As of 29 July 2021





United Nations Centre for Regional Development Ministry of the Environment, Government of Japan

Provisional Programme of Experts' Workshop for the Second State of the 3Rs and Circular Economy in Asia and the Pacific

Date of Experts Workshop IV: 29 July 2021 (Thursday)

Japan Time: 13:30-15:00 PM

Format: WeBex (Online Platform)

Theme: Food Waste

Co-organizers: Ministry of the Environment, Japan (MOEJ) United Nations Centre for Regional Development (UNCRD) of Division for Sustainable Development Goals (DSDG) / UN DESA

*Duration of Webinars: Approximately 90 minutes

PROGRAMME OF WORKSHOP

Date: 29 July 2021 (Thursday)

Japan Time: 13:30-15:00 PM

Theme: Food Waste

Short Introduction

This workshop is on the sub-section "3.2.6. Food Waste" of the report of "The Second State of the 3RS in Asia and the Pacific

- Advancing Circular Economy in Asia and the Pacific

Towards Achieving the Sustainable Development Goals (SDGs) –". This workshop aims to describe regional situation on food loss and waste at each stage of food supply chain as well as landfilled amount of food waste per capita as well as national efforts including national policies and programmes, stakeholders' action and civil societies' engagement to reduce food loss and waste.

Reference 1: Table of Content of report "The Second State of the 3RS in Asia and the Pacific - Advancing Circular Economy in Asia and the Pacific Towards Achieving the Sustainable Development Goals (SDGs) –"

Reference 2: Table of Content of chapter "Food Waste".

Discussion Points

Chair:

Dr. Shinichi

Technology &

Management Research

Sakai, Vice

President, Advanced

Science.

Discussion Points

- Any major issues including new emerging issues that needs to be highlighted in this section.
- Any potential source of data, information, reports which could be useful for developing this chapter.
- Any specific box, graph and chart that could be included in this chapter. (For example, any

new policy initiative that is very effectively working in a country should be add in box)	Kyoto (ASTEM), Japan
 working in a country should be add in box) <u>Experts</u> Mr. Desmond Tan, Group Director (Resource & Sustainability), National Environment Agency, Singapore Mr Jason Tan, Executive Engineer (Resource & Sustainability), National Environment Agency, Singapore Mr. Yihang Ong, Assistant Director, Singapore Food Agency, Singapore Dr. Trung Thang Nguyen, Deputy Director General, Institute of Strategy and Policy on Natural Resources and Environment (ISPONRE), Vietnam Prof. Gang Liu, Department of Green Technology, Faculty of Engineering, University of Southern Denmark and Institute of Geographical Sciences and Natural Resources Research, Chinese Academy of Sciences, PR China Ms. Clementine O' Connor, Programme Management Officer, Sustainable Food Systems, United Nations Environment 	Japan Facilitator / Moderator: Mr. Choudhury Rudra Charan Mohanty, Environment Programme Coordinator, United Nations Centre for Regional Development (UNCRD)- DSDG/UN DESA, Japan Rapporteur: Prof. Anthony Shun Fung Chiu, De La Salle
 Programme, Paris, France Ms. Maggie Ka Ka Lee, Environmental Sustainability Program Lead, Thailand Dr. Premakumara Jagath Dickella Gamaralalage, Director, CCET, Institute for 	University, the Philippines and Dr. Anupam Khajuria, Researcher,
 Global Environmental Strategies (IGES), Japan Mr. Amit Jain, Managing Director, IRG Systems South Asia Pvt. Ltd, India Mr. Manabu Kishida, Assistant Director, 	United Nations Centre for Regional Development (UNCRD)-
 Ministry of Agriculture, Forestry and Fisheries, Japan Ms. Hikari Takano, Officer, Ministry of Agriculture, Forestry and Fisheries, Japan Mr. Takaaki ITO, Director, Office for Promotion of Sound Material-Cycle Society, 	DSDG/UN DESA, Japan

