

国際交流基金アジアセンター
アジア・文化創造協働助成プログラム

「東アジアにおける持続可能な
社会の構築に向けて」

報告書

Report of the

“Towards Building a Sustainable Society

in East Asia”



日本国際フォーラム



助成：国際交流基金アジアセンター

2020年3月

まえがき

本報告書は、2019（令和元）年度において、当フォーラムが実施した研究事業「東アジアにおける持続可能な社会の構築に向けて」の成果である。

アジア各地では、大気汚染・水汚染・土壌汚染・食品汚染などが健康リスクとして顕在化し、さらに気候変動による災害リスクが増大している。また、海洋プラスチックごみが年間800万トンにわたり海に流出し、生態系への影響が深刻化してきている。そしてそれらに拍車をかけて問題であるのが、こうした課題に対して地域規模による情報共有プラットフォームなどの整備不足により、多国間による協働した対処ができていないということである。こうしたなか、東アジアにおいては、持続可能な社会の構築に向けて、特に環境分野の課題に対する早急な対処体制の構築が不可欠である。

以上のような問題意識の下、当フォーラムは、下記の主査・メンバーから成る「東アジアにおける持続可能な社会の構築に向けて」研究会を組織し、本事業の実施にあたってきたが、この度その成果を取りまとめたので、報告するものである。

【主査】	稲田 十一	専修大学名誉教授
	太田 宏	早稲田大学教授
【メンバー】	石川 智士	東海大学教授
	小野田弘士	早稲田大学教授
	菊池 誉名	日本国際フォーラム主任研究員

（五十音順）

なお、この報告書に記載されている見解は、すべて上記研究会のものであり、当フォーラムの見解を代表するものではない。

最後に、本事業は、国際交流基金アジアセンターより、「アジア・文化創造協働助成プログラム」の助成金を得て実施することができた。記して深甚なる謝意を表したい。

2020年3月31日
日本国際フォーラム
会長 伊藤 憲一

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第 I 部 調査・研究活動の概要

1. 背景と目的

東アジアでは、1997 年の ASEAN+3 (APT) や 2005 年の東アジア・サミット (EAS) の制度化、2015 年の ASEAN 共同体の設立などにみられるように、経済、金融、教育、防災などの分野を中心に地域協力・統合が進められている。とりわけ、東アジアは急速な経済発展とともに域内のサプライチェーンが構築され、経済的相互依存関係が進んでいる。その一方で、これら統合の進展に伴い、その負の帰結ともいえる各種の越境的な脅威が地球および地域規模で拡大するようになってきている。これらの脅威は、地域に政治的、経済的、社会的に甚大な影響を及ぼしうるものであるところ、どの国も単独ではその解決を望むことはできず、各国が協力して初めて対策が可能となるものである。

では現在、東アジアが直面している地球および地域規模課題とは何であろうか。それはとりもなおさず、SDGs の目標などを進展させることも含めて、如何にしてこの地域に持続可能な社会を構築できるかどうかということであろう。「持続可能な社会」とは、一般的に地球環境や自然環境が適切に保全され、将来の世代が必要とするものを損なうことなく、現在の世代の要求を満たすような開発が行われている社会と定義されている。東アジアにおいては、環境問題が深刻化しており、その影響で様々な課題が顕在化し、持続可能な社会構築を妨げている。例えば中国では、大気汚染・水汚染・土壌汚染・食品汚染などが健康リスクとして顕在化している。またアジア各地では、気候変動による災害リスクが増大し、他に海洋プラスチックごみが年間 800 万トンにわたり海に流出し、生態系への影響が深刻化してきている。そしてそれらに拍車をかけて問題であるのが、こうした課題に対して地域規模による情報共有プラットフォームなどの整備不足により、多国間による協同した対処ができていないということである。例えば、ASEAN+3 (APT) には環境教育に関する作業部会 (ASEAN Working Group on Environmental Education: AWGEE) があり、各国の環境教育に関する取り組みを相互参照する仕組みができていますが、それが地域におけるグッド・プラクティスの集積や国を超えたノウハウの移転にまではつながっていないのである。以上のような次第で、東アジアにおいては、持続可能な社会の構築に向けて、特に環境分野の課題に対する早急な対処体制の構築が不可欠である。ただし、すでにいくつかの取り組みがなされてきていることも確かである。例えば APT の枠組みにおいては、2002 年から毎年 1 回環境大臣会合を開催し、2015 年からは年 2 回のペースで開催され、2017 年の同会合で日本から廃棄物・リサイクル分野をはじめとする様々な環境分野での協力を抜本的に強化するための「日 ASEAN 環境協力イニシアティブ」を提案し、今後、東アジア地域の環境分野における課題の共有や様々な取り組みが強化されることが期待されているところである。また、2018 年の APT 首脳会議では、環境上適切な廃棄物管理及び 3 R (リデュース、リユース、リサイクル) によるプラスチックごみ管理の改善を進展させるものとして、日本が提唱した「海洋プラスチックごみ協力アクション・イニシアティブ」に対して各国から賛同が得られたところである。日 ASEAN の枠組みにおいては、2018 年の日 ASEAN 首脳会議で、日本より「スマート・シティー (環境配慮型都市)」に向けたネットワーク構築および技術支援や防災分野での協力を進めることが表明された。

このように、東アジア地域においては、新たな展開をみせている環境分野の諸課題に対して、ネットワークを築き、協働した対応が始まりつつある。今後、東アジア地域が環境分野の協力を進展させ、持続可能な社会を構築することが出来れば、地域の繁栄のみならず、国際社会の課題解決にも大いに貢献することとなり、この分野の地域協力を進める意義は大きい。特に国際社会においては、SDGs における取

組を強化しようとしているところであり、その実現に向けて、本事業は大きく貢献することができるだろう。このような状況から、本事業の取り組みは、日本外交に寄与することができ、かつ ASEANをはじめとした APT 諸国からも歓迎されることになるだろう。

以上のような問題意識のもと、本事業では、「東アジアにおける持続可能な社会の構築に向けて」をテーマとして、気候変動などによる環境問題全般、海洋プラスチックごみなどに対する資源循環に向けた社会の構築、スマート・シティ構築など、主に環境分野の諸課題に対して、東アジアでどのような協力ネットワークを構築して協働で対処するための体制を築くことが可能なのか、そしてそれを如何にして持続可能な社会に向けていくのかについて、APT の専門家が一同に会して協議を行う研究交流活動、また国際シンポジウムを主催する。そしてそれらの成果をもとに、最終的に本事業に参加する APT の各国の専門家による協働の政策提言を取り纏め、アジア地域および地球規模課題である持続可能な社会の構築に寄与し、かつ広く世の中に発表することで市民から政府にいたるまで問題意識を高め、この分野の進展に貢献することを目的に本事業を実施する。さらに、本事業を進める過程においては、国内外の研究機関をはじめとする産、官、学のネットワークの構築にも努め、もって当フォーラムがこれまで蓄積してきた実績とノウハウを礎として、東アジアのエピデミック・コミュニティの発展にも貢献することができるだろう。

2. 研究会合、交流一覧

前述の 1. の背景と目的のもと、本事業は、主に以下に記載の研究会合、海外訪問による調査・研究交流、東京での国際シンポジウムの開催などを実施した。そしてそれらの成果をもとに、国際シンポジウムに参加した ASEAN+3 の有識者と共同による政策提言を取り纏めた。その政策提言については第 II 部、東京での国際シンポジウムについては第 III 部に掲載されている。

年月日	研究会および交流内容／開催場所（開催地）
2019 年 7 月 12 日	国内研究会合／都内（東京）
2019 年 7 月 12～15 日	タイ訪問による調査・研究交流／バンコク
2019 年 8 月 5 日	国際セミナー／都内（東京）
2019 年 8 月 6 日	国際シンポジウム非公開会合／都内（東京）
2019 年 8 月 7 日	国際シンポジウム「日・東アジア対話：東アジアにおける持続可能な社会の構築に向けて」／明治大学駿河台キャンパス「グローバルホール」（東京）
2019 年 8 月 22～23 日	国内研究会合／都内（東京）
2019 年 9 月 15～17 日	中国訪問による調査・研究交流／北京
2019 年 9 月 16～19 日	インドネシア、ベトナム訪問による調査・研究交流／ジャカルタ、ハノイ
2020 年 2 月 17 日	国内研究会合／都内（東京）

第Ⅱ部 政策提言

Towards Building a Sustainable Society in East Asia

Policy Recommendations

Background

In East Asia, regional cooperation and integration have been promoted, as seen in the cases of the establishment of ASEAN+3 (APT) in 1997, East Asian Summit (EAS) in 2005, and ASEAN Community in 2015, focusing on the fields of economy, finance, education, disaster prevention, etc. in particular. Especially, economic mutual dependency has deepened as East Asia observed a rapid economic development, which promoted the formation of supply-chain within the region. In the meantime, as the integration progressed, the negative side effects of it including various trans-border threats are spreading regionally and globally. Such threats can only be dealt with the multilateral cooperation, because it would make a major impact politically, economically and socially, therefore no single country is able to combat alone.

Then, what is the global/regional challenge the East Asia is facing today? That is to say, whether we could build a sustainable society and continue the development accordingly, with the Sustainable Development Goals in mind. The “sustainable society” is generally defined as the society in which the natural environment is appropriately preserved, and the development is conducted to fulfill the needs of the current generation while not passing down the cost to the future generation. In East Asia, the building of the sustainable society and its development is being disturbed by the severing environment issues, and various related issues are surfacing.

For example, disaster risks originating from the climate change are rising in Asia, and the ocean is polluted by 8 million ton of disposed plastics annually, posing a serious threat to the marine bio-ecosystem. What makes those issues challenging to tackle originates from the lack of region-wide information sharing platform, or of an environmental education, hence the lack of a multinational cooperation scheme.

Under the framework of the ASEAN Plus Three (APT), Meeting of the Ministers of the Environment has been held once a year since 2002, and twice since 2015. The ASEAN+3 Marine Plastics Debris Cooperative Action Initiative that aims to promote environmentally friendly management of plastic wastes and of 3Rs –Reduce, Reuse, Recycle- was proposed, which was widely welcomed at the APT Summit Meeting last year.

In a case of Indonesia, the understandings to the environment cycle were deepened thanks to the environment education given to the youth of the community and females, so they turned to organic farming or growing various products in small units. The community businesses were further supported

with micro-financing, and it generated the cash revenue for those who sell the manufactured farm products (e.g. chocolates, vegetable snacks, etc.), helped decline the number of females and younglings moving out of the city, while in return increasing the number who moves in and remains to stay. In Japan, 'recycle stations' have been placed in the cities to promote habitants-led collection of recyclable products and the environment education. It is observed that the activities related to the recycle station has let not only the reduction of the wastes, but also made the area friendly for senior citizens, single-parents, or children living in poverty to live in, resulted in having strengthened the social capital of the area.

Such good-practice can be adopted in other countries, too, though it still remains to be an example within that area due to lack of measures to analyze it or of information sharing platform. While APT framework has ASEAN Working Group on Environmental Education (AWGEE), providing a platform for a mutual reference on the environment education practiced in the member countries, yet it has not given a function to collect region-wide data of good-practices or to transfer know-hows to abroad. Based on such circumstance, building of a rapid response scheme particularly in the environmental issues is inevitable to further promote the sustainable development in East Asia.

Objective

This research team examines the possibilities of developing a new approach as well as constructing the network of cooperation on the environmental issues in particular, such as ocean plastic pollution, building of 'Smart City,' the environment education, while utilizing the current existing schemes, to further develop a sustainable society in East Asia. The team was expected to identify the major challenges, examine possible areas to improve or further develop and prepare recommendations.

Discussions at the Working Group meeting

25 Experts from APT countries and the sponsoring organization, the Japan Forum on International Relations (JFIR), took part in a research meeting in Tokyo on 6 and 7 August 2019.

As for the "Promoting the Cooperation and Enhancement in Building 'smart city' Concept, and the Regional Environment Issues," the idea of "smart city" is not necessarily commonly shared among East and Southeast Asian nations, but this concept is closely related to various Sustainable Development Goals (SDGs), especially SDG 4 (Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all), SDG 7 (Ensure access to affordable, reliable, sustainable and modern energy for all), SDG 11 (Make cities and human settlements inclusive, safe, resilient and sustainable), and SDG 13 (Take urgent action to combat climate change and its impacts). It also points to some technological elements to suggest the integration of energy, transport and industry managing by the Internet of Things (IoT) and artificial intelligence (AI), by promoting renewable energy resources, the electrification of local communities, and integrated water and waste management schemes, etc. The notion of smart city should go beyond the boundary of the city to include rural communities seeking a fair, resilient, livable, family-

minded and environment-friendly society.

As for the “Cooperation on Tackling the Ocean Plastic Pollution,” each member countries have been conducting efforts of improving waste management, including promoting 3R (recycle, reuse, reproduce), introducing quality environment infrastructure for final disposal treatments of the plastic debris, enhancing public awareness through information sharing. On the other hand, these are not enough to reduce marine plastic debris, because there is lacking a sense of reducing plastic products. We should take additional ways to reducing plastic products, such as to invent alternative materials of plastic which can be biodegradable with economic reliability, and to promote the change of life style from using one-way plastic products to multi-time use plastic products, and the infrastructure developments (e.g., public water supply). In addition, change of minds and attitudes of ordinal persons are necessary. Therefore, enhancing public awareness of plastic pollution should be targeted for our action and we should to try to change activities of daily lives and economic activities relating plastic pollutions.

As for the “Further Development of a Sustainable Society in East Asia,” the definitions and agenda of “sustainable society” include very wide aspects, such as wellbeing dimensions of environment, human aspects and economic dimension. In a more narrow sense, it is often considered as reducing pollution of air and water (including ocean), improving sanitation and waste water management, reduction of CO₂ emission and use of renewable resource, more efficient farming technique, and efforts of reducing consumption aiming to 3-R (reduce, reuse, recycle) oriented society, etc. To improve the situations towards sustainable society, there are several pillars of efforts such as: (1) formation of effective plan and goals improving environmental situations (such as country-based SDGs), (2) improvement of infrastructure of reducing waste (improvement of water supply/waste management, etc.), (3) increase of the awareness of the people to preserve clean environment, eliminate waste and needless consumption, and to take actions to promote sustainable practices. (4) improvement of poor governance relating to the environmental issues (such as the lack of responsibility and accountability). In the discussions, the differences of the situations and the level of technology among member countries were also mentioned, but we are sharing the common agenda and importance of the joint actions and intra-regional cooperation to tackle the common challenges.

Policy Recommendations

Based on the discussions above, the research teame summarized the following policy recommendations:

1. Development of “Sustainable Society”

(1) Create the information-sharing platform in East and Southeast Asia to share necessary data and information, know-how and the examples of best practices to promote a sustainable society among member countries.

(2) Promote the joint efforts among local governments, civil society organizations (CSOs), international developing partners in addition to the governments of each member country of ASEAN+3 (APT), for the advancement of “sustainable society.” Especially, promote participation of local stakeholders into the policy-making and concrete actions to promote effective implementation of our efforts for sustainable society.

2. Building “Smart City”

(1) Create a "smart city," with a demand-side approach, by incorporating local culture and traditional wisdom into the blueprint of a sustainable community aiming at strengthening various regional and international cooperation for sustainable development.

