Seventh Session of the Asia-Pacific Urban Forum (APUF-7)

Summary Report

APUF7

15-17 October 2019
Setia Spice Convention Centre
Penang, Malaysia

Co-Organizers

Host City

This publication has been issued without formal editing.

EXECUTIVE SUMMARY

The seventh session of the Asia-Pacific Urban Forum (APUF-7) was held from 15 to 17 October 2019 in Penang, Malaysia. Held every four to five years, the Asia-Pacific Urban Forum is the largest regional gathering of urban stakeholders. This year APUF-7 was co-organised by the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), United Nations Human Settlements Programme (UN-Habitat), and Urbanice Malaysia, Ministry of Housing and Local Government, Malaysia and the host City Council of Penang Island and the State of Penang. APUF-7 served as a multi-stakeholder regional platform for participants to share best practices in critical and emerging urban development issues. Expert speakers and thought leaders from national and local government, private sector, research communities and civil society were engaged to provide insights into future-proofed urbanisation solutions. APUF-7 provided opportunities to mobilize common actions and strengthen effective partnerships for sustainable urban development in the region. Additionally, APUF-7 provided engagement space for organizers to host networking and technical events in the urban innovation sessions, center stage and exhibition hall. There were a total 59 urban innovation side events held by co-organizing partners and all the reports are saved for viewing (https://drive.google.com/drive/u/1/folders/13vz_K8T49gbKotaW2qHl_njvo8VmpafL). There were also showcase and technical site visits arranged by local organizers to multiple areas within the Penang Island. (For organizers, speakers, panellists and synopses of the sessions, they can be found in the official APUF-7 website www.apuf7.org)

APUF-7 served as the venue to launch *The Future of Asian & Pacific Cities 2019* report which outlines four priorities and approaches to realize a sustainable urban future in Asia and the Pacific: urban and territorial planning, urban resilience, data and technologies for smart cities, and urban finance. Guided by the theme "Future of Asia and Pacific Cities: Transformative Pathways to Achieve the 2030 Agenda for Sustainable Development", APUF-7 featured four 'Leaders Dialogues' highlighting innovative policy and technical solutions, and 16 Deep Dive Discussions which consisted of seminar-style technical discussions under each respective thematic area.

APUF-7 brought together more than 5,000 participants and up to 200 speakers from 60 countries, including 30 countries from the ESCAP region, including ministers, mayors and other government officials, representatives from academia, urban professionals, the private sector, civil society, grassroots leaders, older persons, youth, and international organisations, to discuss persistent and emerging issues related to sustainable urban development in the Asia-Pacific region, and in particular priority issues in terms of implementation of the 2030 Agenda for Sustainable Development and the New Urban Agenda.[1]

APUF-7 resulted in notable messages and recommendations that were delivered during the 4 thematic tracks discussions:

Urban and Territorial Planning

- Planning processes must be re-imagined to better include the needs, voices, knowledge, wisdom, contributions and legitimate aspirations of the urban poor who can also provide critical data to enable more evidence-based urban planning and management.
- Building a collaborative regional roadmap towards a zero-emission, efficient, and resilient buildings and construction sector for Asia-Pacific could raise ambition levels through priority actions in urban planning, new buildings, retrofits, operations, systems, materials, resilience and clean energy.
- The huge investment in infrastructure that is needed provides significant opportunities to develop the capacities of national industries, but it is important to do so in an integrated, evidence-based, and planned way, that also includes the informal sector and builds the capacities of local governments.

Urban Resilience

- Partnerships on resilience approaches should develop decentralised solutions, mobilise the private sector for financing urban resilience efforts, aim to empower the informal economy and support the poor and vulnerable as agents of change.
- There is a sense of urgency to accelerate the ability of cities to survive, adapt and thrive in the face of shocks and stresses driven by urbanisation, climate change and globalization.
- Self-organised communities are key to providing more effective responses in times of crises after natural hazards because formal structures are disrupted, and such connection provides fast responses

[1] Please see Annexes for more details about Voluntary Commitments and Penang Platform for Sustainable Urbanisation.

and access to information on affected populations.

Data and Technologies for Smart Cities

- It is important to collect relevant statistics and data for smart systems through a platform to work with the private sector and people, to inform policymaking (e-government) that can contribute to measuring indicators of the Sustainable Development Goals.

Urban Finance

- Badly designed public-private partnerships can carry significant risks for the public in terms of reduced or more costly service coverage, poor quality of service or contingent fiscal liabilities and good governance, transparency and integrity are non-negotiable for the success of new finance approaches.
- Key starting point to make a project more bankable is to identify the risks and figure out mitigation solutions to lower the risk profile through various risk-sharing mechanisms such as involving institutions and philanthropic funds.
- To make blended finance work, multiple elements are required, including but not limited to sound and viable project proposal, risk mitigation solutions, monetary or reputational incentives for private sector, technological tools, awareness and capacity building, as well as dialogues among stakeholders and investors for cities to reduce dependence and sustain on their own.

