# APPENDIX F

# Summary of Thematic Session D: ASEAN ESC Cities Part 2

This session was chaired by Mr. Sengdara Douangmyxay (Deputy Director, Urban Planning Division, MPWT, Lao PDR), and co-chaired by Mr. Yutaka Fukase (Director, Global Environment Department, Japan Cooperation Agency). A total of six presentations were made.

- "Laos Pilot Program for Narrowing the Development Gap towards ASEAN Integration (LPP)" by Mr. Khouankham Vongkhamsao, Department of Planning, Ministry of Planning and Investment (MPI), Lao PDR
- "ESC Promotion by MONRE/PCD together with LPP/LPPE in Lao PDR" by Mr. Vanhxay Phiomanyvone, Deputy Director, Pollution Management Division, Ministry of Natural Resources and Environment (MONRE), Lao PDR
- 3. *"ESC Promotion by the Ministry of Public Works and Transport of Lao PDR"* by Mr. Sengdara Douangmyxay, Deputy Director, Urban Planning Division, MPWT, Lao PDR
- 4. *"Department of Environment, Pursat Province"* by Mr. Thay Chantha, Director, Department of Environment, Pursat Province
- "Model of Environmentally Friendly Residential Area in Danang City" by Ms. Nguyen Thi Thu Ha, Vice Head, Environmental Protection Agency, City of Da Nang
- 6. *"JICA's Activities for ESC Promotion"* by Mr. Yutaka Fukase, Director, Global Environment Department, JICA

**Mr. Khouankham Vongkhamsao, Department of Planning, Ministry of Planning and Investment (MPI), Lao PDR** presented *"Laos Pilot Program for Narrowing the Development Gap towards ASEAN Integration (LPP)."* 

There are three components of the LPP: environmentally sustainable cities (ESC), which enables cities to effectively manage solid waste through ESC visions and strategic plans; community-based tourism (CBT), which enables village people to manage eco-tourism themselves with new CBT business models; and good agricultural practices (GAP), which enables farmers to provide safe, certified agricultural products that meet ASEAN standards.

LPP's contribution to narrowing the development gap is through the creation, sharing, and application of knowledge. The LPP for regional cooperation uses the resources and expertise of ASEAN countries (tourism, agriculture, environment, ASEAN integration) to

develop the capacity of the Lao Government, develop project monitoring and evaluation mechanisms, ASEAN CBT, ASEAN GAP, and ASEAN ESC to disseminate LPP outputs to CMV.

LPPE has cooperated with the Cambodian environmental sector through participation in sessions and workshops in Indonesia, Lao PDR, and Cambodia, which has contributed to the HRD and national ESC guidelines in Cambodia.

Mr. Vanhxay Phiomanyvone, Deputy Director, Pollution Management Division, Ministry of Natural Resources and Environment (MONRE), Lao PDR presented "ESC Promotion by MONRE/PCD together with LPP/LPPE in Lao PDR."

The MONRE of Lao PDR has a policy to encourage the cities in Laos to be environmentally sustainable cities (ESC). Since all cities face the threat of environmental sustainability degradation due to pressure from urbanization, it is necessary to put the Concept of ESC (Put the Concept in Practice) into effect to encourage cities to start taking steps towards ESC. The MONRE has publicized National Guidelines for Environmentally Sustainable Cities (ESC\_GL) with the cooperation of JICA's LPP/LPPE for operationalizing ESC Concept.

The ESC\_GL consists of two Stages, i.e. Stage 1 Formulation of ESC Vision and Stage 2 Implementation of ESC Vision. The ESC\_GL has been implemented in three pilot cities in Lao PDR in collaboration with LPP/LPPE. As a result, the three pilot cities formulated their ESC Visions and are implementing various pilot projects derived from the ESC Visions focusing on the solid waste management sector.

With the intention to apply the ESC\_GL to all provincial cities in Lao PDR, MONRE organized dissemination workshops. As a result, the three pilot cities, as well as other remaining cities, are now on the track to ESC and MONRE will keep following up with them on their ESC initiatives.

**Mr. Sengdara Douangmyxay, Deputy Director, Urban Planning Division, MPWT, Lao PDR** presented "ESC Promotion by the Ministry of Public Works and Transport of Lao PDR."