(2) Galvanize all the stakeholders such as public officers, entrepreneurs, industrialists, financiers, non-governmental caretakers, local people to participate in planning and building a smart and sustainable society. The keys to achieve these policies are universal and quality education and bottom-up as well as community-to-community approaches in addition to a government-to-government approach.

3. Tackling the Ocean Plastic Pollution

(1) Promote regional collaboration in sharing experiences and good practices, data and information, methods and technology of tackling the issue in both modern and traditional ways, how to get financial resources for the purpose, including not only governmental agencies but also private sectors.

(2) Facilitate participation of many stakeholders into the actions of combating against marine debris as a whole, not only plastic debris.

(3) Promote education to all generations to realize plastic debris impacts and strengthening actions in daily life, such as not using one-way plastic products and good management of daily waste.

(4) Promote additional interdisciplinary researches to precisely grasp current situations and future impacts of the marine debris, by using standardized methods and sharing the results with reliable data.

(5) Create new market-based mechanisms of effectively reducing waste and promoting alternative material usages.

第Ⅲ部 国際シンポジウムの記録

公開シンポジウム概要

2019年8月7日に明治大学駿河台キャンパス・グローバルフロント「グローバルホール」にて、65名の出席者のもと、シンガポール国立大学東アジア研究所、インドネシア国立大学社会政治学部、明治大学国際関係研究所との共催による公開シンポジウム「日・東アジア対話：東アジアにおける持続可能な社会の構築に向けて」が開催された。当日のプログラム、主な出席者リスト、パネリストの横顔、当日の議論を取りまとめた速記録は以下のとおりであった。

(1) プログラム

Japan- East Asia Dialogue "Towards Building a Sustainable Society in East Asia"

7 August, 2019
"Global Hall," Global Front, Meiji University
Tokyo, Japan

Co-Sponsored by
The Japan Forum on International Relations (JFIR)
The Global Forum of Japan (GFJ)
Meiji Institute of Global Affairs (MIGA)
East Asian Institute, National University of Singapore (EAI)
The Faculty of Social and Political Sciences, University of Indonesia
Supported by
Japan Foundation Asia Center

Wednesday, 7 August, 2019

"Global Hall", Global Front, Meiji University

Opening Session

13:30-13:45	
Opening Remarks (5min.)	WATANABE Mayu, President, JFIR / President, GFJ
Keynote Speech (10min.)	OHATA Hiroshi, Professor, Waseda University (Japan)
Session I	
13:45-14:45	Promoting the Cooperation and Enhancement in Building 'Smart City' Concept, and the Regional Environment Issues
Chairperson	INADA Juichi, Professor, Senshu University (Japan)
Speaker A (5min.)	Sarah TONG, Senior Research Fellow, East Asian Institute, National University of Singapore (Singapore)
Speaker B (5min.)	Calvin CHENG Kah Weng, Researcher, Economics, Trade and Regional Integration, Institute of Strategic and International Studies (Malaysia)
Speaker C (5min.)	Kullapa SORATANA, Professor, Naresuan University (Thailand)
Speaker D (5min.)	Marife BALLESTEROS, Vice-President, Philippine Institute for Development Studies (Philippines)
Free Discussions (40min.)	All Participants
14:45-15:55	Break

Session II	
15:55-15:50	Cooperation on Tackling the Ocean Plastic Pollution
Chairperson	INADA Juichi, Professor, Senshu University (Japan)
Speaker A (5min.)	Shofwan Al Banna CHOIRUZZAD, Executive Secretary, ASEAN Study Center, Universitas Indonesia (Indonesia)
Speaker B (5min.)	XUE Xiaopeng, Vice Dean of International Studies, Dalian University of Foreign Languages (China)
Speaker C (5min.)	NGUYEN LE Ngoc Anh, Senior Research Fellow, Fellow Researcher, Institute for Foreign Policy and Strategic Studies, Diplomatic Academy of Vietnam (Vietnam)
Free Discussions (40min.)	All Participants
Session III	
15:50-16:50	Further Development of a Sustainable Society in East Asia
Chairperson	INADA Juichi, Professor, Senshu University (Japan)
Speaker A (5min.)	Bounphieng PHEUAPHETLANGSY, Academic officer of Research Division, Institute of Foreign Affairs (Laos)
Speaker B (5min.)	Yuzilawati ABDULLAH, Associate Researcher, Centre for Strategic & Policy Studies (Brunei)
Speaker C (5min.)	Khin Maung LYNN, Joint Secretary 1, Myanmar Institute of Strategic & International Studies (Myanmar)
Speaker D (5min.)	Dyakanal SOPHAL, Technical Officer, Ministry of Environment (Cambodia)
Free Discussions (40min.)	All Participants
Closing Session	
16:50-17:00	
Summarization (10min.)	ITO Go, Director, MIGA and Professor, Meiji University / Director and Director of Research, JFIR / Academic Governor, GFJ

(2) 主な出席者名簿

Brunei

Ian MAIDIN	Second Secretary, Embassy of Brunei (Brunei)
Yuzilawati ABDULLAH	Associate Researcher, Centre for Strategic & Policy Studies, Brunei Darussalam

Cambodia

Dyakanal SOPHAL	Technical Officer, Department of Hazardous Substances Management, Ministry of Environment
TROEUNG Monich	Deputy Chief Bureau of ASEAN Plus Three and East Asia Summit, Department of General Department of ASEAN, Ministry of Foreign Affairs and International Cooperation

China

XUE Xiaopeng	Vice Dean of International Studies, Dalian University of Foreign Languages
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Indonesia

Shofwan Al Banna CHOIRUZZAD	Executive Secretary, ASEAN Study Center, Universitas Indonesia
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Japan

INADA Juichi	Professor, Senshu University
OHTA Hiroshi	Professor, Waseda University
ISHIKAWA Satoshi	Professor, Tokai University
ONODA Hiroshi	Professor, Waseda University
WATANABE Mayu	President, JFIR / President, GFJ
ITO Go	Professor, Meiji University
KIKUCHI Yona	Director and Senior Research Fellow, JFIR
TAKEDA Yuki	Research Fellow, JFIR

Laos

Sulathin THILADEJ	Director of Research Division, Institute of Foreign Affairs
Souksavanh VICHITTAVONG	Director of International Cooperation Division, Institute of Foreign Affairs
Bounphieng PHEUAPHETLANGSY	Academic officer of Research Division, Institute of Foreign Affairs

Malaysia

Calvin Kah Weng CHENG	Researcher, Economics, Trade & Regional Integration, Institute of Strategic & International Studies
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Myanmar

Khin Maung LYNN	Joint-Secretary 1, Myanmar Institute of Strategic and International Studies
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Philippines

Marife Magno BALLESTEROS	Vice President, Philippine Institute for Development Studies
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Singapore

Sarah TONG	Senior Research Fellow, East Asian Institute, National University of Singapore
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Thailand

Kullapa SORATANA	Assistant Professor, School of Logistics and Supply Chain, Naresuan University
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Vietnam

NGUYEN Thi Bich Ngoc	Senior Research Fellow, Institute for Foreign Policy and Strategic Studies, Diplomatic Academy of Vietnam
NGUYEN Le Ngoc Anh	Fellow Researcher, Institute for Foreign Policy and Strategic Studies, Diplomatic Academy of Vietnam

など 65 名（国名アルファベット順）

(3) パネリストの横顔

【海外側パネリスト】

Sarah TONG *Senior Research Fellow, East Asian Institute, National University of Singapore*

Sarah Y. Tong graduated from Beijing University of Aeronautics and Astronautics and worked at the Development Research Center of China's State Council for several years. She obtained her Ph.D. in Economics from the University of California at San Diego. She was Assistant Professor of the Department of Economics and Research Fellow of East Asian Institute, both at the National University of Singapore. Currently, she is Senior Research Fellow of NUS' East Asian Institute. Her research interests concentrate on the recent development and transformation of Chinese Economy, including development in trade and foreign investment, development of regions, financial sector reforms, the reforms of state-owned enterprises, and industrial policies and restructuring. Her work appeared in journals such as Journal of International Economics, Global Economic Review, China: An International Journal, Review of Development Economics, China and the World Economy, Comparative Economic Studies, and China Economic Review. In addition to contributing chapters to numerous books on contemporary China, she also edited and co-edited three books including China and Global Economic Crisis (2010), Trade, Investment and Economic Integration (2014), China's Evolving Industrial Policies and Economic Restructure (2014), China's Great Urbanization (2017), China's Economic Transformation under the New Normal (2017), and China's Economic Modernization and Structural Changes (2019).

Calvin Kah Weng CHENG *Research Fellow, Institute of Strategic and International Studies*

Researcher in the Economics, Trade and Regional Integration Division at the Institute of Strategic and International Studies (ISIS) Malaysia. He researches economic policy issues related to economic development, inequality and poverty, and trade and regional cooperation. He studied Economics and Econometrics at Monash University in Clayton, Australia, focusing on economic development. Prior to joining ISIS Malaysia, he was an economist with an investment fund in Malaysia.

Kullapa SORATANA *Assistant Professor, School of Logistics and Supply Chain,
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Received M.A. of Environmental and Hazardous Waste Management, Chulalongkorn University, Bangkok, Thailand in 2005 and PhD of Sustainability and Green Design, Civil and Environmental Engineering, University of Pittsburgh, Pittsburgh, Pennsylvania, USA. in 2012. Served as Acting Deputy Director for Research and Community Services and Deputy Director for Administration Lecturer, Acting Deputy Director for Research and Community Services and Deputy Director for Administration Lecturer.

Marife Magno BALLESTEROS *Vice President, Philippine Institute for Development Studies*

Marife Ballesteros is currently the Vice President at the Philippine Institute for Development Studies, where she has worked as Senior Research Fellow for the past 20 years. She began her career as an economic researcher and moved to achieving expertise in public policy analysis and advocacy. Dr. Ballesteros is a leading expert in the field of development economics with specialization on housing policy, land policy and urban development. She has been involved in several evaluation studies of government regulatory policies and poverty programs. She has also done work on several projects with the World Bank and ADB and those funded by JICA and AusAID. She is a member of the Society of Industrial and Organizational Economics (SIOE) and the International Development Evaluation Association (IDEAS).

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Shofwan Al Banna Choiruzzad is a lecturer at the International Relations Department, Faculty of Social and Political Sciences, Universitas Indonesia, Depok, Indonesia. He also serves as the Executive Secretary of the university's ASEAN Study Center. His research interests are regional cooperation and the intersections between 'the global,' 'the national,' and 'the local.' Shofwan has published academic articles and opinion pieces both for Indonesian and international audiences, including in Contemporary Southeast Asia, Forest Policy and Economics, Asian Politics and Policy, Indonesia, Global, The Jakarta Post, Nikkei Asia, Kompas, Good Governance Africa, and some others. He was awarded as the 1st Winner of the St.Gallen Wings of Excellence Award in 2009. Shofwan also assists various government agencies and international organizations to develop their strategies and policies in Indonesia and Southeast Asia. He discusses international issues in Indonesian perspective through his podcast channel in Spotify, "Bebas Aktif."

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Ngoc Anh has been working as a research fellow at the Centre for Security and Development Studies, Institute for Foreign Policy and Strategic Studies, Diplomatic Academy of Vietnam since 2011. Ngoc Anh shares her research interest on several topics including ASEAN China Cooperation field, the integration policy in Vietnam, sustainable development, non-traditional security issues... She got Bachelor and Master Degrees in International relations at the Diplomatic Academy of Vietnam.

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Graduated from University of Dundee, Scotland with an M.Sc. in Energy Studies in from the Centre for Energy, Petroleum, Minerals, Law and Policy. She is an Associate Researcher at the Centre for Strategic & Policy Studies (CSPS), a national think-tank in Brunei. Yuzilawati began her career in the petroleum industry, and later joined the financial services sector. At CSPS, she currently heads the Brunei Futures Initiative portfolio. Yuzilawati has been involved in numerous national-level projects at CSPS, and provides training to government stakeholders in the area of strategic foresight and strategic planning.

Khin Maung LYNN **Joint-Secretary 1, Myanmar Institute of Strategic and International Studies**

U Khin Maung Lynn served in the foreign service of the Government of the Republic of the Union of Myanmar for over 36 years before retiring as Charge d'Affaires/ Minister-Counsellor at the Myanmar Embassy in Kuwait. He held various diplomatic posts at the Myanmar missions in London, Geneva, New York, Tokyo, Islamabad, Kuala Lumpur, Manila, Riyadh and Kuwait. During his career, he also served in various capacities in the Ministry of Foreign Affairs of Myanmar at the International Organizations and Economic Department, Minister's Office, and the Political Department where he served longest. He was Assistant Director of the Boundary Division, Political Department from 1993 to 1996 and served as Deputy Director in the Southeast Asia Division, Political Department, from 1998 to 2001 and as Director from 2005 to 2007. He led diplomatic

missions to open new Myanmar embassies in Riyadh in 2007 and in Kuwait in 2009. He retired from the Myanmar Foreign service in January 2011 and since August 2012 he has been involved in Track II diplomacy by attending some of the conferences and workshops in the region. He was also a part-time advisor from 2012 to 2013 with the International Management Group (IMG), an intergovernmental organization, helping with the implementation of capacity building projects for personnel of the Myanmar civil service including the Myanmar Foreign Service, with funds provided by the Norwegian Government and the EU. He has been serving as Joint Secretary (1) of the Myanmar Institute of Strategic and International Studies (MISIS) since its formation in 2013.

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【日本側パネリスト】

WATANABE Mayu

President, JFIR / President, GFJ

Graduated from Chiba University. Received M.A. in Education from the Graduate School of the University of Tokyo in 1997. Joined the Japan Forum on International Relations (JFIR) in 2000 and appointed Senior research fellow in 2007, during which period she specialized in global human resource development and public diplomacy. Appointed Executive Director in 2011 and assumed Senior Executive Director in 2017. She has served as President since 2018. Concurrently serving as President of the Council on East Asian Community (CEAC) and President of the Global Forum of Japan.

ITO Go

Director and Director of Research, JFIR / Professor, Meiji University

Graduated from Sophia University. Received Ph.D. at the Josef Korbel School of International Studies, University of Denver in 1997. Served as Associate Professor at Meiji University in 1998, and assumed the current position in 2006. Also served as Visiting Professor at Beijing University, Academia Sinica (Taiwan), Bristol University (Britain), Australian National University, and Victoria University (Canada), Adjunct Professor (International Security) at Waseda University as well as Sophia University, and as Adjunct Researcher of the House of Councilors. Recipients of the Eisenhower Fellowships in 2005 and the Nakasone Yasuhiro Award in 2006. Concurrently serves as Superior Research Fellow, JFIR.

INADA Juichi

Professor, Senshu University

He received his M.A. in international relations and graduated from doctoral course of the University of Tokyo (Japan). He has experiences of working & studying at several think-tanks such as the Nomura Research Institute (1980-81), the Japan Institute of International Affairs (1986-90). He was also a Research Fellow at the Center

for International Affairs (CfIA) at Harvard University (1992-1994). He has his experiences of working at the World Bank twice. Once in 1996-97, he joined into some research works at the Policy Research Department (DEC/PRD). More recently in 2004-2005, he worked for LICUS (Low Income Countries under Stress) Unit (OPCS). He has a lot of experiences of engaginvolving into researches on fragile states, especially regarding the relationship between security and development, governance and institutional aspects of development, socio-economic analyses, and evaluation of ODA projects and programs.