Members of stakeholder assemblies also provided their statements and messages to APUF-7. They stated that the role of local governments is more critical than ever before and decentralization will help improve cities, and cities are committed to work closely with the central governments and stakeholders. Related to gender equality for governance, more policies for women's empowerment can ensure effective and consistent enforcement of policies. As for the grassroots and urban poor, they are productive citizens of society that can collect data for city-wide mapping, organise community finance systems, empower women and help informal settlements with housing. Businesses and private sector can be strong partners as well for sustainable urbanisation and cities need to collaborate more with them since they understand the developmental challenges experienced by cities. Lastly, the youth and future generation are very committed to SDGs and need to be engaged further on future plans impacting their lives

APUF-7 concluded following Declaration of Actions and the Voluntary Commitments and, the result of the Penang Platform for Sustainable Urbanisation (PPSU) which serves as action-oriented platform to be monitored and followed up in the next eighth session of the Asia-Pacific Urban Forum tentatively planned for 2023. For the record, the forum witnessed five declarations delivered by the stakeholder assemblies, 10 voluntary commitments announced by sponsor cities and institutions, and 22 founding members to formally establish and launch PPSU. The Platform will support collaboration among partners to take forward the outcomes of APUF-7 and policy pathways identified in *The Future of Asian & Pacific Cities 2019* report for safe, inclusive, resilient and sustainable cities across the region.

This report is a summary of discussions which highlights the main points and key outcomes from APUF. It should be noted that this report has been issued without formal editing.

The co-organizers wish to acknowledge the valuable support and guidance provided by the Steering Committee members as listed below:

- 100 Resilient Cities
- Asian Development Bank
- Asian Coalition for Housing Rights
- Bloomberg Philanthropies, Global Covenant of Mayors for Climate and Energy
- C40 Cities Climate Leadership Group
- Centre for Liveable Cities, Singapore
- City Council of Penang Island
- City of Penang Island
- CityNet
- Commonwealth Local Government Forum
- European Union / International Urban Cooperation Programme

- Huairou Commission
- ICLEI-Local Governments for Sustainability
- Institute for Global Environmental Strategies, Japan
- Ministry of Housing & Local Government of Malaysia
- The Rockefeller Foundation
- United Cities and Local Governments Asia and the Pacific
- United Nations Development Programme
- United Nations Economic and Social Commission for Asia and the Pacific (Secretariat)
- United Nations Human Settlements Programme
- Urbanice Malaysia
- World Business Council for Sustainable Development

OPENING SESSION

The opening session of the Seventh Asia-Pacific Urban Forum (APUF-7) presented a strong call for cities to take the lead for sustainable development across the region. The opening also served as the occasion to launch *The Future of Asian & Pacific Cities 2019* report, with 15 policy pathways to realize a sustainable urban future in Asia and the Pacific.

Urban planning, natural resource management, climate change, disaster risk and rising inequalities are just some of the critical development challenges affecting over 2.3 billion people living in Asia-Pacific's cities. By 2050, the addition of 1.2 billion new urban residents will have profound implications for the region's economy, society and environment.

Dato' Ar. Yew Tung Seang, Mayor of Penang, opened APUF-7 with key messages about population growth and climate change. In a time where temperatures are rising due to global warming, something must be done to ensure a future for the next generations. Population now is more than 7.7 billion and will be 8.5 billion in 2030. Population growth will bring challenges such as food shortage and resource consumption, and sustainable urbanisation is key to addressing these problems.

Ms. Armida Salsiah Alisjahbana, the United Nations Under-Secretary General and Executive Secretary of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), highlighted how crucial the role of cities is in the region. Partnerships that give depth to the work of policymaking are essential to deal with the consequences of climate change and exponential urban population growth. Three areas demand particular attention from local and national governments: (1) Sustainable and inclusive planning processes that engage all stakeholders in evidence-based decisions to support green growth, scale up nature based solutions, and mitigate future risks; (2) Smart cities and people-centered solutions to make cities more efficient while reducing the digital divide; (3) Financing mechanism for the localisation of the SDGs and financing of affordable housing, through Public-Private partnerships and community mechanisms. Every block, every building and neighbourhood requires careful planning. Cities can play a major role in supporting a more sustainable and inclusive future in our region, but this depends on decisive action in cities and urban centres across Asia and the Pacific.

Ms. Maimunah Mohd Sharif, the United Nations Under-Secretary-General and Executive Director of the United Nations Human Settlements Programme (UN-Habitat), addressed the emerging future risks and areas of urgent action needed. Climate change is reducing the capacity of urban and rural areas to renew commitments on governance, policies and infrastructure, impacting land and citizen's trust The next generation will have to live in a world that results from the decisions made today. In this context, decision-makers need transparent urban management to regain citizens' trust, planning to attract long-term investments, creativity, knowledge and commitment to apply innovative solutions, and investment in data collection for evidence-based policymaking. Cities of opportunities are needed that connect diverse cultures and have nature-based solutions. In this path, the New Urban Agenda can inspire sustainable local action for the achievement of the 2030 agenda. We now need vision and courage to move this agenda forward, leaving no one and no place behind. Ms. Sharif invited all APUF-7 participants to the next World Urban Forum to be held in Abu Dhabi, UAE, in February 2020.

The Prime Minister of Fiji, His Excellency Josaia Voreqe Bainimarama, stated that urban centres are assuming a larger role in achieving the SDGs and in particular with climate change. As concentrated population hubs with high density living, the world's cities are naturally more vulnerable to catastrophic weather events, have an outsized carbon footprint, and their buildings and infrastructure trap heat, further intensifying the effects of global warming. But when it comes to meeting any of our SDGs, the cities should not be seen as the problem; with proper urban planning, and through innovative, local thinking, they can be the solution. According to the Prime Minister, finding solutions is more urgent than ever before and cities are assuming key roles. Some of the drivers of rapid urbanisation include people looking for jobs and escaping climate change impacts. Decision-makers must ensure people have the conditions for living a dignified life and must guarantee no one is excluded from the benefits of urban development. Substantial work remains to be done and requires integrated approaches across sectors. "The future is in our hands for the sake of our communities and our planet" declared the Prime Minister.

