian Seas (EAS) Congress 2021 will garner more support for PEMSEA's sustainability as well as the continuous implementation of the SDS-SEA.

Photo by DENR-BMB

THAILAND

The implementation of the SDS-SEA Project to scale up ICM approaches and good practices in Thailand has translated to 567 km or 18% of the country's coastline now under ICM. Thailand was able to commence the project later than the other countries, with some activities initiated only in 2018, and further affected by limitations due to the pandemic. Despite the delays, the SDS-SEA Project achieved significant results through the coordination of the Department of Marine and Coastal Resources (DMCR), and the support of the PEMSEA ICM Learning Centers in Burapha University and Prince of Songkla University. ICM scaling up in Chonburi, a PEMSEA ICM demonstration site since 2001, delivered a number of good results on climate change and disaster risk reduction in Saensuk Municipality, coastal use zoning in Koh Si Chang Municipality, oil spill management, and preparation of an integrated environmental monitoring plan for the province. Considering good practices in Chonburi, additional ICM learning sites were established in Chantaburi, Rayong, and Trat Provinces. All three provinces started with very limited baseline data. Through the Project, Rayong Province was able to establish baseline information to support pollution reduction initiatives in pilot sites along the Rayong River and adjoining coastal areas, and secure assistance from the provincial government as well as from the private sector in the area. In Chanthaburi Province, the focus was on habitat protection and rehabilitation. Key results in Chanthaburi included the establishment of an institutional arrangement that included the community, and the development of a draft ICM plan for coastal habitat rehabilitation and conservation in its pilot sites. For Trat Province, the efforts focused on promoting sustainable fisheries including combatting illegal, unregulated and unreported (IUU) fishing. To address this, the Ecosystem Approach to Fisheries Management (EAFM) was introduced and trainings were conducted with some support also coming from the Southeast Asian Fisheries Development Center (SEAFDEC).

> ***"Although the cross-cutting issue of gender was not in the Project's first design, the SDS-SEA Project was able to engage women (elderly and youth) to a high degree in many activities, including promoting alternative livelihoods in fish and food processing, waste management in the households, villages, and coastal areas, and habitat rehabilitation."***

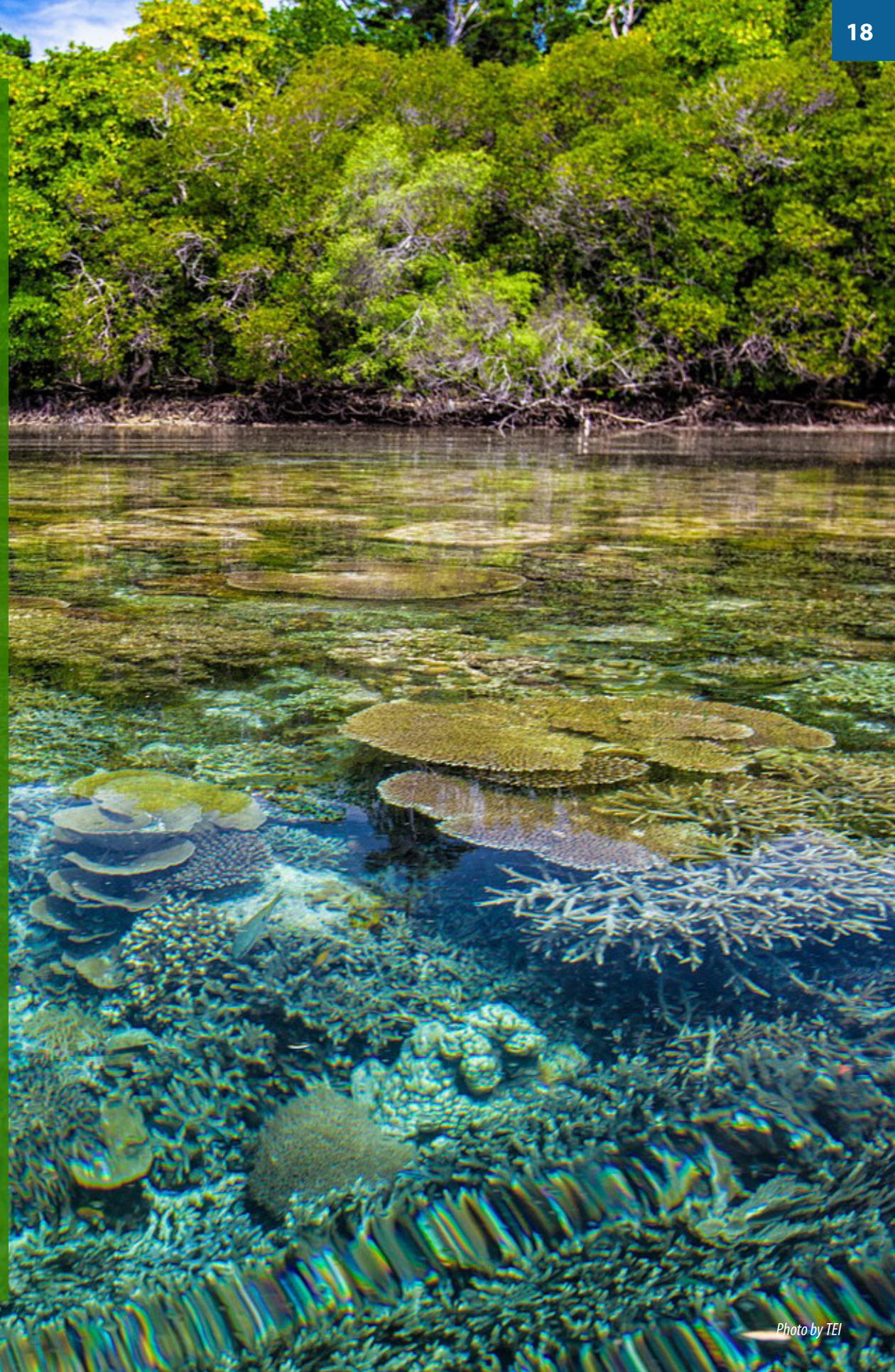

Photo by TEI

To date, a sustainable fishery management plan that includes actions to combat IUU fishing has been drafted in Trat, for consideration in the government's adoption process. In addition to the ICM scaling up component of the project, the Gulf of Thailand sub-regional partnership on oil spill preparedness and response and PSHEMS Level 2 establishment in Bangkok Port and Laem Chabang Port were implemented as mainstreamed in the programs of the Marine Department and Port Authority of Thailand, respectively. Overall, the significant impact of the SDS-SEA Project in Thailand can be measured in terms of improved partnerships and relationships among the communities and the local, provincial and national governments and the academe, as well as an increase in scientific knowledge and their application in support of marine and coastal policy, planning and management in the participating sites and institutions.

The terminal evaluation noted that ICM was introduced by PEMSEA to Thailand for more than a decade, and the concept is now widely used in the country through various projects and initiatives. Proposed future areas of collaboration include blue economy development and introduction of new tools in line with global issues and emerging concerns. As Thailand has 24 coastal provinces, establishment of additional PEMSEA ICM Learning Centers was also recommended in the upper/middle Gulf of Thailand and in the Andaman Sea coastline.

On lessons learned, the terminal evaluation highlighted the partnership among the national and local governments, civil society organizations, private sector and communities in Rayong in managing and reducing wastes from the upstream to downstream areas of Rayong River and along the coast, and the capacity building of communities on waste segregation and management to support the operation of the Rayong integrated waste management center that converts municipal solid waste into refuse-derived fuel for energy generation. The SDS-SEA Project also supported the development of Chonburi's Integrated Environmental Monitoring Program (IEMP), which engaged five agencies to develop a shared plan for systematic monitoring of the Chonburi coastal area, with clear focus areas and responsibilities that will help avoid duplication of work, ensure more efficient use of financial resources, and provide necessary data to support policy and planning in Chonburi. The National SOC report and local SOC reports were also cited as useful references for the provincial and local governments and academic institutions in developing project proposals and obtaining budgets to continue the activities in the pilot project sites. The terminal evaluation also noted that although the cross-cutting issue of gender was not in the Project's first design, the SDS-SEA Project was able to engage women (elderly and youth) to a high degree in many activities, including promoting alternative livelihoods in fish and food processing, waste management in the households, villages, and coastal areas, and habitat rehabilitation.

On behalf of Thailand, **Ms. Saowalak Winyoonuntakul of the Department of Marine and Coastal Resources**, expressed appreciation to the GEF and UNDP for the financial support, as well as to the PRF, and all concerned agencies including the ICM Learning Centers in Thailand, for their support in the implementation of the Project. Although Thailand started implementing the Project in its later stage, Ms. Winyoonuntakul confirmed that the country was able to complete all project components within the timeframe with the support of all project participants, and scaled up ICM implementation from Chonburi Province to Rayong, Chantaburi and Trat. In particular, she highlighted the importance of engaging the established provincial committees under the National Act on Promotion of Marine and Coastal Resources Management 2015, and establishing working groups for the SDS-SEA Project under these committees, as essential mechanisms that would help ensure the continuing implementation of the SDS-SEA and sustainability of ICM in each of the provinces.

Photo by D. Ronan

TIMOR-LESTE

At least 235.20 km or 32% of Timor-Leste's coastline is now covered under ICM. Major impacts of the Project as identified by various stakeholders include: (a) improvements brought about by alternative livelihood initiatives (i.e., increase in household income); (b) increased understanding and capacities on coastal and marine resources management and climate change adaptation; and (c) improvement in the Management Effectiveness Tracking Tool (METT) rating of the Marine Protected Area (MPA) in Atauro Island. The impact of good results from the three local sites (Dili, Manatuto, and Liquiça) were also considered in national programs as well as in policy making related to coastal and ocean protection. At the national level, the country highlighted the stakeholders' recognition of PEMSEA's contributions towards ocean and coastal governance and blue economy development. This was underscored through the value of PEMSEA as a knowledge platform, bringing in knowledge and regional experience to Timor-Leste. Apart from these successes, several challenges include the need to accelerate the review and approval of the National Oceans Policy and completion of its implementation plan in order to provide basis for cross-sectoral collaboration and integrated management programs at the national and local levels and for blue economy development. The project has also helped to establish an inter-sectoral and multi-partner coordination structure for ICM at the municipal level although its operation is currently not optimal until the decentralization process is completed. It has nonetheless demonstrated ICM partnership mechanisms that could be incorporated in the development of the country's local government system. Overall, Timor-Leste acknowledges the importance of sustaining the gains achieved under the SDS-SEA Project, and the need to further build the country's knowledge on sustainable coastal and ocean governance. The coordinating role of PEMSEA is also integral to bringing in science into policies.

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Photo by PEMSEA/J. Zaldivar

Evidence on the ground shows that the Project has produced positive results in improving local incomes through alternative livelihoods of salt-making and seaweeds cultivation, although there is a need for sustained support over a period of time to develop these alternative livelihoods into sustainable livelihoods that would contribute significantly to sustainable fisheries management. Therefore, it was recommended to continue support for the local initiatives from a technical and financial standpoint. The terminal evaluation report also recommended to continue support for PEMSEA as a self-sustaining intergovernmental organization to support its member countries in sharing and learning best lessons and experiences from each other. This would enable small countries such as Timor-Leste to learn from other countries on the issues of blue economy, pollution management and fisheries management, among others.

On lessons learned, it would be important to have sufficient involvement of scientists in the ICM sites to observe progress, communicate at the national level, and integrate their findings in policy development. As it stands, the PEMSEA ICM Learning Centers have very limited resources, and their participation in the project activities were facilitated by consultancy contracts for baseline studies or trainings. It was recommended to continue the engagement with the ICM Learning Centers in relevant project activities especially in scientific monitoring and research related to blue economy and other national and local priorities. During the project implementation, it was identified that good and effective coordination at both the national and municipal levels facilitated the implementation of the project activities through trainings and working together. It was also acknowledged that the successful implementation of project activities was partly due to the proper institutional set up, capacity building, and good collaboration between local, national and regional project management offices. Project coordination is expected to improve further when the government decentralization process is completed, and PEMSEA would be able to work directly with the municipal governments on ICM development and implementation.