OHTA Hiroshi

Professor, Waseda University

Professor at the School of International Liberal Studies (SILS), Waseda University, received a Ph.D. in international relations from the Department of Political Science of the Graduate School of Arts and Sciences of Columbia University. Some recent works include: Hiroshi Ohta, “EU and Japanese climate and energy security” with Katja Biedenkopf, in Emil Kirchner and Han Dorussen eds., *EU-Japan Security Cooperation: Trends and Prospects* (London and New York: Routledge, 2019); *Kankyo-to-enerugee-wo meguru shuyoukoku-no hikakuseiji: Jizokukanou shakai heno sentaku* (Comparative Politics about the Environmental and Energy Policies of Major States: Make a Choice for A Sustainable Society) (Tokyo: Toshindo, 2016: 536pp.); “Global Governance and China: The Hu Jintao Era and Governance of International Public Goods,” *The Japan Institute of International Affairs (JIIA), Japan Digital Library International Circumstances in the Asia-Pacific Series: China and Korean Peninsula*, JIIA, March 2016; H. Ohta and Yves Tiberghien “Saving the Kyoto Protocol: What Can We Learn from the Experience of Japan-EU Cooperation?” P. Bacon, H. Mayer, and H. Nakamura, eds., *The European Union and Japan: A New Chapter in Civilian Power Cooperation?* (Surrey, UK: Ashgate, 2015: 169-184); and H. Ohta “Climate Change and Human Security: the Convergence on Policy Requirements” in S. Takahashi ed., *Human Rights, Human Security, and State Security: the Intersection* (Oxford: Praeger, 2014: 75-96).

(In order of appearance in the “Program”)

(4) 速記録

本速記録は、すべての発言内容について発言者全員の確認をとることが不可能であったため、当フォーラム事務局の責任において再生、編集されたものである。

1. OPENING SESSION

Kikuchi Yona

Excuse me. Now, the time is 1330. I'd like to open the Japan-East Asia Dialogue Towards Building a Sustainable Society in East Asia, sponsored by the Japan Forum of International Relations and co-sponsored by the Global Forum of Japan; Meiji Institute of Global Affairs; East Asian Institute, National University of Singapore; and the Faculty of Social and Political Sciences, University of Indonesia. This event is also supported by The Japan Foundation Asia Center.

I am Kikuchi Yona. I'm a director and senior research fellow of JFIR. I would like to express our gratitude to all of you for your attendance today. In the opening session, now, I'd like to invite Ms. Watanabe Mayu, President of the Japan Forum of International Relations as well as Global Forum of Japan for her opening remarks. Ms. Watanabe, please?

Watanabe Mayu

Good afternoon. I am Watanabe Mayu, President of The Japan Forum on International Relations and the Global Forum of Japan. It is with pleasure to host the Japan East Asia Dialogue under the co-sponsorship of the East Asian Institute of National University of Singapore, and The faculty of Social and Political Sciences of University of Indonesia, and the Meiji Institute of Global Affairs, MIGA. First of all, on behalf of the organizers, I would like to express my deep appreciation to all the panelists and audience who have gathered here today. Especially, I would like to extend my warm welcome to the distinguished guests from overseas: Dr. Marife Ballesteros of the Philippines, Mr. Khin Maung Lynn of Myanmar, Dr. Sarah Tong of Singapore, Dr.

Shofwan Al Banna Choiruzzad of Indonesia, and other fellow experts. Also, I would like to thank The Japan Foundation Asia Center for its support to make this conference possible.

In recent years, East Asia has undergone a marvelous development as a global center of the world. But on the other hand, the global issues that no one country can solve alone are becoming apparent, particularly the reduction of ocean plastics that are severely harming the marine ecology. Development of smart city which is adaptable of the issues like waste management, constructing interregional information sharing platform of the environmental issues are urgent needs to be dealt with for fulfilling the environmental initiatives such as sustainable development goals, SDGs.

The ASEAN Plus Three Framework has been strengthening the regional cooperation to counter such environmental issues. Last year's ASEAN Plus Three Summit, for example, to clear up the ASEAN Plus Three marine plastics debris, cooperative action initiative, to promote the environmentally appropriate waste management, and plastic pollution management, and three R's—reduce, reuse, and recycle.

Also, within the G20 framework, the Osaka Blue Ocean Vision, a comprehensive initiative to reduce the spread of plastic debris in the ocean was declared by the host country, Japan, and warmly welcomed at the G20 summit held in June this year. Under the circumstances, JFIR has organized a research project on "Towards Building a Sustainable Society in East Asia" led by Professor Ohta Hiroshi of Waseda University and Professor Inada Juichi of Senshu University.

As part of this project, today's dialogue focuses on three topics as shown in the program. In closing my remarks I wish today's dialogue will be a fruitful exchange of discussion for all. Thank you very much.

Kikuchi Yona

Thank you so much. Next, I'd like to invite Professor Ohta Hiroshi of Waseda University for his keynote speech. Professor Ohta, please?

Ohta Hiroshi

Thank you for the introduction. Thank you for coming to this seminar on "Towards Building a Sustainable Society in East Asia". In the era of Anthropocene, in which human beings have become a force to influence and change the earth's ecosystem, our civilization or the growth of civilization becomes strategic to ourselves. So, the concept of sustainable development has become the key to our survival. This concept spread during the run-up period to the Rio Summit or Earth Summit, something called the Rio Summit which was held in Rio de Janeiro in Brazil, June, 1992.

In September 2000, the Millennium Summit was held and adopted the Millennium Declaration with eight Millennium Development Goals to reduce poverty by 2015. Ten years after the Rio Summit, the World Summit on Sustainable Development was held in South Africa in 2002 to accelerate the action to realize Agenda 21 for global sustainable societies. Twenty years after the Rio Summit, the United Nations Conference on Sustainable Development or Rio+20 was again held in Rio de Janeiro, Brazil in June 2012 to accelerate international action towards sustainable development. Then September 2015, the United Nations Sustainable Development Summit adopted the 2030 Agenda for Sustainable Development with 17 SDGs, sustainable development goals, at the core.

These are the 17 sustainable goals. It's very much important, the 17 goals are interlinked. We should pursue in a comprehensive way so that we can achieve the sustainable societies. But today, we are

going to focus on several sustainable development goals. One of them addresses the marine plastic litter and microplastics which is Goal 14, SDG 14 which deals with the life below water. Particularly, 14.1 addresses to reduce marine pollution, particularly by 2025, to significantly reduce marine pollution of all kinds, in particular, from land-based activities including marine debris and nutrient pollution.

Now, the transboundary movement of microplastics becomes a global environmental problem. That requires a global governance approach, galvanizing all the stakeholders—governmental, nongovernmental; and integrating all the levels of efforts—international, regional, national, local, and individual. Also, it means the international legal instruments – expand the existing international legal instruments such as MARPOL Annex V ship-generated plastic waste, and also Basel Convention which deals with transboundary movements of hazardous wastes; and UN Environment Assembly Resolution 4/7 on marine litter and microplastics et cetera.

This government is making efforts to address these issues on a voluntary basis, like, G20 Implementation Framework for Actions on Marine Plastic Litter, and also ASEAN Framework of Action on Marine Debris. We should try to establish a new legally binding agreement on marine litter and microplastics since the current approach is fragmented and does not necessarily adequately address the problem.

Furthermore, we need to strengthen current measures by going beyond merely addressing or reducing or prohibiting single-use plastics or plastic bags, focusing more on addressing the problem of microscopic plastic particles or microbeads which occupy by the vast majority of plastic discharged into the environment. Here, the private and industry associations, environmental NGOs and individuals should be brought into the solution. The product of cosmetics, for example, need to produce

microplastic-free products, and at the same time consumers should avoid using microbeads containing product with the help of environmental NGOs' awareness-raising campaigns. All actions need to be carried out based on sound science and cost-effective and environmentally-friendly ways. Thus, it's crucial to enhance scientific means and promote science-based policies and innovative solutions so that we can assess fairly relative advantage and disadvantage of the substitution, finding substitutions, and use multi recycling, and waste-to-energy which tries to extract energy from waste, and also convergence of technologies.

Now, I'd like to turn to another issue relating to energy transitions and smart cities – changing this slide. This is another focus for the afternoon seminar. All the 17 SDGS, Agenda 2030 for Sustainable Development are interlinked but three of them—Goal 7, Goal 11, Goal 13—have a very strong synergistic effect to address these issues.

Goal 7: Ensure access to the affordable, reliable, sustainable and modern energy for all.

Goal 11: Make cities and human settlements inclusive, safe, resilient, and sustainable.

Goal 13: Take urgent action to combat climate change and its impacts including adaptations.

Government is making efforts such as G20 Karuizawa Innovation Action Plan on Energy Transitions and Global Environment for Sustainable Growth, and also G20 Action Agenda on Adaptation and Resilient Infrastructure. These are the outcomes of the last G20 held in Karuizawa.

Energy transition driven by the electrification by renewable energy sources such as solar and wind could reduce 75% of energy-related carbon emissions which we're required to limit the global rise in temperature to well below 2 degrees Celsius by 2050. If we add the effect of improved energy efficiency through renewable electrification, we

could reduce 90% of that emission. The clean electricity generated by renewables combined with smart digital technologies is a path to a sustainable future by promoting the electrification of end users, transport, building, and industries, decentralization of power system and digitalization of power sector. Most of the technologies are already available to realize these logistic effects.

For transport, for instance, many electric vehicles indeed are already on the road. The widespread application of rooftop solar PVs and micro wind turbines and heat pumps are providing electricity and heat to local communities through decentralization of power system. Digitalization of society is enabling the management of large amounts of data and optimizing system with many small generation units. The application of smart meters and sensors, the Internet of Things, and artificial intelligence can enhance the development of smart cities. The cutting down of conventional energy such as fossil fuel use and economic growth in East Asia will stimulate the economy, create employment, and further invite investment in new technologies in these regions while mitigating and being able to adapt to climate change.

That's the options and tools galvanized world. Let's work together to achieve sustainable development. Thank you very much for your attention. Please enjoy the rest of the seminar.

2. Session I : Promoting the Cooperation and Enhancement in Building 'Smart City' Concept, and the Regional Environment Issues

Kikuchi Yona

Thank you so much, Professor Ohta. Now, I would like to open Session 1, Promoting the Cooperation and Enhancement in Building Smart City Concept, and the Regional Environment Issues. Let me invite Professor Inada Juichi of Senshu University to chair the first session. Professor Inada, please?

Inada Juichi

My name is Inada. I'm professor of Senshu University. I was nominated as the chairperson. But I'm not an expert on this kind of environment issues. My major task is to be a timekeeper of the program. I would like to mention or explain the background of today's program. You might know that ASEAN Plus Three has a think tank network. This time, The Japan Forum on International Relations held a working group on this topic. This time the major topic is "sustainable society" how to attain a sustainable society. But the definition of sustainable society is very wide including not only the environmental aspects but also economic aspects and cultural aspects.

In our program, we would like to focus especially on environmental aspect of sustainable society. Two specific topics are raised. One is smart city, and another is ocean plastic pollution. One of our major tasks of the working group is to make recommendations to the ASEAN Plus Three a little bit higher-level meeting. In fact, yesterday, we held a one-day closed session. The members are the same. Today, we are now holding an open session to the public. I am sorry. The time is very limited to 5 minutes. I will not stop your presentation at 5 minutes sharp but I'd like to ask each presenter not to make your presentation too long. I would like to invite our first presenter, Ms. Sarah Tong, Senior Research Fellow of East Asian Institute of National University of Singapore.

Sarah Tong

Thank you, Mr. Chairman. I'm very happy too. Thank you for having me here. Even though I'm not a specialist in the area, yesterday's one-day discussion has been very fruitful and I have learned a great deal. I also want to say that my institute is proud to be co-sponsoring this event. In addition to that, I'm going to say three things in 5 minutes. First, the importance of this event in the cooperation. Second, Singapore's views and commitments. The

third one is Singapore practices in this area of smart city development and regional environmental issues.

First, I think the importance is quite well-known. The region, East Asia and wider Asia in general are facing some common challenges due to the nature of the environmental issues. The other aspect is that the economy is becoming increasingly interdependent. Those two mean that we have to face the challenges together. The second aspect is that new technologies provide opportunities and risks. These opportunities can only be benefited by the economies by working together, and working together also to address the risks that new technologies are presenting.

Second, Singapore's views and commitment to sustainable development, smart city, or smart nation in Singapore's case, and also the environmental issues. First, as a highly open economy, Singapore has a very strong commitment to openness and to cooperation because Singapore is very dependent on external relations economically and otherwise. The other thing is Singapore also lacks resources. Those combined together, Singapore has always been a strong supporter of openness and cooperation.

Second, in terms of Singapore's view, is that Singapore thinks the smart portion of the development and sustainability are complementary elements of the same thing. They complement each other. By stressing the smartness or the employment of new technologies, we are also promoting sustainability of a society.

Third, Singapore's commitment is that it's going to try or at least have practice strong leadership and strong cooperation within the nation. Strong leadership, I discussed yesterday, the efforts to promote smart city, smart nation is under the direct leadership of the Prime Minister's Office. That was started in 2014, the smart city, smart nation initiative, and a lot has been done over the past 5 years.

Last one, in terms of Singapore's commitment and views is that the cooperation has different layers. At the first layer, perhaps within the government institutions, across different agencies, the cooperation is quite important. The second is, within Singapore, cooperation between private and public and society and NGOs, there's another layer of cooperation. The third layer is cross-border cooperation. I think that's also part of the efforts by the Singapore government to promote cooperation across the board.

The last thing I want to say is the practice. As I mentioned, the smart nation initiative was proposed in late 2014. Since then, the practice has gone from focusing on certain areas to a much broader, comprehensive, and integrated approach. Originally or initially there's emphasis on data, digitization of government services and government data, and has gone beyond that. If I want to highlight some of the programs, the 2015 Sustainable Singapore Blueprint, that emphasizes a lot on the greenness, gracious community, eco-smart and so on and so forth. The Urban Redevelopment Authority Draft Master Plan in 2019 has gone much wider covering various areas.

In terms of cooperation, international cooperation, let me just say three things. First, Singapore is strong supporter of the Paris Agreement. Second, it also supports the United Nations Sustainable Development Goals, the 17. The last one highlights – Singapore has done a substantial amount of work to provide training for officials from different countries—just some examples of Singapore's practices.

I think I'll end here. Thank you very much.

Inada Juichi

Thank you, Ms. Tong. I'll invite questions from the floor later after completing four presentations. I'd like to ask Mr. Calvin Cheng Kah Weng, Research Fellow at the Institute of Strategic and International Studies of Malaysia.

Calvin Cheng Kah Weng

Thank you very much, Mr. Chairman. Many thanks for the very kind host at JFIR and Meiji University, and distinguished audience members. My name is Calvin Cheng. I research economic policy in ISIS, Malaysia. Today I'll keep my points very brief. I made comments yesterday at the working group meeting. I'll be firstly talking a bit about the amazing experience with smart cities and urban development initiatives. We have two examples. One not so good, and one quite good. The first of course is Cyberjaya, and second is the smart villages and smart communities program in Malaysia. Secondly, I'll be talking about some focus areas and potential avenues for international cooperation regarding this initiative.