The National Urban Sector Development Strategies, launched in 2012, have action plans for town greenery, solid waste management, wastewater treatment, sanitation and hygiene,

Appendix F – Summary of Thematic Session D, E, F Page 2 of 18

infrastructure and housing, and urban services.

Key actions in this strategy include the integration of green city concept in urban design, more focus on area development than traditional city master plans, adoption of site and building codes, and annual meetings (urban forum).

Lao PDR plans to carry out the following in each action area:

- 1. Town greenery: creation of town green areas, promote tree plantation on individual land
- 2. Wastewater treatment: Define short and long-term investment plans, launch demonstrative pilot projects
- 3. Solid waste management: Support cities in waste collection, town cleanliness and sanitation, construct landfill sites

**Mr. Thay Chantha, Director, Department of Environment, Pursat Province** presented "Department of Environment, Pursat Province."

Pursat City is a small, but densely populated urban area. The city has a total land area of 299 km2, an urban area of 9 km2, green area of 120 km2, and 170 km2 of rice fields and farms.

Pursat City has a population of 46,100 and is made up of seven communes and 64 villages. The city has 10,970 households, and a density of 154 persons/km2. Eighty percent of the population are farmers.

Pursat City faces problems in solid waste management, in particular, storage before collection and separation at source. The city tries to build awareness of the people through trainings in the urban area and by publishing billboards and banners.

In Pursat Province, there is a steering committee that advises, follows up, monitors, and evaluates ESC activities in Pursat City. A public awareness campaign was also carried out together with IGES in which 800 participants took part.

**Ms. Nguyen Thi Thu Ha, Vice Head, Environmental Protection Agency, City of Da Nang** presented "Model of Environmentally Friendly Residential Area in Danang City." Danang city has a population of about 950.000 and an area of over 1,253 km2. It is a major city in the key economic zone in central Viet Nam.

Danang has developed a plan to become an environmental city by 2020 that will ensure the quality of soil, water and air. The plan includes the establishment of a proper solid waste collection and treatment system and suitable green area.

Under framework of ESC program phase 2, Danang has implemented a pilot project for the development of an environmentally-friendly residential area in a ward area in the suburbs. A set of criteria and action plan were developed for this pilot project. Some activities have been implemented, including capacity building for local staff and community leaders groups, raising awareness of communities on environment protection, mobilizing communities to clean up residential areas and plant trees, and provision of equipment for waste collection.

Some activities will be planned for the next time to reach the goal of Environmental City, including a building plan and pilot model for none plastic market; community based waste separation at source, and gender mainstreaming assessment on environment protection.

**Mr. Yutaka Fukase, Director, Global Environment Department, JICA** presented "JICA's Activities for ESC Promotion."

This presentation introduces two JICA Projects and shows some of the lessons that are useful for the promotion of environmentally sustainable cities (ESC) in CMLV.

One case is the Project for Development of Low Carbon Society Scenarios for Asian Regions, which is for developing methodology to create low carbon society scenarios for application in Malaysia, and disseminating the research findings to other Asian countries. The outstanding feature of this project is the strong linkage between "research" and "policy", through close collaboration between the Japanese and Malaysian research teams.

Another case is Technical Cooperation Project for the development of a draft of the Bangkok Master Plan on Climate Change 2013-2023 and the capacity development for the implementation of the Master Plan. In this project, we are emphasizing the importance of a co-benefits perspective through the formulation of the draft of the Master Plan and capacity development.

Some of the lessons that are useful for ESC promotion in CMLV include the following.

- (1) Importance of the role of science and technology in solving environmental issues
- (2) Comprehensive approach (cross-sectoral, diversifying partnership)
- (3) Capacity development (raising awareness) for stakeholder(s)

#### Discussion:

#### Comment:

My country is currently going through a period of reform. Management systems needed to be modernised and foreign investors need to be attracted. Capacity building and institutional reform as well as public awareness and action will be needed to fully realise the protection of the environment mandated by the national constitution. To achieve this, there are on-going efforts to attract assistance from other countries through a variety of modalities such as national to national government cooperation, city to city cooperation, and national/local government cooperation with international organisations. Much of the work is focused on the establishment of national guidelines on environment issues such as air, water and hazardous waste amongst others. It is hoped that international organisations can further assist in such work.