On behalf of Timor-Leste, **Mr. Mario Cabral, Project Coordinator at the Ministry of Agriculture and Fisheries (MAF)**, expressed the country's gratitude for the opportunity to work with PEMSEA for the past 20 years. The long history of partnership has resulted in many advances in Timor-Leste, especially on alternative livelihood, economic development, habitat rehabilitation, policy development and implementation. As a result of the interventions, Timor-Leste is now seeing good changes on the ground particularly in the three coastal municipalities of Dili, Manatuto and Liquiça. At the regional level, Mr. Cabral reiterated the continuing benefits provided by the PEMSEA platform in terms of cooperation and networking for learning and sharing of good practices. Mr. Cabral emphasized the importance for the region to continue working together in order to sustain the results that have been achieved through science, education and policy development.

Photo by PEMSEA/J. Zaldivar

VIET NAM

ICM scaling up in Viet Nam now covers 1,608.35 km or 49.2% of the country's coastline. ICM scaling up in Viet Nam covering 14 out of the 28 coastal provinces over the past two decades have been fast-tracked as evidenced by the notable developments in ocean and coastal governance and blue economy development at the national level and increasing experiences in ICM implementation at the local level. These developments included the: (a) passage of the Viet Nam Law on Marine and Island Resources and Environment (Law No. 82/2015/QH13) in 2015 and Decree No. 40/2016/ND-CP in 2016 providing details for the implementation of certain articles of the Law, including the development and implementation of ICM programs at the local level; (b) Decision No. 01/QD-BDP issued in 2017 establishing the National ICM Coordination Office that would assist the National ICM Coordinating Committee in overseeing the implementation of the National ICM Strategy and National ICM Action Plan; (c) approval of the National ICM Strategy up to 2020 with Vision to 2030 (Decision No. 2295/QD-TTg) in 2014 by the Prime Minister and the National ICM Action Plan 2016-2020 (Decision No. 914/QD-TTg) in 2016); (d) approval of Circular No 49 by MONRE in 2017 (No. 49/2017/TT-BTNMT) detailing the technical regulations for ICM, which aims to implement the articles of the Law on Marine and Island Resources and Environment on ICM; and (e) issuance of the Central Party Committee's Resolution on the Strategy for Sustainable Development of Viet Nam's Marine Economy by 2030, with a Vision to 2045 (Resolution No. 36-NQ/TW) in 2018.

> ***Expectations on targets on developing national sector legislative agenda and priorities, and incorporating SDS-SEA targets into national and local medium-term development and investment plans, should be tailor-fitted to the country's capacity and resources to ensure the Project's success. Policy development is complex and takes a long time. Funding for meetings or workshops should be reduced, and should be channeled instead to the pilot activities. International cooperation and exchange of experiences in coastal and ocean governance is seen as key to evaluate the country's performance and to replicate successful models.***

Photo by NSOC Viet Nam

As host of the 2015 East Asian Seas Congress held in Da Nang City, Viet Nam witnessed the signing of the Da Nang Compact, and as one of the signatories, reaffirmed its commitment to contribute in achieving the 4 major targets, including scaling up ICM to cover 25% of the regional coastline, and formulating the necessary policies, legislations and plans to support implementation and developing the National State of Oceans Report. Viet Nam's NSOC report is particularly relevant in the implementation of the Strategy for Sustainable Development of Viet Nam's Marine Economy by 2030, with a Vision to 2045 since this can provide valuable information in the development of the six priority marine economic sectors that are identified in the strategy, i.e., marine tourism and services; maritime economy; mining of oil and gas and other marine mineral resources; aquaculture and fisheries; coastal industry; and renewable energy and other emerging marine economies.

At the local level, good practices have been generated from the six priority sites. In Danang, the Tho Quang commune's experience in establishing the Club for Sustainable Development that has been replicated in five communes has contributed to reducing the exploitation of fisheries, and improved the income for the fishers' households. In Tam Hai commune in Quang Nam, funding has been allocated to continue the solid waste management program that the project has initiated, including minimizing plastic wastes. Good progress has been made in the mapping of pollutant sources and developing the plan to determine the pollutant loading around Cat Ba Island (Hai Phong) and the entire coast of Quang Ninh. These outputs are very useful for developing the management strategies and investments for pollution reduction in the future. In Kien Giang and Thua Thien Hue, integrated coastal use zoning plans were developed and updated, respectively, mainstreaming climate change adaptation and disaster risk reduction concerns. A case study was prepared on the implementation of the Environmental City Initiative of Da Nang where the level of investments in environmental infrastructure to improve environmental quality for the past 10 years (2010-2020) was documented. Another ECI cycle is being developed in consideration of Da Nang's status as an urbanized and industrialized city while maintaining its reputation as an environment-friendly, clean, and green city.

Da Nang is one of the pilot sites of the ACCORD (Addressing Challenges of Coastal Communities through Ocean Research for Developing Economies) Project with technical support from Plymouth Marine Laboratory, a non-country partner of PEMSEA. The project has enhanced the capacity of the technical staff of the Department of Natural Resources and Environment on field sampling, analyses and data collection and further strengthening the integrated environmental monitoring program of Da Nang.

The project has also contributed to the strengthening of capacity for ICM implementation of the staff involved at the national and local levels. This has provided opportunities for the staff to apply their learnings in project development and management with the influx of foreign-funded projects such the as the KOICA Project on Establishing the Foundation for ICM in some Coastal Provinces in Viet Nam and the Agence Francaise de Development Project on Supporting ICM of Hai Phong estuarine areas and Ha Long and Bai Tu Long Bay. The other added value of the project is the prominent role of women in coastal and ocean governance in Viet Nam where about 50% of the Project Management Board and Agencies for Seas and Islands in Da Nang and Quang Nam is comprised of women holding key positions in the organization.

Awareness of managers and policy makers on the importance of integrating ICM/SDS into the socio-economic development policies and plans has increased. This is evident in the establishment of ICM Steering Committees at the national and sub-national levels with clear mandates. These committees will be maintained to fulfill the goals and tasks set out in the Resolution on the Strategy for Sustainable Development of Viet Nam's Marine Economy by 2030, with a Vision to 2045.

Hosting the GEF Expanded Constituency Workshop for South Asia, East Asia and China in Da Nang in April 2017 and the 6th GEF General Assembly in June 2018 in Da Nang, has put the spotlight on Viet Nam's efforts in ocean and coastal governance. The study visits that were associated with both events provided international and regional participants with a glimpse of the best practices in ICM implementation in Da Nang and Quang Nam.

For lessons learned, expectations on targets on developing national sector legislative agenda and priorities, and incorporating SDS-SEA targets into national and local medium-term development and investment plans, should be tailor-fitted to the country's capacity and resources to ensure the Project's success. Policy development is complex and takes a long time. Funding for meetings or workshops should be reduced, and should be channeled instead to the pilot activities. International cooperation and exchange of experiences in coastal and ocean governance is seen as key to evaluate the country's performance and to replicate successful models.

On behalf of Viet Nam, **Dr. Nguyen My Hang from the Viet Nam Administration of Seas and Islands (VASI), Ministry of Natural Resources and Environment (MONRE)**, expressed their agreement on the findings of the terminal evaluation. Dr. Nguyen reiterated their continuing commitment for cooperation under PEMSEA in undertaking specific activities in support of the SDS-SEA implementation.

Photo by PEMSEA

Challenges and COVID-19 Impact

In a year like no other, several factors also contributed to some delays in the delivery of the Project's outputs. Issues on staffing, budget constraints, even political unrest, were cited by the Country Partners. Two countries (Thailand and Viet Nam) were delayed in signing the Project Document and Memorandum of Agreement (MOA) with PEMSEA to formalize the start of the project due to their countries' stringent government review and approval process. The eight participating countries also had disparities in capacities, skills, knowledge, access to resources, information and technologies.

But perhaps the most disruptive event of 2020—the COVID-19 pandemic—was the biggest challenge encountered by all in the implementation of the SDS-SEA. While the Project was supposed to end on August 2020, an extension was granted by the Global Environment Facility (GEF) to give countries ample time to work on their remaining deliverables.

The 12-month project extension (September 2019- August 2020), as well as the 4-month extension (September-December 2020) in view of COVID-19, allowed the Project to realign its work plan and budget to focus on high-impact activities that can be completed within the SDS-SEA's implementation time frame.

The travel and mobility restrictions imposed in light of the pandemic prevented the conduct of face-to-face meetings of all the project participants at some of the national end of project workshops and the regional steering committee to discuss, engage and reflect on the successes and lessons, share case studies and key reports, as well as identify and agree on the sustainability measures post-project. Instead, hybrid and/or full virtual meetings were conducted which did not quite capture the significance of the meetings.

Terminal evaluation findings for the SDS-SEA Scaling Up Project rated the project delivery as Satisfactory with all 3 components achieving majority of the end-of-project targets. The project was touted to be well managed and had excellent implementation strategies, particularly capitalizing on the local governance and partnering approach and the creation and mobilization of learning networks regionally and nationally to support implementation.

Photo by PEMSEA/J. Castillo

Sustaining the Gains of the SDS-SEA

Building on the achievements of the Project, it is important to note some key elements that would help sustain the gains under the SDS-SEA implementation and scaling up. This includes sustainability at the country and local level through the institutionalization and mainstreaming of ICM into the development and investment planning of the national and local governments, continued capacity building, networking, monitoring and evaluation, as well as assessment of ICM effectiveness.

On ICM effectiveness, further validation and assessment of ICM coverage in the region will be conducted or replicated in PEMSEA countries in the coming years, building on the experience of the Project on the Third-Party assessment undertaken for the ICM initiatives in the Philippines (covering initiatives in 34 provinces and municipalities under the GEF/UNDP/PEMSEA Project, national programs and programs/projects supported by other donors in the country) using key indicators from the ICM Code. An ICM effectiveness assessment with support from the Ministry of Natural Resources, China is also being planned, and the conduct of the pilot assessment in China with opportunities for application in selected ICM sites in other countries can further enhance the set of indicators to measure the effectiveness of ICM implementation across the region.

Expounding on the achievements made by the Project in line with climate change adaptation and strengthening of coastal community resilience, plans are underway for the development of Coastal Use Zoning Plans (CUZP) in some sites which integrate climate change and disaster risk reduction measures and aspects. As an example, Kien Giang Province, a flood prone area in Southern Viet Nam, built on its experiences and outputs from previous projects that focused on vulnerability assessments to develop its CUZP and enhance its plan. Rehabilitation and management of mangrove areas in a number of sites were also cited as effective measures for climate change adaptation by enhancing habitat resilience and shoreline protection.

Other important initiatives that will be helpful to step up to a next level of PEMSEA and SDS-SEA transformation include the need to continue the (a) use of the SOC reporting mechanism as a significant tool in evaluating and assessing the state of the coasts and socio-economic status of coastal communities; (b) capacity building initiatives; and (c) development of communications and knowledge products, best practices and tools to document and tell a compelling story of PEMSEA.

Sustaining the gains from the Project also includes maintaining the PEMSEA Resource Facility's (PRF) operations through various funding streams and mechanisms (e.g., country contributions, multilateral and bilateral funding, private sector engagement). Several pipeline projects and ongoing discussions with various donor agencies can also contribute towards building a diverse mix of revenues that will ensure the PRF's financial sustainability. The integral role of countries in demonstrating ownership and leadership by investing in PEMSEA initiatives and the Secretariat is also expected to give other donors more confidence in investing in PEMSEA's programs and initiatives. To date, Indonesia and Viet Nam have pledged their support for PEMSEA as a self-sustaining regional organization through cost-sharing arrangements in addition to China, Japan, Korea, Philippines, Singapore and Timor-Leste.

A Mid-Term Review (MTR) of the **Sustainable Development Strategy for the Seas of East Asia (SDS-SEA) Implementation Plan (IP) 2018-2022** is ongoing. The SDS-SEA IP identifies expected outcomes, indicators and targeted actions and schedules for priority governance and management programs that contribute to the sustainable development of oceans and coasts and blue economy growth in the region over the next 5 years. It is comprised of three Priority Management Programs and three cross-cutting Governance Programs. The Priority Management Programs include: (a) Biodiversity Conservation and Management; (b) Climate Change and Disaster Risk Reduction and Management; and (c) Pollution Reduction and Waste Management. The cross-cutting Governance Programs include: (a) Ocean Governance and Strategic Partnerships; (b) Knowledge Management and Capacity Development; and (c) Blue Economy Investment and Sustainable Financing. The Mid-Term Review aims to evaluate the SDS-SEA IP in consideration of:

- Preparations being undertaken towards establishing a sustainable pathway for the next decade (2021-2030) in line with the 2030 Agenda for Sustainable Development.
- PEMSEA's Post-2020 Futures Strategy that offers strategic objectives to help navigate PEMSEA towards the next decade.
- Adapting to the new normal and facilitating sustainable recovery in response to the COVID-19 pandemic.