On Cyberjaya I want to share the experience with our city-building project. Cyberjaya was a project initiated in 1997 by the Malaysian government to build a large hi-tech city about 40 minutes south of Kuala Lumpur. Yet today, in 2019 about 2 decades and billions of ringgits later, the success of Cyberjaya as a smart city is quite mixed. Numerous challenges including the onset of the Asian financial crisis and a failure to attract enough knowledge, industries, away from culturally vibrant cities like Kuala Lumpur and Penang meant that instead of becoming a Silicon Valley of Malaysia like Utopia as envisioned, Cyberjaya ended up being a place where large corporations merely parked their backend data processing call centers and other auxiliary functions. This Cyberjaya experience emphasizes the challenges surrounding smart city development. I think it shows that even if you get most of the hard infrastructure and technology correct, physical development alone is not enough to build a smart and sustainable city.

Ensuring that there is sufficient demand in the first place, and ensuring sufficient network effects is crucial, equally as important is making sure that there is enough soft infrastructure in place. Here, I'm talking about entertainment, culture, restaurants,

bars. Focus on smart technology often addresses the need for this soft infrastructure, but the reality is that a city needs vibrancy and liveliness to be truly livable.

Moving on to the next example of the smart communities and smart village programs in Malaysia. These programs were initiated somewhere in 2014. These programs try to bring smart development efforts outside of the major cities to smaller towns, to remote rural communities, with the aim of decreasing regional disparities and encouraging more equitable growth across the nation.

The smart community projects outfitted smaller urban areas across the country with tech-based solutions including smart flood announcement systems—of course, flooding is a huge problem in some parts of Malaysia—and also Internet access centers and tech-training programs to encourage local innovation. Meanwhile, the smart village initiatives focus on more remote rural areas. Here, the efforts are more basic including electrification, helping local villagers increase their income sources through smart agri business, farming, eco-farming.

In light of this, what are the potential focus areas for future inter-country collaboration? I think one key area in which inter-country collaboration will be most useful is on implementation. This is especially true for developing nations where we can build the infrastructure and the tech needed, but it's often the post-construction implementation and maintenance that poses major challenges.

The second area in which, I think, inter-country collaboration would be useful is also in addressing and compensating for the disadvantages and risks that come with smart city development, that come with large-scale deployment of smart technologies. Here, I'm talking about disadvantages like increased inequality, increased exclusion. Smart cities, especially large-scale manufactured smart cities, often seem designed for the wealthy, doing little to help other communities living nearby. One clear

example of this in Malaysia is the Forest City Project in Johor. At ISIS Malaysia we conducted a national study on the Belt and Road Initiative. We interviewed residents of villages nearby for a city. Many of these lower-income villages were unhappy with the project. They felt excluded. They felt it was an exclusive area for elite, for foreigners. They thought they would be not welcomed there despite living literally steps away from Forest City. And as such, inter-country collaboration and cooperation needs to focus on how to make smart city developments more inclusive to both the communities living in the development, around the development. Also similarly, we also need to ensure that this focus on smart cities does not mean we neglect the smaller urban areas or rural areas in a country.

There are other concerns too. I'll just briefly talk about this like cybersecurity risks, data privacy concerns. Do lesser developed states in Southeast Asia necessarily have the resources or know-how to ensure that their networks are secure? How can regional cooperation and regional institutions help ensure that data and privacy of smart citizens are not abused for political reasons or whatnot?

Lastly, just briefly what are some potential avenues for cross-country collaboration on this front? I think in my view it's a huge opportunity to increase collaboration between the ASEAN Plus Three and the Asia-Pacific Economic Cooperation, APEC, on smart cities. APEC has been doing a lot of work on smart cities for a long time now, even before Singapore. In fact, APEC member economies pledge in 2014 to enhance cooperation across businesses, academia, with regards to smart cities. They even established the APEC Research Institute for Smart City Initiative in China in 2014. In view of the fact that APEC and ASEAN Plus Three are both Asia-focused regional institutions that share very similar goals and share very similar member economies, I think the scope and room for collaboration on this issue is very large.

In the interest of time, I'll end my presentation here, today. Thank you.

Inada Juichi

Thank very much, Mr. Calvin Cheng. I would like to ask the presentation of Dr. Kullapa Soratana, professor of the university in Thailand.

Kullapa Soratana

Thank you. Hello, everyone. A little bit of my background: my background is in sustainability and green design. Today, I would like to discuss on how we can make a smart city become more sustainable. Smart city is the city that utilizes technology and innovation in order to improve community services and to help people in the community reduce resource consumption and also to reduce their living expenses. We can achieve that by promoting social involvement and setting up a good plan so that we can have a livable and modern city as we long for. However, by employing only technologies cannot guarantee that we will have the livable city that we want.

The reason I say that is because currently in Bangkok, that's the capital city of Thailand, we are having several infrastructure construction sites for sky trains and for subways all over the city. That's caused impact not only on the environment but also on human health – caused impact on their respiratory systems from particulate matter 2.5, that's like the very fine particles of 2.5 micrometers, size of micron particulate matters. What we need is a sustainable smart city which is the city that encourages healthy living, increases transportation choices and decreases automobile dependence.

To reach a sustainable smart city, some projects can be done. For example, rather than using a high technology public transportation system, maybe we can adjust it to a sustainable public transportation system. By that I mean rather than having very high technology vehicles, we can just simply shift from fossil fuels to renewable energies. Most of the sky trains and subways in Bangkok are used by

middleclass people. That way, they can have accessibility and also they can afford to use the commute.

Another thing that we can do is green public space and by locating green spaces or parks in the city. By city, it's not limited to only the urban areas; it can be in rural areas as well so that people can use the areas to go do some exercises or do some social activities. Another one can be urban planning through a public hearing process or with certain level of community involvement.

I'll keep my presentation pretty short today. In conclusion, in order to have a sustainable smart city, I would like to propose five points here. These recommendations are based on smart city program that's been going on in Thailand. The first one is, we need a comprehensive database on, for example, resource consumption and production, and also on impact per capita. The second point is, we need a decentralized system to increase level of community involvement. The third one, we need an implementation plan to inform the community on what they should do to build a sustainable smart city, something beyond just a policy because in policy, sustainability is the term that has been used a lot but we don't exactly have the plan for it.

Next one is, we need research-based policies. The policies should be set up based on results of some research, from studies. Last but not least, we need a monitoring system to assess the city's performance and to ensure that we are moving in the right direction without creating unintended consequences.

I will end my presentation here. Thank you.

Inada Juichi

Thank you very much, everyone. I think 5 minutes is too short to explain the contents of one side. Anyway, the final presenter of this session of smart city is Dr. Marife Ballesteros, Vice President of the Philippine Institute for Development Studies.

Marife Ballesteros

Hello. Good afternoon. Thank you for this opportunity to present the initiatives in the Philippines with regards to smart cities. My discussion will be broken into three parts. One would be, what are the major initiatives with regards to smart cities? What are the evolving issues with regards to the practice of smart city in the country? Then, some recommendations on areas of possible cooperation or collaboration for development.

Compared to the concept earlier of the eco city, the green city, I think the Philippines is embracing greater, I guess, passion, the concept of smart cities. I think it has something to do with the digital technology and transformations that can be done through technology and innovation.

The initiative of the Government of the Philippines basically on smart city is built on the concept of digital transformation and modernization. We have adopted the innovation of digital technology in different government platforms – in disaster response and disaster risk management, community health tracking system, and public safety system. At the same time, around the country, you will see certain test sites, buckets of pilot areas where we have well-developed, well-planned small areas with better infrastructure.

All of these innovations are actually undertaken both at the national and at the local level. At the local level, there are significant investments and prioritization of investments in terms of ICT infrastructure. However, most of these efforts are actually only in experimental or pilot stages. In fact, there are a lot of sectors – and I would say areas – that we consider as still a large proportion of areas that is left behind from these modernization activities. One sector is of course agriculture. There is still a slow adoption of technology, both for production and for processing. In the environment, we have yet to incorporate smart concept when we talk of solid waste management, water resource management

including clean energy. Of course, there are still large areas where we have smart cities within the city there are still large areas surrounding the smart city which – actually we have a lot of informal settlements, settlements which have no access to basic infrastructure.

When we look at all these initiatives, there are a lot of issues that have emerged from the adoption and practice in the country. One of these is, it remains unclear about the scalability of these pilot or test projects. Secondly, it's not clear how and where the smart city becomes embedded in our urban and social fabric. That still remains an issue.

There are sectors that are actually raising concerns that smart cities have this potential of undermining equality or democracy. It is actually the area of challenge because most of the developments are not city-wide. There is a challenge of whether these cities or projects are inclusive, and whether it is woven within the urban and social fabric of the local area or the community.

Given that, what I think the areas for development and cooperation within the region would be the promotion of the concept of smart nation, which is actually the concept that was provided or actually defined how Singapore, for instance, and the EU define what a smart city is. It's really nationwide rather than just pockets of development. It should be a holistic approach to the concept. I think in the discourse of smart city we should be able to not leave the environmental issues over that of digital technology.

We did just a quick review of the discourse on smart city since 2014. What we find out is that only about 1% of this discourse on smart city pertains to environmental sustainability; and most of the others are about connectivity, infrastructure, data analytics and so forth.

I think the other are for cooperation would be to engage our local leaders; especially this is a clear

case for the Philippines because we have in advance decentralized system. It is the local governments that are taking the lead in terms of management of their local areas. In the promotion, in cooperation and collaboration, the local leaders should also be part of that discussion.

There's also a need to engage our external actors, the Asian Development Bank, JICA, the World Bank through the official development assistance to ensure that these developments of smart cities are done simultaneously with the environmental concerns; and similarly, engage our private sector, the industry, in providing the balance to environmental concerns and modernization.

I'll end my presentation with that note.

Inada Juichi

Before this session, I said that the definition of sustainable society is wide. I would like to focus especially on the environmental aspects. But as Dr. Ballesteros mentioned, smart city initiatives might have negative impacts on equality and democracy. The discourse on smart city is not limited to the environmental issues but also many other aspects. I think the discussions and questions can be possible to many aspects of the smart city concept, and the initiatives and actions of smart city.

I would like to invite questions from the floor to any presenter. I think it is better for us to invite questions on Professor Ohta's presentation as well. If you have any questions and comments, please raise your hand and identify your name and affiliation, please. Yes.

Female Participant

Hello. My name is Michiko Iwanami. I am from Sojitz Research Institute. I have question to, if possible, all the panel members here. I have two questions. The first question is within the various aspects of smart city such as mentioned in agriculture. It might be water resource management. It might be solid waste management. For us, myself

being Japanese and being from a Japanese company, in which areas would you like to see investment or joint research for Japanese companies or Japanese research institute? Which areas would you like to collaborate with research?

The second one is related to the strength of your country. In which aspect of smart cities, do you think you have strengths? In other words, how – in which areas do you think you can help us being Japanese?

Inada Juichi

Could you identify the name of the presenter you ask the questions to? Or maybe anyone can.

Female Participant

I did say all. If you feel that you are not really prepared for, I'm sorry that's fine. Anyone from the panel, I will be very grateful.

Sarah Tong

Before I answer the questions, I do have a few points to add in terms of cross-border cooperation. I think in terms of cooperation, we all know cooperation is good but we want to think more practically on what area. I think in our proposal of cooperation, there are a couple of areas. Number one is information sharing, sharing the good practices, and also the not-so-great practices for others to prevent such not successful practices. The first one is information sharing of various practices across countries. Perhaps some of the practices would say, okay, Malaysia is doing well and that might address the questions how we can teach each other.

Number two concerns training, education and awareness, increase awareness among public as well as local leaders and so on and so forth. I think someone touched on that point yesterday. It's not just that public need awareness but the leaders at every level also. That's the part I mentioned about training. Singapore has provided training for officials domestically as well as from other countries.

Perhaps that's one of the strengths for Singapore to be relatively more developed, and also facing much more risks, more urgent environmental issues, so on and so forth.

The third aspect is technical support or technical cooperation in terms of research, in terms of practices, whether it's water treatment or sewage systems, so on and so forth. That also combines – technical support also combines in terms of pool of experts in different areas so that countries know who are good in which areas.

The last one, the fourth area of cooperation is financial assistance. I think earlier speaker mentioned about ADB, World Bank, and other forms of assistance. That's the financial aspect of cooperation. I mentioned yesterday some kind of ODA mechanism or the ADB mechanism, or other institutional settings would also be a useful aspect.

The question in particular, areas of collaboration or cooperation with the Japanese companies, I think also there are two aspects of that. Number one is financial aspect. But being a company, financial aspect has to be – it's not ODA, it's profit-driven. I think that depends on the strength of the company. In addition to the financial aspect, the company is good at doing what. I think that's important. That's the first question.

The second question, the strengths of my country, Singapore. I think in terms of domestic institutional setting is perhaps one but that's not – each country has different system. That doesn't mean that the system works in Singapore – works in other places as well. But I think training is one; that's training of experts and exchange of practices. That's obviously benefiting everyone. I think the other aspect, Singapore has been learning is to be not focusing on just the government, is also trying to encourage participation of private sector and citizens in general, and societies.

There are a lot of pilot programs within Singapore's smart city, smart nation initiatives, and community building, and community involvement. Actually there was a certain smart community pilot project, transportation system, car light. There's a lot. That's why it confuses me to say too much about that. But there's a lot of information in terms of Singapore's practice. Hope I'm not doing a too messy job. Thank you very much.

Calvin Cheng Kah Weng

Thank you. I don't think I'm in a position to officially comment on which aspects that Malaysia would like to see investments or assistance. But I'll quickly comment on what I think are important areas for Malaysia and where it's lacking. I think one of the areas in which it's important is human capital development. Malaysia has traditionally always been lacking human capital development element. I think the societal aspect of smart city initiatives are very important as well. I think that's where traditionally we have been lacking. We've always had lots of collaboration in terms of tech, in terms of infrastructure, but on the human side it's less so.

The other thing is of course on implementation as I mentioned earlier. The thing that – I suspect a lot of states as well – is that we can build; we have the technology infrastructure but what comes after the post-implementation and the maintenance, that's the tough bit. Thank you.

Kullapa Soratana

For the first question I will say similar to Ms. Tong that it depends on the company's strength. But based on the situation, in Thailand we are more focusing on the agriculture part since the country has been undeveloped for this – trying to be agricultural country. That's still for the second question as well. I think Thailand, our strength in agriculture. That's not based on the technology but cooperation. The joint research will be based in terms of Japanese providing the technologies. Thailand has long been collecting data and resources to conduct research in that aspect. Thank you.

Marife Ballesteros

Thank you for the question. If we look at the investment of the Japanese companies in the Philippines, I think we are actually happy about how it is being done in terms of being concerned not only about just building the infrastructure but also being involved in environmental impact assessment, social impact assessment. I guess it should continue along that line. But in addition to the infrastructure development, we would need support in terms of water conservation, and technology and innovation in terms of solid waste management.

I think research and development is very critical for us especially in the case of the agriculture sector. We have local inventors but usually without the support from external sources in terms of how you can commercialize or how you can – those inventions. What is happening in terms of local invention is that they test it and then eventually it will not be adopted. We have a lot of experience in that in terms of the agricultural processing sector.

Governance is really a weakness, I would say, in the Philippines. But we have a lot of human resource capacity in terms of, I guess, interest in – for this digital technology, data analytics. We have graduates of engineering and science. But there's not enough opportunity where they could really put their capacities into practical aspects. If there could be joint collaboration in this area of research and development as well as in commercialization of inventions, I think that really would be another important contribution from the external sources.