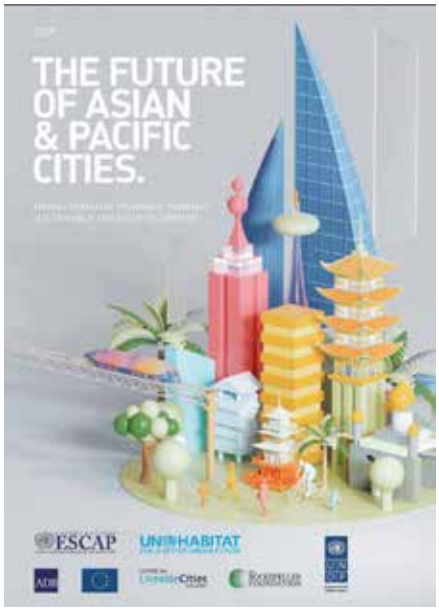
According to H.E. Ms. Hajah Zuraida Kamaruddin, Minister of Housing and Local Government, Malaysia, urbanisation is one of the defining trends of Asia-Pacific's transformation. Cities generate over 80 per cent of gross domestic products and are engines of economic growth in many countries in the Asia and the Pacific region. The quality and efficiency of our cities will determine the region's long-term productivity and overall stability. For the Minister, however, investment in physical structure and policies are not enough to develop a nation. People need to be empowered to understand policies, build ownership, access services, influence decisions and implement plans to be most effective. People want more liveable cities and for that different sectors need to engage. The national policy community in Malaysia seeks to make sure there is enough engagement and cooperation with low-income population, giving them access to information, knowledge, financial capacity, and means to upgrade their living standards. Community engagement is the most important element to move policies forward. In addition to public participation, there is a need to minimize the income gap between rich and

poor.

H.E. Mr. Chow Kon Yeow, Chief Minister of Penang highlighted the importance of localising approaches to the SDGs. In Penang, there is a vision called A Family-Focused Green and Smart State that Inspires the Nation: the Penang 2030 Vision. It is not a blueprint for development but an approach and a call to stakeholders to participate and contribute in shaping Penang's future towards a liveable and green city. Penang 2030 Vision includes the city's hope to work in partnerships with other cities and countries. Aligned with this Vision, the Chief Minister celebrated the hosting of APUF-7 in Penang. APUF-7, is a key platform for different stakeholders to share, discuss and collaborate to formulate steps to solve environmental, economic and social issues. It provides opportunities to discuss critical issues and work together for sustainable urban development.

LAUNCH OF THE FUTURE OF ASIAN & PACIFIC CITIES 2019 REPORT

The Future of Asian & Pacific Cities 2019 was officially launched during the opening session of APUF-7. The report was jointly developed by ESCAP and UN-Habitat, supported by the Asian Development Bank, the European Union, Singapore's Centre for Liveable Cities, The Rockefeller Foundation and the United Nations Development Programme. The report summarized that a sustainable future occurs when planning lays a foundation; resilience guards against future risk; smart cities deploy the best technology for the job; and financing tools help pay for it all. Getting these essentials right in cities today is vital in order to adapt to the demands of tomorrow. The Report will serve as a vital roadmap for the next decade of Asia-Pacific's urbanization and serve as a reference to shape cities of all sizes, from booming intermediate cities to ageing legacy cities, heading into the crucial final decade to meet the Sustainable Development Goals and the New Urban Agenda.



The thematic tracks of APUF-7 mirror the thematic priorities identified by cities and stakeholders for the report and gave the participants the opportunity to dialogue and discuss their ideas. During the launch, youth representatives highlighted the significance of the thematic priorities through their reflections and aspirations of each of chapter.

High-level Roundtable:
Future of Asia and Pacific Cities: Transformative Pathways to Achieve the 2030 Agenda for Sustainable Development

The session was moderated by Dr. Stefanos Fotiou, Director, Environment and Development Division, ESCAP and the following speakers served as panellists:

1. Ms. Elizabeth Yee, Managing Director, Climate & Resilience, The Rockefeller Foundation
2. Ms. Sonia Cadornigara, Homeless Peoples Federation of the Philippines (also representing Asian Coalition for Housing Rights and Slum/Shack Dwellers International)
3. Dr. Bernadia Tjandradewi, Secretary General, United Cities and Local Governments Asia-Pacific (UCLG-ASPAC)
4. H.E. Ms. Zuraida Kamaruddin, Minister of Housing and Local Government, Malaysia
5. Prof. Kazuhiko Takeuchi, President of Institute for Global Environmental Strategies (IGES)

Following the official opening session, the High-level Roundtable set the scene for the Seventh session of the Asia-Pacific Urban Forum. Leaders representing different stakeholder groups shared their visions for sustainable urban development in Asia and the Pacific. They touched upon the four themes of *The Future of Asian & Pacific Cities 2019* report - around which the thematic tracks of APUF-7 are structured. The visions also highlighted some key pathways to accelerate local progress on the global sustainable development agendas. The session concluded with an opportunity for fellow leaders to reflect on and add to the presented visions in a moderated roundtable discussion.