The MTR aims to consolidate and analyze the progress made by various partners in the past 2.5 years towards achieving the Project's objectives and expected outcomes. It also aims to propose practical recommendations on adaptive management measures and amendments to the SDS-SEA IP to ensure its effective implementation for the remaining 2.5 years and to inform future planning for the development of the next implementation plan starting in 2023.

SDS-SEA and Sustainable Livelihood Case Studies

The SDS-SEA terminal evaluation found evidence of the positive socio-economic impacts of the Project on the ground. Sustainable livelihood programs were implemented in 8 ICM sites in 6 countries, including sustainable tourism in Koh Rong, Cambodia; financially sustainable and ecosystem-friendly livelihood activities in Lianyungang, China; alternative livelihood in mangrove conservation in Tangerang, Indonesia; traditional salt-making in Manatuto, Timor-Leste; and replication of community-based fisheries and ecotourism development in Danang, Viet Nam.

Photo by Koh Rong (MFMA)

In **Koh Rong, Cambodia**, the development of the Marine Fisheries Management Area (MFMA) has attracted more tourists and contributed to the improvement of local livelihood. A user's fee or the collection of 8,000 Riel per tourist visiting the island has been implemented to sustainably finance the implementation of the MFMA Management Plan and the overall protection and management of the Koh Rong Archipelago (KRA). A rapid growth of tourists visiting the KRA has brought significant impact to the local communities, especially in Koh Rong Sanloem and Koh Touch villages. More employment opportunities in tourism are being recognized and community women have expressed their interest in upscaling their agricultural activities to supply the tourist market.

The interviews conducted during the mid-term review evaluation of the SDS-SEA Project in 2018 noted the major shift in income sources, i.e., from fishing to tourism-related livelihood in Koh Touch and Koh Rong Sanloem villages. In 2005, 90% from 139 families in Koh Rong Sanloem were fishers; while only 5 families were involved in fishing in 2018 as one of their sources of income. The livelihood assessment, which was conducted as part of the implementation of the GEF/UNDP Scaling Up SDS-SEA Project, reported that a family could earn around USD 1,380 to USD 1,980 annually from tourism-related jobs while tourism service providers could earn from USD 6,000 to USD 12,000 annually. By comparison, income from fishing ranged from USD 1,690 to USD 3,825 annually.

The promotion of sustainable livelihood and livelihood diversification in Koh Rong Archipelago are crucial factors towards lessening the dependence of communities on coastal and marine resources. Among the recommendations from the Livelihood Assessment Report include the promotion of ecotourism, capacity strengthening support to relevant tourism industry (e.g., English language, safety manual for boat operators, food safety, tourism safety manual), and establishing the tourism supply chains to ensure enough and safe food supply for tourists.

Photo by PGENRO-Batangas

In **Batangas Province, Philippines**, the establishment of Mangrove Protected Areas provided livelihood opportunities (i.e. ecotourism, recreation) to coastal communities. Mangroves also serve as sources of food and other marketable products for coastal communities, particularly wood, fish, crabs, clams, bangus (milkfish), and oysters. Most of the coastal residents who earn from mangrove resources from products to aesthetic services are found in the municipalities of Lobo, San Juan, Lian and Calatagan. Local people from the municipalities of Lobo, Lian and Calatagan, are benefiting from Mangrove PAs in terms of ecotourism activities such as educational tours, kayaking or boating, snorkeling, bird watching, and sunset viewing. Because of ecotourism, aquasilviculture was developed specifically in Olo-olo Mangrove Protected Area. Other livelihoods derived from the effective management of Mangrove PAs are catering services, making souvenirs, and selling of mangrove seedlings.
The Calatagan Mangrove Forest Conservation Park or the "Ang Pulo" in Barangay Quilitisan, Calatagan, Batangas, is an excellent example of how the community benefited from the effective management of the mangrove ecosystem. "Ang Pulo" produced a business plan and product manual that identified ecotourism activities such as mangrove tour and study tour (Php 150.00 for locals and Php 250.00 for foreigners); research activity (Php 200.00); kayaking (Php 200.00/hour); swimming (covered by the entrance fee of Php 100.00 for locals and Php 200.00 for foreigners); use of balsa, a floating flat structure made from bamboo (Php 2,500.00/day); mangrove planting (Php 150.00/propagule plus a certificate of planting) and bird watching. It was highlighted that coastal communities should be provided with alternative livelihoods to reduce their dependence on mangroves.

Results from the socio-economic identification of coastal communities in **Semarang City, Indonesia**, showed that sources of alternative livelihood income vary. Besides usage of raw material like fish or other sea products, some people have already done business using coastal raw

materials. In the village of Tugurejo, beside Putri Tirang, there are people engaged in the sewing business, catering and selling of snacks, aside from processing fish.
In Mangkang Kulon village, the community has been doing business through the production of nata de coco, various shrimp and fish-based products, tempeh chips, souvenirs, and batik (made from mangrove waste). The business group also has a good relationship with garbage bank activities in the neighborhood. They process the garbage in the environment, which is then converted into a number of useful items, or sold to several collectors. In the national terminal evaluation report, the garbage bank activity was cited as a good practice: "the community waste management in Semarang, which was linked to alternative livelihood development, has potential for replication. It included a revolving fund regulated with a reward scheme, including training and facilities for alternative livelihoods, for people who actively play a role in domestic waste management." Similarly, in Tugurejo village, beside the garbage bank activity, there are several potential alternative livelihood activities such as urban farming, snack production, selling of salted dry fish, catering, tailoring and sewing businesses.

Mangrove rehabilitation in **Tangerang Regency, Indonesia** through its "Gerbang Mapan Program" provides direct value benefits for fishery resources and coastal communities in improving their welfare. From 2015 to 2019, Tangerang Regency has implemented a mangrove rehabilitation program that has planted some 700,000 trees in a 65-hectare area along its coast. This has added value potential in the increase of public income through activities such as mangrove tourism, mangrove nurseries, fishing, cultural tourism, and educational activities.

The estimated monetary value of the mangrove ecosystem services obtained in the form of fisheries is at Rp 196,311,374,912.53; the value of the provision of mangrove seedlings is at Rp 494,693,729.00; the value of recreational services through its customers is at Rp 6,705,433.69; and the value of education services is at Rp 964,229.44.

In **Liquiça Municipality, Timor-Leste**, income generation can be improved through eco-tourism, and the implementation of ICM should focus on valuing the pristine, cultural, as well as fauna and flora conservation of the coastal areas. Economically, Liquiça has become a strategic place for tourism and daily excursions through its beaches in Ulmera, Maubara, Vatuvou and Vaviquinia. Apart from tourism, fishing (tuna, mackerel, red snapper, grouper, flying fish and skipjack) and aquaculture (tilapia, milkfish, seaweed, trepan, mud crab) are also main activities and a source of livelihood. Liquiça also has sand deposits which are important for house construction, and use for tourism destinations both local and international. In Manatuto, traditional salt-making communities have experienced improvement in their weekly incomes. Similar stories were narrated by seaweed growers in Ulmera, wherein seaweed production has gone up and given them more income than ever before.

In Vaviquinia village, one of the strategic income generations is the development of a roadside food park aimed at providing alternative livelihood, diversifying income sources, and enhancing adaptive capacity of the local communities to natural hazards that affect their fisheries and agriculture-based livelihood. PEMSEA, Liquica ICM Task Team and PNLC – UNITAL are also working with coastal communities to diversify their income from different sources, for example, through selling 'ikan saboko' (fish wrapped with palm leaves). The people in Vaviquinia sell 'ikan saboko' with white wine (palm wine) and 'ketupat' (white rice covered by woven young coconut leaves in a diamond shape) to serve-up passengers from Dili to Maliana and vice versa daily. Additionally, their food stalls are too small, and typically constructed with palm leaves. PEMSEA has been working with the ICM Task Team and local vendors to improve their food stalls by providing some financial support.

For Vatuvou village, activities were concentrated on training in eco-tourism, coastal protection, conservation and livelihoods. To support eco-tourism activities, some mini-resorts have also been established in Vatuvou. In the current project phase, one of the programs implemented in the village's pilot site was the engagement of PLNC-UNITAL for providing the community with training in chicken farming, milk fish and tilapia farming.

Photo by Lince case study Liquica/Paulo 2020.

The Partners and Projects that shaped our 2020

We welcomed new partners and projects in a year that may have hampered face-to-face interactions, but still saw PEMSEA forge new agreements and expand its network. Here's a rundown of the new and continuing members to the growing PEMSEA family, as well as the local, regional and global initiatives we got involved in for the East Asian Seas.

Non-Country Partners (NCPs)

PEMSEA's network of Non- Country Partners (NCPs) includes non-governmental organizations—scientific institutions, industry associations and regional programs—all working together to support the implementation of the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA). The Norwegian Institute for Water Research (NIVA) joined PEMSEA as its 23rd Non-Country Partner following the approval of NIVA's application during the PEMSEA Partnership Council (PC) Meeting last July 2020. NIVA is Norway's leading institute for fundamental and applied research on marine and freshwaters and is the lead partner agency implementing the **ASEAN-Norway Cooperation Project on Local Capacity Building from Reducing Plastic Pollution in the ASEAN region (ASEANO)**.

NCPs who renewed their agreements with PEMSEA in 2020 include: **International Center for Environmental Management of Enclosed Coastal Seas (EMECS), International Ocean Institute (IOI), Oil Spill Response Limited (OSRL), and Northwest Pacific Action Plan (NOWPAP)**.

The Letters of Cooperation (LOCs) between PEMSEA, EMECS and IOI aims to facilitate collaboration through project development and implementation, relative to the objective and targets of the shared regional SDS-SEA. For OSRL, the Memorandum of Understanding (MOU) with PEMSEA seeks to further collaboration in the field of professional training and technical support regarding the implementation of international conventions relating to oil spill preparedness, response, cooperation and compensation.

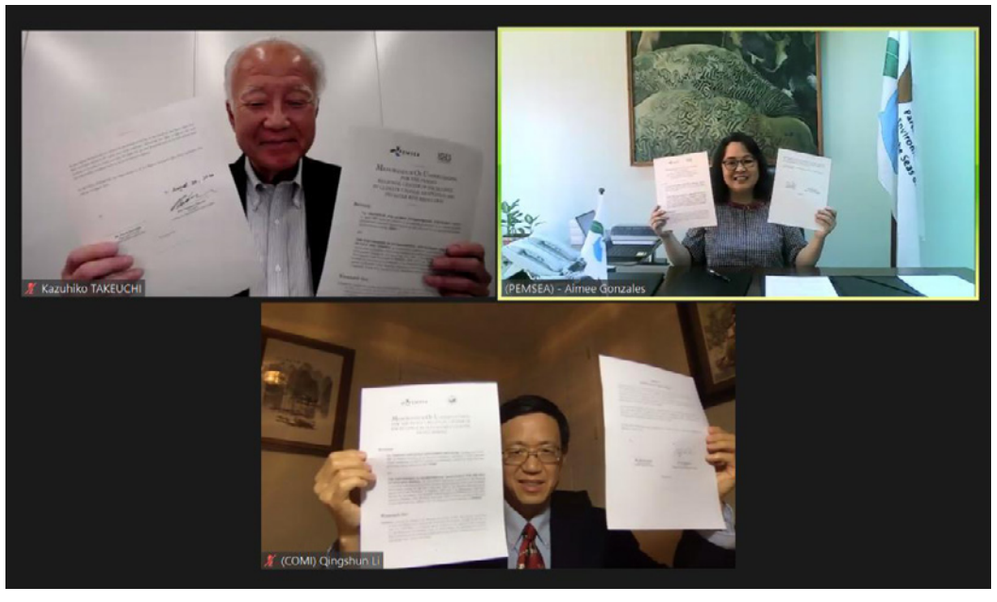
For its part, NOWPAP's MOU with PEMSEA seeks to provide a framework of cooperation and understanding, and facilitate collaboration in the development of effective measures for cooperation in integrated coastal zone management specifically, the Integrated Coastal Area and River Basin Management (ICARM); marine pollution preparedness and response; cooperation in responding to oil and hazardous noxious substances spill incidents; as well as strengthening of relevant capacity and public awareness efforts.

