UN DESA-UNCRD Side Event at the UN Ocean Conference

Theme/Title: 3R as the Basis for Moving Towards Zero Plastic Waste in Coastal and Marine Environment

Date: 5 June 2017 (Monday) / Time: 17:00-18:15

Venue: Conference Room 6 in the UN Conference Building, United Nations Headquarters

Organizers: United Nations Centre for Regional Development (UNCRD) and UN DESA

Organizing Partners: Ministry of the Environment, Government of Japan; UNEP-IETC; VITO, Belgium; Office of Green Industries South Australia, Australia.

I. Background and Objective

Marine and coastal environment are vital resource for a socio-economic development of the region. Marine species provide many ingredients for food, medicines and industrial products such as cosmetics, chemicals and dyes. Coastal ecosystems such as coral reefs, mangroves, sea-grass bed, estuaries, coastal lagoons and wetlands serve as nursery grounds to commercial fish species and also play important roles in providing protection from storms and tidal waves. The major threats to the health, productivity and biodiversity of the marine and coastal environment result from human activities on land and inland activities such as physical alterations of the coastal zone. Most of the pollution load in the ocean originates from land-based activities, including municipal, industrial and agricultural wastes and runoff and atmospheric deposition.

Plastic litter has become a critical concern in coastal and marine environments of the world. Plastics are a modern and emerging waste stream which is typically discharged from the land during run-off events. Plastics usually float and can travel long distances across oceans, and often accumulate in ocean gyres where they can become more voluminous than-zooplankton. Plastics in the marine environment progressively break down into micro-plastics (size < 5 mm) making their management increasingly difficult. Plastics can have a range of impacts in the marine environment including smothering, entanglement, and physical effects arising from plastic ingestion, and from the transfer of hydrophobic persistent organic pollutants (POPs) such as PCBs and organochlorine pesticides from the plastic to the tissue of organisms which ingest plastics. The transferred and accumulated POPs in marine organisms may cause endocrine disruption and reproductive impacts in affected animals, birds, fishes, and bivalves. As a consequence, marine plastics should be classified as a hazardous waste and reduction of plastic waste from land-based activities is essential to manage this growing threat. This can be practically influenced through promotion and implementation of 3R policies and programmes. Through the adoption of Hanoi 3R Declaration (2013-2023), the member countries of Regional 3R Forum in Asia and the Pacific have called for increased attention towards new emerging

waste streams, including strengthened regional, national and local efforts to address the issue of plastics in the marine and coastal environment. The Hanoi 3R Declaration has specifically called member countries to address and monitor a number of relevant indicators such as -

- number of coastal cities with complete ban on use of plastics packaging materials;
- issues of plastic waste considered as part of integrated coastal zone management (ICZM) plans;
- national policies concerning plastic waste developed or strengthened, taking into consideration the impacts of plastic waste in marine and coastal environment; and
- regional initiatives to address the issues of plastic waste in the marine and coastal environment.

These are especially important because tropical Asian countries are considered as dominant discharger of waste plastics to marine environments on global basis and management of plastic wastes in this region greatly affects microplastic pollution in world ocean.

The Small Island Developing States (SIDS) also face a varying degree of waste management and sustainability issues in view of their unique geographical features, remoteness, resource limitations and scale of vulnerability to climate change and natural disasters. Pacific Island Countries (PICs), for instance, are facing critical challenges in managing increasing and diversifying wastes due to changing lifestyle and concentration of the population in urban areas. Plastics in the marine environment are of increasing concern because of their persistence and effects on the oceans, wildlife and potentially humans (Jambeck et al., 2015). Mismanaged plastic debris can enter into the ocean via inland waterways, wastewater outflows and transport by winds or tides in PICs. It is therefore urgent to establish a sustainable solution to avoid the island countries from being progressively buried in wastes. All the regulatory options should be consistent with Paris Agreement, i.e., no net emission of carbon dioxide. In this aspect, incineration of fossil-fuel-based plastics should be minimized. Instead, recycling potentially provides opportunities to reduce oil usage, carbon dioxide emissions and quantities of waste requiring disposal. The "S.A.M.O.A. Pathway", the outcome document of the 3rd International Conference on Small Island Developing States, 1-4 Sep 2014, Apia, Samoa, UN member countries have called for implementation of 3R+R (reduce, reuse, recycle and return) through capacity building and environmentally appropriate technologies, partnerships among and broad alliance of people, government, civil society and the private sector. The '3R + "Return" concept was also endorsed by the participating countries of the 4th Regional 3R Forum in Asia and the Pacific (2013, Hanoi) considering the absence of available recycling industries and limited scale of markets in SIDS.