Ms. Elizabeth Yee stated that the region's cities need new sources of capital and there was a need to design solutions to address the challenges and enable cities to rebound and thrive in the face of those challenges whilst mitigating the impacts of climate change and social risks. However, cities do not have the necessary capacities or financial autonomy, and technical assistance has not been enough to meet the needs. It was emphasized that cities need new solutions that deliver multiple outcomes for opportunities for investment. This starts at the top and the best way to do this is to hire a change leader like a Chief Resilience Officer who can help the city to prioritize resilience as a part of budget and procurement policies.

Ms. Sonia Cadornigara gave an example of the City of Iloilo, The Philippines whereby poor community organisations looked to the local government for housing, but were told the governemnt did not have the money to buy the land to resettle them. The community started saving money and within four years were able to buy the land themselves. The communities are now part of the decision-making process of the city able to influence the city's budget. For her own 2030 vision more financing for poor communities was called for. Ms. Cadornigara raised cautions regarding smart cities, as technology can unintentionally reverse social progress. Whilst technology is supporting slum dweller community mapping, the data being gathered must be given back to the community to be used to influence local government planning processes. Finance must also be directed to bridge the gap rather than increase the divide, with a focus on housing, health, communities and protecting the environment.

Dr. Bernadia Tjandradewi presented a series of zero targets as her visions for the region's cities: zero inequalities, zero poverty, zero greenhouse gas emissions and pollution, and zero intolerance. Optimistism was expressed and that these can be achieved with good practices from cities and committed leaders in the region. Examples of cities were provided that have achieved their goals to be replicated. Surabaya, Indonesia, has almost doubled its green public space every year, and other cities are learning from its example. In Penang, culture is an important element of the city, and culture makes cities unique throughout the region. Youth in Penang have been participating with the processes of development in cities; local governments are ready to provide space for young people in the process with participatory budgeting. It was believed that Mayors are particularly well-placed to enable change and make a difference. All were called upon to dream big and to bring prosperity and hope throughout the entire Asia-Pacific region.

H.E. Ms. Zuraida Kamaruddin raised a concern that most people are not aware of the SDGs, even though they are designed to be responsive to all categories of society, including women and youth. Mostly the focus is on policymaking but when it comes to implementation there is often not enough political will to follow through. Therefore, efforts are needed to reach out to both decision-makers and people on the ground to expose them to these messages, otherwise in 2030 there will need to be another set of development goals for 2040, like the MDGs and SDGs before them. To ensure that her government is taking a more integrated approach to policymaking, it was mentioned that the newly appointed cabinet ministers are from diverse disciplinary backgrounds.

Prof. Kazuhiko Takeuchi reminded all that with

economic growth most Asia-Pacific countries has resulted in damage to the environment. The SDGs are about how our system can be maintained within the planetary boundaries, and how a new kind of economic development can be pursed that aligns with the Thai concept of 'sufficient economy'. IGES and Japan are launching initiatives to support this vision and localise the SDGs. IGES is pursuing three aspects: decarbonisation, establishment of circular economy, and establishment of a society in harmony with nature through nature-based solutions. They are disseminating these ideas to cities in Japan and are willing to collaborate with cities throughout the Asia-Pacific region. It is also very important to invite all stakeholders, such as in the case of the development of Voluntary Local Reviews, which were launched in three Japanese cities, and the idea is being expanded this year.

THEMATIC TRACK 1

URBAN AND TERRITORIAL PLANNING

Leaders Dialogue: *The 2030 Vision for Urban Territorial Planning for Asia-Pacific Cities*

The session was moderated by Ms. Norliza Hashim, Executive Director, Urbanice Malaysia and the following served as panellists:

1. Mr. Dato TPr. Mohd Anuar Maidin, Director of General Planning, PLANMalaysia, Malaysia
2. Mr. Atsushi Koresawa, Director, Regional Office for Asia and the Pacific, UN-Habitat
3. Mr. Hongyang Wang, Professor, International Society of City and Regional Planners (ISOCARP), China
4. Ms. Renu Khosla, Director, Centre for Urban Excellence, India
5. Mr. Nelson Legacion, Mayor of Naga City, Philippines
6. Ms. Dr. Riyanti Djalante, Academic Programme Officer, United Nations University - Institute for Advanced Study in Sustainability (UNU-IAS)
7. Mr. Zhang Dongqiang, Deputy Director General, Regional Economy Department, National Development and Reform Commission (NDRC), China

The session opened with the observation that over half of the Asia-Pacific region's population is urban, with a projected urban population of 3.5 billion by 2050. This will require planning frameworks that are comprehensive, integrated and focused on the quality of growth. Despite this ambition, there remains a lack of institutional coordination, weak regulatory frameworks, poor integration of climate resilience, and a dearth of city-wide approaches to comprehensively address urban poverty. Only a revolution in urban planning approaches and innovative financing models can deliver integrated solutions spanning all the SDGs.

In today's context and in the future, urban and territorial planning (UTP) plays a core strategic role in helping decision-makers identify development priorities and bottlenecks, formulating and implementing solutions, and targeting available resources for balanced and sustainable growth pathways. Urban and territorial planning can also provide a forum or opportunities for various other stakeholders, governments at different levels, private investors, civil societies and community groups, to interact and work together to plan their sustainable futures. In the Asia-Pacific region, UTP concerns planning systems at different levels (national, sub-national, municipal levels), legislative frameworks, various institutions and their vested interests.