Photo by PEMSEA/R. Cortez

PEMSEA Network of Learning Centers (PNLC)

Officially launched on November 2015, the PEMSEA Network of Learning Centers (PNLC) is comprised of universities and scientific institutions that include PEMSEA's Regional Centers of Excellence (RCOEs) and Integrated Coastal Management (ICM) Learning Centers. Currently, the network has 19 members (16 ICM Learning Centers and 3 RCOEs) from nine countries in the East Asian Seas region. The centers have directly assisted in on-the-ground transfer of ICM practice, knowledge, tools and methodologies.

On June 2020, the East Asian Seas (EAS) Partnership Council approved the designation of the Coastal and Ocean Management Institute (COMI) of Xiamen University as an RCOE in Sustainable Coastal Development. COMI integrates both natural and social science and promotes interdisciplinary research on sustainable coastal and ocean management and governance. It was designated as an RCOE because of its expertise in sustainable coastal development and integrated coastal management; its publication of nearly 690 papers and 38 books on coastal and marine governance and management; application of research to real-life policy issues; capacity development; and extension services in terms of organizing training workshops for coastal managers and policy makers from East Asia and beyond. As part of Xiamen University, COMI has been officially acknowledged by the Government of China as the leading university in marine sciences.



During a virtual meeting held on November 2020, the PNLC discussed its accomplishments over the last five years and ways to evolve and strengthen the PNLC as a regional learning network in light of the global pandemic and emerging opportunities. The meeting also aimed to solicit inputs on the draft PNLC Charter that will formalize the institution by specifying the network's ground rules on membership and identifying joint activities and outputs among its members. To sustain and build on its operations, the PNLC Charter will also explore options for funding support such as through voluntary member contributions or joint fundraising initiatives.

PEMSEA Network of Local Governments (PNLG)

Founded in 2001 as the Regional Network of Local Governments (RNLG) and formally inaugurated as the PEMSEA Network of Local Governments (PNLG) for Sustainable Coastal Development in 2006, the PNLG is a self-sustaining network of local governments implementing ICM programs and is considered the first of its kind in the East Asian Seas (EAS) region. The PNLG Secretariat is hosted by the Xiamen Municipal Government in China.

The PNLG's continued expansion saw the addition of two new members, namely **South Bangka Regency (Indonesia)** as a regular member, and **Fujian Institute for Sustainable Oceans (FISO)** as an associate member. South Bangka Regency has made notable progress in the fields of mangrove rehabilitation, coral transplantation, and waste recycling. FISO on the other hand, provides technical support to Xiamen University (XMU) in modernizing ocean governance. The new partnerships bring the PNLG membership total to 51 regular members in 10 countries, and 3 associate members, thereby underscoring the increasing influence of the network in the EAS region.

GEF-UNDP-IMO GloFouling Project

PEMSEA has joined the global effort to address biofouling, a seemingly innocuous process wherein living organisms attach themselves to artificial surfaces like shipping hulls and other equipment, thereby threatening the health of the world's oceans. Biofouling matters because over 40 percent of international trade passes through Southeast Asia—exposing the region's marine ecosystems to invasive species from around the world. For example, shellfish from the Caribbean have been found in Southeast Asian ports brought by ships. Once established, it is difficult to impossible to remove these species.

Set up to tackle the issue of biofouling in developing regions across the world, GloFouling Partnerships is part of the wider efforts by the International Maritime Organization (IMO), in collaboration with the United Nations Development Programme (UNDP) and the Global Environment Facility (GEF), to protect marine ecosystems from the negative effects of invasive species. As the regional coordinator of the project in the East Asian Seas, PEMSEA is the latest organization joining global efforts to stop the impact of invasive species across maritime industries.

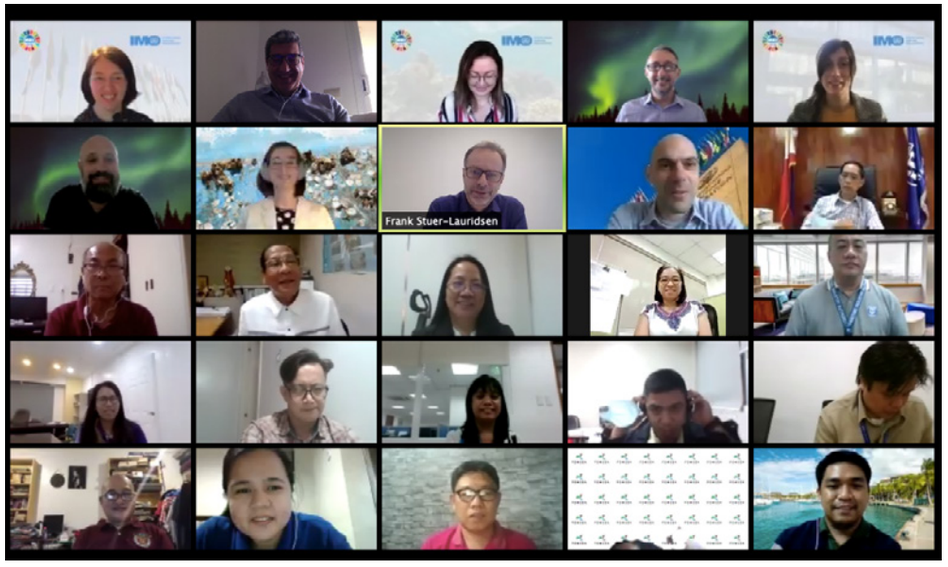
Within Southeast Asia, Indonesia and the Philippines are the leading partners in this project. Both countries share the following similarities: they are located within the Coral Triangle; have coastal communities that rely on fisheries for their livelihoods; are tied to global international shipping; and both countries rely on their coastal waters for new industries such as aquaculture and ecotourism.

In Indonesia, a range of agencies from transportation, fisheries, the environment, science and academe have partnered together as part of this initiative. The first envisioned step is the carrying out of a port biological baseline survey. The lack of information in the region is a challenge for understanding the issue of biofouling, and such surveys will go a long way towards tackling this.

The Philippines has similarly brought together a range of organizations and academic institutions, with the focal point being the Maritime Industry Authority (MARINA). There are currently no biofouling-related regulations in the country, and no reliable and cohesive data on marine invasive species. To address this, the Philippines is now preparing a national plan of action to deal with the issue of biofouling.

On December 14-17, 2020, GloFouling and the Philippines collaborated on the first training course on biofouling management. The training was delivered to over 50 participants using online resources. The course introduced participants to the key features of marine biology and environmental impacts of invasive species; the range of antifouling coatings, marine growth prevention systems, in water grooming and cleaning technologies available to prevent the biofouling issue; the main aspects of IMO's Biofouling Guidelines; and the current status of national regulations around the world. The new training package will be deployed in 2021 to the remaining 11 Lead Partnering Countries of the GloFouling project, and through national maritime training academies that will be enabled to incorporate the course into their teaching programs and deliver it on a regular basis.

GloFouling Partnerships, which started in December 2018, will run for five years until the end of 2023. Total cost of the GloFouling Partnerships is approximately US$49 million, with the funds to be used to deliver a range of governance reforms at the national level via capacity building activities, training workshops, demonstration sites and technology adoption.



Coca-Cola Foundation Ecological Solid Waste Management in Cavite Province (Plastic Wastes Recycling Project)

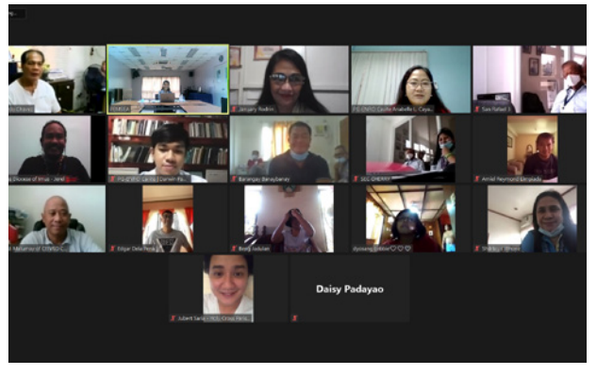
On January 10, 2020, Coca-Cola Foundation Philippines and PEMSEA signed a Project Agreement for the implementation of the Ecological Solid Waste Management (Plastic Wastes Recycling Project) in Cavite Province, Philippines to provide practical and sustainable solutions in the handling and disposal of recyclables and residual wastes in the province. Processing of recyclables and plastic residuals of five communities (Brgy. San Rafael 3, Noveleta; Brgy. B. Pulido, General Mariano Alvarez; Brgy. San Jose, Tagaytay City; Brgy. Bucana, Ternate where the Caritas Diocese of Imus Foundation, Inc. has implemented its SEARCHDEV (Sustaining Empowered and Resilient Communities through Holistic Development) Programme; and Brgy. Banay-Banay in Amadeo where the Plastic Recycling Facility will be established. The project is being implemented in partnership with the Caritas Diocese of Imus Foundation, Inc., and in close coordination with the Provincial Government of Cavite through the Provincial Government-Environment and Natural Resources (PGENRO).

The project was made possible through a USD 150,000 grant from the Coca-Cola Foundation Philippines and will run until December 2021. It aims to: increase the diversion rate of solid waste by upcycling plastics and residuals; enhance community awareness on the circular economy approach and solid waste management (SWM) programs and empower locals to join relevant activities; ensure the sustainability of SWM initiatives beyond the duration of the project; and share the lessons learned and good practices to other members of the PEMSEA Network of Local Governments (PNLG).

There are four major components of the project: (1) establishment of a plastic recycling facility; (2) capacity building of local governments and communities; (3) enhancement of livelihood opportunities for target communities; and (4) information, education and communication (IEC) campaigns on circular economy and SWM. Expected project outputs are: 435,782 direct beneficiaries from the 5 communities; 3,678,301 people informed on recycling-related education and awareness; and 50,320 kg/day of debris weight to be collected.

To date, completed and ongoing activities include the online and face to face consultation meetings between the Caritas Diocese of Imus Foundation, Inc., Cavite PGENRO and the leaders of the 5 communities and other stakeholders on project implementation, including roles and responsibilities and implementing arrangements; securing the permits for the construction of the Bishop Manuel Sobrepenas Ecological Center in Brgy. Banaybanay, Amadeo, Cavite where the plastic recycling facility will be housed; construction of posts for fencing and clearing and inventory of trees in the site; recruitment of volunteers to implement the Communication and Advocacy Plan; and

Visit to Villar SIPAG. *(Photo by PEMSEA)*



the preparation of modules for capacity development and awareness programs.

Remaining activities until the project's completion in 2021 include the establishment and operations of the recycling facility for production of chairs for distribution; capacity building and roll-out of IEC campaigns; and the enhancement of livelihood opportunities for the beneficiary communities. Already in the pipeline for 2021 are the conduct of the first awareness-raising activity on the circular economy (January); updating the profiles of the 5 communities to include assessment of capacity, organizational structure and microfinance for livelihood implementation (February); procurement and delivery of the plastic recycling machine (February); and the training of machine operators (March). The hauling of plastics and production of chairs are targeted to be initiated in April.

The COVID-19 pandemic and natural disasters were some of the challenges encountered during the project's implementation. Cavite Province was one of the most affected areas during the eruption of Taal Volcano in January, putting discussions on hold and only carried out in the 2nd quarter of 2020. The implementation of the Luzon-wide community quarantine due to the pandemic also severely limited mobility and visits to the communities. This was addressed via online consultation meetings, albeit implementation was more difficult due to the limited internet connectivity of some of the communities.

The above challenges will be addressed through close coordination with the Caritas Diocese of Imus Foundation, Inc. and Cavite PGENRO. In particular, the following actions will be undertaken: face-to-face meeting will be convened on January 2021 involving the Municipal Environment and Natural Resources Officers (MENROs) and Barangay Leaders of the 5 local governments to discuss the project objectives, activities and required support from the municipal and barangay local government units (LGUs) on project implementation; and a Technical Working Group will be established to oversee the overall implementation of the project including the crafting of mitigation measures for potential environmental impacts of the operations of the plastic recycling facility.