## Comment:

I recently visited Pursat, Cambodia and was deeply impressed by their efforts despite not having the benefit of overall ESC guidelines. Substantial efforts have been undertaken to ensure the city is attractive to tourists and solid waste management is implemented well. There are other countries which have ESC guidelines, but their cities are not implementing as well as Pursat. Pursat is a model in that respect, and if Pursat had guidelines then it could develop further.

### Comment:

IDRA is currently implementing its Low Carbon Blueprint which was developed by Universiti Teknologi Malaysia and JICA and launched at Doha at COP18 in December 2012. IRDA has started implementing 10 of the 281 programmes planned. Upon completion the programmes will combine to reduce emissions by 58%. IRDA is following the PDCA (plan, do, check, act) project management methodology and is currently in the check and act stages.

Appendix F Summary of Thematic Session D 6th High Level Seminar on Environmentally Sustainable Cities 9-10 February 2015 Johor Bahru, Malaysia

## Summary of Thematic Session E: Governance and Community Engagement

This session was chaired by Mr. Abdul Jamil Arshad (Director, Research and Development Division, Federal Department of Town and Country Planning), and co-chaired by Ms. Aisa Tobing (Deputy Secretary General, CITYNET). A total of six presentations were made.

- "Measuring Sustainability Cities and Community Wellbeing through the Malaysian Urban Rural National Indicators Network (MURNInets)" by Dr. Azmizam Abdul Rashid, Principal Assistant Director, Research and Development Division, Federal Department of Town and Country Planning
- 2. "SENTUHN KASIH": A Sustainable Community for Inclusive Development in FELDA" by Mr. Abdul Malek Jalil, Director, National Food Storage, FELDA, Malaysia
- 3. *"River of Life"* by Tn. Hj. Nurazizi Mokhtar, Director, Physical Planning Division, Kuala Lumpur City Council, Malaysia
- 4. *"Various Programs towards Future Green Citizens by Local Government"* by Ms. Kim, Ju-ran, Team Manager, Green City Experience Center, Green City Department, City of Gangneung
- "Community-based Management for Domestic Wastewater Treatment" by Mr. M. Dadang Basuki, Head of Division, Division of Monitoring and Recovery of Environmental Quality, City of Tangerang
- 6. *"Our Home, Our Environment, Our Future: Sustainable Singapore Blueprint 2015"* by Mr. Tan Junyuan Christopher, Deputy Director, Environmental Policy Division, Ministry of the Environment and Water Resources, Singapore

Dr. Azmizam Abdul Rashid, Principal Assistant Director, Research and Development Division, Federal Department of Town and Country Planning presented "Measuring Sustainability Cities and Community Wellbeing through the Malaysian Urban Rural National Indicators Network (MURNInets)."

The Malaysian Urban Indicators Network (MURNInet) was established in 1998 for 11 sectors and with 56 indicators. In 2002, pilot projects were carried out in six cities. In 2004, MURNInet was applied to eight capital cities in 11 sectors and with 38 indicators. Between 2005 and 2006, it was applied in all capital cities in Malaysia, and between 2007 and 2009, the MURNInet Porta was launched. In 2010, an indicator modification workshop was organized in 11 sectors and for 40 indicators. In 2011, the program was reviewed and strengthened, and in 2012, the Malaysian Urban Rural National Indicators Network for Sustainable Development (MURNInets) was launched with 36 indicators, 21 themes, and 6

dimensions.

MURNInets has indicators in six dimensions: Competitive economy, environmental quality, sustainable communities, optimum land use, efficient infrastructure, and effective governance. MURNInets is a monitoring mechanism to identify sustainability gaps in local authorities and to assist in improving identified areas of concern.

In the 10th Malaysia Plan, the government has stated their commitment to ensure high quality of life in urban and rural areas. A study on the Happiness index involves the primary data collection between local authorities and residents. The Happiness index can be used as a tool to formulate related policies to improve the social wellbeing of communities, and as a framework for decision-making and policy development guidance to local authorities interested in improving the level of wellbeing of people.

**Mr. Abdul Malek Jalil, Director, National Food Storage, FELDA, Malaysia** presented "SENTUHN KASIH": A Sustainable Community for Inclusive Development in FELDA."

