Proceedings of the 5th PEMSEA Network of Learning Centers (PNLC) General Assembly Meeting 2026

27 Marc 2026
Manila, Philippines

Introduction

i. The 5th PEMSEA Network of Learning Centers (PNLC) General Assembly was held at the Marine Science Institute, University of the Philippines, Diliman, Quezon City, Philippines, on 27 March 2026. The meeting served as a strategic platform to review PNLC accomplishments, discuss future workplans, and strengthen regional collaboration in coastal and marine management.

ii. A total of 20 out of 25 PNLC member institutions participated in the General Assembly, representing countries across the East Asian Seas region, including Cambodia, China, Hong Kong, Lao PDR, Indonesia, the Philippines, Thailand, Timor-Leste, and Vietnam. The meeting brought together experts, researchers, and institutional representatives to exchange knowledge and align priorities.

iii. The General Assembly covered the following key agenda items: (1) Opening of the meeting and approval of the Meeting Agenda; (2) Presentation of PNLC Accomplishments in 2024-2025 and Workplan for 2026; (3) The PEMSEA Regional Strategic Framework: Sustainable Development Strategy for the Seas of East Asia Implementation Plan 2023-2030 and the Role of PNLC in Implementation; (4) Collaboration with PEMSEA Partners and Projects; (5) Other Business, including announcements by PNLC Members; (6) Next Steps; and, (7) A Special Session by the SKLMEH on Conservation and Management of Marine Biodiversity.

iv. The meeting also highlighted ongoing and upcoming collaborative initiatives, which included presentations on the Effectively Managing Networks of Marine Protected Areas in the Large Marine Ecosystems of the ASEAN Region (ASEAN ENMAPS) Project and the Reducing Pollution and Preserving Environmental Flows in the East Asian Seas through the Implementation of Integrated River Basin Management (IRBM) Project. The IPB University introduced the PKSPL Regional Summer Course on Marine Litter Management, Policy, and Integrated Coastal Governance in the East Asian Seas Region. Dr. Brian Szuster of the University of Hawai'i (UH) introduced a project concept on a Blue Carbon Initiative for the PNLC which was conceptualized and inspired by the PNLC Blue Carbon Workshops co-sponsored by UH.

v. In addition, a special session on marine biodiversity conservation was conducted by SKLMEH, featuring expert presentations and discussions on integrated approaches, global monitoring programs, and innovative tools such as eDNA for marine conservation. Detailed information on the meeting agenda is provided in Annex 1.

vi. The following supporting documents are annexed to these proceedings:

- Annex 1: 5th PNLC General Assembly Agenda
- Annex 2: Link to the 5th PNLC General Assembly documents, presentation and photos
- Annex 3: List of participants

1.0 OPENING PROGRAM

1.1. Isdahartati, Secretariat Coordinator of PNLC, reported on member attendance, noting that 20 of 25 members were present. Participants to the PNLC GA may be found in Annex 1. Members that were not able to attend include Institute for Global Environmental Strategies (IGES), Catanduanes State University (CatSU), De La Salle - Lipa (DLSL), Zhejiang University, and Kim Il Sung University (KISU).

1.2. Prof. Dr. Yonvitner, President of the PEMSEA Network of Learning Centers (PNLC) opened the meeting and acknowledged the presence of the participants He formally opened the General Assembly by expressing his appreciation to the University of the Philippines–Marine Science Institute (UP-MSI) for organizing and hosting the meeting. He then invited the host, represented by Dr. Laura David, to deliver welcome remarks.

1.3. Dr. Laura David from the University of the Philippines–Marine Science Institute (UP-MSI), as the co-host of the PNLC General Assembly, delivered welcome remarks and expressed her appreciation to all participants for attending the meeting at the UP-MSI campus. She introduced the institute as a leading center for marine science education and research in the Philippines, highlighting its academic programs, number of researcher and students, and well-established research facilities. She noted that the institute is supported by comprehensive field and laboratory infrastructure, including six research vessels that enable extensive marine and coastal studies. She invited all PNLC members to do research at and with the UPMSI. Dr. David warmly welcomed all PNLC members to actively engage in discussions throughout the meeting and emphasized that students of UP-MSI are enthusiastic and ready to provide assistance whenever needed, creating a supportive and collaborative environment for the event.