Arafura and Timor Seas Ecosystem Approach Phase II (ATSEA-2)

The ATSEA-2 project is the second phase of the Global Environment Facility (GEF)-financed, United Nations Development Programme (UNDP)-supported ATSEA program, and is designed to enhance regional collaboration and coordination in the Arafura and Timor Seas (ATS) region. ATSEA-2 specifically focuses on the implementation of the endorsed Strategic Action Programme (SAP), a 10-year vision with the long-term objective "to promote sustainable development of the Arafura-Timor Seas region to improve the quality of life of its inhabitants through restoration, conservation and sustainable management of marine-coastal ecosystems."

Fisherwoman looking for shrimp. *(Photo by ATSEA-2)*

Immediately following the official project kick off meeting in late 2019, the ATSEA-2 project proceeded with its full roll-out at the regional and country level, focusing on three major areas: (a) Strengthening of regional and national governance structures; (b) Improving the status and carrying capacity of ATS ecosystems; and (c) Ensuring effective dissemination and transfer of knowledge generated by the project.

Recognizing that establishing a formal regional governance mechanism takes time, the ATSEA-2 project has adopted a stepwise manner by first setting up its interim Regional Steering Committee and Regional Project Management Unit. A deeper governance, policy, institutional, and stakeholder assessment was initiated to provide the region with better guidance in establishing a participatory mechanism through a Stakeholder Partnership Forum that would cover a wider range of stakeholders, as well as in identifying the best viable model for a regional governance mechanism for the ATS region.

Hand in hand with governance-related initiatives and building on the 2011 ATS TDA, the ATSEA-2 project carried out baseline assessments to update and further refine the region's data with regard to fisheries, climate change, marine pollution, biodiversity and habitats. The updated information and reports which are expected to be completed in 2021 are envisaged to provide the region with better understanding of the different prevailing and emerging issues and opportunities, to properly guide interventions, and to aid future strategic planning. At the country level, several local initiatives have been initiated with support from national ministries and agencies. In Indonesia key accomplishments include: (a) the establishment of Kolepom MPA through Papua's Governor Decree covering 353,287 ha; (b) completion of EAFM Strategy and Action Plan for Red Snapper and pre-assessments on red snapper, barramundi and shrimps; and (c) Establishment of Marine Pollution Task Team in Nusa Tenggara Timur. In Timor-Leste, key actions focused on: (a) Marine pollution hotspot study in Viqueque, Manufahi, Covalima and Manatuto; (b) Establishment of ICM sub-task team in Posto Administrativo Barique in Manatuto; and (c) Training for Fisheries on IUU Fishing Vessel Identification Method and other surveillance measure and safety at sea. While in Papua New Guinea, the baseline studies have just been initiated.

In support of these efforts, the knowledge and information-sharing platforms of ATSEA-2 were set up (i.e., website, e-newsletter, social media pages, project infosheets, dropbox, data portal, etc.) to promote better coordination, information and data sharing, and awareness and capacity building. Strengthening of these online platforms were integral to ensure continuing communication in spite of the limitations posed by the global pandemic.

At the heart of these initiatives is the commitment of ATSEA-2 on the UN Sustainable Development Goals (SDGs) and to ensure that no one will be left behind.

Mama Oli showing her harvested shrimps. *(Photo by ATSEA-2)*

Thus, to further strengthen the project's gender design, ATSEA-2 conducted a rapid Gender Equity and Social Inclusion (GESI) Training Needs Assessment with the aim of documenting current knowledge and capacity of the ATSEA-2 team and partners on addressing gender and inclusion issues as well as to identify gaps and challenges. The needs assessment will be the basis of the GESI training that will be conducted in 2021. In Indonesia, a separate GESI assessment was carried out with the objective of designing activities that sustainably respond to climate change impacts with an aim towards empowering women and other vulnerable groups.

Despite the operational challenges brought about by COVID-19 restrictions, a total of 3,100 individuals have been engaged in various ATSEA-2 meetings, forums, and various awareness and capacity building activities from 2019-2020. Of this number, 2,000 (65%) are men and 1,100 (35%) are women. It is envisioned that more participatory initiatives will be undertaken as ATSEA-2 further boosts its implementation in 2021.

Country and Non-Country Partners: Key Performance Highlights

PEMSEA's Country and Non-Country Partners quickly adapted to the changed working environment, with the vast majority of staff working remotely, but without interruption to their activities in support of the SDS-SEA's implementation. In some instances, some partners and collaborators still managed to conduct face-to-face meetings or on-the-ground activities. Despite the odds, working together with shared goals and a sense of purpose for the East Asian Seas defined our efforts in 2020.

Department of Environment and Natural Resources- Biodiversity Management Bureau (DENR-BMB)

The Coastal and Marine Ecosystems Management Program (CMEMP) of the Philippines DENR-BMB is a 10-year program that commits to effectively reduce the drivers and pressures on coastal and marine ecosystems. CMEMP's implementation is guided by the ICM framework and approach as detailed out in BMB Technical Bulletin No. 2017-14 (Guidelines on the application of ICM as strategy in CMEMP implementation) in addition to BMB TB No. 2017-05 (Guidelines on the Assessment of Coastal and Marine Ecosystems); BMB TB No. 2017-06 (Establishment of Marine Protected Areas) and BMB TB 2017-11 (Guidelines in the Identification and Recognition of Biodiversity-Friendly Enterprises). In 2020, the DENR-BMB in coordination with PEMSEA, the Department of the Interior and Local Government (DILG), and the Department of Human Settlement and Urban Development (DHSUD), spearheaded the dialogue on the possible mainstreaming of the ICM planning and processes into the Comprehensive Land Use Planning (CLUP) and Comprehensive Development Planning (CDP) of local governments.


DENR staff participate in Manila Bay clean up activities. *(Photo by DENR-BMB)*

A National Forum on ICM was also organized as part of continuous capacity building for DENR Regional and Provincial personnel. The virtual forum focused on the highlights of ICM implementation at the local and national levels, and aimed to build on the discussion on mainstreaming the ICM into the CLUP and CDP.

Despite the limitations brought about by the pandemic, three coastal cleanups were conducted in the Manila Bay area. Consultation workshops for the establishment of the Manila Bay Marine Turtle Network were also done.


Photos by EMECS

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

EMECS was set to host the EMECS13 Conference in the UK in September 2020, but was postponed for one year due to COVID-19. In 2020, EMECS co-organized two seminars with the Asia Pacific Network (APN) and Kobe University. The first seminar was held with APN and the University in February to discuss marine environmental issues from a broad perspective and help network and foster young researchers.
In the sessions, speakers focused on the current conditions and recent changes in coastal ecosystems, and dealt with the issue of marine plastics and nutrients, for which public awareness has been increasing.

There were 81 attendees, and it was a good opportunity for the participants to know how current researches on the above matters have been developing.

In December 2020, the second seminar was held with Kobe University, aiming to increase the number of young people interested in marine research; expand the range of human resources involved in and promote marine environment conservation activities by introducing research on the marine environment in an easy-to-understand manner to the younger generation, particularly high school and university students. Some 86 high school and university students, including 33 online participants, attended the seminar.

The seminar was well-received, as the participants were able to envision how their researches and activities on the marine environment would lead to their future paths. EMECS plans to organize a seminar for students for next year and beyond.

International Ocean Institute (IOI)

On November 27, the IOI organized a webinar on "The Blue Economy in the New Normal: Capacity Development beyond COVID-19, Challenges and Opportunities." The webinar successfully gathered expert speakers who shared knowledge and experiences gained in areas of the blue economy, ocean governance, climate and oceans, and human health, from the perspective of capacity development. PEMSEA Executive Director Aimee Gonzales spoke on how existing regional socio-economic development trends faced novel amplified challenges due to the COVID-19 pandemic, yet also highlighted how the current crisis offers opportunities for a 'reset' on technical and capacity enhancement towards a sustainable and inclusive Blue Economy.

Opportunities via PEMSEA's role in facilitating science, policy- action interface to promote sustainable and inclusive Blue Economy could be achieved through:

- Co-designing context-appropriate capacity development programs and trainings on the use and application of science and tools with partners and networks of local governments and learning centers.
- Co-host early career researchers in ICM sites.
- Build a new generation of coastal managers/leaders.
- Boost women's capacity as a channel for introducing the concepts of integrated coastal management and blue economy in ways that are meaningful to local communities.
- Online delivery of services: technical, capacity development and knowledge management, facilitation.

IPIECA

Since 1974, IPIECA has convened the industry and stakeholders to advance environmental and social performance across the global oil and gas industry. Its Oil Spill Group helps industry prepare for and respond to shipping and exploration oil spills and through its partnerships with organizations such as PEMSEA and the International Maritime Organization (IMO), develops regional organizations to help countries build oil spill preparedness and response capability. During 2020 the Oil Spill Group:

- Published a Shoreline Response Programme technical support document outlining how to carry out activities such as oiled shoreline assessment surveys, technical decision-making, incident monitoring, post treatment inspection and stakeholder engagement.

- Published a technical support document to help operators plan and implement a Monitoring and Sampling (M&S) programme.

- Translated our oil spill preparedness and response introduction into French, German, Portuguese, Russian and Spanish language versions.

- Formed a 'pandemic responses' task force to help members identify how responses can be applied in different pandemic-related situations. The task force has produced a draft report in the form of power point slides, and IPIECA is currently converting it into a formal report. For more information on the task force, contact Rob Cox, IPIECA Technical Director, at rob.cox@ipieca.org.

Institute for Global Environmental Strategies (IGES)

Global sustainability is at the core of the IGES mission. The Institute is dedicated to working across international boundaries and across issues to support response and recovery. In May 2020, IGES published a position paper, "Implications of COVID-19 for the Environment and Sustainability" (https://www.iges.or.jp/en/pub/covid19-e/en), in which we identified key issues in dealing effectively with such pandemics and their wide-ranging impacts in the short, medium, and long-term. In addition to presenting issues where we see scope for IGES work over different time periods, we identified potential initiatives in which IGES could collaborate with our partners inside and outside of Japan.

On October 2020, IGES published "Strengthening Risk Management Systems to Manage New and Emerging Transboundary Risks: Lessons from

COVID-19 Pandemic" (https://www.iges.or.jp/en/pub/covid19transrms/en), which details various past experiences of transboundary disasters, their impacts, and important lessons related to risk reduction. The paper highlights the need for recognition of transboundary risks and puts in place an integrated risk reduction framework from international to the national and local levels and across multiple sectors. This entails building the capacity of institutions and revamping information and decision support systems. The paper further argues that countries such as India and Japan have the potential to lead the formulation and implementation of such a risk reduction framework that can effectively address transboundary risks given their emerging role in the Asia region and beyond.

Korea Marine Environment Management Corporation (KOEM)

In 2020, KOEM conducted regular monitoring of surface organisms, subsea deposits and beaches as well as seawater for marine microplastic management. In order to collect marine floating wastes, it used drones to conduct surveys on major concentrated areas of wastes by port. In the marine atmospheric environment area, KOEM established a system to identify the source of pollution, assess the impact, and collect and analyze data according to the roadmap for integrated marine air environment management (2019-2021).

KOEM was also designated as a specialized institution for mudflats investigation and post-management in accordance with the Enforcement Decree of the Mudflats Act. The Act, which was newly implemented in 2020, enabled KOEM to carry out the mudflats restoration project in priority areas. KOEM also manages marine protection zones, which consists of 30 zones in Korea, with a total area of 1,782 square kilometers as of 2020.

In the marine environment education area, KOEM produced and distributed online education videos and an education package for the "untact" education of students. "Untact" in Korea refers to the use of contactless services (e.g., online shopping, telehealth) in the fight to stop the spread of COVID-19.

Japan's Ministry of Land, Infrastructure, Transport and Tourism (MLIT)

Japan's MLIT shared its report on the impact of COVID-19 in the country, while simultaneously carrying out actions aimed at "blue recovery" jointly implemented at the government, private and citizen levels. Responding to the "Call for Climate Action in the Ocean" issued at the second

Clean-up event in Sanbanse. (*Photo by Japan MLIT*)

Constructed Tidal Flat on the waters of Takeshiba. (*Photo by Japan MLIT*)

meeting of the UN High Level Panel (UNHLP) in September 2020, Prime Minister Yoshihide Suga mentioned "a virtuous cycle of economy and environment" in his statement and set a goal for Japan of reducing its greenhouse gas emissions to zero by 2050 (https://japan.kantei.go.jp/99_suga/actions/202010/_00024.html).