The panel underlined the important role of national-level institutions in providing guidance, frameworks, and support to cities in order to enhance their planning capacity. At a macro-level, the emergence of city clusters requires planning that goes beyond city boundaries to leverage inter-city synergies in energy, transportation, utilities and economic growth. Another challenge is the emergence of megacities across Asia-Pacific, which bring their own challenges of traffic, high population densities, and pressures on limited environmental resources. A standardized system for development across urban scales could help re-balance urban development and avoid further growth of unsustainable megacities. The proliferation of overlapping plans and frameworks at global, regional and local levels also impedes efforts to determine the real trade-offs inherent in any planning process. The more successful planning exercises in Asia-Pacific have been those rooted in a culture that is modest, inclusive, collective, dynamic and tolerant of differences.

The panel noted that many cities continue to be planned without regard to the actual needs, aspirations and desires of all citizens – resulting in exclusionary dynamics and unplanned settlements. Planning processes must be re-imagined to better include the needs, voices, knowledge, wisdom, contributions and legitimate aspirations of the poor. The urban poor can also provide critical data to enable more evidence-based urban planning and management. Planning should start from the precept that all citizens are resources that can also contribute to the struggle for more sustainable, resilient cities – particularly as the poor are often found in ecologically fragile sites within cities. Thus, protecting the urban poor requires environmental protection which can only be achieved via active participation by the urban poor. This becomes doubly important when the impacts of climate change are considered. Although research and science on disaster risks and mitigation exists, urban decision-makers struggle to integrate it into urban territorial plans due to lack of awareness or competing interests. Localising the SDGs will also require leveraging emerging technologies and generation of data in order to track progress against agreed indicators and targets. Only when planners leverage environmental and social inclusion, can urban planning truly contribute to the emergence of vibrant, liveable, resilient and inclusive cities.

The Q&A focused on how planning can better incorporate urban marginalized groups. Though universally recognized as important, it was noted that even when the poor are 'consulted' there are not always appropriate mechanisms for integrating their feedback into formal plans in a meaningful way. Potential solutions included leaving space for dynamic, self-organised responses that are informed by science/evidence on climate change and keeping plans simple and grounding them in the existing urban community activities and livelihoods.

DEEP DIVE DISCUSSION 1.1:
Applying Integrated Spatial Data for Housing and Land-use Planning Processes

The session was moderated by Mr. Fernando Dacruz, Country Programme Manager, Afghanistan, UN-Habitat and the following served as panellists:

1. H.E. Vice Minister Pol. Lt. Gen. Nadhapit Snidvongs, Ministry of Interior, Kingdom of Thailand
2. Ms. Elisapeti Veikoso, Senior Urban Planner, Ministry of Lands and Natural Resources, National Government, Tonga
3. Ms. Villa Mae Libutaque, Project Development and Coordination Manager, Linkbuild
4. Ms. Puja Sawhney, South Asia Expert, SWITCH-Asia
5. Ms. Rebecca Ochong, Senior Manager of Urban, Land and Policy, Habitat for Humanity, Philippines
6. Mr. Saurin Siagian, Asia Regional Coordinator, International Land Coalition, Indonesia
7. Dr. Shamsaini Shamsuddin, Director of PLANMalaysia, Selangor, Malaysia

H.E. Vice Minister Pol. Lt. Gen. Nadhapit Snidvongs talked about Thailand being routinely affected by climate related disaster. The effects of the catastrophe have largely hit the housing and infrastructure sector of the country. Consequently, the National Act for Land-Use Planning, recently approved by cabinet includes water, sanitation, drainage and waste management considerations aimed to prepare the country and make the city resilient against future climate related events. Moreover, Thailand wants to have 30 per cent increase in forest area protection, as part of the land act territorial management strategy.

Ms. Elisapeti Veikoso explained that urban planning as a government approach is quite recent. The Kingdom of Tonga has just recently started to draft their housing policy. 47 per cent of the population of the main island lives in the main urban area. Like in most urban areas in the Pacific region, Tonga's capital is very vulnerable from sea-level rise, climate disaster and change in rainfall patterns. The current land act is quite traditional still as all land belongs to the crown, and the main administration then allocates to people. Unfortunately, housing has been built in inadequate locations, without proper care to quality and flooding and poor infrastructure is the norm for most urban dwellers.

Ms. Villa Mae Libutaque explained that her company, Linkbuild, works mainly with mapping tools that can allow for inclusive planning, and a lot of her work is focused on the homeless in the City of Muntipula, Philippines. Information is outdated, data covers limited samples, and there is mistrust between government and the public, as well as lack of political support and bureaucracy to improving the planning systems. Linkbuild promotes a community led-management, assessment, implementation and capacity development. Initiatives such as this one, allow cities to find out what people need and how they can plan to solve their issues with evidence and data.

Dr. Puja Sawhney elaborated that EU SWITCH-Asia has created a community of interest in housing, because housing is one of three main urban issues identified in the Asia-Pacific region which can serve as an entry point for sustainable consumption and production patterns. The real challenge on leveraging finance for policymakers on data and planning is related to governance structures. For instance, ministries and government departments are affected and allowed in different ways to access finance. The recommendation is first to have the people that can gather the right type of data that can serve institutions leverage finance for specific purposes related to solving land and housing issues.

