Meeting report of the Asian Pacific Regional Consultation Meeting under the Ad hoc Open-ended Expert Group (AHEG) of the United Nations Environment Assembly (UNEA) 26-27, August 2020

Ministry of the Environment Japan 15th Sep 2020

Background and Intended Outcomes of the Meeting

As Asia and the Pacific region has been seen as one of the major contributor to the global marine plastic pollution, the region's collective efforts - towards combatting marine plastic litter and microplastics by taking active part in the AHEG's intersessional work - is of global significance and merit. Many countries of Asia and Pacific region took part in the AHEG 3 (18-22 November 2019, Bangkok) and gained common understandings on issues, which are leading to greater engagement of the region in the intersessional work. This good momentum needs to be further strengthened and more countries must be encouraged to take part so that AHEG outcomes are of use and relevance to the region overall. In light of the above, the Ministry of the Environment, Japan (MoEJ), as member of the Bureau of the AHEG as well as the Chair of the Asian Pacific regional group(Chair: Satoru Iino from the MoEJ), organized a virtual meeting of the AHEG for countries in Asia and the Pacific to: 1) Share information on the progress and ongoing work of the AHEG intersession work 2) Discuss possible regional coordination mechanisms and 3) Facilitate consultations of the Chair and Bureau with the regions.

Time and Venue

26-27 August 2020 3-6pm Japan time (GMT+9) Venue: Web-base

Participants

- Member states
- UNEP as AHEG global Secretariat and Asia Pacific Office
- Selected regional experts on marine litter and microplastics
- International organizations
- *There were 115 and 109 participants respectively

*Please be informed that the contents of the document were neutrally captured based on presentations and comments during the meeting but not reflected in a word-by-word manner.

Agenda 1: Opening

The Chair of the meeting, Satoru Iino from the MoEJ (member of the Bureau of the AHEG as well as the Chair of the Asia Pacific regional group) introduced background information and objectives of the meeting, and the welcome remarks was delivered by Dr. Dechen Tsering, Regional Director of UNEP-ROAP. Then, the agenda of the meeting was adopted.

Agenda 2: Presentation from international organizations

Japan International Cooperation Agency (JICA)

JICA introduced its cooperation approach on the waste sector and integrated waste management through the 3Rs. The main points of the presentation were the following.

- JICA's approach for marine plastic waste is to contribute mainly to solutions of waste management on land for developing countries, from which major portion of marine litter is coming.
- In order to tackle the marine plastic issue, JICA has four pillars: (1) developing a robust waste management system, (2) evidence-based approach, (3) introducing alternative materials/reduction of use, and (4) encouraging networking and co-learning.
- Some examples of specific projects to achieve the 4 pillars are: promotion of proper collection and disposal in the Clean Dhaka Project, pursuing the circular economy and '3R+return' concept in the 'J-PRISM' project in Pacific island countries, the establishment of a center of excellence for marine plastic pollution in Thailand, and introducing biodegradable shopping bags in Kenya.

Responding to the question on how to address foreseen increase of plastic wastes, JICA stressed the importance of reducing the volume of waste by introducing proper treatment through the 3Rs concept and by having a proper system for recovering resources from plastic.

Asian Development Bank (ADB)

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ADB presented on their efforts including some programs and projects to address marine plastic litter issues in Asia and the Pacific. The main points of the presentation were as follows.

- ADB launched the 'Action Plan for Healthy Oceans and Sustainable Blue Economies' at the 52nd Annual Meeting of ADB's Board of Governors in Fiji. The Action Plan aims to increase sovereign and nonsovereign operations to \$5 billion between 2019 and 2024. It consists of three focus areas: (1) Ecosystem Management, (2) Pollution Control, and (3) Sustainable Infrastructure.
- One of the flagship programs that support the Action Plan on Healthy Oceans is a regional technical assistance (TA) on "Promoting Action on Plastic Pollution from Source to Sea in Asia and the Pacific". This builds on ADB's Livable Cities program and country projects to reduce marine plastic pollution by boosting investment in integrated solid waste management (ISWM, including 3Rs) and accelerating the transition to circular plastics economy across the region (implementation: December 2019-2023). Some of the main activities under the TA are the Healthy Oceans Technology and Innovation Forum planned for 2Q 2021 and the proposed Circular Business Hub in Indonesia.
- ADB has created the Ocean Financing Initiative (OFI) to increase the amount and efficacy of financial capital for ocean health and sustainable blue economies. The OFI has the following six objectives: (a) define ADB ocean investment screening and selection standards; (b) develop a pipeline of bankable ocean investments; (c) develop and demonstrate innovative ocean finance instruments; (d) mobilize and de-risk financial capital for healthy oceans and sustainable blue economies; (e) support DMCs to reform national taxes and subsidies to align with ocean health and sustainable blue economies; and (f) strengthen policies, knowledge and capacity for ocean finance capacity in the Asia and Pacific region.