While civic activities were restricted due to the pandemic, hands-on learning and events for the ocean were held utilizing online platforms. In October, the Tokyo Bay Public-Private Partnership Forum held the Tokyo Bay Thanksgiving Month online, attracting more than 40,000 participants.

Even as COVID slowed down research implementation, the Technical Research Association (Japan Blue Economy association), which conducts research on blue carbon, etc., was approved by the government on July 14. In the future, the implementation of model projects and the promotion of research will be done through industry-academia-government-private partnerships.

Singapore's Ministry of Sustainability and the Environment (MSE)

Singapore's MSE reports that in line with the SDS-SEA, the country focuses on the building of healthy and resilient marine and coastal ecosystems through the implementation of its Integrated Urban Coastal Management (IUCM) (https://www.nparks.gov.sg/biodiversity/community-in-nature-initiative/iucm), which is based on the Integrated Coastal Management (ICM) framework advocated by PEMSEA and takes into account Singapore's unique urban context.

In 2020, Singapore's initiatives at the national level included:

- Habitat enhancement, restoration and conservation of coastal and marine environments and biodiversity, including the Sisters' Islands Marine Park; coastal and marine habitat mapping for marine spatial planning; outreach and education efforts though citizen science programmes and public engagements;

research on marine pollution and invasive alien species to support coastal management; and exploration and testing of nature-based solutions for coastal protection.

- Plastic waste reduction and recycling initiatives to close the plastic waste loop. This includes the introduction of the Mandatory Packaging Reporting regulations and the development of local plastic recycling capabilities.
- The Maritime Singapore Green Initiative (MSGI), launched in 2011 and aimed at reducing the environmental impact of shipping and shipping-related activities and promoting clean and green shipping, is further enhanced to feature a new focus on maritime decarbonisation. Singapore also jointly hosted a "Future of Shipping: Decarbonisation" webinar with the International Maritime Organization (IMO) on September 17, 2020.

The Ocean Policy Research Institute (OPRI)

OPRI undertakes interdisciplinary research on sustainable blue economies including integrated coastal management, blue carbon and marine debris elimination. In the summer of 2020, OPRI hosted the three sessions of the Blue Recovery Webinar series. OPRI also co-organized with PEMSEA a webinar session on the measures to eliminate marine plastics at the UNEP-SEA 2020 in November; and hosted an international webinar to launch policy recommendations by the High Level Panel for a Sustainable Ocean Economy in

Prime Minister Yoshihide Suga speaking at the international webinar that OPRI hosted on Dec. 3, 2020 in Tokyo. (*Photo by OPRI*)

December. During the latter, Prime Minister Yoshihide Suga of Japan underlined his administration's determination to promote sustainable blue economies and international cooperation for the 2020 UN Ocean Conference. Myriad research works were undertaken by OPRI on several issues including blue carbon, sustainable fisheries, ocean and climate change, marine biodiversity, marine science, education and human resource development. OPRI intends to continue interdisciplinary research, multi-stakeholder policy dialogues and international cooperation for achieving a sustainable ocean.

Oil Spill Response Limited (OSRL)

Before the pandemic, OSRL worked with the Global Initiative for South East Asia (GISEA) in supporting the RETOS (Tool to Evaluate Oil Spill Management Capabilities) workshop during the 13th Gulf of Thailand (GoT) National Contact Point Meeting (Feb 2020) in Cambodia. OSRL responded and adapted quickly to the COVID crisis, remaining response-ready throughout the year regardless of border closures. The adoption of online tools was a great enabler to support and engage our stakeholders remotely. In 2020, OSRL:

- Launched its COVID-19 dashboard "live", which published the status of OSRL's resources globally and COVID-19 related documents, including over 50 response plans for countries globally.
- Held and recorded over 30+ technical webinars which were held over virtual platforms.
- Successfully transitioned our Emergency Operations Centre (EOC) virtually, which was tested during exercises and real incidents throughout the year.

Amid the challenging environment, OSRL supported the development of dispersant guidelines for the Gulf of Thailand (GoT) and signed Memorandum of Understandings (MoUs) with the Philippines Coast Guard, Petroleum Industry of Malaysia Mutual Aid Group (PIMMAG) and PEMSEA to further enhance cooperation and development in oil spill preparedness and response capability across the South East Asia region.

Taken outside of the event after the participants toured the palace. *(Photo by OSRL)*

PEMSEA Network of Local Governments (PNLG)

In 2020, with the support of the PEMSEA Resource Facility, the PNLG Secretariat carried out several activities in accordance with the "PNLG Strategic Action Plan 2016-2021" (PNLG SAP 2016-2021), achieving the following results:

- Accepting new PNLG members. The PNLG assessed and accepted the applications of South Bangka Regency of Indonesia for regular membership, and Fujian Institute for Sustainable Oceans (Xiamen University) for associate membership.
- Organizing the 2020 PNLG Annual Forum. Themed "Marine Eco-civilization, Blue Development," the Forum was held virtually, with Xiamen, P.R. China as the offline venue. It is the first time for the Forum to be held both online and offline. More than 130 delegates from 35 member local governments across 8 countries (China, Cambodia, Indonesia, Japan, Malaysia, Philippines, Timor-Leste and Viet Nam) and PNLG Associate members, resource speakers and other invited experts participated in the event, including a representative from Busan, Republic of Korea who attended the forum as observer.
- Enhancing communication and information sharing between the PNLG members through the preparation of newsletters as agreed during the PNLG EC meeting in 2019, including the updating of the members' profiles with Xiamen University's support.

Plymouth Marine Laboratory (PML)

This year saw the launch of a new PML strategy, delivering research excellence supporting a sustainable ocean. Our experts were able to continue their work despite COVID-19 and explored its impacts on inshore fishing and aquaculture by undertaking fieldwork interviews and focus groups in Viet Nam among their ongoing research activities for the 'Addressing Challenges of Coastal Communities through Ocean Research for Developing Economies' (ACCORD) project.

PML scientists worked with Marine Protected Area (MPA) practitioners in the Philippines, Viet Nam and Malaysia to promote climate resilience in marine conservation, by supporting local management interventions with climate change modelling analyses for the UK Government Global Challenges Research Fund £6.7 million 'Blue Communities' programme.

An ACCORD project partner scientist from Cambodia MOE uses an infrared temperature meter to measure sea-surface temperature at a monitoring station PML established for biogeochemical measurements. *(Photo by PML)*

Taken on Koh Ach Seh island, the litter shown is likely mainly derived from the mainland, either Cambodia or Viet Nam, via river systems that open into the sea around 10 miles from the island. (*Photo by PML*)

As part of their investigations into ecological and societal impacts of marine plastics, PML researchers pioneered satellite remote sensing of marine debris, provided modelling expertise on the origin and movement of plastic debris in Southeast Asia, and progressed on nature-based solutions in Viet Nam.

Reinventing Productivity in PEMSEA

Discover, Dream and Design: A seminar on mental well-being

The jarring effects of COVID-19 undoubtedly raises new questions around its long-term impact on our mental health and wellness. To address this, some 20 members of the PEMSEA Resource Facility and ATSEA-2 Project Team participated in a half-day **Reflection and Energizing Virtual Workshop** last December 21, 2020. The workshop, facilitated by Ma. Rita Cecilia Kismadi (Budhsi) from INSPIRIT, aimed to reflect on the accomplishments of the team in 2020, despite the challenging year. Participants were also asked to imagine and plan for 2021, and what they would do differently.

In small groups, the participants shared their personal strengths during a difficult year: power of adaptability, resilience, multi-tasking, power of gratitude, self-love, commitment to learn new things, building and strengthening connections, and finding and maintaining a healthy work-life balance.

Looking forward to new beginnings in 2021, the PRF staff and ATSEA-2 Team said they are committed to adapting to the changes the new year will bring in terms of new projects, as well as learning and developing new skills. They added that as opportunities to travel and meet face-to-face in the field will open up, they want to make up for lost time, reconnect with people on the field, and build new relationships with communities and partners. Building on what the staff have learned in 2020, some want to look for and explore new solutions based on a better understanding of the situation in the countries they are working in such as Timor- Leste, and in new countries such as Papua New Guinea.

On a personal level, all participants want to stay healthy and pay more attention to maintaining a good balance between their personal and professional lives.

Photo by PEMSEA/C. De Vera

The PEMSEA Resource Facility (PRF)

Post COVID-19 Strategy

In a post-coronavirus world, there is a need to generate new ideas and approaches and adjust them to pave the way to a "better normal." There is increasing realization that the pandemic is not just a short, periodic, epidemiological glitch, but a huge disruption to how communities and local government units (LGUs) will conduct themselves even after the general population is vaccinated.

While capacity and resources vary among countries and local governments, LGUs in particular, are on the frontline of balancing economic recovery, environmental protection and preservation, and keeping the people safe and healthy.

PEMSEA's work on integrated coastal management (ICM) can help support LGUs prepare for a "better normal" through the strategy of adaptive management. ICM provides the necessary platform through the following:

- the **institutional mechanisms** (coordinating mechanisms) that have been established can serve as a venue to bring together all key players at the local level to discuss a comprehensive and integrated approach (covering all sectors) to mainstreaming the national government's proposed actions into their plans. The result is **a retrofitted plan that is pandemic responsive and adjusting to the new normal**.
- revisiting **tools and approaches of ICM** that are proven to be working in strategic and operational planning and in implementing and monitoring the effectiveness of the retrofitted plans and utilizing new novel tools and approaches to beef up the response and recovery process; and
- **communication planning** – while the pandemic has resulted to massive information campaigns, the message is mainly focused on health and safety but not on the environment. There are silver linings to the pandemic in relation to the environment – lesser gas emissions, more animals are expanding their home ranges, etc. But once the economic recovery programs are implemented, it is anticipated that all of the anthropogenic impacts that we have seen in the past will return (and possibly create greater impacts.)

As local governments start implementing actions to cope with the new normal, they need the following support to build back better and leave no one behind: (a) capacity building on new tools and approaches; (b) financing to implement critical action programs; (c) engaging the business sector to help them achieve the triple bottom line while being seen as partners in the recovery process; and (d) promoting citizen science to engage the general public in the recovery process, such as being educated on social distancing measures, etc. In most cases, having a champion—such as a local chief executive, a woman leader or a youth leader—can provide the face and inspiration on what it takes to achieve a "better normal" and rise from it.

The PEMSEA Resource Facility (PRF) in collaboration with the PEMSEA Network of Local Governments (PNLG) has and will continue to support LGUs in preparing for a "better normal." PRF has been utilizing available online technologies where possible (e.g., for meetings, office operations, etc.), thus increasing efficiency while at the same time reducing carbon footprint.

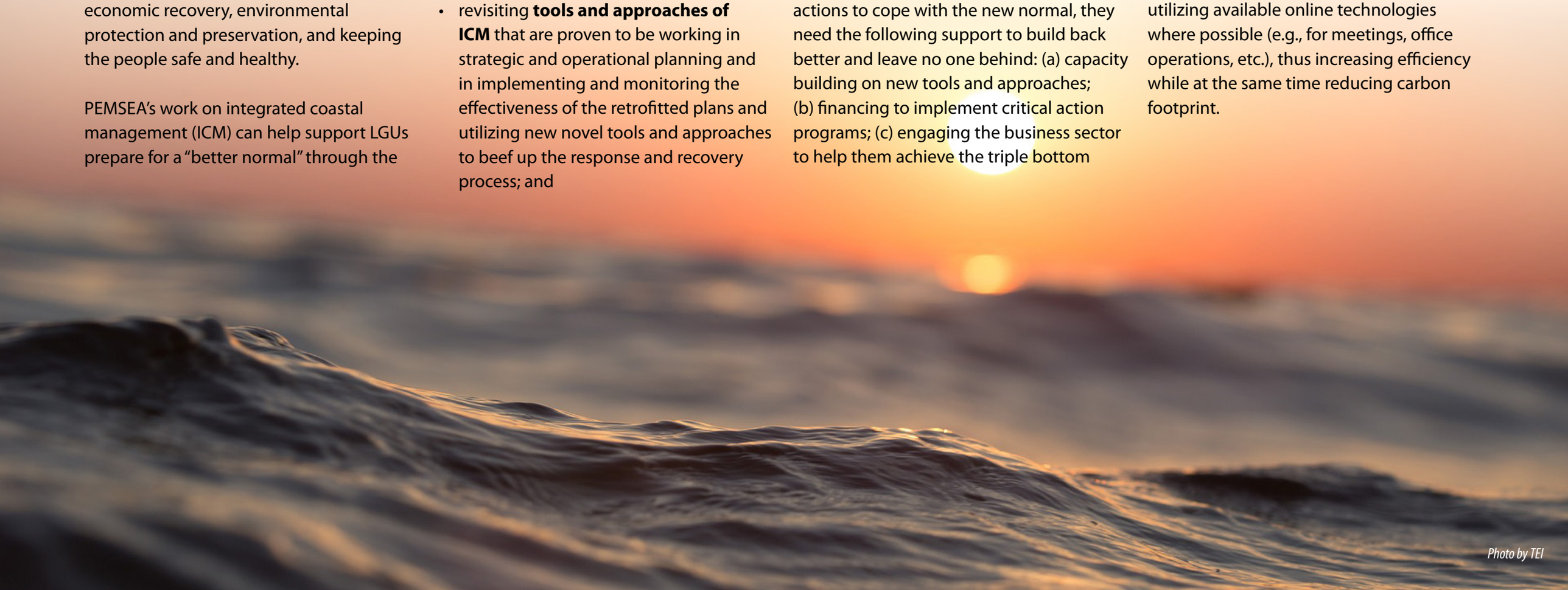


Photo by TEI

Ensuring the Financial Sustainability of the PRF

For PEMSEA to achieve financial sustainability, member countries are reminded of their commitment under the **Da Nang Compact in 2015** and **Iloilo Declaration in 2018** to contribute funding to support core PRF functions. A look at analogous international and regional organizations reveals that funding of secretariat functions generally comes from member (i.e., country) contributions. By making a financial commitment to the organization, members are communicating to donors and other partners that they believe in the value and viability of the regional coordinating mechanism.