Ms. Rebecca Ochong remarked that for NGOs like Habitat for Humanity the issue of data stress was a challenge because several organisations often have duplicated approaches, requests and strategies. Therefore, Habitat for Humanity proposed a coordinated approach to the work of data collecting from NGOs and like-minded organisations. The main focus of Habitat for Humanity is working directly with families and ensuring their access to secure tenure and adequate housing.

Mr. Saurlin Siagian emphasized that land rights are important to be included in data gathering. His organisation has tools that can guide sustainable land management which include their recently launched global Land Governance Index in the Philippines and Nepal, which is supported by PRINDEX, RRI, Transparency International, and Defend the Defenders Coalition. Some indicators used by their initiatives correspond to Global Land Tool Network (GLTN) indicators, as well to the SDG indicators.

Dr. Shamsaini Shamsuddin shared that his Selangor State developed an integrated land use information system, including all national, state-wide physical, structure, land plan, etc. It was explained that most of the data that they collect undergo updating, metadata formulation and revisions in a very detailed manner. This way, the information can be readily available in GIS to provide evidence for affordable housing related decisions. For instance, data can shed light on the location of land which is not suitable for development, such as disaster-prone risk areas, prime agricultural land, or even land which is suitable and cheap.

DEEP DIVE DISCUSSION 1.2: *HUMAN-CENTERED SYSTEMS APPROACH FOR SMART AND FUTURE-ORIENTED CITY MANAGEMENT*

The session was moderated by Mr. Mr. Niloy Banerjee, UNDP and the following served as panellists:

1. Ms. Khairiah Mohd Talha, Advisory Board Member, City of Kuala Lumpur, Malaysia
2. Dr. Stefanos Fotiou, Director, Environment and Development Division, ESCAP
3. Ms. Porntip Janphong, Deputy City Clerk, Koh Samui Municipality, Thailand
4. Dr. Junichi Fujino, Principal Researcher and Programme Director of City Taskforce, Institute for Global Environmental Strategies (IGES), Japan
5. Ms. Charrlotte Adelina, Researcher, Stockholm Environment Institute

The opening remarks by Ms. Khairiah Mohd Talha focused on the fact that participation is key in human centered design. Building the trust of communities is necessary – via face to face interaction and understanding and empathy. Likewise, identifying leadership that can expand programmes and bring them into the future is important for success.

The Keynote presentation by Mr. Stefanos Fotiou from ESCAP emphasized that urban problems are extremely complex today and we have moved beyond the era of addressing a single challenge in cities. Working in this new paradigm means systems thinking, an approach that requires smart systems and problem definition. Defining the problem is not a linear process, and sometimes if the challenge is misunderstood, the wrong solution may be applied. 'Why' the problem should be solved and 'what' the goals are needs to be considered first before dealing with the 'how'.

The case study from Ms. Porntip Janphong showed how the City of Samui utilized a bottom up, human centered approach to stabilize daily waste production at 140 tonnes per day. Further, the city shared efforts supported by UNDP to combat greenhouse gas emissions and further reduce ocean waste. These efforts include many community and school-led approaches to scale up organic waste reduction and reduce plastics.

Dr. Junichi Fujino highlighted Japan's commitment to reduce plastic usage by 2050 through capacity building and technical assistance, and provided a policy-level perspective from Japan's experience reducing plastic waste. In this case, policy solutions were not the only element to meeting waste reduction goals – social systems around waste management were also important. Japan could also learn from other cities in this region that have good examples. It was emphasized the importance of taking into consideration the development stage of each country/city and their vision.

Ms. Charrlotte Adelina drew on experience from a joint project with ESCAP and highlighted the fact that informal waste pickers are a key part of the waste management systems in Bangkok and Pune. Informal businesses are common throughout the Asia-Pacific region and add significant value to economies and cities in the form of waste collection. However, these informal waste pickers and businesses are vulnerable, lack negotiation power, and are often not included in policy decisions. Policy responses for waste management that can bring these actors into the system in a more recognized way include: efficient resource management (by consumers and supply chain), inclusive waste management, and strengthening of institutions for waste management. It was emphasized that technical, data-based indicators of success are easier to develop and implement, but the human element is necessary to achieve lasting solutions.

DEEP DIVE DISCUSSION 1.3: *Moving Beyond Business-as-Usual: The Future of Public Spaces in Asia-Pacific Cities*

The session was moderated by Mr. Jose Chong, Global Public Space Programme, Urban Planning and Design Branch, UN-Habitat and the following individuals served as panellists:

1. Mr. Xavier Castellanos, Regional Director for Asia-Pacific, International Federation of Red Cross and Red Crescent Societies (IFRC)
2. Ms. Celine D'Cruz, Vice President, Block by Block, India
3. Ms. Thi Kieu Than Ha Tran, Manager of Liveable Cities Programme, Health Bridge Foundation, Viet Nam
4. Ms. Kalpana Viswanath, Co-Founder, Safetipin, India
5. Mr. Hitoshi Ara, Group Director for Urban and Regional Development, Japan International Cooperation Agency (JICA), Japan
6. Mr. Hannes Juhlin Lagrelius, Program Officer, World Blind Union, Sweden
7. Dr. Bernadia Tjandradewi, Secretary General, United Cities and Local Governments Asia-Pacific (UCLG-ASPAC)

Mr. Xavier Castellanos stated that the future of Asian and Pacific cities involves confronting the biggest development challenges. These include natural resource management, social economical inequalities, climate change, natural disasters and human induced risks. These challenges will impact urban spatial areas that include both the urban wealthy and urban poor, and both informal and formal environments. Urban security and protection are key issues, which includes a number of spheres, such as infrastructure, digital access, health and personal insecurity. Urban resilience is integrated across these themes and will become an underlying challenge for cities particularly in Asian and Pacific counties.

