



### **ASEAN SCP Multi-stakeholders Dialogue**

with a focus on SCP AND CIRCULAR ECONOMY THROUGH SUSTAINABLE TOURISM AND FOOD WASTE

12 July 2019 - Amari Watergate, Bangkok, Thailand

















The ASEAN SCP Multi-stakeholders Dialogue with a focus on SCP and Circular Economy through Sustainable Tourism and Food Waste has been organised by the Ministry of Natural Resources and Environment of Thailand, the Thai-SCP Network, and the SWITCH-Asia SCP Facility.

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## INTRODUCTION

"Circular Economy is a must when dealing with waste management in ASEAN. Partnerships are key to achieve Sustainable Development Goals and policy targets."

### Dr. Wijarn Simachaya

Permanent Secretary of the Ministry of Natural Resource and Environment, Thailand



This report summarises the discussions that took place at the ASEAN Sustainable Consumption and Production (SCP) Multi-stakeholders Dialogue which focused on SCP and Circular Economy through Sustainable Tourism and Food Waste. The meeting was co-organised by the Ministry of Natural Resources and Environment of Thailand, the Thai-SCP Network, and the SWITCH-Asia SCP Facility.

According to the United Nations, the current world population of 7.6 billion is expected to reach 8.6 billion in 2030 and 9.8 billion in 2050. The demand for energy supply, water resource and food are also expected to increase by 50, 40 and 35 percent respectively by 2030. This increase has an impact on natural resources. In the next decades, resource scarcity and pollution are going to be critical issues for the world population. In the ASEAN region, since more than a decade, urbanisation, economic growth and industrialisation have been rapidly increasing; however, the patterns of production and consumption have often followed the path of unsustainability. Rising resource use and amount of waste constitute serious challenges. The importance of resource efficiency must be addressed, as well as the need to switch to more sustainable consumption and production patterns. Further integration of SCP into overarching policy frameworks, serious commitment from governments, technological innovation, new business models, stronger multi-stakeholder partnerships, and effective awareness raising efforts are of critical importance when moving towards a more circular economy.

### Key objectives of the meeting were to:

- Exchange experiences, perspectives and lessons learned on how to overcome the challenges for SCP and circular economy, in particular through sustainable tourism and food waste management;
- Provide comprehensive knowledge and practices for strengthening stakeholder's knowledge and capacity on related key areas;
- Elaborate recommendations and suggestions from the dialogue to improve the SCP policy in Thailand and the ASEAN region;
- Engage SCP networks among stakeholder groups in Thailand, other ASEAN Member States and leading countries.

### Structure of the Report

The structure of this report is guided by the agenda of the meeting. The one-day event that was organised in Bangkok, Thailand, was divided into four sessions, each with their own theme relevant to SCP and circular economy, with a focus on sustainable tourism and food waste. Each chapter is built around a session and summarises the main points made by each speaker.

## **OPENING SESSION**



### **Opening Speakers**

The conference was opened by Giuseppe Busini, Charge d'Affaires, European Union to Thailand, who clearly acknowledged that as ASEAN has undergone dramatic transformation, driven by increasing population, growing urbanisation and developing industrialisation, the level of consumption will sharply increase, resulting in GDP growth over the next 10 years. Busini stressed the urgent need to *"building our future responsibly by taking into account sustainable consumption and production, and bringing it back to a sustainable path"*.

Dr. Wijarn Simachaya, Permanent Secretary of the Ministry of Natural Resources and Environment, Thailand, followed Busini's opening remarks and emphasised the importance of applying a Circular Economy approach when dealing with waste management in ASEAN. He highlighted, *"60 percent of waste in Thailand comes from food alone"*. A third of food produced around the world is never eaten because it is spoiled after harvest and in transportation, or thrown away. That amounts to economic losses of about \$940 billion per year. Less food and food waste would lead to more efficient land use and better water resource management with positive impacts on climate change and livelihoods. Effective interventions to prevent and minimise food waste exist in the region, yet, they are still to be widely implemented. Partnerships and support from the EU, the Thai SCP Network, the SWITCH- Asia SCP Facility were also recognised as crucial to achieving Thailand's SCP Roadmap targets and SDG12.