Given the nature and relative size of GEF funds compared to others in the field, particularly with respect to ocean funding, PEMSEA will continue seeking GEF support, whether through the existing channels of UNDP or other accredited agencies. PRF is waiting for the approval of the five-year, 7-country **UNDP/GEF/ASEAN Reducing Pollution and Preserving Environmental Flows in the East Asian Seas through the Implementation of Integrated River Basin Management in ASEAN Countries project.**

To reduce overdependence on GEF, PEMSEA has been tapping a broader set of funding sources from bilateral agencies, private foundations and collaborative activities with the private sector, where there is topical and geographic alignment.

A key project that is under development is the International Climate Initiative (IKI)-funded **Reducing Maritime Transport Emissions in East and Southeast Asian Countries project** for Euro 16 Million with the International Maritime Organization (IMO) as well as the **UNDP/GEF Effectively Managing an Ecological Network of Marine Protected Areas in the Large Marine Ecosystems in the ASEAN Region (ASEAN ENMPAs) project** with the ASEAN Centre for Biodiversity (ACB). Accreditation applications for the conduit of grants and procurement of goods and services are also pending with the Green Climate Fund as well as the EU Pillar Assessment.

PEMSEA'S CURRENT SERVICES

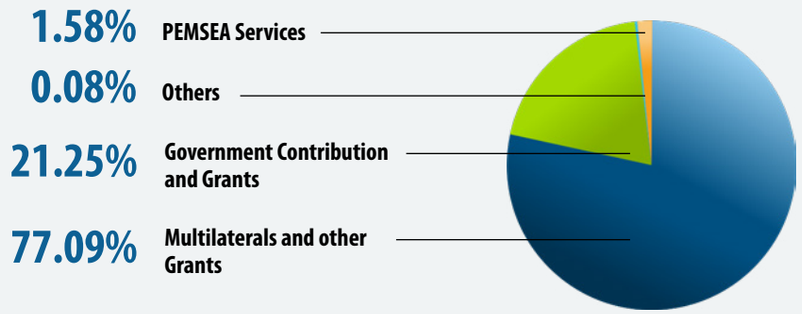
- **Advisory and Project Management**
- **Knowledge Management**
- **ICM Training and Capacity Building**
- **Port and ICM Certification Services**
- **Facilitation and Secretariat Services**
- **Monitoring and Evaluation Services**

A review of PEMSEA's business model is under consideration. Options include a) developing a spin-off entity that will manage more business-oriented or commercially sourced engagements, or b) establishing an investment facilitation service in partnership with the private sector.

2020 Financial Summary

Receipts:

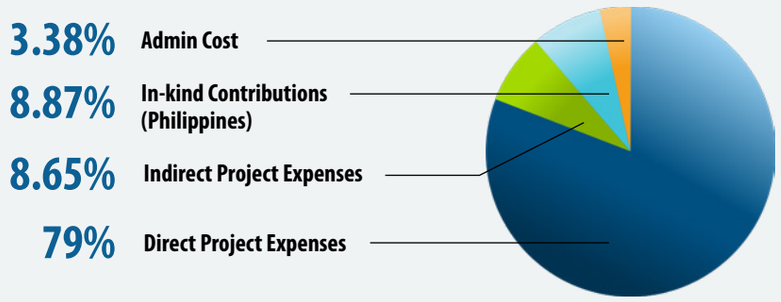
Total receipts for 2020 amounted to US $2.4M, which was slightly lower than the $2.5M generated in 2019. Multilaterals and other grants represent 77 % of the total receipts in 2020, the bulk of which came from GEF. Government contributions and grants from country partners are 21 % of the total receipts. The decrease in gross receipts is due to the delayed implementation of project activities and the recalibration of workplans and corresponding budget allocations as a result of the travel and mobility restrictions and social distancing measures imposed by country partners to manage the COVID-19 pandemic.



Expenses:

Expenses in 2020 totaled $2.5M, which was a 3% decrease from 2019. Project expenses (combined direct and indirect expenses) reached $2.2M, representing 88% of the total expenses for 2020. The direct expenses for the projects amounted to $2M. Personnel and consultancy expenses amounted to 47% of the total expenses.

Administrative expenses represented 12% of the total expenses for 2020. The 12% can be broken down into: 3% for administrative cost, and 9% for in-kind contribution provided by the Philippine Government (for office space and utilities).



Total Assets

PEMSEA's total assets decreased by 6%, which was mainly attributable to the decrease in financial assets and the decrease in country commitments under deferred grants.

Despite a challenging year, we remain thankful to our partners' continuing support and look forward to working together towards the sustainable development of our shared Seas of East Asia in the coming years.

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

Statement of Financial Position (in US$)

ASSETS	31 December	
	2020	2019
CURRENT ASSETS		
Cash	2,804,730	2,882,978
Receivable	69,011	14,577
Total current assets	**2,873,741**	**2,897,555**
NON CURRENT ASSETS		
FA at Fair value	70,580	171,265
Property & Equipment - net	8,250	17,976
Other non-current assets	21,118	74,996
Total non-current assets	99,948	264,237
TOTAL ASSETS	**2,973,689**	**3,161,792**
LIABILITIES AND FUND BALANCE		
CURRENT LIABILITIES		
Accounts Payable and Accrued Expenses	261,920	376,349
Deferred Grant	1,125,596	1,148,066
Total current liabilities	**1,387,516**	**1,524,415**
NON CURRENT LIABILITIES		
Defined contribution liability	101,479	94,532
Retirement benefit obligation	78,479	83,659
Total non-current liabilities	179,958	178,191
TOTAL LIABILITIES	1,567,474	1,702,606
EQUITY		
Fund Balance	1,399,493	1,471,666
Employee benefit reserve	6,576	(24,593)
Fair value reserve	146	12,113
Total equity	**1,406,215**	**1,459,186**
TOTAL LIABILITIES AND EQUITY	**2,973,689**	**3,161,792**

Statement of Receipts and Expenses (in US$)

ASSETS	31 December	
	2020	2019
RECEIPTS		
Government Contributions and grants	523,548	857,822
Multilaterals and other grants	1,899,211	1,652,956
PEMSEA services	38,967	76,175
Others	1,966	4,094
TOTAL RECEIPTS	**2,463,693**	**2,591,047**
EXPENSES		
DIRECT PROJECT EXPENSES		
Personnel	715,360	569,544
Consultancy	234,833	156,203
Subcontract	842,131	926,855
Travel and meeting	47,478	149,069
Training	21,389	228,111
Other direct costs	149,902	61,997
Total direct project expenses	**2,011,092**	**2,091,779**
INDIRECT PROJECT EXPENSES		
Personnel	169,728	157,616
Travel and meeting		24,230
Overhead	50,221	8,027
Total indirect project expenses	**219,949**	**189,872**
ADMINISTRATIVE COST		
Personnel	64,323	60,981
Consultancy	21,602	22,185
Travel and meeting		23,644
Overhead	225,651	226,623
Total administrative cost	**311,576**	**333,433**
TOTAL EXPENSES	**2,542,618**	**2,615,084**
EXCESS (DEFICIENCY) OF RECEIPTS OVER EXPENSES	(78,925)	(24,037)
OTHER COMPREHENSIVE LOSS Items that will not be reclassified subsequently to receipts or expenses		
Remeasurements gain/loss on retirement benefit obligation	31,169	(27,714)
Fair value loss on FA at FVOCI	(5,215)	16,233
TOTAL COMPREHENSIVE INCOME	**(52,971)**	**(35,518)**

Moving Forward in 2021

PEMSEA is looking forward to the new year with plans in place based on the lessons learned in 2020. Inspired to move on with strength and a clear strategy for the East Asian Seas, here is a preview of the initiatives, programs and projects in the pipeline for 2021.

Photo by PEMSEA/P. Paleracio

East Asian Seas (EAS) Congress 2021

EAS CONGRESS 2021

THE EAST ASIAN SEAS CONGRESS

Charting a New Decade of Healthy Oceans, People and Economies

1-2 DECEMBER 2021 • Hosted by the Royal Government of Cambodia

The year 2021 will be a defining moment as we contain current and future pandemics and near the completion of the implementation plan of the **Sustainable Development Strategy for the Seas of East Asia (SDS-SEA) 2018-2022**. Armed with greater public awareness on the links between ocean health and human health, the EAS region is one and aligned with the global sentiment to rise above pressing socioeconomic, ecological, and climate change issues, and sustain the momentum of building meaningful and transformative solutions for a sustainable ocean-based economy at the local, national, and regional levels.

Themed "**Charting A New Decade of H.O.P.E. (Healthy Oceans, People and Economies)**," the EAS Congress will be held on December 1-2, 2021, in Sihanoukville, Cambodia.

The Congress aims to:

- **Share** the lessons learned, track the progress made, and scale up good practices in implementing the SDS-SEA at the regional, national, and local levels.
- **Build** on and recalibrate existing management interventions and foster new opportunities for regional partnerships using innovative approaches, technologies, investments and financing towards the sustainable development of the coastal and marine environment.
- **Set up** a clear road map on transformative blue solutions in the next decade in accordance with the United Nations Decade of Ocean Science, the 2030 Agenda for Sustainable Development, the United Nations Framework Convention on Climate Change (UNFCCC), the Post-2020 Global Biodiversity Framework, and other relevant international and regional commitments.

During the Congress, a meeting of the PEMSEA Network of Young Leaders (PNYL) will convene youth leaders in the region to map out the strategic actions of the network from 2022 to 2030, including ways to integrate the PNYL into other core PEMSEA activities. Ongoing preparations for the Congress include finalizing the details of other key events such as: a Plenary and Technical Sessions (or Collabs); General Assembly of the PNLG to discuss and adopt the Strategic Action Plan 2022-2027; PNLC Meeting to launch its new Charter; the joint PNLG-PNLC Meeting to approve the workplan for 2022 onwards and identify possible funding sources; and the Ministerial Forum. An EAS Roadmap to 2030 will also be mapped out and discussed during the Congress.

Since 2003, the EAS Congress has served as an intellectual marketplace and forum on the sustainable development of the seas of the world's fastest-growing region. This triennial event provides a platform for ministerial and high-level technical discussions along with opportunities for knowledge sharing and networking between different sectors of society: from international organizations, multilateral banks, and local governments, to the scientific community, youth sector, private firms, academe, civil society, and other development partners.

EAS Futures: Youth and the Oceans Photo and Video Competition

PEMSEA, through the triennial **EAS Congress Youth Forum**, has offered the EAS region's youth the opportunity to participate in creative activities, workshops and discussions with experts on coastal and marine concerns. The forum, a side event of the EAS Congress, is also a venue for young people to learn some practical skills to strengthen their roles in addressing environmental issues. Since its inception in 2006, more than 200 youth in the region have been able to participate in this event.