 COVID-19 has impacted the achievement of Healthy Oceans. In response to its impacts such as an increase in marine plastic pollution, economic losses along seafood supply chain, loss of tourism jobs, increased pressure on coastal fisheries, and loss of conservation revenues. ADB addresses these impacts by continuing to mainstream ocean health initiatives and spur a 'blue recovery' in the aftermath of the pandemic.

As for the request on details of Blue Recovery, ADB further introduced examples such as boosting investment in ISWM and sanitation, shifting to green businesses, creating jobs through conservation and nature-based solutions, and redesigning seafood supply chains. Expounding on green jobs, ADB discussed that these are at development phase and could include research on opportunities and pathways to circular plastics economy and quality job creation; develop a jobs assessment tool/calculator for investments in circular economy and SWM; design thinking, skills training, and micro grants/loans for businesses/jobs using waste streams and circular business in ADB's demonstration projects (community-scale); and behavior change programs and capacity-development in the cities ADB support, including knowledge and learning through the circular business hub in Indonesia. ADB also replied to a question on activities in the Pacific, where ADB currently has SWM programs, supporting development of a subregional strategy on waste management, and with (Pacific Region Infrastructure Facilities (PRIF), and working with partners on developing a regional recycling hub (in feasibility stage).

Agenda 3: Stocktaking of existing activities and actions to reduce marine plastic litter and microplastics and an inventory of technical and financial resources or mechanisms for supporting countries in addressing marine plastic litter and microplastics

There were presentations from Iran, Japan, Singapore, South Korea, and UNEP. Presenters mentioned various countermeasures covering a life-cycle of plastics from downstream countermeasures including improved waste management to upstream countermeasures including innovative solutions, according to their national situations. Specific activities and actions mentioned include:

- 1 Policy framework such as national action plans and legal systems
 - National management plan such as National Action Plan for MPL (2019, Japan) and 3rd National Marine Debris Management Plan 2019-2023 (2019, Korea)
 - Waste management act such as Marine Debris Management Act (2020, Korea), Waste Management Law (2004, Iran) and bylaw (2005, Iran)
 - Mandatory Packaging Reporting (MPR) framework (2020, Singapore)
- 2 Prevention and reduction of plastic wastes
 - Promotion of reduce, reuse, and recycle ("3R") and circular economy of plastics
 - Phasing out single-use plastics such as prohibition of the use of plastic water bottles across the country since mid-January 2018 (Iran)
 - Establishing a MPR framework (2020, Singapore)
 - Preparation of "Guideline for reducing plastic consumption in the country" (Iran)
 - Introduction of Extended Producer Responsibility framework for managing packaging wastes (Singapore)

- 3 Environmentally-sound management and clean-up of marine plastic litter
 - Improvement and development of a comprehensive waste management system in order to control waste at the source
 - Promotion of public participation in waste collection and clean-up schemes such as beach cleanups and incentives to local fishermen such as *Clean Beach activities for all of the coastal cities located Hormozgan Province (Iran)*
 - Measures to prevent waste dumping at sea, through introduction of a *deposit system for recovery* of fishing gear (Korea)
- 4 Promotion of innovative solutions
 - Measures to develop alternatives to plastics such as biodegradable buoys and fishing gear including *distribution of eco-friendly fishing gears (Korea)*
 - Preparation of guidelines for use of biodegradable plastics (Iran)
 - Public-private partnerships to create innovative solutions regarding marine plastic such as *biodegradable bio-based plastics (Japan)*
 - Technological development for recycling marine debris including eco-friendly treatment or resource recovery of fishery waste
- 5 Technical and financial resources
 - Three main categories of technical resources are 1)monitoring and review, 2)waste management and recycling and 3)systemic perspective on responsible production, design and use.
 - Innovative financing opportunities such as public-private initiatives, blended financing, and blue bonds
- 6 Sharing scientific information and knowledge
 - Monitoring and evaluation programmes for marine debris and microplastics in key sea areas such as establishment of *Marine Debris Management Center (Korea)*
 - Harmonization of monitoring methods across nations such as *Guidelines for Harmonizing Ocean* Surface Microplastics Monitoring Methods (Japan)
 - Research and development regarding microplastics, investigating microplastic transport pathways and biological toxicity *(Iran)* and addition of membrane bioreactor technology to prevent microplastics discharged into the sea *(Singapore)*
 - Investigation and estimation of domestic generation amount and routes, and investigation of floating plastic
- 7 Multi-stakeholder involved solutions
 - Awareness-raising campaigns to involve the public in cooperation with local governments, NGOs, and businesses such as *"Plastics Smart Campaign"(Japan)*
 - Involving the private sector to take actions such as *requiring businesses to submit mandatory packaging reports (Singapore)*
 - Working with environment groups such as Zero Waste Singapore, the Public Hygiene Council, International Coastal Cleanup Singapore and the Waterways Watch Society to foster shared ownership in keeping the environment clean and minimizing waste (Singapore)