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## ASEAN SCP POLICY AND IMPLEMENTATION TO ACHIEVE SDGs

Panel Moderator: Arab Hoballah, Team Leader, SWITCH-Asia SCP Facility

### Thailand SCP Roadmap: Challenges and Progress

Mr. Prasert Sirinapaporn, Director of Strategic and Planning Division, ONEP, Thailand

In this session, Mr. Prasert Sirinapaporn, Director of Strategic and Planning Division, ONEP, presented Thailand's SCP Roadmap 2017-2036 and stressed the importance for the Thai society to use resources in an efficient manner. Thailand gives great importance to the concept of sustainable development. This has also been reflected in the adoption of the Sufficiency Economy Philosophy, which is in conformity with the 2030 Agenda and can serve as a valid approach to support the realisation of the Sustainable Development Goals (SDGs). Moreover, SCP has been integrated into various national policy frameworks. The SCP Roadmap 2017-2036 was established to promote efficient use of resources, pollution reduction and food and energy security. It also includes various medium and long term plans and strategies on sustainable industry, tourism, agriculture and procurement, as well as various green labelling schemes to ensure the achievement of SDG 12. Mr. Prasert also presented some of the challenges the country is facing today when promoting SCP, and stressed the importance of investing in science and technology to promote innovation and sustainable development.

### The National SCP Blue Print / Action Plan: Implementation Challenges and Progress

#### MALAYSIA

Mr. Hari Ramalu Ragavan, Council Member, Environmental Management and Research Association of Malaysia, Board Member (ENSEARCH)

Mr. Hari Ramalu Ragavan, Council Member, Environmental Management and Research Association of Malaysia, Board Member (ENSEARCH) introduced the Eleventh Malaysia Plan 2016-2020 (Eleventh Plan), where the concept of SCP is prominently integrated as the key mechanism to pursue green growth, the game changer towards productivity, resource efficiency and natural protection. In the Eleventh Plan, green growth has been identified as a fundamental shift in how Malaysia sees the role of natural resources and the environment in its socio-economic development, protecting at the same time biodiversity and development gains. Mr. Hari Ramalu Ragavan also stressed the importance of building a socio-economic development strategy that will increase the resilience to climate change and natural disasters. Malaysia's commitment to the 2030 Agenda for Sustainable Development was also reaffirmed, in particular SDG 12. The formulation of the National SCP Blueprint (2016-2030) aims to guide the implementation of SCP in the country.

### INDONESIA

Mr. Noer Adi Wardojo, Ministry of Environment and Forestry (MoEF)

Mr. Noer Adi Wardojo, MoEF, introduced Indonesia's approach to advance SCP implementation on the ground. This approach aims to be systemic and operational when addressing environmental challenges, and encourages a bottom-up approach when connecting with government, businesses and society. Ways forward to support innovation and solutions were presented. These include: increasing driver of responsible consumption and production by creating demand through green public procurement policy for central and local government and educating communities on sustainable lifestyles; developing Indonesia's SCP resource poll as a good practice sharing platform for stakeholder collaboration; and strengthening SCP communication among the public to raise awareness and improve communities of practices.



#### PHILIPPINES

Nieva T. Natural, Director of the Agriculture, Natural Resources and Environment Staff (ANRES), National Economic and Development Authority (NEDA)