The Malaysian government established FELDA in 1956 with the objectives of providing land for landless, eradicating poverty and uplifting socio-economic status of rural communities, and encouraging the development of a progressive, productive, and disciplined settlers' community.

Sentuhan Kasih FELDA is a comprehensive model designed to address issues with regards to the new generation of FELDA migration of youth to urban areas, unemployment, low income, lack of skills and housing. The project has three core components: modern contemporary housing, modern integrated farming, and modern infrastructure. The target group for this program are new generations of FELDAs that are married, do not have permanent income, and cannot afford to own a house.

Sentuhan Kasih has the following components: Koto IBS technology (industrialized building system), integrated farming, AutoPot and aquaculture technology, and modern infrastructure.

In order to ensure the project is sustainable, a cooperative is formed, which is comprised of a management team and the participants. The cooperative's objective is to support and nurture new entrepreneurs and create new industry within the communities using

Appendix F – Summary of Thematic Session D, E, F Page 8 of 18

agricultural products or their relevant expertise. These new industries will provide job opportunities to surrounding communities and raise the communities' income. Consequently, the future generation will not have to migrate to the urban areas in order to get a job and improve their lifestyle. Sentuhan Kasih will be owned by the participants in the form of master grants and it is stipulated that the ownership cannot be transferred via sales and purchase procedure. Therefore, the objectives of this program are secured.

In the future, the program will have five focus areas: a role model for other villages, a high income community, a global leader in the palm oil industry, development of the new generation of FELDA, and form FELDA into a strong institution.

Tn. Hj. Nurazizi Mokhtar, Director, Physical Planning Division, Kuala Lumpur City Council, Malaysia presented "River of Life."

The Greater Kuala Lumpur/Klang Valley (GKL/KV) National Key Economic Area (NKEA) is one of 12 NKEAs under the Economic Transformation Programme. Its goal is to transform the GKL/KV into the top 20 most livable metropolises globally and top 20 in terms of economic growth. The GKL/KV has a population of 5.7 million.

One of GKL/KV's initiatives is the rejuvenation of the River of Life, which has a goal of transforming the Klang and Gombak Rivers into a vibrant and livable waterfront with high economic value. The initiative is conducted in three parts: river cleaning, river beautification, and land development.

The river cleaning component has a main target of achieving a WQI of Class IIb by 2020. At this time, the WQI is Class III and IV. The river beautification component has a goal to transform the rivers through the revitalization of the public realm along the rivers and to provide a consistent design signature, a brand for the city waterfront, in planning, architectural, functional, and economic terms.

The DBKL and ROL team use a "Planning with the People" approach to ensure success. Public participation is needed to inform the people about the proposed river cleaning projects, get feedback, input, and suggestions from stakeholders, assess people's needs in ensuring the viability of the project and sustainability for the local community, identify local issues and related problems before, during, and after the project is implemented. Ms. Kim, Ju-ran, Team Manager, Green City Experience Center, Green City Department, City of Gangneung presented "Various Programs towards Future Green Citizens by Local Government"

The centre of Gangneung's green programmes is the Green City Experience Center. It was opened in March 2014 and includes an exhibition, convention centre and green experience centre with the aim of accomplishing the goal of becoming a landmark for Gangneung environmental model city in Korea and to present future eco-friendly architecture with state-of –the- art green technology. The centre incorporates solar power generation, energy storage systems and an electric bus and charging facility.

The city has six programmes constituting their aim to be a green city. The themes of these programmes are green environment, climate change, eating habits, alternative energy, resource recycling and nurturing green leaders. Education of the younger generation is the common theme which runs through all of the programmes with children introduced to environmental sustainability through activities such as making small wind power generators with cups, using food waste for plant food and making fruit juice using a bicycle as a power source.

Mr. M. Dadang Basuki, Head of Division, Division of Monitoring and Recovery of Environmental Quality, City of Tangerang presented "Community-based Management for Domestic Wastewater Treatment."

There is a lack of public awareness in maintaining environmental conditions in residential areas and housing. Residential or housing communities dispose of wastewater into the drainage system without adequate treatment. Most communities use groundwater or drinking water companies to water plants, flushing, and washing vehicles.