Inada Juichi

Are there any other questions or comments to this session?

Male Participant

My name is Muraishi, from Musashino university. I'm not an expert in this subject, so my question maybe vague. I've got two questions, a general one and a particular one. The particular one is to Dr.

Kullapa Soratana. I think you referred to a "smart people." I'm afraid I'm far from being a smart person. I'm really interested in asking this question. What do you mean, could you be a little more specific about "smart people"? The general question is I don't know who to ask, but regarding this panel, building a sustainable society in East Asia. Is there any difference between sustainable society in East Asia and sustainable society, for example, in Europe? Anyone could answer this. Thank you very much.

Kullapa Soratana

For smart people in terms of smart cities is that – people in the smart city will be educated and knowledgeable, and living in the smart city that they can utilize the community services that have been equipped with the technology and innovation so they can live in the smart city. They need to be educated and knowledgeable. Anyone wants to add on that?

Inada Juichi

Who can answer the differences, the applicability and concepts of smart city between East Asia and Europe?

Ohta Hiroshi

I'll just give a very general answer. As a matter of fact, we did not discuss the difference between smart city in Europe and in East Asia. But just kind of an impressionistic response is that, I think EU, actually the core states in Europe – Germany and Scandinavian countries, they are very much smart cities type of cities, kind of many cities utilizing digital technologies, IoT, and also artificial intelligence and others, also public transportation system is very good. The street car systems, using rubbers something like this, which is fine, very sophisticated and modern, energy efficient, sustainable European cities, even villages.

In terms of East Asia, I think we still have a different level of development in technology and economic growth so that we cannot have – except Japan, Korea, and southern part of China, very much

advanced in terms of technological development, and also utilization of digital technologies. We may find some cities, and also company living some smart city like National – Panasonic and Toyota building a particular city as being very much energy efficient using renewable resources. But because of the different level of economic development, also technological development it's quite difficult to find smart cities in East Asia. But through our discussions, I think we should not transform our Japanese or Korean model to Asian countries because it's different, and natural environment is also different. Human resource is different. Also, they have abundance of natural resources, more than we have. They should have their own model to be developed. This is kind of the things we have been discussing.

They are much more interested not only in smart technological cities but also more sustainable societies, addressing education and also gender equality, including. Those are the things we have been discussing, maybe a different model and different ideas, maybe more ideas emerging through these discussions. Someone?

Sarah Tong

We didn't talk about how we are different. But being East Asian, we just naturally think East Asia. That's where we start – we didn't try to distinguish ourselves. But to think about the question now that you raised it, just some thoughts. First, I think, just been mentioned, East Asia has a huge variation in terms of development. Development itself means a lot to East Asia because we are still in very different stages of development. That means sustainable development for us is still a lot of focussing on development, while in Europe perhaps the development level is relatively more similar. They may focus more on the sustainability issue but we are also equally emphasizing development and sustainability because we do have economies that are still at the starting-up position in development, while in Japan – in the case of Japan, they have advanced quite a bit.

I think the second issue—if I were to think about East Asia versus Europe—is that East Asia is economically very integrated and interdependent. But institutional setting has been much lagged [ph] relative to Europe. Europe has a lot more institutional setup working together in terms of many areas, while in East Asia we are economically very dependent on each other, but institutional-wise we are still at a relatively initial stage. In that sense we are somewhat different. But to put East Asia in there, I think it's just being natural. East Asian, we talk about East Asia. We won't pay much attention to the rest of sustainability issues, not that they are not important, not that they are different, it's just that we haven't got the chance to think about that yet. Thank you.

Calvin Cheng Kah Weng

Just briefly. I think some excellent points by Dr. Tong and Dr. Ohta. I am sure there are a host of differences between East Asia and Europe models. But I think one aspect especially if we also look at the smart manufacturing aspect is that the level of state intervention is very different. How each region uses state resources to further these initiatives are quite different. In the East Asia approach, we see a lot of direct state intervention, direct state sponsorship, subsidies, very intensive government help in this respect; whereas in Europe, we see more the state playing an enabling role, so direct state subsidies, less intervention, a lot of use of tax credits to incentivize indigenous research and development. I think this difference will have very different outcomes for each region.

Inada Juichi

Are there any questions and comments? I am thinking to ask Professor Ohta to explain the very summary of yesterday's discussion about smart city. So, very, very briefly.

Ohta Hiroshi

This is not the final because I had to ask the members to check. Anyway, we have discussed the

following content. The idea of smart city is not necessarily commonly shared among East and Southeast Asian nations. But this concept is closely related to the various sustainable development goals, especially SDG 4, which is: Ensure inclusive and equitable quality education, promote lifelong learning opportunities for all. SDG 7: Ensure access to affordable, reliable, sustainable and modern energy for all. SDG 11: Make cities and human settlements inclusive, safe, resilient, and sustainable. SDG 13: Take urgent action to combat climate change and its impacts. This also points to some technological elements that suggest integration, energy, transport and industry managed by IoT, AI – artificial intelligence, by promoting renewable energy sources, the electrification of local communities, and integrated water waste management scheme et cetera.

The notion of smart city should go beyond the boundaries of the city to rural communities seeking a fair, resilient, livable, finally an environmentally benign society recognizing the necessity of addressing a broad range of sustainability.

We are going to suggest to the ASEAN Plus Three and some other forum the following policy recommendations. First, we urge the creation of information sharing platform in East and Southeast Asia to share necessary data and information, know-how and examples of the best practices to promote a sustainable society.

Second, we encourage a demand-side approach to create a smart city by incorporating local culture and traditional wisdom into the blueprint of sustainable community aiming at strengthening various regional and international cooperation for sustainable development.

Third, we should galvanize all the stakeholders such as public officers, entrepreneurs, investors, financiers, environmental caretakers, local people to participate in planning and building a smart sustainable society. The keys to achieve these

policies are universal and quality education, and bottom-up as well as community-to-community approaches and government-to-government approaches. These are the kinds of tentative proposals from our team. I just typed up this morning. We want to circulate not only our members of smart city but also rest of the participants, and maybe even public audience, if you had any comments later. Thank you very much.

Inada Juichi

Thank you very much, Professor Ohta. In fact, the time is already up. If you have any specific questions and comments you would like to raise, is it all right? Then, I would like to go to the break, a 10-minute break. The next session will begin at 2:55, 5 minutes before 3 o'clock. Thank you.

[Break]

3. SESSION II : Cooperation on Tackling the Ocean Plastic Pollution

Inada Juichi

We would like to start Session 2. Could you gather and sit down? We would like to start Session 2. The topic is “Cooperation on Tackling the Ocean Plastic Pollution”. There are three presenters. I think we have a lot of time. I'd like to ask each presenter to make your presentation up to 10 minutes. Yes, we have still a lot of time for discussions. I would like to ask the first presenter, Mr. Shofwan Al Banna. He is the Executive Secretary of ASEAN Study Center of Universitas Indonesia.

Shofwan Al Banna Choiruzzad

Thank you very much, Inada-sensei. Thank you very much to all participants and colleagues here. Good afternoon, everybody. It is a great honor for me to be here, discussing an important event that pretty much will affect our common future.

Today, I will share the efforts to combat marine plastics pollution – ocean plastics pollution in East Asia. We are all aware this is already a global

concern and Asia is in the spotlight because it is in Asia and particularly in East Asia which is often said to be one of the major producers of plastic pollution in the sea.

To start with, I would like to remind us all that water has been long becoming very central to our life. This is the site is the site from the Mesolithic Age in the eastern part of Indonesia. This is the waste of clams that were eaten by our ancestors during the Middle Stone Age. This shows how water areas had been providing us with the necessities of life since our ancestors. It's no wonder that oceans are often considered in our country as the source of life.

What we had done to this source of life, this is the picture of the Bahagia river. It's in Bekasi in the western part of Java, the most populous island in the world. Bahagia literally means happy, but I don't think this river is happy right now because of less water than the plastics and the trashes there. From this, we understand that the problem of plastics waste is very alarming. We have tons of trashes—you can see the numbers here—are thrown into the water every day. Even in our conference, we are using plastics. Soon, this will also – in one way or another, even if it's recycled or not, it will affect the environment to some extent.

This is recently circulating also in our news media. This is a container full of trash exported from Europe to be recycled in developing countries like Indonesia. But recently we heard the news that countries like Indonesia, Malaysia, Philippines are rejecting such imports because it is also then to some extent illegal. Legally, illegally – it's a gray area in which many players are playing inside that. With that kind of problem, most of the plastics pollution in the ocean are macroplastics, things that we use every day. Larger than 5 mm is considered as macro. But a lot of process then turns this into the secondary source of microplastics. But there are also macroplastics that already become microplastics when they are produced by the industries such as in the cosmetics and other daily products that we use, like shampoo,

facial wash and other things. This will affect, as many scholars have noted, this will create a lot of problems from the entanglement and ingestion.

We see this cute seahorse is taking our ear cleaner. It cleans our ears but it makes the ocean dirtier. It will not be decomposed for a long time. We all have seen the picture of turtles, tortoises, seagulls trapped in plastics. But those are the things that we see. Apart from that, there are more dangers that we cannot even visually see because then a lot of other problems are also introduced. It will come back to us. For example, in economic terms marine pollution leads to losses in fishing, shipping, tourism and insurance amounting to \$12 billion per year. This is the number in 2010. I believe the number is increasing.

The impact goes beyond the economy. More than 693 different species, at minimum, that were recognized and known by scholars had been affected by ingesting plastics. The real number might be worse, might be bigger. This of course will come back to us because in East Asia, 25% to 65% of our protein intake is from the sea, from fishes, from other ocean species. We go to sushi shops, most of them are coming from our polluted seas. That will of course affect us too since these animals are eating microplastics and then we eat them, so the microplastics are also entering our bodies.

With this as a background, there are regional initiatives to tackle this. In ASEAN, we already have an ASEAN action plan on combating marine plastics debris. But we also have the larger regional mechanism, the East Asia Summit mechanism. Now, the process is on the regional plan on combating the marine plastics debris. In the sense that this issue had been taken into an important issue at the regional level, it's already there. But I am afraid that we are not quick enough. We are not effective enough in preventing further destruction of our oceans. There is a need to accelerate the process and to make it more effective. To do so, there are several things that need to be realized. First, apart

from the national governance and the regional mechanisms that are already discussed, it is important to understand that most of the pollution, the plastics waste that came to the seas starts from the land. Inland, the authorities that manage the waste are mainly local authorities, are mainly municipalities or cities. It is important to put them at the forefront.

Currently, the regional or the global mechanisms are built up with the national governments as the representatives of each country. But then there will be bureaucratic complexity on how these commitments then be translated into actions at local government level. I think it is important to design an institutional cooperation that puts local governments more at the forefront. There needs to be direct cooperation, direct technology transfer, direct knowledge sharing between cities and between municipalities.

The other dimension that I would like to highlight is the international dimension. As the picture that I showed you before shows, tons of plastics waste are coming from not this part of the world but somewhere else. It's traveling thousands of miles, thousands of kilometers from the developed countries in Europe, from Australia, from the United States. I'm not really from Japan. But my friends are doing a survey on the accumulated waste. We get lots of plastics waste that are not coming from our market. We get plastics snacks packages from Australia, from the United States, from Europe, which are not available in Indonesia actually, but the wastes are coming. It is also important to take this into account, and any efforts to combat the plastics debris must also tackle this issue – how could we manage this illicit or semi-illicit export and import of trashes because it's huge?

The third point that I think is important to put into our consideration is that maybe sustainable society is not always gained through linear process. The higher the technology, the easier it is to prevent pollution. That's true in many sense. But in many

countries with less advanced technological situation, looking at their traditional culture might be the source of innovation by which we could prevent further destruction to our environment.

This is an example of how the private sector is making their innovations based on both technological advancement and/or through traditional inspiration. The first picture is funny. This is a company in Bali producing plastic-like material based on cassava. This one is a Vietnam-based company producing straws from bamboo that replace plastics. I think initiatives like these should be further promoted through various incentives to make the entrepreneurs look at the alternatives of plastics.

At the same time, encouraging the use of traditional packaging might also be helpful even though more research is needed to be done on how the use of this traditional packaging will affect the environment overall. For example, in Java we have different ways of presenting food and packaging food using banana leaves. There are other methods, not only using banana leaves but also using palm leaves and other leaves. I think maybe it is good to look at this old wisdom again. This is from bamboo. It could be used to be a bag or other thing to replace plastics.

I think I will end with this: to accelerate the efforts to combat ocean plastics pollution. I think the first thing to do is to further strengthen the expertise and experience needed by the countries, by the stakeholders, by the actors to combat ocean plastics pollution. Capacity building is needed. The database is also needed. Effective cooperation could only be done if we have standardized measurement which until now we do not have that standardized measurements. Researches are conducted by different agencies with different measurements, with different standards. Sometimes we do not really know what is really happening. I think it is important to have

standardized measurements and joint research between countries.

The other aspect is by accelerating institutionalization through creating platforms for sharing best practices, collecting information, sharing information, sharing the best practices based on local wisdoms that might be learned by others, technology transfer and include the inter-regional dimension in the cooperation ideas.

The next point is by connecting collaboration and creating stronger collaboration amongst stakeholders, and maybe promoting sister cities programs because many of the waste management authorities are at local level. If the cooperation is at national level, it's often difficult to be translated into action.

Lastly, it is important to raise the awareness of various stakeholders. One more point related to capacity building that I would like to highlight is that action, learning by doing is the best way of knowledge and technology transfer. Rather than more training, maybe it is good to have more joint projects. We are building the knowledge through that joint action. Thank you very much. Hopefully, this is beneficial for our discussion. Thank you.

Inada Juichi

Thank you very much. In fact, this slide, the message Shofwan made is a summary of most discussions we made yesterday regarding plastics pollution issues. I would like to ask the next presenter, Dr. Xue Xiaopeng, Vice Dean of International Studies, Dalian University of Foreign Languages in China.

Xue Xiaopeng

Thank you, Chair. Thank you all. Today, I just want to make several points clear about the ocean plastic waste since it is really a very serious problem that we are facing now. The first point is – what is the general information about ocean plastic waste? The world produced about 380 million metric tons of plastic in 1950, and about 55% of plastic waste was

discarded in that year, that is 2015, and 25% incinerated and 20% recycled. The rate of recycled plastic is very low all over the world. Since plastic was introduced into the consumer market in 1950s, only 9% of the cumulative total has been recycled. According to UN data, about 300 million tons of wasted plastic are produced every year, and 8 million to 12 million tons end up in the oceans annually. Packaging including everything from the plastic bags to bubble wrap accounts for 44% of plastic production. That's to say the plastic bags we are using every day just occupy nearly half of the plastic production every year. This is a really very high rate.

While dealing with the ocean plastic waste, we can do ourselves and it is more practical. The second point I want to make clear is all the plastic products we throw and discard into the sea will be cut into very tiny pieces by tides, winds, and sun. The fish and other ocean creatures will digest the plastic debris. We finally eat them. We are not saving the ocean creatures and protecting the sea; we are saving ourselves and protect our generations. What is the idea of protecting environment? It's to live with nature, not live over the nature since we are part of nature. We are not god. We have to deal with the problems since we have to live, and our children, our generations have to live in this earth forever, we hope.