Ms. Nieva Natural explained that in 2018, through the second phase of the Asian Development Bank's regional technical assistance number 9245, the Philippines was one of the selected countries to receive support for the implementation of environment-related SDGs. The main output of the Project was the formulation of Philippines' Action Plan on Sustainable Consumption and Production, including a Strategic Framework. The Action Plan guides and facilitates the implementation of SCP across sectors in the country; lays down the priority strategy per core SCP thematic areas to support the implementation of SCP; and identifies means to effectively implement programs and interventions in the areas of resource conservation and efficiency, waste and chemicals management, sustainable business and lifestyles, among others. Key challenges in the Philippines were also identified, including: lack of coordination in the implementation and enforcement of relevant laws and issuances; absence of a monitoring mechanism on SCP; lack of funds to support the shift to SCP approaches. Ms. Natural also presented initial findings from a scoping study on Circular Economy (CE), in which Sustainable Tourism, Food Waste, Green Procurement and Eco-labelling were identified as priority sectors. CE can indeed help the country achieve its development priorities, she affirmed. For example, CE is crucial to achieve the target solid waste diversion rate of 80% by 2022, help address climate-resilient housing needs for two million informal settlers, and contribute to having reliable and affordable access to energy, among others.

## **KEY** MESSAGES



Government's commitment to uphold respective SCP Roadmaps, Action Plans, and policy frameworks is critical, as well as participation and collaboration of multiple stakeholders at regional, national, subnational and community levels.

ASEAN countries recognise the importance of SCP and Circular Economy as a means to shift towards more sustainable development pathways and achieve Green Growth.



## **SCP AND CIRCULAR ECONOMY**

Panel Moderator: Ms. Peeraporn Palapleevalya, Thai SCP Network

### Circular Economy, Drivers for Change through SCP

Ms. Sooksiri Chamsuk, United Nations Industrial Development Organisation (UNIDO)

The first speaker, Ms. Sooksiri Chamsuk from the United Nations Industrial Development Organization (UNIDO), emphasised the importance of adopting a circular economy approach to promote sustainable development. The implementation of circular economy, however, presents several challenges, including the need for: effective legislation and policy; business viability and the need to provide incentives; technology and feasibility, and the need to invest on innovation; behaviour change and raising awareness among producers and consumers on the benefits and advantages of SCP. Several practical actions and projects on Circular Economy (CE) that were undertaken by UNIDO in Vietnam, Thailand, Tunisia and Ethiopia were presented. Ms. Sooksiri Chamsuk also acknowledged that CE could cut poorer countries out of the global supply chains they have worked so hard to enter. UNIDO's role is to help advance CE models to support inclusiveness, in particular in developing economies.

### Circular Economy in Malaysia

#### Mr. Hari Ramalu Ragavan, ENSEARCH

Mr. Hari Ramalu Ragavan from ENSEARCH introduced Malaysia's National SCP Blue Print (2016-2030) / Action Plan, the progress of its implementation and the challenges faced by the country in adopting a circular economy approach. The National SCP Blue Print guides the implementation of SCP in Malaysia. The country has already adopted SCP in its plans since 2001 (The 8th Malaysia Plan); but it is only since the current plan (The 11th Malaysia Plan) that a strong commitment has been clearly expressed on pursuing green growth for sustainability and resilience. Mr. Ragavan also explained the ten pathways that are included in the Blue Print to achieve the goals set by 2030. These include making a business case for SCP, monitoring and evaluation, and awareness raising. Several SCP related initiatives in Malaysia were also presented, including the Green Building Index, the Energy Rating, Eco labels and promotion of the electric scooter.

### Greening the Supply Chain: Closing the Loop of Efficiency

Mr. Weerachai Christwathanyu, Manager Staple Fibers & Non-woven Material Sales Division, Teijin Polyester (Thailand) Limited

Teijin Polyester (Thailand) Limited provided a brief background of the Group's corporate philosophy and business targets, and thoroughly explained the Teijin circular economy model applied to the recycling of PET bottles into polyester fibre. Close loop recycle can reduce  $CO_2$  emissions up to 80%, explained Mr. Weerachai. Currently the company is importing pellets form Japan but has plans to use pellets from Thailand in the future. The company also collaborates with Siam Kraft and recycled polyester fabrics are being produced and used for shopping bags.

### From 3R to Circularity: The Power of Eco-innovation

Mr. Krisada Ruangchotevit, Circular Economy Manager, SCG Chemicals, Bangkok

Mr. Krisada Ruangchotevit from SCG Chemicals, introduced the 3Rs that govern circular economy, namely Reduce, Reuse, and Recycle and led the discussion on how circular economy is conceived in the present. He stressed the importance of eco-innovation, good product design and the need for strong awareness raising efforts in order to change consumers and producers' mindsets.