1.4. Presentation of the Meeting Agenda

Prof. Yonvitner presented the provisional agenda of the meeting (*PNLC GA DOC01_PNLC GA Programme*) for review of the group. The agenda was approved as presented.

2.0 PRESENTATION OF PNLC ACCOMPLISHMENTS IN 2024-2025 AND WORKPLAN FOR 2026

2.1. Ms. Isdahartati of the PNLC Secretariat presented the Network accomplishments in 2024-2025 as well as the workplan for 2026. (*PNLC GA DOC02_Accomplishment Report and PNLC Workplan 2026*). Highlights of the report are as follows:

- The PNLC Operational plan has 4 strategic components: (i) Governance Mechanism; (ii) Programs; (iii) Communication and Knowledge Management (Internal & External); and, (iv) Partnerships and Resource Mobilization.
- Based on the activities for 2024 – 2025, majority of the activities have been accomplished while some are continuing. Achievements for Component 1: Governance accomplishments, include the conduct of Executive Committee and General Assembly meetings, as well as the preparation and dissemination of key documents and proceedings to strengthen institutional coordination within the network. She emphasized that PNLC continues to serve as a regional platform connecting universities and research institutions to support integrated coastal and marine management. She further presented major achievements for Component 2: Programs. Accomplishments include the organization of joint PNLG–PNLC forums, capacity development trainings on blue carbon and marine spatial planning (MSP), student exchange programs, and collaborative conferences. PNLC also actively contributed to regional initiatives such as the ASEAN ENMAPS project and the Integrated River Basin Management (IRBM) project, which involve multiple member institutions across ASEAN countries. In addition, she highlighted efforts in strengthening communication (Component 3) through the SEA Knowledge Bank (SEAKB), which serves as a regional platform for knowledge sharing, documentation, and networking among members. Ms. Isdahartati also outlined key action points and ongoing

initiatives, including the establishment of thematic working groups, promotion of youth engagement programs, development of communication strategies, and strengthening of resource mobilization and financial sustainability plans. She noted that several activities have been successfully completed, while others remain ongoing and require continued collaboration among members. Ms. Isdahartati also highlighted efforts on sustainable financing, including member contributions and the development of a fundraising strategy. This includes identifying funding opportunities, ongoing discussions on membership fees, and strengthening support from IPB and PRF. (see DOC03_Member contributions).

- Looking ahead, the 2026 workplan focuses on scaling up integrated capacity development, enhancing technical support for SDS-SEA implementation, strengthening partnerships, and improving knowledge-sharing systems. Key priorities include expanding training programs, promoting youth and internship initiatives, improving the utilization of the SEA Knowledge Bank, and developing sustainable funding strategies. She concluded by emphasizing that sustained collaboration, resource mobilization, and active engagement of PNLC members are essential to strengthen the network's contribution to sustainable coastal and ocean governance in the region. The PNLC workplan 2026 includes the objectives, components, targets, indicators and specific activities for the year. It also included possible engagements of PNLC members.
- **Action to be taken**: The PNLC Secretariat will circulate the 2026 work plan to all PNLC members for reference, and members will provide feedback and complete their inputs accordingly.

3.0 THE PEMSEA REGIONAL STRATEGIC FRAMEWORK: SUSTAINABLE DEVELOPMENT STRATEGY FOR THE SEAS OF EAST ASIA IMPLEMENTATION PLAN (SDSSEA 2023-2030) AND THE ROLE OF PNLC IN IMPLEMENTATION