Supported by the Ministry of Oceans and Fisheries, RO Korea, PEMSEA is hosting the **EAS Futures: Youth and the Oceans Video Competition** in 2021 to generate interest, awareness, and engagement in coastal, marine and maritime actions and solutions among the region's youth. The contest is open to high school students, university students and amateur photographers and videographers up to 30 years old. Entries can come from any of the following countries: Brunei, Cambodia, China, Indonesia, Japan, DPR Korea, Lao PDR, Malaysia, Philippines, RO Korea, Singapore, Timor-Leste, Thailand and Viet Nam.

Cash prizes await the winners who can submit the best photo and video entries related to the following themes: (a) oceans and coasts as source of food and livelihood; (b) oceans and coasts as habitat and ecosystems; (c) protecting and conserving coastal biodiversity; (d) responsible ocean and coasts tourism; (e) addressing marine pollution; and (f) coastal adaptation to climate change. For more details, visit: https://www.pemsea.org/our-work/youth/eas-futures-youth-and-ocean.

Photo by PEMSEA/A. Equi

Implementation of Marine Pollution Reduction and Maritime Activities

Photo by PEMSEA/G. Dantes

PEMSEA is set to implement the **GIZ-EU project on Ship Waste Management in Philippine Ports** with the support of international experts. The pilot project will be at the Batangas Port in the Philippines, located 110 kilometers south of Manila, and considered to be a strategic trading point for all industries in Cavite, Laguna, Batangas, Rizal and Quezon provinces. The project aims to improve the treatment and reception of waste in the port, thereby reducing the generation of marine waste and consequently the discharge of plastic into the sea. An advance waste notification, the adequacy of the facilities, and the introduction of a Ship Waste Management Manual will be the key solutions that will be introduced for the project. The arrangements for the payment of a waste fee will be revised and incentives for ships (as the Baltic Strategy NSF/Indirect fee) will be considered to ensure that the waste will be delivered to the port on a regular basis. The project will also develop guidance documents and training materials to help enforce existing regulations.

Other project partners include the Philippine Ports Authority (PPA), the main agency in charge of Philippine ports, as well as the Department of Environment and Natural Resources (DENR), the Maritime Industry Authority (MARINA) and the Philippine Coast Guard (PCG), who will be consulted in an advisory capacity on specific issues or decisions. Close cooperation with the shipping companies and the waste operator is essential to evaluate and test processes. A Project Steering Committee (PSC) will be put in place at the start of the project, with the PSC in charge of finalizing the recommendations and measures for efficient ship waste management. The PSC will be composed of representatives from PPA, DENR, GIZ and Expertise France, with PEMSEA serving as the Project Secretariat. Should COVID-19 restrictions still be in place in 2021 that will restrict travel and mobility, the project aims to make use of online technologies to conduct research, analysis, review of documents, committee decisions, webinars and staff recruitment.

PEMSEA is also set to start on a World Bank-funded project on **Assessment of Policies and Regulations at National Level and Facilitate Actions at Local Levels to Reduce Plastics Waste in the Philippines**. The World Bank is contracting PEMSEA to develop: (1) policy recommendations to ensure effective implementation of the National Plan of Action for the Prevention, Reduction, and Management of Marine Litter (NPoA-ML) to reduce plastics pollution and ensure better management and disposal of the same; and (2) site-specific recommendations in line with the NPoA-ML to be developed in consultation with relevant stakeholders in two select Metro Manila cities/barangays for possible integration into their ten-year Solid Waste Management Plans to reduce plastics pollution (e.g. single use plastics) and ensure better management and disposal of the same. These recommendations will help inform the World Bank's engagement with the Philippine government on pollution reduction and solid waste management in the near to medium term.

A five-year project funded by the International Climate Initiative (IKI) Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) is scheduled to begin in 2021. Called **Blue Solutions for Reducing Maritime Transport GHG emissions through increased energy efficiency of ship and port activities in East Asia**, PEMSEA and the International Maritime Organization (IMO) are seeking to support East and Southeast Asian countries as they transform their maritime sector to a low carbon future. ASEAN countries, including China, Japan and RO Korea, are participating in the project.

Strengthening of institutional capacity and governance arrangements

PNLG Drafting of Strategic Action Plan 2022-2027

The PEMSEA Network of Local Governments (PNLG) adopted the **5-year Strategic Action Plan (SAP) 2011-2015** during its 2010 Forum in Chonburi, Thailand outlining the proposed strategies, objectives and targets of the PNLG in line with its commitment and obligation to contribute towards achieving regional, national and local targets related to sustainable coastal development or the SDS-SEA. At the 2011 PNLG Forum, the PNLG adopted the **Dongying Declaration** in Dongying, PR China which strengthened the PNLG's resolve to implement the 5-year SAP. The Dongying Declaration includes six concrete and measurable targets that the PNLG members agreed to implement until 2015.

With the completion of the PNLG SAP 2011-2015, and in alignment with the UN Sustainable Development Goals (SDGs) and the SDS-SEA 2015, which was adopted through the Danang Compact, the **PNLG SAP 2016-2021** was discussed and approved during the 2016 PNLG Forum in Ansan, RO Korea. The PNLG SAP 2016-2021, builds on ICM initiatives that are already underway but focuses on greater impact and recognition for contributions to national, regional and global sustainable development targets. It standardizes measurement and reporting so that data can be used consistently to highlight individual member efforts, as well as the collective impact of the PNLG membership. It also makes information readily available to the public through existing knowledge management and marketing platforms.

PRF, with the assistance of the PNLG Secretariat, is responsible for monitoring and evaluating the SAP's implementation through the PNLG online tracking system, which was established as part of the SEA Knowledge Bank, to facilitate the reporting of progress by the PNLG members in relation to their commitments to contributing to five SDGs - Goal 6 (water and sanitation), Goal 11 (sustainable cities), Goal 13 (climate action), Goal 14 (life below water), and Goal 17 (partnership development).

In 2021, PRF and the PNLG Secretariat will review the accomplishments of the PNLG SAP 2016-2021 and initiate the development of the **PNLG SAP 2022-2027** which will take into consideration the new developments and emerging concerns in ocean and coastal management. The SAP 2022-2027 will be approved during the

Photo by PEMSEA/R. Dorilag

General Assembly of the PNLG Forum at the 2021 East Asian Seas Congress.

PNLC New Charter

The PEMSEA Network of Learning Centers (PNLC) is working on a new PNLC Charter that should be ready in 2021. Within the first year of the Charter's signing, the PNLC's Executive Committee will develop the Code of Conduct and 5-year operational plan to be approved by the General Assembly. The Code of Conduct outlines the standards for professional conduct in every major field of operation of the PNLC; while the operational plan will identify strategic areas of interest in terms of education, training, research and project-related pursuits in the next five years, taking into consideration the existing capacity and expertise of the members as well as the development needs of their respective localities and the EAS region at large.

The 5-year financial sustainability plan will identify the initial funding requirements, resource mobilization initiatives, and cost-effective measures for the Network's operations to ensure the sustainability of the PNLC. This will be revisited annually by the General Assembly for further enhancement. Sources of funding may include: voluntary financial and in-kind contributions of PNLC members; training and capacity development funds from relevant PEMSEA projects; capacity development initiatives of Country Partners and Non-Country Partners; PNLC-PRF joint resource mobilization initiatives; and donations or grants from other sources.

Under the Charter, PNLC members will enjoy the following benefits: participation in an annual network meeting/workshop; information exchange; participation in learning fora; participation in research collaboration; access to SEA Knowledge Bank; access to consulting opportunities; participation in PEMSEA training courses; and invitations to regional workshops and conferences.

Integrated Coastal Management (ICM) Effectiveness Review

PEMSEA is planning to develop a more effective assessment of current and future ICM programs; and along this line, provide adjustments to improve current certification approaches/ instruments. A major region-wide ICM assessment will be conducted using the revised ICM assessment approach. If funded, this project will enable PEMSEA to validate the ICM coverage estimated to be at 40% in 2020. Recognizing the complexities related to coastal governance and management in varying political, socio-economic and capacity conditions, the proposed project could contribute to enhancing the validity and applicability of the ICM system, and the need for its continuity over several cycles in order to achieve the set sustainable development targets or environmental improvement objectives.

Validation of the ICM effectiveness has already been initiated in the Philippines and China, covering 32 coastal provinces and 3 coastal cities, respectively. The PEMSEA Resource Facility (PRF) aims to replicate this initiative to initially cover selected PNLG members through the China-PEMSEA Sustainable Coastal Management Cooperation Center (CPC) as the conduit of the assessment for China-based sites in 2021. A review for select sites outside of China and within the region is being discussed with the PEMSEA Network of Learning Centers (PNLC).

The ICM review will be conducted in 2021 with financial support from China's Ministry of Natural Resources (MNR) with the end result of awarding ICM certifications to the PNLG members to recognize their efforts in maintaining and continually improving their ICM systems.

Decade of Ocean Science

The United Nations has declared **2021-2030 as the United Nations Decade of Ocean Science for Sustainable Development**. The UN issued a Call for Decade Actions, inviting partners to submit programmes or contributions that will enhance the sustainability of ocean science initiatives, including infrastructure or individual / institutional capacity, in light of the current COVID-19 pandemic. The Call for Decade Actions focuses on large-scale, multi-country, transformative Decade Programmes; and large-scale contributions of in-kind or financial resources for Decade Actions, or support to the coordination functions of the Ocean Decade through provision of in-kind and/or financial resources, and/or hosting of a Decade Collaborative Centre/ Coordination Office.

PEMSEA joined Xiamen University, IOC WestPac and other partners in recommending **Coastal Zones Under Intensifying Human Activities and Changing Climate: A Regional Programme Integrating Science, Management and Society to Support Ocean Sustainability (Coastal-SOS)** as its proposed Decade Programme.

With 2 billion people relying on its resources, the East Asian seas have nourished rapid economic growth during past decades, which has unfortunately occurred at the expense of ocean health. Coastal-SOS articulates a novel approach of cross-sectoral partnership in designing, conducting and delivering "the science we need for the ocean we want." Through interdisciplinary research, PEMSEA proposes to examine the trajectories of six model East Asian coastal ecosystems over the past 50 years and predict their future (30- year) direction. The Programme will enable effective integration of science, governance, and society to fundamentally change the business-as-usual development model of the coastal zone.

The proposed Decade Programme consists of four categories of activities: innovating partnership, advancing scientific research, co-delivering outputs, and promoting ocean literacy. Coastal-SOS will run from 2022 to 2030, and will be implemented in China, Thailand and Malaysia.

Our Organization

EXECUTIVE COMMITTEE

Chair: **Mr. Arief Yuwono**
Council Chair, East Asian Seas Partnership Council, PEMSEA

Members: **Dr. Vann Monyneath**, Council Co-Chair
Dr. Vu Thanh Ca, Intergovernmental Session Chair
Ms. Chen Yue, Intergovernmental Session Co-Chair
Dr. Jae Ryoung Oh, Technical Session Chair
Dr. Keita Furukawa, Technical Session Co-Chair

EAST ASIAN SEAS PARTNERSHIP COUNCIL

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

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

Indonesia
Mr. M.R. Karliansyah, Director-General for Environmental Pollution and Damage Control, Ministry of Environment and Forestry

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

Viet Nam
Mr. Nguyen Que Lam, Deputy Director-General, Viet Nam Administration of Seas and Islands, Ministry of Natural Resources and Environment

NON-COUNTRY PARTNERS

ASEAN Centre for Biodiversity (ACB)

Coastal Management Center (CMC)

Conservation International (CI) Philippines

International Center for 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)

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

International Petroleum Industry Environmental Conservation Association (IPIECA)

Korea Environment Institute (KEI)

Korea Institute of Ocean Science and Technology (KIOST)

Korea Marine Environment Management Corporation (KOEM)

Korea Maritime Institute (KMI)

Marine Biodiversity Institute of Korea (MABIK)

Norwegian Institute for Water Research (NIVA)

Northwest Pacific Action Plan (NOWPAP)

Ocean Policy Research Institute (OPRI)

Oil Spill Response Limited (OSRL)

Plymouth Marine Laboratory (PML)

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

UNDP/GEF Small Grants Programme (SGP)

UNDP/GEF Yellow Sea Large Marine Ecosystem (YSLME) Project

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

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