### Waste Management in CE: Challenges and Opportunities

Dr. Vincent Aloysius, CEO of Ecocycle, Insee Ecocycle Company Limited

Dr. Vincent Aloysius, CEO of Ecocycle, Insee Ecocycle Company Limited, explained that the current production culture is to produce more than what is required, resulting in wasteful consumption patterns, leading to large volumes of waste generation. Big businesses don't make radical improvements; they often pass on the high cost of waste disposal to society, he affirmed. Better waste management will not happen unless this becomes a profitable business. Other main challenges that were identified are the lack of infrastructure and the not so proactive role of businesses in taking the lead towards adopting CE models. INSEE Ecocycle landfill mining projects and their achievements in turning co-mingled, soiled plastics into Refuse-Derived Fuel (RDF) were also presented.









Engaging brand owners is key to stopping the use of harmful materials in production processes, and ultimately, products.

Circular economy is a long journey that requires collaborations, networks and strong engagement from multiple stakeholders in order to drive it successfully and effectively.

## **ASEAN SUSTAINABLE TOURISM**

### Panel Moderator: Dr. Chaiyod Bunyagidj, Thai SCP Network

### Sustainable Tourism in Penang

Dr. Shin Wei NG, Director of Global Policy Asia Sdn Bhd, Malaysia



The first speaker, Dr. Shin Wei NG, Director of Global Policy Asia Sdn Bhd, Malaysia, provided an overview of Penang Green Tourism, highlighting green buildings and township targets, the Transport Master Plan, ongoing campaigns to reduce food waste, and the importance of waste management and eco-tourism initiatives. Dr. Shin also introduced the main challenges when promoting green tourism in Penang. Changing people's mindset to responsible consumption and behaviour was identified as the number one challenge, followed by the need to have in place good business models. Great interest was expressed by participants from Thailand on lessons learned from Penang and ideas were shared on how to replicate and scale-up good practices in other ASEAN countries.

### SWITCH-Asia Zero Carbon Resort

### Dr. Chaipipat Pokpong, Thailand

The second speaker of this session. Dr. Chaipipat, introduced the SWITCH-Asia Zero Carbon Resorts project which aims to enable tourism SMEs, such as hotels and resorts, to provide their energy services in an efficient, cost effective, and environmentally-friendly manner. Experience from project implementation in Philippines and Thailand were compared and the 3R strategy: Reduce-Replace-Redesign was presented. Dr. Chaipipat explained, the first step is to reduce the energy consumption in hotels and resorts, the second step is to replace inefficient fossil-based devices with better, greener technologies; in the Redesign stage, a showcase of "Zero Carbon Resort" in Thailand operating using solar energy, was presented. The importance of training engineers, building and facility managers, environmental consultants, as well as resort staff members was highlighted, as well as the need for local production of renewable materials and green technologies.



### Tourism as a Driver to SCP: The Case of Thailand

Ms. Parichat Suntararak, Secretariat of the Thai Ecotourism and Adventure Travel Association (TEATA), Bangkok



Ms. Parichat, represented TEATA, a leading network organisation with the mandate to promote community-based tourism and sustainable tourism practices in Thailand and ASEAN. Her intervention began by addressing whether tourism can truly drive sustainable consumption and production. To respond to this question, several cases of sustainable tourism initiatives from different provinces in Thailand were presented. Ms. Parichat stressed, tourism must not change the local identities of communities; it must indeed boost economic growth, but it must not do so at the expense of the environment. She also explained there is an increasing market demand for sustainable tourism, not only from northern European countries, but also from the domestic market.