3.1. Ms. Aimee Gonzales, Executive Director of the PEMSEA Resource Facility (PRF), presented "The PEMSEA Regional Strategic Framework: Sustainable Development Strategy for the Seas of East Asia (SDS-SEA) Implementation Plan 2023–2030 and the Role of PNLC in Implementation." She highlighted PEMSEA's long-standing regional collaboration, involving national governments, local authorities, universities, and partner institutions, aimed at achieving healthy oceans, communities, and economies. She explained that the SDS-SEA Implementation Plan 2023–2030 provides a comprehensive framework consisting of multiple priority programs, outcomes, and indicators that guide regional efforts in integrated coastal and ocean governance. Aimee further outlined the progress of the mid-term implementation review, noting that while several targets are on track, some remain in progress or face challenges, particularly in areas such as climate change adaptation, pollution management, and sustainable financing. She emphasized the importance of strengthening institutional sustainability, strategic programming, and resource mobilization to ensure the long-term effectiveness of PEMSEA initiatives. Ms. Gonzales also elaborated on the critical role of the PEMSEA Network of Learning Centers (PNLC) in supporting the implementation of SDS-SEA, particularly in capacity development, knowledge generation, and stakeholder engagement. She highlighted key contributions of PNLC, including promoting integrated coastal management (ICM) systems, supporting local government reporting, developing learning centers for integrated river basin management (IRBM), and advancing ocean literacy and knowledge-sharing initiatives. She concluded by emphasizing that stronger partnerships, cross-network collaboration, and continuous capacity building are essential for achieving the goals of SDS-SEA and ensuring sustainable coastal and ocean governance in the region.

4.0 COLLABORATION WITH PEMSEA PARTNERS AND PROJECTS

4.1. Ms. Cristine Ingrid S. Narcise presented an overview of the GEF/UNDP/ASEAN Project on Effectively Managing Networks of Marine Protected Areas in the Large Marine Ecosystems of the ASEAN Region (ASEAN ENMAPS Project). She explained that the project aims to strengthen the management of marine protected area (MPA) networks and marine corridors across selected large marine ecosystems in the ASEAN region, with a focus on conserving biodiversity and supporting sustainable fisheries and ecosystem services. The project is funded by the Global Environment Facility (GEF), implemented by UNDP, and executed by the ASEAN Centre for Biodiversity, involving Indonesia, the Philippines, and Thailand over a five-year period (2024–2029).She highlighted that the project adopts a science-based and integrated approach, including assessing ecological, socioeconomic, and institutional connectivity to define effective MPA networks. Key components include improving MPA management, strengthening regional cooperation, and enhancing adaptive management through monitoring, evaluation, and knowledge-sharing platforms. She also emphasized the role of capacity development, including training on integrated coastal management (ICM), marine spatial planning (MSP), nature-based solutions, and sustainable fisheries management. Ms. Narcise further elaborated on the collaboration with PNLC, particularly in delivering capacity-building programs, developing training modules, and conducting pilot testing in project sites across Indonesia, Thailand, and the Philippines. She highlighted opportunities for collaboration in areas such as blue economy development, ecosystem restoration, community-based management, and blue carbon initiatives. She concluded by emphasizing that strong partnerships among PNLC members, governments, and regional institutions are essential to enhance the effectiveness and sustainability of MPA networks in the ASEAN region.

4.2. Ms. Nancy Bermas from the PEMSEA Resource Facility presented the GEF/UNDP/ASEAN Project on Reducing Pollution and Preserving Environmental Flows in the East Asian Seas through Integrated River Basin Management (IRBM). She began by highlighting the importance of river basins in the East and Southeast Asian region, which host a significant portion of the global population and water resources but face increasing challenges such as pollution, water insecurity, and climate-related risks. She explained that the project adopts a source-to-sea (S2S) approach, linking upstream and downstream systems to address key flows such as water, sediments, pollutants, and ecosystem services. The project, funded by the Global Environment Facility (GEF) and implemented by UNDP with PEMSEA as the executing agency, involves six ASEAN countries—Cambodia, Indonesia, Lao PDR, Malaysia, the Philippines, and Vietnam—over a five-year period (2023–2027). It aims to establish functional IRBM mechanisms in priority river basins to reduce pollution, sustain environmental flows, and enhance climate resilience. Key components include state of river basin reporting, pilot demonstration projects, and knowledge management and capacity development. Ms. Bermas further highlighted several pilot projects addressing priority issues such as wastewater management, solid waste reduction, sediment control, mangrove rehabilitation, and nature-based solutions. She also emphasized the role of PNLC in supporting capacity development through the establishment of IRBM learning centers, training programs, and regional knowledge-sharing platforms. She concluded by stressing that strengthened governance, regional cooperation, and capacity building are essential to operationalize integrated river basin management and achieve sustainable source-to-sea outcomes in the region.