Ms. Celine D'Cruz stated that the quality and quantity of public spaces are vital elements of our future cities, particularly those within Asian and Pacific countries and specifically for the urban poor. Public spaces are increasingly under threat from private sector ownership in this region, and there is a need for pro-poor planning to intervene in this trend. Public planning is a transformational tool to bridge the gap between the informal and formal and this can be exploited for the benefit of the city.

Ms. Thi Kieu Than Ha Tran noted that the future of Asia-Pacific public spaces must accommodate for an ageing population, and the one billion people with disabilities who will live in cities by 2030. Broader trends of increased inequality in this region highlight the necessity for a coordinated and multi-faceted approach to dealing with the challenges. Some key methods to face these challenges were identified in this discussion such as investment in mixed land-use and high density neighbourhoods with affordable and accessible housing, as well as making sure financial and planning mechanisms enable accessible and inclusive cities through consultation and accessibility design principles.

Ms. Kalpana Viswanath stated that the future of public spaces must acknowledge decrease in urban safety in cities, particularly in Asian and Pacific countries. Urban safety includes the 'right to the city', freedom from violence and fear, enabling opportunities, addressing the needs of vulnerable groups, physical and social infrastructure and institutional responses. Elements of a safe city, specifically in relation to gender security include access to basic services, spaces to play, road infrastructure, walkability, good lighting, public toilets, safe shopping areas, schools and last mile connectivity. Four key methods were identified to achieve urban safety; through legal frameworks, generating data, monitoring and research, through changing social norms including intersection of vulnerabilities, and finally through gender responsive design.

Mr. Hitoshi Ara provided best practice examples in relation to resilience, heritage and public engagement in public space programmes. JICA provides finance and investment to both development projects and private-sector investment, as well as technical cooperation and aid grants. They provide support for public spaces through increasing capacity for implementing urban planning, development control and implementation of improvement projects. Two examples include a physical improvement pilot project, with trial programming, and a masterplan, with a participatory workshop, trial event and wayfinding. Three examples were given in this discussion about public space improvement projects that included street conservation, community engagement and initiatives and urban resilience programmes.

Mr. Hannes Juhlin Lagrelius remarked that the city of Hoi An developed a public space strategy with the goal to both improve existing and increase the total number of public spaces from 120 to 199. This strategy fits with a general city-wide goal to provide public spaces within walking distance for all residents of Hoi An. This speaker used the case study of Trang Keo Park, one pilot project within the strategy, to highlight best practices in relation to multi-stakeholder engagement. Whilst it was built by a developer, with support from an NGO for equipment, the community provided labor contributions, and the local authorities funded and organised maintenance and management. This highlights the importance of stakeholder contributions in innovative and multi-faceted ways to achieve successful redevelopment outcomes.

Dr. Bernadia Tjandradewi reiterated the suggestion that public space improvement projects and the creation of more public spaces within the city rely less on financial support than upon the participation from communities. It was emphasized the importance of considering planning in identifying existing sites within the city, that are either under-used or impermeable, to be redeveloped as public spaces in the most cost-efficient way in terms of design, maintenance and management.

DEEP DIVE DISCUSSION 1.4:
The Potential of Urban Territorial Planning for the Economic Growth of Cities

The session was moderated by Prof. Brian Roberts, Expert on Economic Growth and Cities and the following served as panellists:

1. Mr. Rajivan Krishnaswami, Regional Expert for Municipal Finance, Cities Alliance, India
2. Mr. Datuk Ismail Ibrahim, Chief Executive, Iskandar Regional Development Authority, Malaysia
3. Dr. Bravish Mallavarapu, Senior Urban Expert, United Nations
4. Ms. Ritsuko Yamazaki-Honda, Director, Policy Planning Office, National Spatial Planning and Regional Policy Bureau, MLIT, Japan
5. Ms. Naomi Hoogervorst, Senior Urban Planner, UN-Habitat
6. Ms. Minh Nguyen, Youth for Asia Project Designer, Asian Development Bank (ADB), Viet Nam

The session has shared interesting aspects on drivers for economic growth of cities from economic, social and environmental perspectives and the importance of planning for urban territorial and special build-up urban areas. The Keynote Speaker, Mr. Rajivan Krishnaswami, set the scene and outlined the critical role of local governments in setting the enabling environment for economic growth by providing access to public goods for all. Policy actions were identified that facilitate a more empowered local government, with focus on leveraging grants with commercial finance. Examples included pooled bonds of small city conglomerates that reduce transaction costs and transform cities from passive service providers to proactive cities that attract private investments, strengthen partnerships and bring prosperity. The keynote speech was followed by in-depth break-out group discussions on the following topics:

World café discussion on territorial/spatial plans for overcoming concentration and toward sustainable growth in Tokyo. Japanese territorial/spatial planning system was explained as a good example for multi-level governance aligning national prefecture-level and city-level planning processes and ensuring greater connectivity through transport-oriented development, which worked effectively in Tokyo. Effective planning is a tool to address the demographic issue that Japan faces from an ageing and declining population. The Government of Japan proposed at Habitat III to establish a Spatial Planning Platform (SPP) which enables sharing of experiences and knowledge on the design and implementation of spatial/territorial plans. Based on the support of many countries, the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) embarked on the establishment of this platform, jointly with UN-Habitat ROAP, to provide a stakeholder engagement facility and to support formulation and implementation of better plans.