Ocean plastic problem is not a problem we can ignore; it is a problem we have to deal with; we have to face. We have to be successful in dealing with. That is why we are sitting here, and we take one and a half days for discussing how to deal with it in our region. I think it is urgent and it is very necessary to talk about that.

We know that we, human beings, we have borders and problems. Plastic wastes they do not have borders. They float with the tides. That's why we need international cooperation. Since no states have power and have desires to deal with it on their own, but we know that global governance has three levels. Domestic, that is national level; regional

level; and global level. The question is – is the global governance on the ocean plastic waste enough to solve the problem? No, definitely not. It's not enough. It's not strong enough to deal with the problems.

Globally we don't have regulatory convention and the problem does not attract enough attention from the world as climate has done. Globally speaking, we need more attention. All of the states need to pay more attention to this issue. The leaders, the elite from all over the world, they should pay more attention and recognize the ocean plastic wastes are the problems. This is the first starting point that we recognize this is the problem. This is the urgent problem that we have to deal with now, at present, not in the future. This is the starting point.

Second, I think globally we need a convention. Yes, we have conventions but we don't have the regulatory conventions. That's to say, all the states, they promise to do something to fight against climate change. For example, I will decrease CO₂ in 2050 or something like that. But not all the states like to make promise on ocean plastic waste. We need a regulatory convention first at the global level, and then we can do something at the regional and national level.

In the East Asian region, is it enough to deal with the problem. No? Yes, we have the action plan. We have the ideas and we have the willingness, but it's not enough to deal with the problem. We have at least three angles [ph] clear about the problem. Firstly, now we are relatively clear about the amount of ocean debris but not clear about how many plastic waste from the river outlets, sea farming, fishing and sea exploration et cetera. That's to say we do not know how many ocean plastic wastes actually are from the land activities. Yes, we know that most of the plastic wastes come from land activities but we don't know the amount. We do not know the concrete data and information.

Second one is, the main sources of ocean plastic waste are not clear. We don't have the data and information of various plastic industries. So, we couldn't trace back the source of the waste and thus can't set the measures. We need to know more about that.

Third, the plastic transferring route is not clear. The present detective station especially in China are set nearby the coast. It is not enough to analyze and model the transferring route of the plastic debris. We need more information to settle what happens nearby our coast, but we don't have enough information and data. Actually one I'm talking about is we should know the transferring route of the plastic waste. I don't mean that we should settle down who should be greatly responsible for that. I think it is nonsense to argue about who should be responsible for what kind of things. What is meaningful is how to deal with it.

We are all responsible for that since it is a cross-border problem. We need to cooperate together to provide the data and provide the information every state has in order to let the region cooperate to be clear about what happened in our region. This is the situation in our region. Yes, we have the willingness. We have the working plan. We have the roadmap. We have the action plan. But it's not strong enough to deal with the matter, and we should do more.

Is the state governance strong enough to solve every state problem? No, definitely not. In China, I guess I know, we are not strong. The national governance is not strong enough to deal with the domestic ocean plastic pollution in China. Things are serious also in many Asian countries including China, Japan, and South Korea and so on. In China, from 2007 China has begun ocean waste detection; and in 2016 China began microplastic test and detection. The results show that China plastic waste occupies 80% of all wastes. Ocean plastic pollution is still very serious in some places especially in seaside villages, ports, and downstream seas. In the

cities, things are better. But in the rural areas, things are very serious. People there, they don't have any mind about – we should cut down the use and consumption of plastic bags and plastic packages, something like it. Things are very serious in China.

China is one of the biggest producers and consumers of plastic production. Actually we are the biggest nation and we have a very serious problem, but China is still very weak in governing the problem. So, we need international cooperation, and we need to attend joining the international cooperation, joining other countries to deal with the problem. China has a strong mind and resolution to do that.

According to the data, China contributes 58% to 65% to the ocean plastic pollution in the North Pacific. We have the responsibility. China just faced a great international pressure recently. How to deal with that? Many speakers just mentioned the international cooperation. This is the way of dealing with the problem and how to do it. First, I think joint research, joint detection, and joint actions are necessary. Why I say we should do joint research is because we can change our way of packaging. We can do that. We must do it. But the final solution to the problem is technology improvements. Why we use plastic bags is because it is cheap and it is convenient. We should have the alternative to take place of plastic production. Also very cheap, also very convenient. It will be more popular. We should change our way of packaging, way of doing things, and also we need technology improvements to help us. Also, we need technology improvements to decrease the present plastic production.

Joint detection: now we have EANET. That is a kind of network in East Asia. That is Acid Deposition Monitoring Network in East Asia. I think we can have another network. We can call it the Ocean Plastic Monitoring Network in East Asia, EANOP, in order to do the joint detection to make clear what happens in our region.

Second, that is to do the officials and public education. Education to public is very necessary, but education to officials working in the environmental ministry is also very necessary. Since not all the officials working in the environmental ministries of nations can't really think that ocean plastic pollution is serious. Firstly, we should let the officials recognize – leaders recognize this is a really very serious problem.

The last one, I just want to stress and make clear is that we should promote the international standards in our region. Our regional culture and diplomatic relations determine the model of cooperation in East Asia. We need the new convention but we don't have it now. What we have to do now is to just introduce the international standards in our region and to let the nations to obey the international standards, and then to push every country – to push every state to upgrade and improve their ability of national governance.

We have three international conventions concerning ocean plastics debris: that is London Dumping Convention, 1973; and Convention on Prevention of Pollutants from Ships, 1972; and Basel Convention on Cross-border Dangerous Wastes. The three conventions just provide us the very concrete criteria and technique index but effectiveness in each country is still not satisfactory.

We should introduce the international standards and regional cooperation can provide information, experiences, and financial support for countries implementing the global convention to promote the state governance as well. That's all for my presentation. Thank you.

Inada Juichi

Thank you very much. The final presenter is Ms. Nguyen Le Ngoc Anh, Fellow Researcher, Institute for Foreign Policy and Strategic Studies, Diplomatic Academy of Vietnam. I would like to ask you to

make your presentation between 5 minutes and 7 or 8 minutes.

Nguyen Le Ngoc Anh

Thank you, Mr. Chair. My presentation here focuses on Vietnam's effort to combat marine plastic pollution. Firstly, I want to mention the situation of plastic pollution in Vietnam. Here, I provide you some numbers showing the very serious situation in Vietnam. According to a World Bank study, now Vietnam is the 17th biggest plastic waste producer and ranks the 4th in the world in terms of plastic waste release to the ocean. With 112 estuaries, 80% of Vietnam's marine debris comes from land activities. Also, according to the Food and Agriculture Organization of the UN, it is estimated that 1.8 million tons of plastic waste is produced in Vietnam each year, while the plastic consumption is projected to increase per year.

According to Vietnam Plastics Association, in 2010 each Vietnamese person consume 43 kilos of plastic. This number is expected to reach 45 kilos in 2019 and 2020. However, despite a huge amount of plastic waste each year, Vietnam's capacity for plastic waste management and treatment is still limited. 90% of Vietnam's waste generally is disposed by burial and burning. In many Vietnam trash treatment plants, the initial classification of waste is almost unavailable. Therefore, the current waste treatment technology is limited.

Now, I also show you some photos taken in Vietnam recently for the exhibition named "Save our Seas". As you can see here, the plastic wastes go floating and many long beach have become garbage dump, and many children are also playing in the toxic environment. This is the image of Vietnamese people throwing the rubbish to the beach. While we have a huge amount of plastic waste – I show you this picture. One of the reasons is because of the habit of using plastic products by the citizens. It is regular to see plastic bags in Vietnam. In such situation, we've taken action to reduce the number of plastic waste against plastic pollution. First at the

national level, it's now in need of strong solution to reduce plastic waste. It can be seen in strong political commitments in plastic waste management.

We are working on the national action for the management of marine plastic waste, and also integrate additional commitments to marine environment in the national strategy for sustainable development of the maritime economy. We also issue many legal documents on environmental protection. We're also preparing a plan with clear and specific goals and actions on minimizing ocean plastic waste. The Ministry of Natural Resources and Environment has recently launched a campaign to encourage people to change their habit of using single-use plastic bags. Now, here I have a picture in which our prime minister is walking on the street at the opening ceremony of the campaign.

We also are planning to construct a waste treatment complex. In addition, recently we have increased the tax for plastic bags and reduced the tax for enterprises producing eco-friendly products. Next, at the international level and regional level, Vietnam has actively participated in international cooperation framework since 2019 until now. We attended the Group of Seven Summit in Canada. Our prime minister proposed establishing an expanded cooperation mechanism between the G7 and ASEAN nations for clean ocean free from plastic waste. Also, at the Global Environment Facility Assembly 2019 in Da Nang, Vietnam, Vietnam also proposed building a regional partnership in East Asia on ocean plastic waste. At the G20 summit in 2019, our prime minister also proposed establishing a global network on ocean data serving for preventing plastic waste.

At the ministerial meeting on marine debris in Bangkok, 2019, we reaffirmed that we're willing to cooperate with ASEAN countries and other partners to join hands to solve the problem of the ocean plastic waste. However, in the process of implementing our policy, Vietnam also faces some

challenges in tackling the marine plastic pollution. I hope that you can help us to solve this problem.

Firstly, we have difficulty in changing the habit of using plastic bags by every citizen in Vietnam in a short time. The second is, it is not easy to raise awareness on environmental protection for low educated people. The next one is the intensive skills on plastic product is disproportionate to the attention paid to the management of such waste.

In Vietnam we don't have the system of initial classification of waste at the waste treatment plants or even at the household or public areas. The next one is we only have very small treatment facilities which use simple technology instead of advanced technologies. The next one is, we also need the financial support for plastic marine pollution treatment.

My point of view, I think no single country can solve this problem unilaterally. I raise some recommendations to enhance the cooperation between countries to cope with this situation. The first one is, we should foster discussion and sharing the initiatives to manage plastic waste and boost regional cooperation through capacity-building and workshops. The second one is, we should foster global and regional network on ocean and sea data sharing. The third one is, we should strengthen the activities to raise the awareness of people such as campaigns of the contents.

The next one is, the countries in the region should have the most stringent approach to single-use plastics and require plastic producers to cooperate with the governments in handling the waste issues. The last one, the nation should devise suitable policy to encourage firms to develop technologies that could shorten the lifespan of plastic waste. I've finished my presentation here. Thank you for listening.

Inada Juichi

Thank you very much. We have 6 or 7 minutes for the discussion for this session. I would like to invite any questions and comments from the floor. Could you raise your hand if you have any questions and comments to the presentations of this session? Nothing?

All three presenters mentioned their own recommendations or challenges of this issue. They are overlapping. If I would add some more points or recommendations that we discussed in yesterday's session, I'd like to summarize some. Firstly, almost all participants mentioned the importance of promoting regional cooperation in sharing experiences, good practices, methods, data on this issue. Secondly, the importance of facilitating participation of many stakeholders to the actions to combat against marine debris. Thirdly, it is interesting that some participants mentioned the importance of creating market-based mechanisms of waste management or alternative material usage. Also, many participants mentioned the importance of implementation, not only policy-making and planning. Implementation is important. For that purpose, not only for the purpose but it is important to include local people and local stakeholders into the implementation process, maybe also the decision-making process of this issue.

Finally, also many participants mentioned the importance of making the data transparent, and make it for the public to access the data. This is still a temporary summary of the recommendation in this Session 2. Again, if there's someone who would like to make comments and raise questions to this kind of recommendations and contents of the presentations, could you raise your hand? Yes, please.

Male Participant

According to your presentations, Vietnam is 17th largest plastic producer in the world. I'm very startled to hear that because considering the economy, that's too big. Would you please explain why Vietnam is so dependent on plastic?

Nguyen Le Ngoc Anh

Thank you for the question. The reason why we depend on plastic products is because the plastic products in Vietnam are very cheap especially the plastic bags, also some products like cups or straws. As I mentioned, recently we just increased the tax for this kind of products. But actually it's not much. That is the simple reason. The other reason is because most Vietnamese people have low income. They just buy the cheap products for their life to use.

Inada Juichi

Just I would like to ask you to identify your name and affiliation. Could you?

Male Participant

Kawamura, a foreign policy watcher.

4. Session III: Further Development of a Sustainable Society in East Asia

Inada Juichi

Thank you. It is the time to complete this session. Based on the program, we should continue to Session 3 on sustainable society. Is it all right to ask the presenters in the final session? The first presenter is Mr. Bounphieng Pheuaphetlangsy, Academic Officer of Research Division, Institute of Foreign Affairs of Laos.

Bounphieng Pheuaphetlangsy

Thank you, Mr. Chair. First of all, I would like to thank the organizers of this event for the invitation extended to my colleagues and me. In order to save time – we have a very short time today – I'd like to focus on four issues, four things on my presentation today. First, I'll briefly introduce SDG of Laos. Second, I'll focus on key aspects of sustainable society. Then third, I'll focus on the challenges associated with building a society that is sustainable. The last, I'll give some recommendations.

Let me start. For many countries, they have 17 SDGs. But for Laos, we have 18 that is unique to

ourselves. We add one more goal that is, lives safe from unexploded ordnance or UXO. The reason why we add this goal into SDG is because during the war Laos was bombarded so much with – I don't know how many – millions of bombs; that's why we need to make sure our citizens, farmers, they can live safely. They can do agriculture safely for their living. The priority of our government is to focus on poverty reduction. That is goal number 1 of SDG.

Goal number 4 is quality education. We want to invest in our human capital because comparing to other countries, the capacity of our people or human resources is quite low within ASEAN, I think. The next goal is G number 8, it's decent work and economic growth, which is very important to our country. We want to uplift our status from the least developed country to middle-income country by 2024. G number 9 would be infrastructure. We are investing in a lot of infrastructure project these days. One of these is – the biggest one is Laos-China railway project. That is a big project for Laos.

Then let me move on to – actually, one has to be honest. Laos is a very small country. We don't have smart cities like in Japan or South Korea or in Singapore. We don't have much to share but I'll explain the current status of our country. Actually, the term “sustainability” or “sustainable development” or “society”, whatever you call, there are so many aspects. There are so many elements that we should focus on. But I think we focus on only three things, three aspects. The first one is economic, social, environmental aspect. In order to get to the destination of sustainability or sustainable development, we need to balance between the three things, the three aspects of development.

What I'd like to state is that sustainable society is a society that is beautiful, that is a wonderful place to live in. However, building it is not easy. So many big deals, so many big tasks that we need to address. The first one is ineffective governance. Our colleagues, we discussed the whole day

yesterday and the day before, governance. What do we mean by governance? Governance is the way we make decisions; the way we make policies. We need to make sure everybody can engage in the process of making policy, otherwise we tend to forget local communities. We don't know what they want, actually. In order to improve our governance, we need to do lots of things as well.

In addition, it's not easy for countries like Laos and maybe Cambodia, maybe Myanmar or other developing countries to balance between economic development and environmental protection. It's not easy. It doesn't mean that we don't care about the environment. We do care. But we want our people to have better lives, better income first. Like Singapore, you are here; it's okay you can come to focus on environment. In addition to this, another problem is the lack of responsibility and accountability. It's another big problem.

