



THE EAST ASIAN SEAS CONGRESS

25 Years of Partnerships for
Healthy Oceans, People and Economies
Moving as One with the Global Ocean Agenda

27-30 November 2018 • Iloilo Convention Center, Philippines



TRACK 3: BIODIVERSITY AND COASTAL MANAGEMENT

SESSION 3.2

MABIK: Promoting Biodiversity in the Seas of East Asia

CONVENER:



Marine Biodiversity
Institute of Korea



EAS Congress 2018

25 Years of Partnerships for Healthy Oceans, People and Economies: Moving as One with the Global Ocean Agenda

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Partnership Hub Track 3: Biodiversity and Coastal Management

3.2 - MABIK: Promoting Biodiversity in the Seas of East Asia

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Session Proceedings

Convener

National Marine Biodiversity Institute of Korea (MABIK)

Partnership Hub Chair:

Dr. Willy Campos, University of the Philippines in the Visayas

INTRODUCTION

- 1.1 Aligning with UN SDGs and the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA), MABIK would like to introduce itself to EAS partners by describing facilities, research projects and outreach programs. Since 2015, MABIK has conducted researches on marine biodiversity including sea turtles, sea snakes, and *Sesarmops intermedius*. MABIK has run and expanded outreach programs as well as research projects for better ocean literacy. MABIK wishes to meet new partners and to establish effective networks for conservation and sustainable use of marine biodiversity.
- 1.2 Through the Partnership Hub session, MABIK hopes to initiate collaborative research projects, outreach programs and joint workshops. It would be a good opportunity to establish joint research laboratories in mutual institutions based on collaborative agreement.

FOCUS

- 1.3 **Dr. Sundo Hwang, President of MABIK: Introduction and Opening Address.** Dr. Sundo Hwang expressed gratitude to all the participants, speakers and PEMSEA. He introduced MABIK that has conducted marine researches since 2015 and signed MOU with PEMSEA in 2017. He expected to strengthen and widen the cooperation with the foreign countries via EAS 2018.
- 1.4 **Dr. Moonguen Yoon, MABIK: Collaboration for coexistence and more ocean literate society.** Dr. Yoon introduced MABIK. It is a brand-new national institute established in 2014. Its mission includes discovery and conservation of marine life, systematic classification, biodiversity management, policy advice and international cooperation, marine genetic resource research, LMO management and assessment, marine biological resource utilization, large scale cultivation technology, integrated management systems, marine biological resource bank, exhibition and education. A principle concept for those tasks is that 80% of the Earth organisms inhabit the oceans but we only know 1% of them. A participant asked what is MABIK's strategy or approach to discover the rest of 99%. Dr. Yoon answered that one way is cooperation with the other researchers in the other countries and that is why MABIK opened this session.
- 1.5 **Dr. Jaejoon Jung, MABIK: Working together for conservation of marine biodiversity.** Dr. Jung presented an example of cooperation conducted by MABIK with the Institute for Tropical Biology (Vietnam). There is a need to exploit marine organisms because there are a lot of potential for food, medicine, cosmetics and many other industrial uses. However, sometimes accessing desired marine life could be a problem because marine life is not equally distributed in the ocean. Usually countries in the tropical climate or upwelling coastal region possess high biodiversity while the others do not. Besides, recently many countries participated in the Nagoya Protocol describing governance on biological materials in sovereignty, permission to access, and benefit-sharing. Given this circumstance, the importance of international cooperation is being recognized. Dr. Jung's talk provided the procedures to settle administrative prerequisites before exchanging researchers and carrying biological materials from ITB to MABIK. Scientific data was also briefly explained to show what types of results could have been derived from the project.
- 1.6 The participants' interest in the international cooperation provoked vigorous discussion as follows:
 - Q1: Are there some experiences with actual completed collaboration and sharing of benefits?
 - A1: Publications from both sides are already available. However there have not been money-related benefits, because commercialization of products will take a long time and substantial amount of research is required.

Q2: Is it possible to access to database of MABIK?

A2: Currently, MABIK's database is for domestic use. Hopefully, the database will be open for everyone in the near future.

Q3: How long does it take from basic research to medicine formulation? Do you have the key species or genetic resources for intensive investigation?

A3: MABIK does not aim for the final product. Its goal is to set up the first step such as the discovery of new species, survey of biodiversity, and screening of activity or material at the basic level. It is said that it takes ten years at least from basic survey to final product and basic steps account for 1/3 of the whole developing process. However, it does not make profit. Many companies give up at this stage. MABIK would like to shorten the beginning stage by conducting basic research.

Q4: Has there been opportunities to provide benefits other than scientific results such as education or training?

A4: MABIK is willing to provide those types of benefits.

NETWORKING SESSIONS

1.7 The Panelists made a brief introduction of projects they are involved in to share experiences and to seek international cooperation.

1.8 **Prof. Chou Loke Ming, National University of Singapore: Personal reflections on regional collaboration to conserve marine biodiversity.** A number of past efforts have been made to investigate marine biodiversity of Singapore. One example is the Comprehensive Marine Biodiversity Survey conducted in 2010-2015. Despite a sampling size that was small, many unidentified species were discovered. Approximately 100 species were novel, 200 species have not been recorded before, and 10 species were re-discovered by conservation efforts.

1.9 **Dr. Luky Adrianto, Bogor Agricultural University: Enhancing the marine biodiversity in Indonesia.** Dr. Adrianto presented an impressive video clip of EMBRIO (Enhancing Marine Biodiversity Research in Indonesia) program of Indonesia. The mission of EMBRIO is understanding, protecting, rehabilitating, and sustainable use of Indonesia's marine biodiversity. To achieve this, they perform research activity, provide education, hold workshop, and others.

1.10 **Dr. Porfirio Alino, Marine Science Institute: Stewarding marine biodiversity.** Dr. Alino gave an introduction of the MSI. MSI maintains a set of collections including sponge and fish. MSI database is MIDAS (Marine Information and Data Analysis System). Their information is managed by MBRIC (Marine Biodiversity Resource Information Center) and MBRIS (Marine Biodiversity Resources and Information System).

1.11 **Dr. Hazel Arceo, University of Philippines-Cebu and Marine Science Institute: BRING (Biodiversity Resource Information Network Group).** Dr. Arceo introduced BRING program to facilitate conservation of marine biodiversity. BRING program promote research and other collaborative efforts and develop meaningful interaction among managers, general public, and scientists. BRING program requires marine biodiversity assessment, taxonomy and systematics, coastal and marine biodiversity management, statistical analysis and technical writing, museum management and practice, communicating marine biodiversity to the public to overcome skill gaps.

RECOMMENDATIONS

1.12 The participants confirmed that the interest in the international cooperation exists. The easiest way of cooperation is scientist-to-scientist co-work. However, to make it truly an international cooperation, the limitations imposed by the Nagoya Protocol has to be overcome and it will be not easy without interaction between institute-academia-government. Only after permission from national authorities has been granted, researchers can start to work and make any form of benefit. Follow-up should be made with knowledge of legal procedures and a tripartite workgroup.
