SESSION 5.4
Higher Education Forum on Implementation of UN SDG 14 and other related Ocean and Coastal Goals
1.1 INTRODUCTION

1.1 Higher education institutions play a vital role towards the sustainable development of the coasts and seas through its core activities in education, research, governance and external leadership. Building on-the-ground capacity in implementing and scaling up integrated coastal management (ICM) programmes involve training and maintaining a critical mass of ICM leaders and practitioners in the East Asian region who can contribute to effective and efficient implementation of SDG 14 and other related ocean and coastal goals. In line with this, PEMSEA’s capacity development strategies include mobilizing universities and research institutes in increasing technical support available on the ground, providing scientific inputs from experts’ advice in focus issues in various phases of ICM cycle and building capacity and skills to replicate and scale up the ICM practice in the region. This forum provided a platform for university leaders to share, discuss and commit to strengthening collaboration among ICM Learning Centers (ICM LCs) through joint initiatives under the wider umbrella of the PEMSEA Network of Learning Centers (PNLC), with an outcome that leads to education, research and outreach through various innovative activities.

1.2 The session was opened by the Session Chair, Dr. Luky Adrianto, Dean of the Faculty of Fisheries and Marine Science of the Bogor Agriculture University of Indonesia. He provided a brief introduction and highlighted the importance of building networks among the
Universities to achieve a long-term implementation and achieving success for SDG 14. Dr. Luky then gave an overview of the session and laid out its objectives for everyone’s reference on the proposed flow of discussion.

KEYNOTE ADDRESS

1.3 On behalf of President Danilo Concepcion of the University of the Philippines, the keynote speech was delivered by Dr. Nestor Yunque, Vice President, Administration, University of the Philippines. He talked about the role of higher education in terms of environmental protection on his topic “Current Initiatives in implementing SDG 14: The Role Learning Centers and the Academe”. In his speech, he mentioned the serious threats that coastal and marine environment is facing such as toxins from run-off, industrial pollution, over and destructive fishing activities that destroy coral reefs and climate change and thus, academe may serve as hubs for the conservation efforts for these ecosystems.

1.4 In response to achieving the goal for the SDG 14: Life below waters, Dr. Yunque explored the tripartite role of the university to live by three functions, to teach, to conduct research and to do an extension service that contributes directly to marine conservation efforts. He also added that the University can be a driving force to bring in together different sectors of the community, the local government and national government agencies, international governmental organization, research funding agencies, private sectors, civic groups and other national and international universities for a common interest.

1.5 He then introduced the efforts and initiatives of two institutions from UP who are also members of the PEMSEA Network of Learning Centers (PNLC); the UP-Marine Science Institute (UP-MSI) which is one of the two Regional Centers of Excellence (RCoE) specifically in the field of Coral Reef Research, and the College of Fisheries and Ocean Sciences in UP Visayas campus, one of the 16 PEMSEA ICM Learning Centers (ICM LCs) is one of the specific units system-wide that support activities in achieving targets under SDG 14. He laid down the efforts of these UP units in terms of reducing marine pollution, protecting and restoring marine and coastal ecosystems, reducing ocean acidification, sustainable fishing, conserving coastal and marine areas, increasing the economic benefits and supporting small-scale fisheries and generally increasing scientific knowledge, research and technology for ocean health, among others.
2. **PEMSEA and ICM Learning Centers: Collaboration Avenues for Capacity Building**

2.1 Following the Keynote Address, **Ms. Johanna Diwa-Acallar**, PEMSEA’s Capacity Development Manager, PEMSEA gave a presentation on the role of PEMSEA in building the capacity in the region through its strategic approach in mobilizing higher education institutions as ICM Learning Centers that provide technical assistance and scientific expertise in the sites. In her presentation she highlighted the capacity building strategy of PEMSEA towards building, creating and maintaining a critical mass of ICM practitioners.