In here we have governance. I don't know if we have the same understanding of the word governance. Like I explained before, we have three or four levels of governance: local, national, regional, international or global level. We call global governance. In here, the SDG number 13, it's climate action. We only focus on the big players like the U.S., China, India, and other big economies. We want to achieve – we want to address climate change, but as you know the U.S. just rejected – withdrew from Paris Agreement. That is a big question. The question is that – how can we bring China, the U.S., and other big countries to come together to take action to address climate change? This is the big question. I want to throw it everyone here. I ask myself too, but I have no answer to this question. I look forward to hearing your answers.

Actually many others are problems or challenges associated with building sustainable societies, but we have very short time so I'll just jump to recommendations.

I have four or five recommendations here. The first one is related to governance. We have weak governance or weak institution. What we're supposed to do is improve governance including local, national, regional, and international governance by making sure everyone, every stakeholder could participate in the process of making policy or making decision. The reason why I say that is because in a sustainable society we want to make sure everyone is not left behind. We want to make sure everyone is better off, having better life. Prior to that, we have to make sure they can engage in the process of making policy.

Regarding governance, it's all about implementing policies. We have to make sure, like other speakers said, we want local communities to get engaged, to participate in implementing policies. We should start from making policy with others or with many stakeholders getting engaged so that they can participate in the process of implementing policy meaningfully, otherwise they don't feel the sense of ownership. Maybe they wouldn't give cooperation to that policy; maybe they reject in some countries.

Also, what is important here is to apply evidence-based policy. What does it mean by evidence-based policy? I want to say if possible every policy should be made based on evidence, not based on ideology, not based on the experience of leaders. Make sure we get evidence before we formulate policy. But the problem in here in using evidence is that sometimes we start fighting, takes so much time to get the result. Some project, pilot, it takes 3 years, 4 years to get the result. But the politicians say, for example in Thailand – their term, I don't know how many years, 3 or 4 years. Then, they want to do something right away when they get into power. That is the problem. Anyway, just recommend to use evidence.

The next is to ensure transparency about the environment by creating database so that we can share information so that everybody – the public, NGOs, the government, researchers can get access to

that information so they can understand maybe fully, or maybe half, but they can get the idea about the impacts on the environment.

Let me just give this recommendation. We discussed yesterday as well, apply market-based instrument. What do we mean by market-based instrument? I got asked yesterday as well, this question. By applying market-based instrument is one kind of environmental policy. Like in Vietnam, people use a lot of plastic bags. The reason is simple, the price is cheap, and then people use a lot. What we can do is to apply pricing strategy, adding more price maybe 10%, 20% to the price of the plastic bags. Then, this is going to help people to reduce the consumption. They're going to change their behavior maybe in a short period of time or maybe in a few years if we add the price. This is the experience from Australia. They did that actually. First time I went to Australia and I went to market, I buy apples, whatever, and then they say, you want plastic bag? Do you want a bag? Yes. But they say, 20 cents. 20 cents, that's money. I think about money in my own pocket. Next time, okay, I'm going to use again that same plastic bag. It's not like two. Reuse, reuse again and again if we can. That's the idea of market-based instrument.

The next one is to develop environmental education program to increase environmental awareness and to impart environmental loving attitude to our public, to our kids. This is important as well. What's more important is that we should develop regional environmental impact assessment standard, for example, within ASEAN if we can do it. There's still problem as well when it comes to implementation.

Anyway, I'll just move on to the next recommendation. It's to innovate energy efficiency technology, just to help us save energy so that we can reduce CO₂ that we produce. The next recommendation is also important – like our colleagues, other speakers also mentioned earlier – we need to transfer technologies to other developing

countries from developed countries. We need technology in order to save energy, in order to build a sustainable society. We need that. Also, if possible shift to renewable energy that is more friendly to the environment.

The last one is to create database like the other speakers have mentioned. That's all for my presentation today. Thank you.

Inada Juichi

Thank you very much. We still have three more presentations. I believe all the presentations are very useful and very impression and important. But I'd like to ask all the presenters to make your presentation – you can have more than 5 minutes but please do not exceed 10 minutes. Next presenter is Ms. Yuzilawati Abdullah, Associate Researcher, Centre for Strategic and Policy Studies, Brunei. Please.

Yuzilawati Abdullah

Thank you, Mr. Chairman. Good afternoon, ladies and gentlemen. I am Yuzilawati Abdullah, an associate researcher from the Center of Strategic and Policy Studies. We are actually a national think tank run privately, but we are still funded by the government. We give where we can, as much as we can, independent recommendations, independent views on domestic socioeconomic issues in the country.

Today, I'd like to speak about where Brunei is in terms of SDGs. I'm not an expert in this but I will try my best to give as much as I can. Just a little bit of background. We've adopted this SDG in 2015. We established the following year a special committee for coordinating SDGs, which is currently the Department of Economic Planning, a unit under the Ministry of Finance and Economy. There is no official report at the moment. Next year, they will publish an official report. At the moment, I'm just seeking some information from this department to share with me on where we are.

What you see in front of you is Wawasan Brunei 2035. Wawasan Brunei is the country's vision, the national vision, the Brunei vision. Under this Wawasan, we have three different goals that we hope to achieve in 2035. We would like to achieve highly educated, highly skilled and accomplished people. We would like to have high quality of life. We also like to have a dynamic and sustainable economy.

Now, under these three goals, we have our own national-level outcomes; there are about 12, and each of them have their own KPIs. But when it comes to – you said 17 but for us it's 17-plus-12. There's a lot more. But having said that, I do believe most of the outcomes are overlapping with SDGs. I have not seen it being addressed properly. That's why I hope to see that all these outcomes together with the national outcomes, the SDGs, to be properly addressed with their relevant KPIs. When we talk about KPIs or indicators, SDG still has about 244 indicators. When you add them with our indicators, about 30, there's an overwhelming number of indicators. Aside from that, it is overwhelming for all the ministries and the departments when I have spoken to them in terms of SDG. But the key challenge is to look beyond these indicators and actually have a solid set of strategies in order to achieve the Brunei vision together with the SDGs.

Again, these are just some of the indicators of the SDGs. They did some analysis looking at the SDGs. In the country we have a problem of data. We do. I do not deny that. In fact, when we look at SDGs, we only have data for perhaps only half of the indicators. Some of them require some assistance as well. We need to look at the current indicators and see how we can modify that and to look at how best we can meet this.

I will touch on one goal which is goal number 9. It talks about building a resilient infrastructure, promoting inclusive and sustainable industrialization and so forth. Now, 9.1 talks about the proportion of rural population who live within 2 kilometers of an all-season road. We have achieved only 97%.

These are very basic indicators. There are several rural villages that have not been connected by roads. Road is one issue. Another issue is transportation. These are just basic.

Then, we'll talk about the access to ICT, information, communication, and technology. As of 2018 when it comes to 2G, 3G, and 4G, yes, more than 90% are connected. There are plans by 2022 to embrace the 5G. We spoke a lot this afternoon about building a smart city. But in Brunei the focus is on having a smart nation. Why? Because we have a small population of less than 450,000. It's 426,000 people. We are not looking at being it as a city when 70% is covered by forest. We're looking at having a smart nation. The idea is still the same. We need to improve the lives of the nation using technology as an enabler. Within the country, it is a collaboration between several ministries, home affairs, development, and transport and communication, and together with the private sector as well.

Recently with the slow growth, GDP growth of Brunei, we realized that the government won't be able to support us. We can't go relying on oil and gas anymore. We need more and more investment. That's where the private sector comes in. Collaboration with the private sector is paramount.

I'm going to talk about some of the current situations, current digital landscape when it comes to delivering the smart nation. For example, looking at some indexes of the digital landscape, for the e-government development index and innovation index, we can see an improvement over the years. Over the years, we have improved our ranking. However, in other measures such as the ICT development index, competitive index, cybersecurity, there is room for significant improvement as well.

These are just some of the ongoing initiatives. We have recently established a digital economy council and they are in the progress of formulating a

digital economy master plan to look at the bigger picture, to look at the policies, the framework on how we can actually have a smart nation. Unfortunately, I cannot share with you any framework because it is currently being developed.

Other smart initiatives such as infrastructure improvement are ongoing. We want to be able to facilitate all these businesses, reduce the cost of doing business and increase productivity. We are in a public-private partnership project with the introduction of a smart meter system. We'll integrate water, electricity together. That's ongoing. We have also recently formulated a framework of digital payment system. We're looking at fintech as well. But all of these are actually in the infancy stage. Brunei being a high-income country, however in terms of development we are still behind – very much behind among all the East Asian countries as well.

Here are some of the initiatives that I've spoken earlier on. We're also trying to have an intelligent transport system for public transportation. We are heavily dependent on cars at the moment. This is a problem. We did a land transportation master plan. At the moment, everyone is using cars. I get to work in 20 minutes' time. But if we don't do anything about it by 2035 itself, I will probably get to work in more than an hour if we don't change our public transportation system. The reliability – we need to change the reliability of public transportation to reduce car dependency.

I'll just share with you a bit of the challenges that we face. There are many, many gaps in fundamental infrastructure services. We do need a holistic approach looking at the big picture, looking at policies, looking at impacts, even obtaining simple data and so forth, many things really. There are many rhetorics. We need to move to the fourth IR but from the rate we are going, I think we're still stuck in the first and the second IR. We also need to capitalize more. We need more PPPs. We spoke about this so much in the last 10 years that it's

about time we materialized more and more PPPs in order to save the country as well, the country's growth.

Our colleague just now spoke a lot about learning by doing, re-training and re-skilling, changing the way of doing things. Another thing I'd like to add – our colleague here talked about evidence-based policy-making. In Brunei that's not the issue. In Brunei it's more of a reactive policy approach. When something happens, then, okay, we need to do something. We lack more anticipatory policy approach, anticipating before looking at emerging issues when setting up policies, when setting up rules and regulations and so forth. We need to adopt a more proactive approach when it comes to policy-making.

Do I still have time? I don't think so. All right. Thank you very much for your attention.

Inada Juichi

Thank you very much. Next presenter is Ambassador Khin Maung Lynn, Joint Secretary 1, Myanmar Institute of Strategic and International Studies, Myanmar.

Khin Maung Lynn

Thank you, Mr. Chair. It's my pleasure to be here and join our friends to discuss about further development of a sustainable society in East Asia. I'm a trained diplomat and now retired, and joined this think tank under the foreign ministry for 6 years now. This is my first lead [ph] meeting. I'm very honored to be here in this famous university. Thank you all the organizers for inviting us.

I would focus more on the political aspect of East Asia because East Asia is our dialogue partner, very important, three countries—Japan, Korea, and China, which are leading investors and traders of ASEAN. Of course, we need to grow together—ASEAN and ES [ph]. We sincerely hope that ES countries can show us good examples of friendship, understanding, and cooperation among them as well as we need to

grow together. We need to help each other. We are all Asians. We need to settle our differences through negotiation to find a peaceful solution. There are no matters that cannot be discussed if you are sincere, open, and genuinely interested in the peaceful prosperous future for all of us because war or conflict or contradiction make matters much worse, and much harder to settle. If we keep on quarrelling, we can get only negative effects.

I just want to say a few things about Myanmar, what Myanmar is doing. Myanmar is trying to come out from a shell, and starting to open up and starting to transform education and also thinking. Most important is education system because we have lost two generations under military rule which makes the country backward, and became a poor country among the ASEAN. Now, Laos has a much higher GDP than Myanmar. Myanmar is the last. We have the internal problems. Peace process – we are fighting. Some of the ethnics are still fighting.

There's illegal immigrant problem in the west, and problem between military and civilian government still unresolved due to this 2008 constitution which was drawn by the military. The constitution drafting took 15 years. That's a record, I think, for the country. Anyway, we are trying to progress as well because our second city, Mandalay – Mandalay is trying to be a smart city. Its rank is now number 5. It's not bad because they have waste management, traffic control. The mayor there is a very smart mayor. He employs a lot of smart people to practice smart policies.

Mandalay: our last king was taken from there by the British colonialist. Now, it's transforming into a smart city and is progressing very well. It's number 5 among the targeted 26 smart cities in ASEAN. To become ES, we need smart leadership. Yesterday, we discussed about smart leadership, smart people to lead the country, to meet the challenges, and how to deal with these new challenges and new problems that we are facing

today because of many fast-changing political landscape in East Asia and over the whole world.

We have natural disasters that are threatening our livelihood. I think it is time now that we all work together. There's a political will, and it's very important. We have to forgive and forget about the past historic animosities or mistakes. In every good relationship, each person or each country helps others to grow. I think it's now time to help all East Asia and ASEAN to grow together as dialogue partners.

Myanmar: we are now building infrastructure development. There are more Japanese investments in Myanmar. They are quite successful in Thilawa project. Even the Chinese, our think tank friends, they want to learn why the Japanese are more successful now than the Chinese before. I think there's also something good between Myanmar and Japan in people-to-people contact.

We look forward to have a more open and more transparent, in fact looking for more opportunities in our own countries, and work together with our East Asian friends, become smarter every day. There's a saying, a smart mouse has more than one hole. We can try holes in every country. There are many chances; we just need to find them. We need good friends, good company, and then look for the mutual benefits. Equality is very important; sincerity and generosity also counts. Thank you very much.

Inada Juichi

Thank you very much, Ambassador Lynn. The final presenter is Mr. Dyakanal Sophal, Technical Officer, Ministry of Environment of Cambodia. Please.

Dyakanal Sophal

Thank you, Mr. Chair. Good afternoon. I'm great to be here. This afternoon, I want to talk about the challenge, and the Royal Government of Cambodia's strategic opportunity in pursuing the Cambodian sustainable development goals. In the

pursuit of this work agenda, there remain four major challenges. First, slow growth in agriculture. Second, the limited efficiency in managing natural resources. Third, rapid growth in urbanization resulting in imbalance in development. Fourth, inability to respond to the impact of climate change.

In order to address the challenges, the Royal Government of Cambodia set out the strategic goals as follows: -

The first goal: promoting the agriculture sector and rural development by strengthening the role of agriculture in generating jobs, ensuring food security, reducing poverty, and developing rural economy.

Second: sustainable development of natural resources and culture by ensuring a balance between development and preservation aimed at contributing to advancement of agriculture, industry, and tourism sector, strengthening of management of mineral resources, and ensuring sustainability of forest and fisheries resources and ecological system, protecting and developing the national cultural heritage.

Third: strengthening urbanization management by developing livable city with clean and charming environment, enhanced well-being of the people, and promote socio-economic efficiency.

The last one: ensuring environmental sustainability and readiness to respond to climate change by minimizing environmental impact, enhancing capacity to adapt to climate change, and contribute to reducing the global climate change as well as ensure sustainable development.

That is all.

Inada Juichi

Thank you very much. I'd like to open the floor for questions and comments. If there are any questions and comments from the floor, could you raise your hand? Yes, please.

Nguyen Bich Ngoc

Thank you. First of all, I would like to take this opportunity to thank the organizers and co-sponsors for having me here. I really enjoy the discussion, yesterday and today. I just want to have a comment. I very much agree with the points made by our Laos presenter. Actually I think that when we talk about system and society, it is about how to make our people and our lives safer and prosper, and how to make people live in harmony with each other and with nature.

First of all, I would like to support your ideas, your recommendations. Second point, I would like to raise some ideas about your question – how to bring the big players into cooperation with the ASEAN countries? I think there are two things that we need to have so that big players want to cooperate with us. One, the first thing is that we need to have ASEAN unity because ASEAN can be attractive to big players, to external partners only when ASEAN is in line. That is one thing.