4.3. Dr. Lusita Meilana from the Center for Coastal and Marine Resources Studies (PKSPL), IPB University, presented the “PKSPL Regional Summer Course on Marine Litter Management, Policy, and Integrated Coastal Governance in the East Asian Seas Region.” She introduced the program as a collaborative initiative between PKSPL IPB University, the Directorate of

International Education IPB University, and the PEMSEA Network of Learning Centers (PNLC), aimed at strengthening regional capacity in addressing marine litter and coastal governance challenges. The course is designed to provide participants with a comprehensive understanding of marine litter issues, including scientific, policy, and practical dimensions, while also equipping them with skills in monitoring, data analysis, and environmental risk assessment. She further explained that the program integrates lectures, field learning, and interactive sessions, covering topics such as global and regional marine litter issues, policy and governance frameworks, circular economy approaches, and community-based solutions. The course also emphasizes cross-country knowledge exchange and hands-on experience to enhance participants' practical understanding of integrated coastal management. In addition, Dr. Meilana highlighted that the program contributes to strengthening regional collaboration and developing future professionals in coastal and marine management. She encouraged all PNLC member institutions to actively participate by nominating and sending their students to join the summer course, emphasizing that the program serves as an important platform for capacity development, networking, and knowledge sharing across the East Asian Seas region.

4.4. Dr. Brian Szuster from the University of Hawai'i shared potential funding opportunities to support regional blue carbon initiatives, particularly through the Henry Luce Foundation Asia Program. He introduced a proposed project titled "Blue Carbon Implementation in Southeast Asia: Enabling Equitable Market Development and Supporting Local Governance," which aims to address key challenges in blue carbon development, including financial mechanisms, governance frameworks, and social equity considerations. The proposal focuses on developing tools for carbon accounting and project feasibility, strengthening local government roles in managing blue carbon resources, and integrating local and indigenous knowledge to support long-term ecosystem stewardship. He explained that the initiative will involve a series of activities such as workshops, field studies, and collaborative research to enhance the implementation and scalability of blue carbon projects in the region. Dr. Szuster emphasized that strong partnerships among universities, PNLC members, and regional organizations are essential to operationalize blue carbon initiatives and achieve measurable climate benefits. He encouraged all PNLC members to actively participate and submit proposals under this funding opportunity, highlighting it as a strategic platform to advance collaborative research, capacity development, and project implementation in Southeast Asia.

5.0 OTHER BUSINESS: ANNOUNCEMENTS BY PNLC MEMBERS

5.1. Dr. Wansuk Senanan's presentation on Nature-based Solutions (NbS) for Coastal Resilience emphasizes the urgent need to strengthen coastal ecosystems in East Asia as natural defenses against climate change impacts, rising sea levels, and pollution. She highlighted how integrated approaches, such as mangrove rehabilitation, watershed management, and ecotourism, can reduce vulnerabilities while sustaining livelihoods and biodiversity. The initiative engages PNLC members and regional partners in pilot projects, capacity development, and policy support to operationalize NbS within riverbasin and coastal management frameworks. By combining science, community participation, and governance, the program aims to build resilient coastal zones that safeguard ecosystems, enhance water security, and promote sustainable development across ASEAN countries.