Kampung Hijau (Green Village) program is one of Tangerang's most popular programs that involve communities. The program has four criteria: green (improve greening), clean (solid waste management), wastewater treatment, and urban farming.

There is often inundation and flooding during the rainy season and rivers are mostly used as wastewater dump sites. Coverage of integrated or communal domestic wastewater treatment facilities is limited. Septic tanks are used by more than 90% of the population and not all of industrial wastewater is treated.

The purpose of the project is to identify WWTP conditions in residential areas, improve community participation to prevent water pollution, and improve and optimize wastewater treatment facilities. Activity programs include community mentors for implementation of small domestic WWTP, improvement of the communities' knowledge on wastewater management in residential areas, and third-party monitoring and evaluation.

Tangerang has developed a plan to conduct a study tour to Surabaya to learn about WWTP management and improve knowledge about WWTP operation and maintenance. Ten participants from communities and two participants from the Environmental Board of the city will take part.

**Mr. Tan Junyuan Christopher, Deputy Director, Environmental Policy Division, Ministry of the Environment and Water Resources, Singapore** presented "Our Home, Our Environment, Our Future: Sustainable Singapore Blueprint 2015."

The Sustainable Singapore Blueprint 2015, an effort jointly led by the Ministry of the Environment and Water Resources (MEWR) and the Ministry of National Development (MND) and involving many agencies across the Singapore Government, was developed after engaging 6,000 people through dialogues, surveys and internet portals. It also built on feedback obtained from 130,000 people through earlier initiatives such as the Land Transport Master Plan 2013 and the Urban Development Authority's Master Plan 2014. Titled "Our Home, Our Environment, Our Future", it outlines Singapore's national vision and plans to be more liveable and sustainable – a Liveable and Endearing Home, a Vibrant and Sustainable City and an Active and Gracious Community. In doing so, it also underscores the importance of working together with a committed Government, forward-looking industry partners and active civic participation to achieve the Sustainable Singapore Blueprint 2015's plans and targets.

## Discussion:

#### Question to all panelists:

When we think about governance we have a feeling it is not the same as the government. Within the government we always have the problem of inter-ministerial cooperation as well as national and local government cooperation. Another important aspect is collaboration between government, private sector and people themselves. Could you tell us how governance is ensured through the closest possible collaboration between ministries within central government, within local government and between central and local government?

### Answer:

The City of Bandung has regional authority so the mayor has the power to manage all the relevant sectors and the city government so it is not a problem to empower the communities. For the central government this is still a problem in Indonesia. How to implement this? Under our regional authority system we try to empower our communities.

#### Answer:

The River of Life is a federal government project coming under the Economic Transformation Plan of the central government. It has a MYR4bn budget with the involvement of three or four major ministries, two state authorities and three local authorities. Due to this federal government involvement, coordination between the different authorities is smooth, however if this was not the case there would probably be a greater level of difficulty.

#### Comment:

The indicators supplied by the Government of Malaysia are warmly received, however it would be preferred if some alterations were made. It would be preferred if the indicator "number of complaints" be changed to "number of complaints resolved on time". It would be helpful if there was a standard national checklist for the verification of Grade A food premises. Regarding the Happiness Index Survey, according to community feedback some of the questions were not relevant.

# **Summary of Thematic Session F: Resiliency**

This session was chaired by Ms. Milag San Jose-Ballesteros (Regional Director for Southeast Asia and Oceania, C40 Cities Climate Leadership Group), and co-chaired by Ms. Lillian Mercado (Deputy Regional Director for Campaigns and Policy, Oxfam). A total of five presentations were made.

- 1. *"Phnom Penh Resilience City"* by Mr. Chiek Ang, Director, Environmental Department of Phnom Penh Capital City
- 2. *"Legazpi City: Disaster Response and Resiliency Initiatives"* by Engr. Gilbert C. Gonzales, Regional Director, DENR Region V, City of Legazpi
- 3. *"Policies and Cases of ESC in Korea"* by Mr. Gyesoo Jung, Assistant Manager, Korea Environment Corporation
- 4. *"Building Urban Climate Change Resilience in Southeast Asia"* by Mr. Vic Aquitania, Regional Director, ICLEI South East Asia Office
- 5. "100 Resilient Cities" by Ms. Lauren Sorkin, Platform Director, 100 Resilient Cities

**Mr. Chiek Ang, Director, Environmental Department of Phnom Penh Capital City** presented "Phnom Penh Resilience City."

Phnom Penh is located at the junction of three main rivers: Mekong, Basac, and Tonlesap, and is at risk for flooding. The flat plain areas usually are dredged during the rainy season. Phnom Penh is located downstream, and is surrounded by a dike to protect the city from flooding.