2.2 Ms. Diwa-Acallar presented a summary of the SDG related initiatives from ICM LCs as reflected in the university profile on the Seas of East Asia Knowledge Bank (SEAKB) platform, such as related curriculum, research and training of their respective institutions that support the implementation of SDG14 and other related ocean and coastal goals. After highlighting various initiatives of ICM LCs and the kinds of support they provide in the sites, the presentation laid out some considerations for the response of the speakers and panelists on potential collaboration on initiatives related to education, training and research needs in the region. The presentation from PEMSEA set the agenda for the discussion in the plenary as each university tried to respond to the actions expected from ICM LCs. Over and beyond, the PNLC, as a network of ICM LCs working towards the sustainable development of our ocean and coasts, provides a platform for knowledge exchange to further address the capacity gaps in supporting the implementation of SDGs related to oceans and oceans.

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

a) **Training Programmes and Course Materials**

PEMSEA is heading the development and certification of training manuals that can be used and adopted by the ICM LCs to fit their local context. The most recent published ICM Training Manual is now available for local adoption and translation in local language. PEMSEA invited ICM LCs to lead the adoption of the material to their local use and translation to local language, when deemed necessary.

The ICM LCs were also encouraged to reflect and tap their expertise in areas proposed for new manuals especially those focusing on the following areas; climate change adaptation and disaster risk reduction (CCA/DRR), MPA/MPA Networking, Ecosystem Services Valuation, and Sustainable Fisheries manuals. Draft manuals on Coastal Use Zoning and Integrated Information Management Systems are also being finalized for accreditation and publication as PEMSEA certified materials.

b) **Research Development and Resource Sharing**
The plenary presentations and panel discussions were expected to illustrate not only the existing research projects in each university but also include further studies that need to be conducted to address the specific challenges they face. Highlighting research strengths while identifying opportunities for improved synergy with existing research areas from other members can potentially lead to development of research clusters addressing respective research priorities of the universities that can be linked to available international funds for capacity building. The ICM LCs were asked to identify their interests for sharing and exchanging knowledge and best practices more efficiently.

Further, ICM LCs whose research interests are similar and in line within the fields of CCA/DRR, and ocean law and marine governance were asked to lead the nomination of potential institutions that they can work with for joint research and training needs as Regional Center of Excellence demonstrating expertise in the same fields.

c) **Postgraduate Curriculum Development and Innovative Learning Delivery Modes**

Initiatives under this group aim to establish a working group on Joint ICM Curriculum Development under the PNLC umbrella. It aims to form a cluster group with collective capacity to lead initiatives on joint curriculum development to integrate ICM skills into postgraduate courses, curricula and programmes, along with the development of a transdisciplinary curriculum focusing on postgraduate ICM course.

Through the internet technology, new modes of delivery can be utilized to spread more access through alternative learning modes such as e-learning, massive open online courses (MOOC), multi-node courses, webinar, intensive seminars, etc. A range of delivery modes can be pursued where PEMSEA, through Seas of East Asia Knowledge Bank (SEAKB) platform, is expected to act as web-based clearing house (as collection point of content), promote free sharing of content and sharing of online resources, host e-learning courses or MOOCs, facilitate knowledge exchange activities, etc.

The importance of international exchange for learning new methods and skills in ICM implementation, experiencing different approaches on the ground, or collaborating with a variety of mentors and graduate students and general knowledge exchange can also be developed providing internship opportunities or research exchange through inter-university exchange programmes for students/researchers.
3. **PLENARY: UNIVERSITY-LED INITIATIVES CONTRIBUTING TO SDG 14 AND OTHER RELATED OCEAN AND COASTAL GOALS**

3.1 In the plenary session, three representatives from ICM LCs presented their initiatives in helping achieve the ocean-related SDGs in a holistic way, through their core activities (teaching, training and research). The speakers provided presentations highlighting the initiatives of their respective institutions in three core areas; education, research and training while also expressing their interests in the above mentioned initiatives. The presentations highlighted their strong areas with existing initiatives that can be potentially tapped or feed into the joint mechanisms, e.g. existing ICM curriculum, similar research interests, training programmes.