Provisional Programme- Workshop IV -3-

Environmental Regeneration and Material Cycles Bureau, Ministry of the Environment,		
Japan		
• Mr. Koji Maeshima, Deputy Director, Office		
for Promotion of Sound Material-Cycle Society, Environmental Regeneration and		
Material Cycles Bureau, Ministry of the Environment, Japan		
 Mr. Yasuki Yamamoto, Senior Environment 		
Engineer, Office for Promotion of Sound		
Material-Cycle Society, Environmental Regeneration and Material Cycles Bureau,		
Ministry of the Environment, Japan		
End of Workshop		

Reference 1: Table of Contents of the report "The Second State of the 3RS in Asia and the Pacific - Advancing Circular Economy in Asia and the Pacific Towards Achieving the Sustainable Development Goals (SDGs) –"

1. Background and Scope of Work

1.1. About the State of 3Rs in Asia and the Pacific Project

1.2. Regional 3R and Circular Economy Forum in Asia and the Pacific,

Ha Noi 3R Declaration, and 3R Monitoring Performance Indicators

1.3. Structure of this Report

2. Urgent Needs and Multiple Benefits of Implementing 3Rs and Circular Economy Approach in Asia and the Pacific

2.1. 3R and Resource Efficiency as the Heart of Circular Economy

2.2. Key Factors for Promoting Circular Economy in Asia and the Pacific

2.2.1. Circular Economy towards Sufficiency Economy

2.2.2. Sound Material Flow and Accounting towards Sufficiency Economy

2.2.3. Technology as a Driver for Clean Energy and Green Industry towards Sufficiency Economy

2.2.4. The Importance of Public-Private-Partnership (PPP) for Advancing Circular Economy

2.2.5. 3Rs and Circular Economy under COVID-19 Pandemic This sub section will aim to address what 3Rs and Circular Economy can offer aftermath of COVID-19

3. Trends of 3R and Circular Economy in Asia and the Pacific

3.1. Trends in 3Rs and Waste Management Policies and Responses This part section will mainly build on by updating the First State of the 3Rs in Asia and the Pacific by addressing the same set of nine indicators selected from the Ha Noi 3R Declaration (2013-2023).

3.1.1. Reduction in the Quantity of Municipal Solid Waste Generated (Goal 1)

3.1.2. Increasing Recycling Rate of Recyclables (e.g., plastic, paper, metal, etc.) (Goal3)

3.1.3. Inventory of Hazardous Waste (Goal 9)

3.1.4. Agricultural Biomass Waste Management (Goal 11)

3.1.5. Eliminating Marine Plastics (Goal 12)

3.1.6. E-Waste Management (Goal 13)

3.1.7. Implementation of Extended Producer Responsibility (EPR) (Goal 15)

3.1.8. Improving Resource Efficiency and Resource Productivity (Goal 17)

3.1.9. Co-benefits for Local Air, Water, Oceans, and Soil Pollution and Global Climate Change (Goal 18)

3.2. Growing Volume and Diversification of Waste Streams with Presence of New Emerging Waste Streams

This section will focus on the emerging waste streams and issues corresponding to the goals and indicators of the Ha Noi 3R Declaration (2013-2023)

(SDG Tier1 and Tier 2 indicators will be used as applicable for 3.2.1. to 3.2.5.)

3.2.1. Plastic Waste

- Indicator 1: Total generation and recycling rate (%) of plastic
- Indicator 2: National policies concerning plastic waste

- SDG Tier1 and Tier 2 indicators as applicable

3.2.2. Electronic waste

- Indicator 3: Formal standards, certification system, and licensing procedures established and enforced

- Indicator 4: Number of state-of-the-art recycling facilities for ewaste

- SDG Tier1 and Tier 2 indicators as applicable

3.2.3. Chemical and Hazardous Waste

- Indicator 5: Proper classification and inventory of chemical and hazardous waste developed

