

As of 15 June 2021



United Nations Centre for
Regional Development



**Ministry of the Environment
Japan**

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 I: 15 June 2021 (Tuesday)

Format: WeBex (Online Platform)

Theme: Agricultural Biomass 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 2 hours 30 minutes

PROGRAMME OF WORKSHOP

Date: 15 June 2021 (Tuesday)

Bangkok Time: 12:30 PM-15:00 PM

Japan Time: 14:30-17:00 PM

London Time: 5:30 AM-8:00 AM

New York Time: 01:30 AM-04:00 AM

India Time (IST): 11:00 AM-13:30 PM

Theme: Agricultural Biomass Waste

Short Introduction

This workshop is on the sub-section “3.2.5. Agricultural Biomass Waste” of the report of “Second State of 3R and Circular Economy in Asia and the Pacific”. This workshop aims to describe quantitative and qualitative information on generation and utilization of agricultural biomass and livestock wastes to present co-benefit from agricultural biomass and livestock wastes with aspects of GHG emission reduction, energy security, and sustainable livelihoods in rural areas.

Reference 1: Table of Content of report “Second State of 3R and Circular Economy in Asia and the Pacific”

Reference 2: Table of Content of chapter “Agricultural Biomass Waste”.

Discussion Points

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

Chair:

Dr. Shinichi Sakai, Vice President, Advanced Science, Technology & Management Research

<p>be included in this chapter. (For example, any new policy initiative that is very effectively working in a country should be add in box)</p>	<p><i>Institute of Kyoto (ASTEM), Japan</i></p>
<p><u>Experts</u></p> <ul style="list-style-type: none"> • <i>Mr. Koji Maeshima</i>, Deputy Director, Office for Promotion of Sound Material-Cycle Society, Environmental Regeneration and Material Cycles Bureau, Ministry of the Environment, Japan • <i>Mr. Takayuki Shigematsu</i>, Deputy Director, Office for Promotion of Sound Material-Cycle Society, Environmental Regeneration and Material Cycles Bureau, Ministry of the Environment, Japan • <i>Mr. Takaaki Ito</i>, Director, Office for Promotion of Sound Material-Cycle Society, Environmental Regeneration and Material Cycles Bureau, Ministry of the Environment, Japan • <i>Mr. Tatsuki Tanabe</i>, Senior Environment Engineer, Office for Promotion of Sound Material-Cycle Society, Environmental Regeneration and Material Cycles Bureau, Ministry of the Environment, Japan • <i>Mr. Yasuki Yamamoto</i>, Senior Environment Engineer, Office for Promotion of Sound Material-Cycle Society, Environmental Regeneration and Material Cycles Bureau, Ministry of the Environment, Japan • <i>Ms. Nivedita Prasad</i>, Deputy Secretary, Department of Rural Development, Ministry of Rural Development, India • <i>Dr. Marlia Mohd Hanafiah</i>, Head of Centre for Tropical Climate Change System, Institute of Climate Change, UKM, Malaysia • <i>Prof. Raj Shekhar Singh</i>, Indian Co-ordinator, Sr Principal Scientist (Ex), Central 	<p><u>Facilitator / Moderator:</u> <i>Mr. Choudhury Rudra Charan Mohanty</i>, Environment Programme Coordinator, United Nations Centre for Regional Development (UNCRD)-DSDG/UN DESA, Japan</p> <p><u>Rapporteur:</u> <i>Prof. Agamuthu Pariatamby</i>, Professor, Jeffrey Sachs Center on Sustainable Development, Sunway University, Malaysia and <i>Dr. Anupam Khajuria</i>, Researcher, United Nations Centre for Regional Development (UNCRD)-</p>

<p><i>Institute of Mining and Fuel Research (CSIR), India</i></p> <ul style="list-style-type: none"> • <i>Dr. Mohammad Jawaid, Laboratory of Biocomposite Technology, Institute of Tropical Forestry and Forest Products (INTROP), Universiti Putra, Malaysia</i> • <i>Dr. Shunichi Honda, Programme Officer, United Nations Environment Programme-International Environmental Technology Centre (UNEP-IETC), Japan</i> • <i>Dr. Chen Liu, Senior Researcher, Institute for Global Environmental Strategies (IGES), Japan</i> • <i>Mr. Amit Jain, Managing Director, IRG Systems South Asia Pvt. Ltd, India</i> 	<p><i>DSDG/UN DESA, Japan</i></p>
<p>End of Workshop</p>	

Reference 1: Table of Contents of the report “Second State of the 3Rs in Asia and the Pacific”

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

3. Trends of 3R and Circular Economy in Asia and the Pacific
 - 3.1. Trends in 3Rs and Waste Management Policies and Responses
 - 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
 - 3.2.1. Plastic Waste
 - 3.2.2. E-waste
 - 3.2.3. Chemical and Hazardous Waste
 - 3.2.4. Construction and Demolition Waste (including Disaster waste)
 - 3.2.5. Agricultural Biomass Waste

- 3.2.6. Food Waste
- 3.2.7. Medical and Healthcare Waste
- 3.2.8. Wastewater Treatment
- 3.2.9. Data Issues on new emerging waste streams

- 3.3. Conventional and Frontier Technologies in Advancing 3Rs and Circular Economy in Asia-Pacific
 - 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
 - 3.4.2. Nationally Implemented 3R-Related Programmes, Projects, and Master Plans

Reference 2: Table of Content of the Chapter “Agricultural Biomass Waste”

- 3.2.5. Agricultural Biomass Waste

3.2.5.1. 3R Potentials in Agricultural Biomass Waste

- i. Definition of agricultural biomass waste
- ii. Available source of agricultural biomass in Asia and the Pacific

3.2.5.2. National Policies, Legislations for Utilization of Agricultural Biomass Waste

- i. Energy related policies and legislations- Renewable energy/ bioenergy
- ii. Waste related policies and legislations for agricultural biomass waste

3.2.5.3. Management of Agricultural Biomass Waste (HNG11 Indicators)

- i. Amount of agricultural biomass waste recycled (HNG11-1).
- ii. Number of new projects initiated that use agricultural biomass waste as material inputs (HNG11-2).

3.2.5.4. Common Technologies Deployed for Agricultural Biomass Waste Management

- i. Composting
- ii. Anaerobic Digestion
- iii. Gasification
- iv. Incineration

3.2.5.5. Innovative Technologies for Agricultural Biomass Waste Management

- i. Fermentation
- ii. Hydrothermal liquefaction
- iii. Some other technologies

3.2.5.6. Conclusion and Way Forward