- 8 Promotion of regional cooperation
 - IMP's MARPOL
 - ASEAN+3 Marine Plastic Litter Cooperation Action Initiative
 - Bangkok Declaration on Combating Marine Debris
 - ASEAN Framework of Action on Marine Debris
 - Regional marine litter initiatives and workshops organized by the Coordinating Body on the Seas of East Asia (COBSEA)
 - Partnerships in Environmental Management of the Seas of East Asia (PEMSEA)
 - Regional project "Addressing Marine Litter in Caspian Sea Region and Establishment of the regional network on marine litter"

In the Q&A and discussion sessions, participants mentioned priority challenges as follows:

- Having national reduction targets (quantitative and time bound) with a PDCA cycle
- Developing and implementing national action plans
- Implementing both upstream (production and consumption) and downstream (waste management) measures at the same time

Agenda 4: Methodology for analysis of the effectiveness of potential and existing response options and activities

The UNEP Secretariat introduced the framework of the analysis consisting of two approaches, namely Bowtie analysis and analysis of indicators.

- Bowtie analysis: considering what is, or could, be done to prevent waste and microplastics leaking into the environment (analysis of effectiveness of operational controls)
- Analysis of indicators: considering the inclusion of management controls to ensure the success of the operational activities (analysis of effectiveness of management controls)

Also, the UNEP shared the results of the analysis of the effectiveness of the three pilot projects, which were regional marine litter action plans, microplastics and a new international framework through the above two approaches.

In the Q&A and discussion sessions, participants listed the following points to be considered in the further analysis.

- Response options at various levels are important; upstream measures should be appeared in the analysis.
- How response options are effective should be described. Further analysis on the comparison of different approaches would be very welcome.
- Analysis of effectiveness should consider feasibility of each potential measure. For example, when can it take effect? , and how many stakeholders can it involve?
- Technology development for actions to reduce marine plastic litter response options should be taken into account.

Agenda 5: Briefing from external experts

Dr. Atsuhiko Isobe from Research Institute for Applied Mechanics, Kyushu University, Japan, gave a presentation on harmonizing observations of microplasitcs and making predictions for the future. According to the laboratory-based studies, microplastic concentration above 1,000mg/m³ found to cause damages (e.g. decrease in feeding, increase in mortality) on aquatic biota.

- Microplastic concentrations of 1,000 mg/m3+ were predicted by August 2066 by a numerical simulation.
- Observation network using a harmonized protocol of microplastic survey is required among different countries.
- A framework of international data center for marine plastic litter is required to synthesize the observed data.
- An intergovernmental framework of scholars with different backgrounds is required to accurately predict the plastic pollution in different scenarios in the future (e,g, Intergovernmental Panel for Plastic Pollution (IP3)).
- The action plan to reduce marine plastic litter should be based on scientific evidence derived from appropriate monitoring and prediction.
- An overly rapid reduction in the use of plastic might compromise the people living in poverty. Action plans should ensure that no one is left behind.

Dr. Daoji Li, professor and director of Plastic Marine Debris Research Centre at East China Normal University, gave a presentation on new monitoring methodologies for marine plastic pollution.

- How plastic waste entered the ocean and the sampling methodologies currently being used to quantify levels of marine microplastics
- The gaps existing in sampling methods, such as a lack of information on microplastic pollution in deep oceans and the risk of microplastic overestimation due to small-volume sampling
- How a lack of monitoring methods and accurate data lead to poor and unreliable predictions, particularly on river plastic waste as monitoring is based largely on models
- The methods he and his team were using to improve those models, including a sampling survey voyage and the development of a river microplastics residual flux model
- The tidal effects of estuaries on microplastic abundance, and the outcome of studies in the main estuary systems of China and on monitoring microplastic flux to the sea from major rivers
- A new way to estimate the amount of plastic waste flooding from rivers based on Human Development Index (HDI) combined with parameters such as river flow, population density and municipal solid waste, which could be important supplement to understand amount of plastic waste in ocean
- The development of a monitoring method for micro plastics in the atmosphere

Through their presentations, they emphasized the importance of formulating measures to reduce marine plastic litter in line with scientific evidence based on monitoring and prediction of distribution, pathway and fate of marine plastic litter. Participating member states received a message from the scientists that governments are expected to establish a framework and provide resources for harmonized monitoring and data sharing.