3.2 **Dr. Arif Satria**, Rector, Bogor Agricultural University, Indonesia provided a brief introduction of the university and its existing international collaborations. He also presented a summary of the SDG goals addressed by the academic programs and research at BAU through its research centers, including the Center for Coastal and Marine Resources Studies (PKSPL/CCMRs), which is one of the ICM Learning Centers of PEMSEA. He then described how BAU serves as a hub for national knowledge management systems to address the targets of SDG 14.

3.3 He emphasized that through the strategy called Agro-Maritim 4.0, the University promotes integration of land and marine management that involves complex social, economic and ecological systems, thus requires transdisciplinary, integrated and participative. In his closing remarks, he stressed that in the era of SDG challenges, knowledge transfer, robust IT and collaboration are important in development of learning processes, knowledge transfers & management and innovative teaching/seminar/workshop techniques.

3.4 Finally, he committed BAU’s cooperation in the identified areas that included double degree or sandwich programs for ICM magister Course. He also expressed interest in initiatives such as in credit-sharing scheme among ICM LCs, and development of e-learning courses. As for training, he added the possibility of creating summer course offering on coral reef and sea farming and training workshops on tools including Fish Stock Assessment, Environmental Sensitivity Index, EAFM, Marine Protected Area Management, etc. For research development, BAU is very much interested in pursuing joint research projects on tropical marine research as well as joint publications.

3.5 **Dr. Hernando Robles**, President, Cavite State University, Philippines (Cavite State University is newest designated ICM Learning Center) started his presentation with a brief introduction of the university and its programs, especially the existing initiatives in areas under the CvSU’s Environmental Research Agenda 2015-2020 such as solid waste management, including
hazardous wastes and sewage treatment plants, sugar watershed management, groundwater conservation, and coastal resource management and climate change, among others. CvSU supports Cavite’s commitment to SDG 6 on water use and supply management and the initiatives that are being undertaken to ensure security of water supply, in addressing sanitation problems and mitigating the impacts of climate change.

3.6 On SDG 14, CvSU’s collaborative activities in support of the ICM program of Cavite Province include hosting of Integrated Information Management (IIMS), membership in the State of the Coasts Technical Working Group, conduct of studies on water resources management, aside from various capacity development and support programs. It was highlighted that CvSU hosted the 1st Cavite Water Summit and was instrumental in the signing of Cavite Water Declaration including providing technical inputs/workshop facilitation on identified targets. A MOA signing and ground breaking ceremony for hosting Cavite Water Testing Laboratory was also recently conducted in June 2018. As the newest member of PNLC, Pres. Robles also expressed that CvSU is willing to work with PEMSEA in development of manuals and to serve as a venue for trainings, seminars and conferences.

3.7 **Prof. Praparsiri Barnette**, Chair, PNLC-Burapha University, Thailand gave an overview of various research initiatives conducted by PNLC-Burapha University. Burapha University (BUU) is committed to promote sustainable development of coastal and marine resources and provide technical assistance and expertise to national and local governments and communities in the region through conduct of training, research, studies and technical advice to ICM-PEMSEA demonstration sites in Thailand contributing to the goals of the SDS-SEA. Since 2017, PNLC-BUU has facilitated the planning and organizing inception workshops for the under the GEF/UNDP/PEMSEA ICM scaling up project in Thailand and other relevant PEMSEA training workshops. Issues identified by four provinces include climate change adaptation (SDG13.1), pollution reduction (SDGs 13.3), sustainable fisheries (SDGs 2 and 14) and marine habitat conservation (SDG14). PNLC-BUU also hosted additional local discussion on pressing environmental issues. Demonstration Artificial Mussel, an innovative device of MERIT, the University of Hong Kong for monitoring heavy metals on Saensuk Municipality coastal water. Sharing platform of ICM education program to Hyogo parliaments of Japan. Ongoing international collaborative activity is developing a joint-research with Xiamen University, P.R.China and will have cooperation with the Center for Southeast Asian Studies at the University of Hawaii at Manoa on its proposal being prepared for the Henry Luce Foundation Initiative on Southeast Asia.