The city is divided into 12 districts and 96 communes, and has a population of approximately 2.5 million, which includes migrants and workers. The city is led by the City Governor and City Council; districts are led by District Governors and District Councils, and communes are led by a commune leader and commune council.

Phnom Penh faces various issues including the extension of living areas, land use problems, increasing number of houses, increased demand for food, energy, and drinking water, traffic jams, problems with wastewater and solid waste, and increased demand for leisure spots and services.

The generation of waste increased from 343,000 tons in 2007 to 617,000 tons in 2014.

Appendix F – Summary of Thematic Session D, E, F Page 13 of 18

To improve solid waste management, Phnom Penh is collecting waste and cleaning roads, carrying out composting and biogas projects, using food waste for pig farms, reducing the amount of plastic bags used, and recycling and reuse of waste. The city is also working on wastewater treatment at source and mobilization, and is improving gardens and exercise spaces.

Phnom Penh also faces issues with flooding, droughts, and lack of resources. The city is addressing these issues by promoting awareness on changing crops to short-term production, improving canals and sewer system for flooding protection, raising awareness in outskirt areas to increase the number of trees on their properties to keep temperatures down, and encouraging people to store water during the rainy season for use in the dry season.

**Engr. Gilbert C. Gonzales, Regional Director, DENR Region V, City of Legazpi** presented "Legazpi City: Disaster Response and Resiliency Initiatives."

Legazpi is a coastal city with frequent problems from natural disasters. It has a total area of 20,437.09 ha and a population of approximately 210,615 (as of 2013). There are 70 barangays in the city (45 in the urban area and the remaining number in rural areas). Legazpi is vulnerable to typhoons, strong winds, volcanic eruptions, landslides, tsunamis, and floods.

Legazpi was included as a Philippine ESC Model City in year 1 for climate change adaptation and disaster risk response.

The ICMA CityLinks Pilot Partnership Program aims to assist the city government to transform their cities into a well-managed city. The program is funded by USAID and designed by ICMA. The program aims to develop tools and resources that advance professional local government management to create sustainable communities that improve lives worldwide. Legazpi is one of the cities in the ASEAN region that has participated in this program.

Common themes between Legazpi and Fort Lauderdale (Florida, U.S.A.) is strategic planning for climate adaptation, including sea level rise modeling/scenario planning, ecosystem-based storm water management, and focus on urban forestry and biodiversity.

Legazpi has developed a project plan on local risk reduction management planning to build

Appendix F – Summary of Thematic Session D, E, F Page 14 of 18

the city's local government capacity in developing scenario-based maps for land use planning, particularly along the coasts. Activities that are continuing include technical exchange, land use planning, flood mitigation project, and low-carbon initiatives.

Legazpi will pursue other environmental initiatives in the future, including urban greening, air quality, water quality, and solid waste management.

**Mr. Gyesoo Jung, Assistant Manager, Korea Environment Corporation** presented "Policies and Cases of ESC in Korea."

In Korea, four Eco-friendly Sustainable City Projects are now in progress regionally based on the country's 'Low Carbon Green Growth' declaration. Each city has own characteristics and specializes their strength like restoration, ecology, and urban regeneration.

- Case of Gangneung: Restoration of wetlands

- Case of Damyang: Eco-friendly development, Installation of Biomass to energy facility using bamboo waste

using LID (Low Impact Development) method.

The Ministry of Environment in Korea is planning to change the policy about ESC from "Selection" to "Certification" as part of an Environmental City Certification system. Korean MOE anticipates that this system would encourage more participation of local governments.

**Mr. Vic Aquitania, Regional Director, ICLEI South East Asia Office** presented "Building Urban Climate Change Resilience in Southeast Asia."