5.2. Prof. Kenneth Leung from the City University of Hong Kong shared insights on potential funding opportunities and strategic collaboration pathways to support regional initiatives under PEMSEA and PNLC. He emphasized that Hong Kong has strong access to research and training funding, highlighting a recent ocean-related technical program that successfully secured approximately HKD 10 million. He noted that such funding schemes are not only available for scientific

research but also for capacity-building programs, including training, workshops, and regional collaboration projects. Prof. Leung stressed that one of the most critical steps in accessing funding is to clearly identify priority topics of interest, as this enables more effective mapping of suitable funding sources and increases the likelihood of successful proposals. He further explained that Hong Kong institutions are actively open to collaborative research, particularly in areas related to marine pollution, blue carbon, and ecosystem management. He encouraged PNLC members to explore joint proposals and partnerships, including contributing to international initiatives such as white papers to UNESCO, which can strengthen global visibility and attract additional support. In addition, he introduced the upcoming *ICMPE-11 & YES-2026 Joint Conference*, scheduled to be held on 19–22 August 2026 in Jeju, Republic of Korea, as a key platform for knowledge exchange, networking, and collaboration among scientists and practitioners in marine pollution and ecosystem research. Prof. Leung concluded by reaffirming his commitment to contribute further to PEMSEA and PNLC initiatives, emphasizing that strategic alignment between research priorities, funding opportunities, and regional collaboration is essential to scale up impactful marine and coastal programs.

5.3. Prof. Xue from the Fujian Institute for Sustainable Oceans (Xiamen University), China, shared opportunities for strengthening regional collaboration through training and capacity-building initiatives. He highlighted upcoming training workshops to be held in Beijing and Xiamen, which will include travel support for selected participants. He invited all members to actively participate and encouraged institutions to take part as co-organizers, emphasizing that such involvement would enhance ownership, visibility, and impact of the programs. He also introduced ongoing activities under FISO, which provide additional platforms for collaboration, knowledge exchange, and joint implementation of marine and coastal initiatives. Prof. Xue expressed his strong commitment to supporting PNLC activities, particularly in advancing training programs, fostering institutional partnerships, and strengthening technical capacity within the network. He concluded by emphasizing that sustained engagement and active participation from PNLC members are key to maximizing these opportunities and expanding regional cooperation.

5.4. Dr. Shenghui Li from Guangdong Ocean University, representing the Marine Spatial Planning (MSP) Working Group, presented key insights on advancing integrated ocean management through MSP approaches. She highlighted the importance of spatial planning in balancing ecological protection, economic development, and sustainable resource use, particularly in the context of blue economy development. The presentation emphasized that MSP serves as a critical tool to reduce conflicts among ocean uses, optimize spatial allocation, and support ecosystem-based management. She further outlined the role of MSP in integrating blue carbon ecosystems into planning frameworks, ensuring that conservation and climate mitigation objectives are embedded within spatial development strategies. The discussion also highlighted the importance of strengthening collaboration among institutions, enhancing technical capacity, and promoting data-driven decision-making to support effective MSP implementation. Dr. Li concluded by emphasizing that the MSP Working Group plays a key role in supporting regional coordination, knowledge exchange, and the development of strategic frameworks to advance sustainable and integrated coastal and ocean governance

5.5. Dr. Sakanan Plathong of the Prince of Songkhla University presented a video summarizing the ICM-MSP outputs of the MSP group during the Regional Blue Carbon Workshop. It highlighted a Marine Spatial Planning framework that seeks to overcome fragmented ocean governance by establishing a collaborative system that balances conservation with sustainable economic growth. Anchored by the PNLC MSP working group, it will integrate strategies such as marine protected areas, OECMs, and locally managed areas, alongside integrated coastal management to link land and sea. Implementation follows a four-step roadmap: funding, collaboration, joint research, and capacity building, supported by global partners such as the

World Bank, ADB, and GEF. By aligning ecological protection with investment stability, the framework aims to create a resilient and equitable maritime order, offering a potential blueprint for managing oceans worldwide.