4. **PANEL DISCUSSION**

4.1 The panel discussion that followed generated inputs from the following panelists:
a) **Dr. Ario Damar,** PNLC Chair, 2017-2018

Dr. Damar highlighted the role of ICM LCs to support the ICM sites through closer cooperation and assistance with the local government. He reminded that the ICM LCs are not only expected to provide technical assistance but to also build the capacity of the local government, and build knowledge through research undertakings of the university. He encouraged the development of collaborative training between the local government and the ICM LC, supported by the private sector, especially on funding the activity, to make it a sustainable undertaking.

b) **Dr. Eduardo Aniceto Serrao,** Vice Rector, National University of Timor Leste

Vice Rector Serrao from UNTL highlighted the importance of establishing courses at the university level including coastal management and institutional capacities. He expressed the importance of exchange opportunities not only for faculty but also for students, especially through internship programmes.

c) **Mr. Roel Ravanera,** Vice President, Xavier University

Mr. Ravanera from Xavier University indicated three areas of collaboration supported by Xavier University. First, XUU has existing basic marine ecology manual and interested to work with PEMSEA in developing other manuals that can be used by staff and students as materials. On research, XU is interested in working with ecological resource assessment and mapping through development of a bay-wide database through GIS basemark. Finally, he seconded Dr. Damar’s emphasis on closer collaboration to support local governance through a joint training as part of the university’s outreach agenda. He concluded that 3Cs are important in working together for the SDGs; connectedness, collaboration, and commitment.

d) **Mr. Eusebio Dias Quintas,** Vice Rector, Oriental University of Timor Leste

Vice Rector Quintas read a statement on UNITAL’s commitment to participate in the sustainable development of the coasts and seas through education, research, governance and external leadership through closer cooperation with the Government typically at district levels to develop SOC report, implementing blue economy which is linked to livelihoods diversification, and providing training to boost the capacity of the coastal community in Liquiça Municipality targeting Ecotourism group.

5. **OPEN FORUM**

5.1 The floor was opened for questions and reactions from the attendees of the session. Three participants were selected to raise their reactions and comments regarding the session.
5.2 With the three (3) “C’s” factor which Mr. Ravena from Xavier University enumerated, Dr. Michael D. Pido, Dean and Professor from Palawan State University, Philippines added a “P” factor that stands for “popularization”. According to him, the results and findings from the studies and projects should be transmitted and communicated to a much greater audience. Also, he added that scientific and technical outputs should be translated in a version which can be easily translated and utilized by politicians and decision makers. They make the crucial decisions and it is important that the science produced be popularized and understand by them.

5.3 Dr. Ruby Gonzales from Mindanao State University on the other hand, also came up with another initial, “M” which means “member”. She asked how to be a member of the PEMSEA and be part of the ICM Learning Center. Ms. Johanna Diwa responded that there is an application process for designation of ICM Learning Centers. There’s an existing guideline for evaluation and screening by PEMSEA technical committee.

5.4 Ms. Diwa-Acallar was also the final reactor for the session who synthesized that collaboration was the common ground identified by all the speakers as also highlighted in all the presentations, and it is an interesting input for discussion in the planning session following the morning forum.

6. CONCLUSIONS AND RECOMMENDATIONS

6.1 Dr. Luky Adrianto concluded the session by emphasizing that strong collaboration between the local government, the academe and other institutions is important in working together for the SDG 14. He explained that as the primary goal of designating ICM Learning Centers, close collaboration should be encouraged and supported through joint training initiatives responding to their needs of the local government in the implementation of the ICM programs. It was highly encouraged that the succeeding PNLC Meeting Planning Workshop should consider discussing how a collaborative training programme between PNLG and PNLC can be made possible.