Marine debris and plastics can affect tourism industry adversely. Marine debris discourages tourism and greatly affects the national and local economy of affected regions which rely on tourism for revenue generation. It also affects the fishing industry and the seafood business. The Regional 3R Forum in Asia and the Pacific has called for regional cooperative framework, under which SIDS could work together in sharing good practices, enhancing capacity with the use of regional experts, promoting intra-region recycling networks, and developing innovative ways of financing waste management system. This may include taxation in tourism sector, deposit-refund system, and develop network for exchange of recyclables. Effective regional resource circulation and recycling networks to achieve resource efficiency, sustainable tourism, and economic prosperity and at the same time reduce health and environmental risks would be crucial for the sustainability of SIDS.

Reduce, reuse and recycle (3R) and circular economic development approach are widely advocated and promoted to reduce the quantities of plastic debris. Resource efficiency and recycling industries and infrastructures are paramount to halt the degradation of coastal and marine environment and resources. Recycling and re-utilization of plastic debris as well as reduction of single-use plastics including plastic packaging could lead to a reduction in the use of virgin materials and energy, thus also a reduction in carbon dioxide emissions. The 5th Regional 3R Forum in Asia and the Pacific (2014, Surabaya/Indonesia), through adoption of the Surabaya Declaration, called for multilayer partnerships and collaboration within and between communities, businesses, industries, all levels of government, scientific and research institutions, international organizations, development banks, academia and the United Nations system, to advance 3R and resource efficiency. The 6th Regional 3R Forum in Asia-Pacific (2015, Maldives) urged to address 3R as an economic industry and called for next generation 3R solutions for a resource efficient society and sustainable tourism development. The 7th Regional 3R Forum in Asia-Pacific (2016, Adelaide/Australia), through adoption of Adelaide Declaration on the Promotion of Circular Economy, called for developing institutional capacity as well as promoting government and international collaborative research projects in the areas of strengthening basic statistics, material flow and waste accounting and analysis, and material and waste footprint analysis and resource productivity analysis with a broad objective to reduce wastage of natural resources, promote optimal use of resources, to preserve natural capital and encourage renewable resource flows towards circular economic development. All these 3R policies and measures have significant implications towards achieving SDG 14 (conserve and sustainably use the oceans, seas and marine resources for sustainable development) and its first three targets -

- *Target 14.1: By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution;*

- *Target 14.2: By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans;*

- *Target 14.3: Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels*

The objective of this side event is to discuss how 3R and resource efficiency measures could help countries address the issues of plastic waste to protect coastal and marine environment.

II. Provisional Programme

Opening Session: 10 mins

- Welcome remarks by DSD/UN DESA
- Opening remarks by H.E.Dr. Mohamed Shainee, Minister for Fisheries and Agriculture, Republic of Maldives
- Remarks by Mr. Vaughan John Levitzke, PSM, Chief Executive Green Industries SA, Government of South Australia

- Remarks by Ms. Rieko Suzuki, First Secretary, Japanese Embassy in US, Government of Japan

Presentations: 50 mins

Moderator: Choudhury Rudra Charan Mohanty, Environment Programme Coordinator, UNCRD

Issue of micro plastics in the coastal and marine environment and 3R solutions - by Prof. Hideshige Takada, Tokyo University of Agriculture and Technology, Japan (10 min)

Circular economy in plastic waste management and reduction of marine pollution – European experience - by VITO, Belgium (10 min)

3Rs (Reduce, Reuse, Recycle) and marine litter issue – Japanese experience and practices– by Ms. Rieko Suzuki, First Secretary, Japanese Embassy in US, Government of Japan (10 min)

Marine debris and plastic waste management – International experiences - by Mr. Jamil Ahmad, Deputy Director of the UN Environment New York (10 min)

Advancing 3R and resource efficient society in the context of the 2030 Agenda for Sustainable Development – Role of Regional 3R Forum in Asia and the Pacific – by Choudhury Rudra Charan Mohanty, Environment Programme Coordinator, UNCRD (10 min)

Panel Discussion /Open Discussion: 15 mins

- Representative from Australia
- Representative from India
- Representative from Maldives
- Representative from Indonesia
- Representative from Europe
- Representative from Africa