5.6. Mr. Mateus Salvador from UNITAL shared his commitment to supporting PEMSEA and PNLC initiatives through ongoing project-based contributions. He stated that he is currently managing a project that includes provisions for regional collaboration and capacity development, and he expressed his intention to allocate part of the project funding to support PEMSEA-related activities. He emphasized that such contributions can help strengthen joint programs, particularly in areas of research, training, and knowledge exchange among member institutions. He further highlighted the importance of leveraging existing projects as flexible funding sources to support regional priorities, especially in situations where dedicated funding is limited. By aligning project outputs with PNLC and PEMSEA objectives, he noted that members can create synergies that enhance both project impact and regional cooperation. He concluded by encouraging other members to explore similar approaches, where ongoing or planned projects can contribute to collective initiatives and strengthen the sustainability of the network.

5.7. Action to be taken: The PNLC Secretariat will provide further information to PNLC members regarding the activities once the details have been finalized.

6.0 NEXT STEPS

6.1 Prof. Yonvitner emphasized the importance of consolidating and systematically implementing the outcomes of the meeting. The PNLC Secretariat will finalize and disseminate the PNLC Workplan 2026, incorporating feedback from members.

6.2 PNLC will strengthen its communication and knowledge management systems by optimizing the use of the SEA Knowledge Bank (SEAKB), increasing contributions of case studies and technical outputs, and enhancing visibility through newsletters, reports, and digital platforms. Members are expected to regularly share updates, publications, and best practices.

6.3 Resource mobilization efforts among all members will be intensified through the development of joint proposals and by leveraging existing funding opportunities, including those introduced by partners such as University of Hawai‘i and other regional institutions. Members are also encouraged to explore co-financing mechanisms, membership contributions, and the integration of PNLC-related activities into ongoing projects to support financial sustainability.

6.4 Capacity development programs will be scaled up through the joint implementation of training courses and exchange programs, focusing on key thematic areas including Integrated River Basin Management (IRBM), Marine Spatial Planning (MSP), Integrated Coastal Management (ICM), blue carbon, and the blue economy.

7.0 SPECIAL SESSION: CONSERVATION AND MANAGEMENT OF MARINE BIODIVERSITY

7.1. **Prof. Kenneth Leung** from the City University of Hong Kong presented on “An Integrated Approach to Combating Biodiversity Loss,” emphasizing the critical role of biodiversity in maintaining ecosystem functions and supporting human well-being. He highlighted that marine biodiversity is increasingly threatened by multiple pressures, including climate change, habitat

loss, pollution, overexploitation, and biological invasions. To address these challenges, he introduced an integrated strategy that combines pollution reduction, sustainable fisheries management, and ecosystem restoration as key approaches to enhance resilience and recovery. Through a series of case studies, he demonstrated successful interventions, including the Harbour Area Treatment Scheme (HATS) in Hong Kong, which significantly reduced pollution levels and enabled the recovery of marine ecosystems, including the return of coral species and improved water quality. He also highlighted the positive impacts of the trawl ban policy, which led to substantial increases in biodiversity, species abundance, and ecosystem functionality. In addition, he presented innovative nature-based solutions such as eco-engineered shorelines and the use of oyster shells to enhance biodiversity and improve water quality through biofiltration. Prof. Leung emphasized that effective biodiversity conservation requires integrated management approaches that combine science, policy, and practical implementation. He also highlighted the importance of knowledge generation, stakeholder engagement, and international collaboration, including contributions to global initiatives such as the UNESCO Ocean Decade White Papers. He concluded by stressing the need for scalable, science-based, and nature-based solutions to address biodiversity loss and support sustainable coastal and marine ecosystems.

7.2. Dr. Elizaldy Acebu Maboloc presented on “Larval Biology and Cultivation of Marine Invertebrates: Implications for Conservation and Aquaculture Management,” highlighting the critical role of early life stages in understanding marine population dynamics and improving aquaculture practices. He explained that larval stages are highly sensitive to environmental stressors, making them important indicators of ecosystem health and key to successful species cultivation. His research focused on commercially and ecologically important species such as sea urchins and pearl oysters, which are increasingly targeted for aquaculture development due to growing market demand and declining wild stocks. Through experimental studies, he demonstrated how environmental conditions, including water quality and temperature, significantly influence larval survival, growth, and development. For instance, findings showed that sea urchin larvae performed better in natural seawater compared to artificial conditions, while pearl oyster larvae exhibited higher survival and growth rates at elevated temperatures. He also highlighted advances in hatchery techniques, including controlled spawning and larval culture systems, which can support both aquaculture production and stock enhancement efforts. Dr. Maboloc emphasized that integrating larval biology research into management strategies can improve aquaculture efficiency while supporting conservation objectives, particularly in restoring depleted populations and enhancing ecosystem resilience. He concluded by stressing the importance of interdisciplinary research, combining ecology, aquaculture technology, and environmental monitoring to ensure sustainable marine resource management in the face of increasing environmental pressures.