ICLEI was founded in 1990 as an international association of local government and national and regional local government organizations that have made a commitment to sustainable development. It is the world's leading network of over 1,000 cities, towns, and metropolises. ICLEI's agenda focuses on sustainable cities, resilient cities, biodiverse cities, low-carbon cities, resource-efficient cities, smart urban infrastructure, green urban economies, and healthy and happy communities.

The UCCR process takes a clustering approach and coordinates with other entities working on resilience to integrate existing initiatives and tools in the UCCR. The ICLEI ACCCRN process is a set of 16 tools that have been refined through trials, as well as internal and external reviews. Some key points from the experience in the Philippines include data access and availability, high awareness of local governments on resilience but is skewed towards DRR, vertical and horizontal integration, willingness by LGUs to co-fund and allocate resources for resiliency initiatives. Some LGUs also tend to protect their image, which can affect their risk assessment.

From the experience in Indonesia, we can see that cities with formal MoUs on ACCCRN have made more progress than cities with no MoU. The MoU ensures that the process will involve the participation of people from various agencies, and secures funding from local budgets to support the process.

Ms. Lauren Sorkin, Platform Director, 100 Resilient Cities presented "100 Resilient Cities."

100 Resilient Cities is a programme pioneered by the Rockefeller Foundation and launched in 2013. 100RC was created to help cities respond to the impacts of three worldwide trends: globalization, urbanization, and climate change. 100RC's mission is to help cities around the world build resilience to social, economic, and physical challenges in the 21<sup>st</sup> century. There are 32 Round 1 cities and 35 Round 2 cities that are a part of 100RC.

100RC aims to solve two problems: that cities are complex and insufficiently organized, and that market solutions do not scale efficiently. 100RC provides cities with funding to hire a chief resilience officer, support to develop a city resilience strategy, a platform of services to support strategy implementation, and membership in the 100RC learning network.

The 100RC strategy is a structured activity of 6-9 months that results in a set of initiatives that will build the city's resilience and signal the market. The strategy includes a process to engage a broad and diverse range of city stakeholders, and offers a holistic preliminary assessment of a city's resilience, followed by a deep diagnostic on particular areas.

# Discussion:

*Question for Mr. Gyesoo Jung, Assistant Manager, Korea Environment Corporation:* In the Gangneung project, 51% of the budget comes from the private sector. What incentives are there for their involvement?

# Answer:

The funds are targeted for the end of 2020. As 51% of the project budget amounts to around half a billion US dollars, this is a challenging target. The city is currently looking for investors, particularly in China. The benefits are that investors would be allowed to operate some of the facilities for a period of between fifteen and twenty years.

Question for Mr. Gyesoo Jung, Assistant Manager, Korea Environment Corporation: Regarding the biomass project in Damyang gun, could you tell us about the progress as we are implementing a similar project in Balikpapan?

# Answer:

Regarding the biomass project in Damyang gun, it has not been implemented yet and is just in the planning stages. Bamboo waste is sold to a local paper company, the benefit being the company receives cheap resources and the local government receives income.

*Question to Ms. Lauren Sorkin, Platform Director, 100 Resilient Cities:* Have all of the cities for the programme been identified?

# Answer:

No, 67 have currently been identified. We would warmly encourage applications from the Philippines as no Philippine cities are currently involved in the programme.

# Question to Mr. Vic Aquitania, Regional Director, ICLEI South East Asia Office:

Could you please supply further details on how the teacher training on climate change project was implemented? In Malaysia this would need to involve the Ministry of Education which makes matters complex.

# Answer:

The Government of the Philippines had already mandated the integration of climate change issues into the school curriculum, but this had not been realised due to a lack of capacity building. ICLEI assisted through the creation of guidelines and assisting with training. There were also discussions on how climate change can be integrated into other subjects being taught.

*Question to Ms. Lauren Sorkin, Platform Director, 100 Resilient Cities:* What are the criteria for accepting cities into the programme?

# Answer:

The programme is looking for cities which wish to deal with resilience in a holistic way lead by a committed chief executive or mayor. The quality of the application is also key as an indicator as the application itself is straightforward and cities have a window of several months to respond. Following the application there is an evaluation including an interview with the chief executive/mayor.