



## Highlights

**P4** **TRP/REP2019 Nay Pyi Taw Seminar**

2nd ASEAN - Japan Meeting Point of Collaboration  
by Stakeholders and Researchers for Reducing  
Environmental Problems in ASEAN Countries

**P6** **UNEP's Global Environmental Information Display:  
"Towards Plastic-Free Solution"**

## PREFACE

Our home “The Earth” which is the most beautiful plant in our solar system and known for the only place of living organisms according to our acquired knowledge from the science.

Although, humankind especially our ancestors might have experience of the varieties of natural disasters and phenomenon in the past, the acceleration of exploiting natural resources due to industrialization and technology revolution made various environmental impacts at our present moment. Some of them are visible through our eyes. The crystal-clear river water that our ancestors used in the past for their daily basic turned unclean and intoxicated with heavy metals from industrial waste water during our generation.

Humankinds and surrounding ecosystems have been suffering from natural disasters: ozone layer depletion, global warming, sea level rising, as well as man-made environmental problems: air pollution, water pollution, industrial waste water contamination, etc. which may further lead to the excessive amount of chemicals in our food changes. These problems further lead to the health and social problems. Developed countries have been facing those environmental problems whilst developing countries have much higher impacts due to the issues of poverty as the underlying background.

Poverty remains one of the greatest challenges in developing and underdeveloped countries where many are still struggling for the most basic human needs such as food, clean water, sanitation, education and work.

Due to the global demand and continuously increasing of gold price in recent decades, artisanal and small-scale gold mining known as ASGM became the survival for the living of the people living in poverty. An estimated 10-15 million miners, including 4-5 million women and children may directly involve in ASGM sector, another 100 million people to be reliant upon the sector for their livelihoods, where there are varieties of social conflicts and economic issues. Along with those conflicts and issues, it is also the largest global demand for mercury and release the estimated amount of 1400 tons of mercury annually.

The environmental pollution related to ASGM activities have health impacts as miners and people living surrounding areas have suffered from varieties of health issues such as respiratory distress and lung disease from toxic inhalation, and vomiting, headache, fever, chills, abdominal pains and diarrhea from absorption of elemental mercury.

In order to make solutions for those environmental and social problems, we need transdisciplinary approach of research and practice in collaboration and cooperation between scientists and key stakeholders including various societal partners such as governments, companies, and citizen groups, and then we will clarify the solution to solve the problems as well as the sustainable development for the future generations to become well-beings and live in this beautiful world because this is the only known planet where human beings can survive.

Prof. Masayuki Sakakibara  
Project Leader  
SRIREP Project, RIHN



*Discussing with stakeholders*



## ABOUT SRIREP PROJECT

Among the environmental pollution problems, the mercury (Hg) pollution problem is one of the most serious problems impacting on the ecosystem and human health. Especially, "Minamata disease" that occurred in Kumamoto and Niigata prefectures in the 1950s and 1960s shocked the world. Despite these, Hg has been used in the industry until now for its unique usefulness, and Hg has been released into the atmosphere. To tackle this issue, the United Nation Environment Program (UNEP) concluded a global treaty, "Minamata Convention on Hg (10 October 2013)", which works for the reduction of anthropogenic release of Hg and prevention of Hg pollution on global scale. Recent investigations by UNEP have highlighted the continuing significance of Hg pollution in developing countries and its harmful effects on human health and ecosystems.

One of the main causes of Hg pollution is artisanal and small-scale gold mining (ASGM), where Hg is used in the traditional method of amalgamation to extract gold from the ore rock. Although many countries have ratified the Minamata Convention, mercury emissions are increasing rather than decreasing. This indicates that in practical, this poverty-based global environmental problem cannot be solved with ratification of international treaties and NGO activities alone.



*Meeting with miners*

## OUR PURPOSE

The purpose of our FR is to understand the link between poverty reduction and environmental management and to establish a process for constructing sustainable societies through regional innovations in collaboration with stakeholders in ASGM areas and to strengthen related environmental governance in developing countries. In our FS, we will conduct the following three levels of research based on a transdisciplinary approach, within the scope of Association of Southeast Asian Nations (ASEAN) countries: a) case studies of reductions in Hg pollution using a future scenario in ASGM areas of Indonesia and Myanmar; b) study of regional networks that aim to generate Hg-free societies communities in Indonesia and Myanmar; and c) study of improvements in environmental governance in ASEAN countries.