7.3. **Dr. Meng Yan** from the City University of Hong Kong presented on *“Applications of eDNA Techniques in Marine Conservation and Fisheries Studies,”* highlighting the growing importance of environmental DNA (eDNA) as an innovative and non-invasive tool for monitoring marine biodiversity. She explained that eDNA refers to genetic material collected from environmental samples such as water, which allows for the detection of species presence without direct observation or capture. This approach offers high sensitivity, efficiency, and the ability to assess a broad range of species simultaneously. She demonstrated the application of eDNA in evaluating the effectiveness of Marine Protected Areas (MPAs), where studies showed higher biodiversity and improved community structure in protected zones compared to non-protected areas. The method was also applied in long-term fisheries monitoring programs, enabling more comprehensive and efficient assessment of fish communities across multiple sites. In addition, she highlighted the use of eDNA for environmental health monitoring, including the detection of harmful species and indicators of ecosystem condition. Dr. Meng also introduced advancements

in methodologies, including improved sampling techniques, new PCR-based detection methods, and the development of databases to support large-scale biodiversity assessments. She concluded by emphasizing that eDNA has strong potential to complement conventional monitoring approaches, providing cost-effective, scalable, and data-rich solutions for marine conservation and fisheries management

8.0 CLOSING

8.1. Prof. Dr. Qinhua Fang, Vice-President of the PEMSEA Network of Learning Centers (PNLC), delivered the closing remarks of the 5th PNLC General Assembly, expressing his sincere appreciation to all supporting institutions and partners, including the University of Hawai‘i, the University of the Philippines, the PEMSEA Resource Facility (PRF), IPB University, FISO, and SKLMEH, among others, for their contributions to both the Blue Carbon Workshop and the General Assembly. He also extended his gratitude to all speakers and participants for their insightful presentations and productive discussions, including the Special Session on the Conservation and Management of Marine Biodiversity led by the Regional Center of Excellence, SKLMEH in Hong Kong, China. Reflecting on the discussions, Prof. Fang emphasized the importance of building on the network’s accomplishments and strategic directions, particularly in implementing the 2026 workplan and strengthening PNLC’s engagement in the PEMSEA Regional Strategic Framework. Prof. Fang highlighted the need to actively pursue collaborative opportunities, including joint projects and proposal development, to further advance regional initiatives. He also acknowledged that many achievements of the network have not been fully recognized and encouraged the Secretariat to strengthen communication and information sharing through newsletters, email lists, and annual reports to enhance visibility and engagement among members. Furthermore, he encouraged all members to actively share information and contribute to the network’s activities, noting that stronger participation is essential for the sustainability of PNLC. He also invited participants to review the draft resolutions and action points resulting from the meeting, which will be circulated by the Secretariat for further input. Concluding his remarks, Prof. Fang expressed optimism for the future of the network, emphasizing the strength of its members, ongoing collaborations, and the emergence of new ideas and initiatives. He officially closed the 5th PNLC General Assembly and wished all participants a safe journey home.

ANNEXES

ANNEX 1: 5th PNLC GENERAL ASSEMBLY (GA) AGENDA

https://docs.google.com/document/d/1U7lBUTnchAksFJZlHf90bRtr9JBBuzwZ/edit

ANNEX 2: PNLC GA DOCUMENTS, PRESENTATIONS, AND PHOTOS
https://drive.google.com/drive/folders/14X3hld0eH50D0YiKQmDWuFvCN2Ofwddc?usp=drive_link

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