### Sustainable City in ASEAN: Clean and Green Land

Mr. Channarong Leelaburanapong, Deputy Mayor Muang Krabi, Krabi Local Authority, Krabi

The last speaker, Mr. Channarong Leelaburanapong, Deputy Mayor Muang Krabi, one of the four major tourist cities in the country, explained how the municipality is responding to the growing number of tourists visiting each year this destination. Mr. Channarong stressed the importance of integrating sustainability into urban development and preserving natural resources and the environment. He also announced more eco-tourism initiatives will be spearheaded, and cultural and artistic heritage sites and museums will be built in Krabi town to showcase Thai local wisdom and heritage to global visitors. The environmental and social concerns raised by mass tourism were also presented, including the increase in garbage, waste and pollution, and the damage to marine and terrestrial environments. In response to the latter, the policy "Krabi Go-Green" was introduced together with other initiatives the municipality is undertaking to promote sustainable tourism.





**KEY** MESSAGES

Mass tourism can be a serious threat to local identity and values. Demand for Sustainable Tourism in ASEAN is going up as environmental awareness increases.

Having the community involved in sustainable tourism initiatives will not only offer visitors a more genuine experience, but the locals will be more likely to see tourism in a positive light because they will feel a sense of ownership and pride in it. Behaviour change starts from here.

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Sustainable tourism helps preserve sites for future generations. If we only think short-term, we might lose our historical, cultural, and natural sites.

## **FOOD WASTE**

**Panel Moderator:** Dr. Rattanawan Mungkung, Director of Centre of Excellence on Environmental Strategy for GREEN business (VGREEN), Kasetsart University, Bangkok

### Laws and Regulation to Address Food Waste and Lessons from EU and Other Countries

Mr. Werner Kossmann, Senior Project Manager, GIZ



The Thai-German Climate Programme towards a low-carbon and climate-resilient future (TGCP) is implemented by GIZ, with the overall objective to improve Thailand's national framework conditions for sustainable and climate-friendly solid waste and wastewater management. The Programme is a collaborative effort spearheaded by the Ministry of Agriculture and Cooperatives (MoAC), the Ministry of Energy (MoE), the Ministry of Natural Resource and Environment (MoNRE), and is funded by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU). Mr. Werner introduced data on food waste in Thailand, and explained there is a high GHG emission potential if waste is not properly disposed. Prevention is key. He also explained that while Food Waste is addressed in several national strategies and plans, there is still no specific policy framework for handling this issue. Food Waste data from the EU was then introduced, alongside measures agreed under the CE action plan on food waste.

### Food Waste Management in the Supply Chain, Lessons Learned from Private Sector

Mr. Benjamin Lephilibert, Managing Director, LightBlue Environmental Consulting

An accredited partner for The Pledge on Food Waste Standard, the LightBlue Environmental Consulting is working on the Food Waste Prevention (FWP) Programme designed to tackle food waste while creating competitive advantages by capitalising on financial opportunities. In Thailand, collaborating with seven hotels across Bangkok, the FWP Programme has rescued over 155,000 kg of food waste, provided trainings to 565 hotel's staffs, reduced around 383 tons of carbon emission, and saved over 19 million TBH (equivalent to 549,000€). Mr. Kevin Thomson, Executive Chef, JW Marriott Hotel, Thailand



The JW Marriott Hotel in Bangkok is committed to preventing food waste. Executive Chef, Kevin Thomson, introduced the "Cut on Food" policy and presented the benefits of the latter as well as good ideas and success stories on cutting food waste. The Hotel saved 45 tons of food since the policy was enforced in October 2018. This approach is part of the JW Marriott's global food policy and The Pledge on Food Waste.