*Creating agriculture plot*

Through these studies, we will achieve the regional innovation in collaboration with the stakeholders, and we will clarify the solution to solve the global mercury pollution of global environmental problem. In addition, we will also examine the design, practical use, and evaluation method of the transdisciplinary community of practice (TDCOP), a tool in problem-solving of regional communities, by applying the transformative boundary objects (TBOs) in interaction with stakeholders.



## TRPNEP 2019

# TRPNEP2019 Nay Pyi Taw Seminar - 2nd ASEAN - Japan Meeting Point of Collaboration by Stakeholders and Researchers for Reducing Environmental Problems in ASEAN Countries

TRPNEP2019 Nay Pyi Taw Seminar or the 2nd ASEAN - Japan Meeting Point of Collaboration by Stakeholders and Researchers for Reducing Environmental Problems in ASEAN Countries was held at Hilton Hotel, Nay Pyi Taw, Myanmar on 11 December 2019.

TRPNEP2019 was organized by Ehime University, Kagawa University, Kochi University, Research Institute for Humanity and Nature (RIHN) and Ministry of Natural Resources and Environmental Conservation (MONREC), and it was sponsored by Japan Society for the Promotion of Science (JSPS).

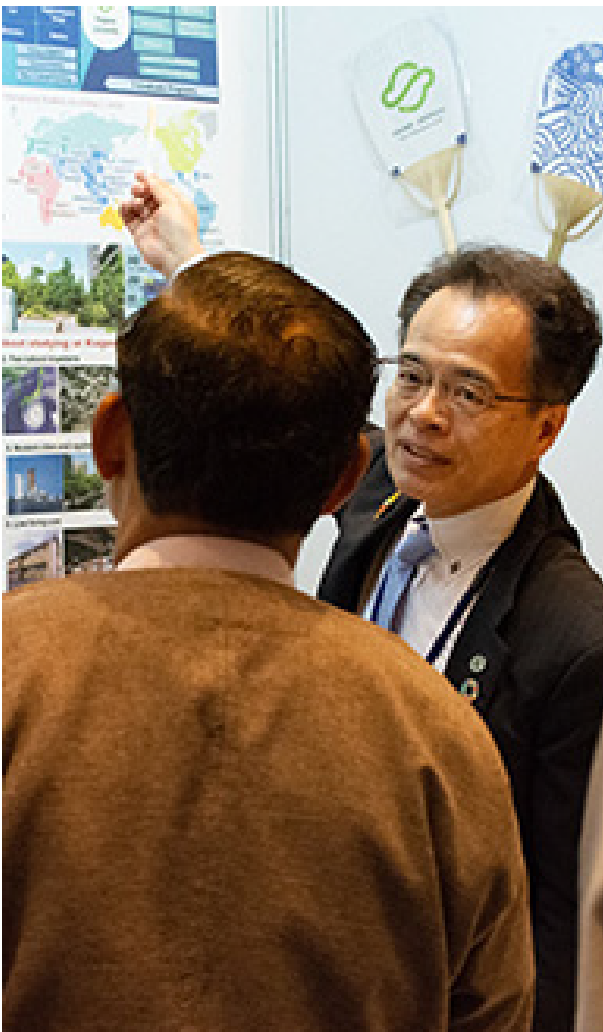
Researchers and scientists from the universities of Japan and six ASEAN countries: Brunei Darussalam, Indonesia, Malaysia, Myanmar, Thailand and Vietnam, as well as key stakeholders from Myanmar ministries, universities, NGO, and private companies, took part in the seminar.

Mr. Ohmn Win, Union Minister of Ministry of Natural Resources and Environmental Conservation, Dr. Ye Myint Swe, Deputy Minister, Managing Directors, Director Generals, and senior officials, as well as officers and researchers from different ministries including Ministry of Health and Sports, Ministry of Social Welfare, Relief and Resettlement, Ministry of Education, Ministry of Transport and Communications, Ministry of Agriculture, Livestock and Irrigation, etc., attended the seminar. The total number of seminar attendees was more than 280 in this year's TRPNEP2019 seminar.





# TRPNEP 2019





## UNEP'S GLOBAL ENVIRONMENTAL INFORMATION DISPLAY

### UNEP's Global Environmental Information Display: "Towards Plastic-Free Solution" Exhibition at Novotel Yangon Max

Japan Association for United Nation Environmental Programme (J-UNEP), Public Interest Incorporated Foundation Associates of the Earth (AOE), and Research Institute for Humanity and Nature (RIHN) organized United Nation Environmental Programme's Global Environmental Information Display: "Towards Plastic-Free Solution" exhibition at Novotel Yangon Max, Yangon, Myanmar from 9th to 12th December 2019.