The second thing, I want to attach importance is the rule of law. I think if ASEAN countries can act – and we have common action in accordance with law. If we can play by the rules, and if we can convince big players, external partners to play by the rules, then we, ASEAN, will be attractive to big players.

I will end my comments. Thank you.

Inada Juichi

Could you tell us your name and affiliation?

Nguyen Bich Ngoc

My name is Nguyen Bich Ngoc. I'm from the Diplomatic Academy of Vietnam. Thank you.

Inada Juichi

I think the first response should come from Mr. Pheuaphetlangsy.

Bounphieng Pheuaphetlangsy

That's right. Questions? Actually, I like your comments. Thank you so much for that. There are gaps in reality. We have rules. We have international laws, like treaties. But in reality there're gaps when it comes to implementation. The U.S., the big power, when they want to do anything, they can – even withdraw from a treaty. We mentioned – we discussed the other day, yesterday about China-U.S. trade war. What about WTO? Can it do anything or do something? It's under the U.S. That's the thing that I want to raise again. Although we have rules, who make the rules? We have to ask that question. Is there any willingness to implement or to follow it, to comply strictly or loosely? That's the point. Thank you.

Inada Juichi

I find two people raising their hands. Professor Ohta and Professor Tong.

Ohta Hiroshi

Thank you all for the presenters. Not picking an issue but the colleague from Laos raised a very important question. Also, this one is for Laos. It's quite important. As you know, you want to mention about WTO and other institutions like IMF and other things. This is a U.S.-led institution, which the current leaders of liberal economic order is opposing. I think in the future, I hope that when the changing of regime in US then they may be back – years taken back, US to come back to its own old creation of the institution, I think everybody benefits, even China and also Cambodia and Laos if you have international economic order.

The first comment – the first issue we raise is about climate change. I think we discussed yesterday. Just making sure, maybe two kinds of comments which are based on evidence, which is the Paris Agreement, not only address climate mitigation, reducing emissions, but also for the first time, to address the adaptations. Those communities are willing to help –developing countries – the least developed to be able to adapt to climate change because it's almost too late to really mitigate to solve

the problem. We have to prepare for the adaptation, prepare for the worst case scenarios. I think this is my opinion. It's different from the Kyoto Protocol which does not address the adaptation. We have international rules to be introduced with the consent of the developing countries. I think we should support this new agreement.

Also of course, nobody can persuade Donald Trump to go back to the Paris Agreement. Nobody can. But many states in the United States—California, New York and Oregon very much support the Paris Agreement, even ahead of the federal government. There's substantial reduction in emissions, and also introducing various measures in electricity – wind power, solar power to name a few, which extracts lots of oil. Now, wind power is much cheaper than oil. They are producing lots of renewable and generate electricity through windmill. I think the United States is changing, even though the current federal or central government tries to withdraw from the Paris Agreement.

As a matter of fact, the United States has not withdrawn from Paris agreement because there are regulations. After a few years, they can submit a letter of withdrawal. After 1 year of submission, United States can withdraw. Until next year, United States cannot withdraw from the Paris Agreement. Still there are parties, even though they are not trying to help. This is the second one.

Thirdly, I think even though the government – you cannot persuade the big governments. But businesses already changed the course, because Paris Agreement gives their signal. We're going to change the economy from the conventional fossil fuel energy economy to new energies. The major institutional investors like social welfare funds are now divesting from coal industry and investing more in renewable new technologies. Even the United States government is trying to change the course. I think the whole world, particularly business sectors very much changed their course and they are now leading. I think it's much more powerful, I guess.

Governments cannot give the seed money but private sector really drives the change. I think this is the kind of hope for me. These are the comments that I wanted to make. Thank you very much. I really understand the needs of development. Of course the quality of the need is also important, I guess. Thank you.

Inada Juichi

I would like to invite further questions and comments from the floor first. After that, I would like to ask the presenters of the session to respond to their comments and questions if you have any. Please.

Sarah Tong

Thank you. I have a couple of specific questions and some comments. The first specific question is for Abdullah. When you talked about the indicators, some available, some are not, the not available ones were different colors. I'm just wondering what those colors are because the available one is one, the unavailable ones have been separated.

Some points, first, you mentioned about the ASEAN unity is the key. I think what's also important is ASEAN leadership. Within ASEAN we also need leadership that would help with the unity, whether its Indonesia – it's the largest in ASEAN – or Singapore being one of the most developed. I think that's another point I want to highlight – leadership versus unity.

The other point I think is looking at Japan's experience. I understand when I visit some of less developed ASEAN countries, there is a sense of understanding that Japan's involvement in the less developed countries are more successful than what China is doing. But when I talk to my Japanese friends or people specializing in Japan, they say, no, we are more successful now but at the beginning we also had problems. I think the Japanese experience in the earlier years of involvement in Southeast Asia, and the recent more successful ones are both

important and useful for China to learn how to engage with less developed countries in terms of providing cooperation and otherwise, investment and so on and so forth. That's the point.

I think talking about today's global politics, most of us are not very optimistic given what Donald Trump is, unpredictability and this and that. But I think there are two things. Number one, the crisis or problems we are facing in the global politics is a structural issue, it's not just Donald Trump. Even without Donald Trump, we are still going to face issues, just not as irrational as his behavior but the problems are going to be there because we are facing some structural changes in global power relations. That is a result of populist politics rising [ph] globally, in Europe, in North America and otherwise. Those are the things we have to take into account, not just "when we get rid of Donald Trump, everyone is happy". No, it's not like that. We have to be more aware that we are going to face some issues for some time to come. That's my last comment.

Last one, I still want to say the future of Asia depends on East Asia. We have to depend on ourselves to make a better future. On top of that, I think Northeast Asia has a lot to do, has a lot of work to do. The three countries, the three big guys here have to work together regardless of the history, other problems. The future is that we have to work together for a better East Asia in general. Thank you very much.

Inada Juichi

Thank you very much. There are several important big issues. Before inviting the responses from the presenters, maybe even other participants of the working group, I'd like to invite any other questions and comments from the floor. Are there any? If there are no additional questions or comments from the floor, I would like to ask, firstly, presenters of the session to respond if you have any. Also, I guess you have. No. Okay. I would like to invite your responses.

Yuzilawati Abdullah

For the first question, Dr. Tong, the colors do not indicate anything really because for every SDG there are, in fact, a lot we don't have the data for. Half of them, like I said, we have only data for 114 indicators. In every SDG, there are some we have, there are some we don't. So, the colors don't refer to anything particular. Thank you.

Inada Juichi

That is the first technical question.

Xue Xiaopeng

I just want to respond to the question from Vietnam. You just mentioned law and rule. Actually, what is rule and what is law? It is a social fact. What is the social fact? That most of us believe in that, that is fact. Actually, while we're talking about law and rule, we have a model. If you think the rule and law, in EU is the rule, is the law; that is us and has no rule, has no law. But actually we notice that ASEAN, they have their own way of cooperation and it does work for several years, for several decades.

In governance we have two kinds of rules, or we have two kinds of laws. First one is a strong one, a strong law, that is regulatory governance. The other one is the loose governance, that is depending on the soft laws. ASEAN, of course the East Asian cooperation, we are loose governance depending on the soft laws. Soft ones still have power. Actually, we have our own culture of cooperation. We just depend on the soft laws.

We have already achieved a great fruit in recent years. Especially ASEAN is a really very best example for that. I think it's good for East Asia to cooperate depending on negotiation, depending on different situations of different countries since we are so different in East Asia. It is good. It's really brilliant and full of wisdom to cooperate among so many different countries. I think soft one is still powerful. We should have confidence on that.

The other one I want to respond is to respond to the professor's question. Climate change is an environmental governance area. Climate change cooperation has the longest history, and has the most successful fruits. Trump just came out and then withdrew from that kind of international cooperation. But he cannot change all of the things. This kind of idea is already deep in everyone's mind. Several leaders in several states in the United States, they promise that they will still keep the promise of the Paris Agreement. I think Trump cannot change all of the things. He can change some of the things, part of the things but not all of the things. People all over the whole, they have a kind of idea that we should do something to save our climate – climate change is really a very serious problem. I think the process is to keep it on, do not retreat back.

While we are talking about the governance, we have new changes in governance especially with the rise of China. But actually what I want to say here is China; we have very fast speed economic growth. That is the truth, but the other truth is China is still a developing country. Actually in global governance, we are the newcomer and we are still weak in some areas. We should cooperate with other countries and with other states in order to make our world better, in order to provide the public good to the world.

Since I have done a research in environmental cooperation and governance for several years, I just want to stress the importance of Japan in this area. Actually, Japan has done a lot in East Asian environmental cooperation, not only in ASEAN countries but also in China. The technology and the way of cooperation is – Japan's way of cooperation with other countries is very flexible and depends on different situations of different countries and just obey or inconsistent with the cooperation of East Asian culture. This is really very good. In environmental cooperation, I think Japan can do much in the technology transfer and also explore the new style of cooperation based on the market to do

the environmental cooperation, to establish coal company, maybe.

Professor Tong just mentioned the China-Japan-South Korea cooperation. We can do many things. We should do some things, and wanted to add new energy to the East Asian cooperation. Thank you. That's all.

Inada Juichi

Are there any participants who would like to respond to the comments and questions from the floor? Is it okay? Do you have? No. Time is up. Before going to invite the summarization from Professor Ito, I would like to say, please excuse me to say my personal impression within one minute. Honestly speaking, almost 35 years ago I was a research fellow of Japan Institute of International Affairs and was engaged in many works, organizing symposiums and programs. At that time there was already ISIS, Asian think tank network existed. Also, we had Japan-South Korea-China tri-lateral symposium network, which was held regularly every year.

Currently, this kind of ASEAN Plus Three network was combined into one. I'm very glad and very impressed to see that this kind of ASEAN Plus Three think tank network has been strengthened. It is my pleasure to be invited to the working group meeting this time. That is my personal impression.

I would like to invite the final concluding remarks from Professor Ito.

5. Closing Session

Ito Go

Thank you, Professor Inada. I'm supposed to make the final summarization of the conference but actually before getting there, Professor Inada already did much of the things that I have to do. Actually I may have to have some kind of roles for the conference towards the end of these very significant sessions. I will have to explain about myself a little

bit. My name is Go Ito. Ito, I-T-O, is my family name.

I'm actually the convener of this conference today. The reason is that I have several different heads. One is the Director of Research at the Japan Forum of International Relations. At the same time, I'm the Director of Meiji Institute of International Relations at Meiji University, of course, this university. By making use of my professorship, we have been able to make use of this conference room.

First of all, as a convener of this conference I would like to thank you, not just the participants, the panelists, but also audience and volunteers and others for attending this conference and spending 4 or 5 hours with us, and listening to the very important and significant speeches and also questions and answers. First of all, I have to give gratitude to all of the participants of this conference.

As the convener, like the Japanese way, I may have to make a little bit of apology for the – to be honest – the shortage of audience. The reason is that, when I had a chance to take a look at the number of the audience this morning, more than 50 or 60 members of the audience are supposed to be here actually. But when I actually came here we found that probably less than half of that; those who applied for the attendance today didn't come probably because it's too hot outside. Temperature probably prevented them from coming over here.

This kind of hot and humid weather, it's like when you have a chance to go out. Of course it's not just hot – but this hot weather of course automatically brings us to make use of air conditioners. In one place the usage of the conditioner creates the heat wave. Accumulation of heat wave brings the people to use the air conditioner. It's a typical case of vicious circle. I may have to actually get into the substance of this discussion by picking up the example of this air conditioner. This is of course the logic of entropy. One thing actually in the world –

one place – bad things can be pushed to the other. Finally, the viscous circle has been created.

Three points would be important. First, entropy is of course too bad. But actually how we would be able to get this bad entropy into issues like inclusiveness, inclusive societies, and also sustainable society. It's actually one thing that we have to pay attention to. The spectrum between the entropy and inclusiveness, how we would define our position between these extremes is going to be quite significant.

We've already listened to the sessions regarding ocean plastic litter. That's creating terrible cases of toxic things for human beings. We have to actually avoid that. One place that is toxic can be of course pushed to others. It's like logic of entropy. We get into the discussion like the case of the smart city in the first session. Smart cities of course, we are always paying attention to environmental issues and trying to include these environmental issues into the entire construct of the society. I think all of the sessions in this conference touched on these actually very significant issues.

The second innovative framework I would actually refer to is the issues of the governance. The ocean plastic reduction, that's of course pushed to the local cities. As seen in the conference sessions, these bad litters have been addressed and also managed by the local villages or towns, or the local cities, whatever. All of development things, all the fruits have been enjoyed by the people in the center. The public bad of course are pushed to the locals. That's not just the issues within the domestic side but also internationally speaking, this is of course a perennial issue between the developed and the developing countries.

I think inclusive society, and also sustainable development, deals with the issue that we have to change our perspectives, change that viscous circle into creation to more advantageous directions. That's the second framework I'd like to pay attention

to. Public bad actually can be changed into public good.

The third framework is, of course, the spectrum between how the viscous circle of the public bad can be changed into more advantageous public good. That's the issue that I mentioned a little bit in the session yesterday. That's also the issue that all the sessions have been touching on. I think the costly disadvantageous can be changed into more beneficial advantageous – that's of course the public good. But it's not an easy process. We are actually Asian. Professor Inada mentioned the ASEAN Plus Three, the combined framework, and geographically pretty close. I think it's time for us think more clearly about this interdependent situation and how we would be able to make inclusive societies and change the public bad into public good. That's the thing would like to say. It's three points.

Professor Ohta mentioned in the keynote speech – already the terminologies are available, like, recycle, reuse, and also waste-to-energy conversion, substitution, materialization. Terminologies are also in here. That actually means that we've already started to think about these new ideas. We have to pay more attention to these new ideas, really think more specifically about the implementation plans for our future.

I'd like to conclude my talk by saying another three points but that probably doesn't last forever. First I have been convening this kind of conference so many times but take a look at the gender balance at the participants of this conference today. Eleven international guests from overseas. But 6 out of 11 are actually women—female participants, those panelists, which is actually really good. I think that also is not just a good thing but also trying to realize more inclusiveness of gender balance for us to think about this significant topic for our future.

Second, this conference is funded by The Japan Foundation Asia Center. I just made greetings to some of the people from The Japan Foundation Asia

Center in a business card that the slogan of the Asia Center right now is “Asia in Resonance” Hibikiau Asia. That sounds very fantastic. One country’s points reverberate into others – good music reverberating the resonance in the region as a whole. This is probably the thing that we are looking forward. I think this slogan is for us to realize the inclusive society and sustainability. The Japan Foundation Asia Center’s slogan, we actually would like to make the resonance. We would like to realize the “Asia in Resonance”.

Finally, some of the people here might already know this, ASEAN Plus Three, but one country is missing. I would like to emphasize that this does not have any political connotation at this time, does not have any political connotation. We would be happy to talk about these important issues with the country who is absent today. We are living in one place in Asia. We’d like to continue this talk.

I would like to finish my talk by thanking all of the panelists especially the chairperson, Professor Inada; and also the keynote speaker, Professor Ohta;

and also the 11 participants from overseas, and also audience, and my students in front of the reception area, before this room. All the people cooperate and they contribute very eagerly for this conference. I would like to thank you very much, all of the people. I would like to close this conference. Thank you very much.

Inada Juichi

Thank you very much. This is the end of the conference. Thank you for your participation.

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