- Indicator 6: Existence of framework for bilateral and multilateral cooperative activities toward efficient, legal, and appropriate trade of chemical and hazardous waste

-SDG Tier1 and Tier 2 indicators as applicable

3.2.4. Construction and Demolition Waste (including Disaster waste)

- Indicator 7: Number of sectoral policies and programmes that have integrated 3R concepts

- Indicator 8: Existence of basic data on construction and demolition wastes required for policy-making, planning, implementation, and monitoring

- SDG Tier1 and Tier 2 indicators as applicable

3.2.5. Agricultural Biomass Waste

- Indicator 9: Amount of biomass waste and livestock waste generated

- Indicator 10: Amount of biomass waste and livestock waste recycled

- SDG Tier1 and Tier 2 indicators as applicable

3.2.6. Food Waste

- Indicator 11: Food waste landfilled per capita

- Indicator 12: Percentage of food loss at each stage of food supply chain
- SDG Tier1 and Tier 2 indicators as applicable
- 3.2.7. Health Care and Medical Waste
- Goal 16 & 32
- SDG Tier1 and Tier 2 indicators as applicable
- 3.2.8. Wastewater Treatment
- SDG Tier1 and Tier 2 indicators as applicable
- 3.2.9. Data Issues on new emerging waste streams
 - SDG Tier1 and Tier 2 indicators as applicable

3.3. Conventional and Frontier Technologies in Advancing 3Rs and Circular Economy in Asia-Pacific

This section will address policy and technology choices made countries in following areas

- 3.3.1. Waste-to-Energy
- 3.3.2. Biobased Plastics and Biodegradable Plastics
- 3.3.3. Used Tire for Roads Construction
- 3.3.4. Plastics as Alternative Timber (for example-Case of Australia)
- 3.3.5. Application of Smart Technology
- 3.3.6. End of Life Batteries
- 3.3.7. Carbon Neutralization Technology

3.4. Progress towards Implementation of the Ha Noi 3R Declaration (2013-2023)

3.4.1. 3R Policy Implementation in Asia and the Pacific

This sub-section will address policy progress in 3Rs and circular economy among countries

3.4.2. Nationally Implemented 3R-Related Programmes, Projects, and Master Plans

- Introduction of a fee for plastic bags in Japan / New Integrated Plastics Resource Management Policy of Japan (for example)

- Similar cases in Asia and the Pacific

4. Experts' Assessment of Policy Readiness for Related Ha Noi 3R Goals and Progress at National Level

This chapter will have comprehensive overview of the countries' progress made on the Ha Noi 3R Goals (2013-2023)

5. Main Recommendations

Reference 2: Table of Content of the Chapter "Food Waste"

3.2.6. Food Waste

3.2.6.1. Emerging Problems in Food Loss and Waste in Asia and the Pacific

- i. Definition of food loss and waste
- ii. Causes of increasing food loss and waste in the region

3.2.6.2. Policies and Programmes on Reducing Food Loss and Waste

- i. National policies and programmes to reduce food loss and waste in food supply chains.
- ii. Local policies and programmes to reduce food loss and waste in consumption-level.

3.2.6.3. Food Loss and Waste Status in Asia and the Pacific

(This 3.2.6.3. should include the trends and developments in Asia and the Pacific on the Ha Noi 3R Goal 10 (HNG10). While developing this section, graphs and charts on relevant indicators under HNG10 should be included. The Indicators of the target 12.3 of SDG12 is also be considered if data is available.)

- i. Percentage of food loss at each stage of food supply chain (HNG10-1).
- ii. (a) Food loss index
 - (b) food waste index (Indicator 12.3.1),

(Target 12.3: By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses and SDG12)

3.2.6.4. Stakeholders' Engagement to Reduce Food Loss and Waste

- i. Technological innovation and improvement to reduce food loss and waste
- ii. Behavioural change
- 3.2.6.5. Conclusion and Way Forward