Agenda 6: Potential response options

Six member states (Iran, Japan, Myanmar, the Philippines, Singapore, Viet Nam) gave slide presentations on their opinions on potential response options, and UNEP gave a slide presentation on the submissions provided by member states and other stakeholders on potential response options. There were five key aspects that participants mentioned in the presentations and Q&A and discussion sessions as follows:

1 Sharing a common long-term visions and targets

Many presenters referred to sharing a common long-term vision and objective. Examples of visions and objectives referred to in the presentations are:

- SDG 14.1 that calls actions "to prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution by 2025"
- G20 Osaka Blue Ocean Vision that aims "to reduce additional pollution by marine plastic litter to zero by 2050"

There was a comment that UNEA Resolution 3/7 stressing the importance of long-term elimination of discharge of litter and microplastics to the oceans and avoidance of detriment to marine ecosystem should be reaffirmed. Some participant called for time-bound measurable targets.

2 Combination of countermeasures through a life-cycle approach

Many presenters also commented on a life-cycle approach to reduce plastic pollution considering their national situations and on the specific barriers they were facing. In addition, some presenters underlined consideration of a combination of response options that were effective in addressing marine litter at various levels including local, national and regional. Reduction of plastic consumption and enhancement of waste/material management infrastructure and systems were emphasized.

Among a variety of stages of the life-cycle, some member states put emphasis on the importance of dealing with key areas. The followings were suggested as part of a life-cycle approach:

- Regarding prevention and reduction of plastic waste generation:
- ♦ Reduction of single-use plastics
- ♦ Labeling
- \diamond Regulation of certain types, composition, and production methods of plastics
- ♦ Development of alternative materials
- ♦ Extended Producer Responsibility
- ♦ Polluter Pays Principle
- ✤ Elimination of subsidies and incentives for fossil based primary feedstock
- ✤ International standards on waste management practices, including the import and export of plastic and global minimum standards to guide development of national plans such as reduction targets, common methods for setting baselines and tracking progress
- Regarding environmentally sound waste management and cleanup of marine plastic litter:
 - \diamond Improvement of dumping site and waste management infrastructure
 - ♦ Clean-up

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♦ Control and removal of fishing gear

3 National Action Plans taking into account national conditions

Most presenters reaffirmed UNEA resolution 3/7 that encourages all member states and invites other actors to develop and implement national action plans for preventing marine litter and microplastics discharged into the ocean, taking into account national conditions. It was commented that national action plans should have quantitative monitoring indicators for the PDCA cycle and a mechanism to monitor and report to a global body.

- 3.1 Financial and technical assistance Most member states commented that a financial mechanism and technical assistance, including capacity building and technology transfer, to support states in implementing countermeasures/national action plans were important.
- 3.2 Scientific knowledge database

Many presenters emphasized a science-based policy approach as crucial to potential response options.

Some presenters recommended building a scientific knowledge database such as regionallevel Plastic Study Centre and requested the establishment of an intergovernmental scientific body.

Most member states also stressed the need for harmonized monitoring methods, and some member states stressed the need for ecological and health impact and risk assessment, and identification of sources and pathways.

3.3 Sharing experiences and measuring the progress

Many member states agreed that measuring the progress at the global level was an important component. The importance of sharing best practices for peer learning at the global level was emphasized. Also, it was mentioned that existing frameworks such as G20 Implementation Framework could be used for sharing experiences and measuring the progress, and a scientific panel for tracking global progress using the same methods was suggested

4 Multi-stakeholder involvement

Many member states stressed the importance of private sector (especially industry) engagement. Some member states stated the importance of promoting public awareness and encouraging behavioral change programs.

5 Structure

It was pointed out that marine litter does not follow national boundaries and that plastics cross borders from its upstream to downstream, which is the reason why plastic litter is a transboundary issue. There were namely two types of discussion on a possible structure that materializes above mentioned four key aspects.

- (1) Some presenters mentioned that global response options should build-on and align with existing instruments, frameworks, partnerships, and actions, such as:
 - G20 implementation framework and action Plan on Marine Litter,
 - ASEAN Framework of Action on Marine Debris,

- the Basel Convention,
- COBSEA and PEMSEA, and
- MARPOL's London Convention and Protocol to regulate the dumping of waste at sea.
- (2) Emphasizing that plastic pollution is a global problem, some suggested establishing a new global agreement. Such agreement might include global and national reduction targets, national action plans, scientific panel, measurement and reporting, global policy measures and standards, and financial and capacity support. It was also noted the nature of agreement as to whether it should be legally binding or voluntary.

In either way of the strucrure, it was discussed we should continue elaborating on substance of the potential response options.

Agenda 7: Summarization of the meeting

The draft short summary of the meeting was shared on the screen. The facilitator announced that he would circulate a draft meeting report based on the draft short summary to the participants and welcome comments or inputs from the participants.

Agenda 8: Closing

UNEP Secretariat gave closing remarks, and the facilitator closed the meeting.