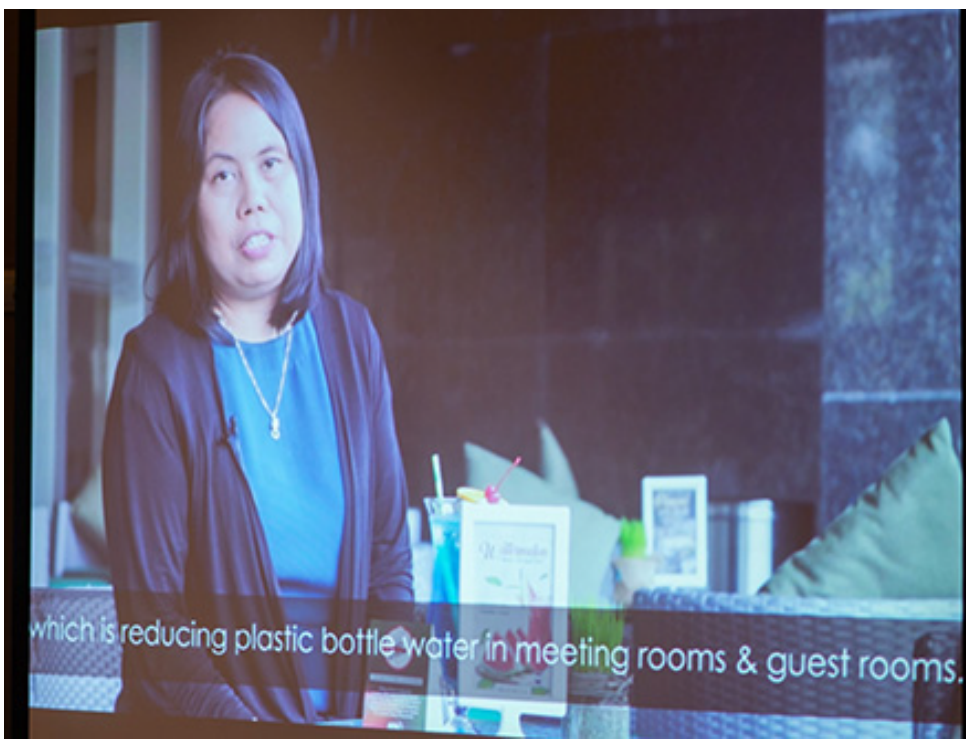
Jun Miyauchi, Director of Japan Association for United Nation Environmental Programme (J-UNEP), Professor Masayuki Sakakibara, Project Leader of SRIREP project, Research Institute for Humanity and Nature (RIHN), and Dr. Thaug Han, Group CEO of Max Myanmar Group gave the speeches about their concerns regarding the present situation of plastic related environmental pollution at the event.

The representatives of Max Myanmar Group and AYA Bank, invited guests, and the media attended the event. After that, the representatives of Novotel Yangon Max toured around the hotel with Jun Miyauchi and Professor Masayuki Sakakibara and showed their plastic-free solution programs of the hotel.

The event and exhibition were sponsored by Max Myanmar Group and AYA Bank.



*Jun Miyauchi, Director of Japan Association for United Nation Environmental Programme (J-UNEP) gave his speech to the audience*



*Novotel Yangon Max presents their plastic reduction program*



## UNEP'S GLOBAL ENVIRONMENTAL INFORMATION DISPLAY



*Dr. Thauang Han, Group CEO of Max Myanmar Group gave the speeches about their concerns regarding the present situation of plastic related environmental pollution at the event.*



Mr. Zaw Zaw, Chairperson of Max Myanmar Group received Jun Miyauchi, Director of Japan Association for United Nation Environmental Programme (J-UNEP) and Professor Masayuki Sakakibara, Project Leader of SRIREP project, Research Institute for Humanity and Nature (RIHN) and discussed about future collaboration on the reduction of environmental pollution at his office in Novotel Yangon Max on 9th December 2019.





## SRIREP PROJECT MEMBERS

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### Xiaoxu KUANG

Project Researcher of SRIREP project, RIHN

Dr. Kuang obtained Ph.D. in Engineering from Yamagata University in 2019 for the specialties of the solidification/stabilization of hazardous substances in industrial waste. She is currently involving in SRIREP activities in Indonesia and Myanmar, takes responsibility for the assessments and the chemical analysis of the concentration of mercury and other heavy metals in environmental, biological, and cosmetic samples.