### Food Waste and Social Responsibility

Mr. Po - Tsao Chen, Program Manager, Scholars of Sustenance (SOS) Foundation



Scholars of Sustenance (SOS) was founded and registered in America in 2014, and is solely funded by the Bo H. Holmgreen Foundation. The American charity works to fund start-up costs and operational base costs for food security programs in Southeast Asia. SOS Thailand was registered as a local Thai charity based in Bangkok in February 2016, and was the 1st operational branch for SOS, now also operating is SOS Bali. SOS Thailand has worked for the past years to build a strong food rescue system that has positive impact for the environment and communities at low and efficient costs. Now with nearly 1,000,000 meals served in Bangkok, SOS Thailand is fundraising to scale their operations up and expand their operations throughout all of Thailand. The mission is to increase food security through the strategic management of food waste. This is done through awareness raising and education; redistribution of edible foods from top retailers to communities in need; and natural, low maintenance composting for local farms. Mr. Po explained SOS Thailand food rescue model and food safety management systems. He also presented data on the current food waste situation in Thailand. 64% of Thailand's landfills are filled with food waste (also a big contributor to global warming through GHG emissions). Moreover, an average Bangkok grocery store can throw away up to 200 kg of edible food a day, while an average 5-stars hotel buffet throws up to 50 kg of edible food in each service period.

### Circularity and Food Waste

Mr. Noer Adi Wardojo, Director of Standards, Ministry of Environment and Forestry (MoEF)

Mr. Wardojo shared experiences from Indonesia, and mentioned that while collaborations between multiple stakeholders are essential to achieve food waste reduction, the current priority in Indonesia is marine litter and plastics, therefore, overshadowing the important issue of food waste management and reduction strategies. Nevertheless, different agencies are working on a number of community initiatives based on the principles of "food-to-feed" and "food-to-farm".



<b>KEY</b> MESSAGES	1	Global food waste is a serious threat. Roughly one-third of food produced for human consumption is lost or wasted globally, this amounts to about 1.3 billion tons per year, contributing to further loss of water, land, energy, labour and capital resources.
	2	Everyone must play a role in reducing food waste. Governments' leadership and motivation is essential.
	3	There is a strong need for integrated and systematic approaches to food waste reduction.
	4	Thailand is taking the lead by becoming the first country to use the Food Waste Prevention Programme spearheaded by Scholars of Sustenance (SOS).

# **CONCLUDING SESSION**

In the closing session, Arab Hoballah, Team Leader of the SCP Facility summarised key points and reflections addressed during the sessions.

### **Recommendations and Next Steps**

Among other outcomes, the following could be highlighted:

- Ensure more exchange between the ASEAN member countries for sharing experience and cross-fertilisation.
- SCP policies and strategies should be followed by a clear Action Plan for short and medium delivery. In terms of material and
  resource efficiency to promote CE, a life cycle of products should be considered from designing in the early stage to its end of
  life through EPR.
- The government should promote all types of green label of products and services through green procurement for all sectors and stakeholders in order to promote CE. Additionally, consumers should drive the green market.
- Raising SCP awareness to change people behaviour is challenging for all target groups, hence, stronger behaviour change communication strategies should be adopted and put in place.
- STI is necessary to improve the ability of the private sector to use materials in a cycle as long as possible by creating new
  materials and improving quality of products. Monitoring and evaluation of products is necessary.
- The national SCP monitoring system, data-base and reporting mechanism should be strengthened in order to improve the capacity of main responsible organisations and related stakeholders.
- It is important to establish an inter-ministerial consultation or coordination body (including the private sector, civil society, academic institutes, among others) since SCP and CE are multi-sector and multi-actor.
- The tourism sector, a driving force for development in various Asian Countries, should integrate SCP and resource efficiency if it seriously wants to contribute to Circular Economy. The role and knowledge of local communities and SMEs is fundamental.
- With the increasing population and growth in most Asian countries and considering the large potentials for waste reductions and savings, the management of food supply and consumption should integrate more sense of responsibility.

### **Follow-up Activities**

Follow-up activities might include, but are not limited to:

- Review and Update the demand from Thailand for support from SWITCH-Asia.
- Consider options for providing support to the Thai SCP Network, as an enabler for SCP and delivering Circular Economy with MONRE and other actors.
- Explore opportunities for collaboration with the ASEAN SCP Committee, to further strengthen collaboration between ASEAN countries.



- Annex 1: Conference Agenda
- Annex 2: List of Participants
- Annex 3: <u>News Story</u>
- Annex 4: Press Release
- Annex 5: Presentations
- Annex 6: Photos