World Café discussion on grasping technological change for urban economic development: The 4IR challenge. The 4th Industrial Revolution (4IR) is already changing the nature of how we work, live and how the economy is organised and how we buy products. Planners need to be aware what is at stake and what kind of enabling environment must be set to answer the trends the 4IR will bring us. Specifically, the transformation of production (i.e. what is made opposed to consumption), encompassing both products and services, was examined. In the urban realm, the 4IR will play itself out in terms of changes to spatial systems re-organisation and management often discussed under the umbrella term of Smart Cities. This will require the adoption and deployment of new technologies to local contexts, which will require the development of new skills - and therefore workforce and entrepreneurial opportunities. Given that industries automate more low-level skills sets, some industries are more vulnerable to standardization, automation and worker displacement than others. Urban economic policy planners will need to conduct thorough evaluations of their economies to spot these vulnerabilities and need to design a variety of pathways to oversee transition and transformation as it relates to employment and entrepreneurship, and what this might mean for worker re-skilling and continuing education.

World café discussion on measuring potential achievement towards the SDGs in urban planning projects aiming at inclusive prosperity: preparing cities to be better clients to the private sector. City authorities can achieve equitable economic growth through urban planning by developing qualitative projects that contribute to the SDGs. It is essential to ensure the projects are properly implemented. Only then, upscaling/replication in the country region can be strategically conducted to achieve a wider impact. One of the good examples of the discussion was the UK Prosperity Fund Global Future Cities Programme with the objective of promoting inclusive prosperity by supporting 19 cities in 10 countries in the field of urban planning, mobility and resilience, improving the way cities are planned and managed to achieve inclusive and sustainable urban development. Through the programme, technical assistance projects will be implemented by the private sector in the coming two years. UN-Habitat serves as the strategic adviser to the programme, which engages the private sector, NGO's, Academia and citizens to scale up and achieve inclusive prosperity.

World café discussion on youth engagement and SDGs

and youth participating in urban territorial planning in Georgia, Fiji and Viet Nam. The discussion focused on exploring the potential economic value added that youth can bring to urban territorial planning for the economic growth of Asia-Pacific cities. The needs for youth engagement and mentoring to realize the untapped potential of the workforce, address unemployment and economic losses were recognized. Youth engagement needs to be harvested and mentoring structures need to be in place to share wisdom from experienced professionals without being benevolent. Planning for economic growth in cities means also incentivizing youth engagement who by nature have the energy to stir innovation and entrepreneurship. Youth engagement has a higher potential to understand the most vulnerable due to their participatory means of engagement. But there is also a huge difference between the potential of youth engagement from upper- middle and lower-income groups as those groups have different potential and access to markets that spur economic growths. A youth participation ladder was introduced to bring youth into urban territorial planning, shifting away from degrees of non-participation of youth (manipulation, decoration, tokenism) to youth collaboration and empowerment (assigned tasks and informed; consulted and informed; adult-initiated, shared decisions; youth-initiated and directed; and youth-initiated, shared decisions with adults).

World café discussion on determining the breadth and depth of urban territorial planning for economic growth. In terms of planning for economic growth, each city has different strengths and weaknesses. In order to ensure economic prosperity, cities should collaborate from early stages of development and support each other to overcome individual weaknesses. In this process, it is also important to engage government, business and communities in order to successfully achieve economic growth. These stakeholders are instrumental agents of economic growth and drivers of prosperity.

THEMATIC TRACK 2

URBAN RESILIENCE

LEADERS DIALOGUE: *URBAN RESILIENCE: SAFEGUARDING AND ACCELERATING THE ACHIEVEMENT OF THE SDGS*

The session was moderated by Mr. Michel Mouchiroud, Deputy Head, Foreign Policy Instrument (FPI), European Union External Action Service (EEAS) and the following served as panellists:

1. Prof. Shobhakar Dhakal, Professor, Asian Institute of Technology, Thailand
2. Dr. Rudolf Niessler, Principal Advisor for International Relations, Director-General for Regional and Urban Policy, European Commission
3. Dr. Dahlia Rosly, Member of Advisory Council, Malaysian Institute of Planners, Malaysia
4. Dr. Won-Tae Yun, President, International Climate and Environment Center (ICEC), Republic of Korea
5. Mr. Kazufumi Onishi, Mayor of Kumamoto City, Japan
6. Ms. Juliana Ding, Regional Director, Ramboll Environment & Health
7. Mr. Sam Kernaghan, Managing Director, Asia Pacific, 100 Resilient Cities
8. Mr. Emani Kumar, Executive Director, ICLEI South Asia - Local Governments for Sustainability

Speakers agreed that the term 'resilience' suffers from "catch-all syndrome", covering every aspect of urban governance and thus requires strong leadership and the involvement of all actors. There are already many plans and actions being taken and a lot of thought has been applied to identify pathways that increase resilience and address urgent challenges for the future sustainability of our cities. The importance of resilience as the link between policies that reimagine cities into safe, sustainable and prosperous environments was emphasized.

Beyond the traditional challenges to resilience from the economic, environmental and social perspectives, new risks in the region were discussed. These included technological disruptors (such as automation and digitalization), migration, ageing and shifting gender roles. The panel underlined the importance of using resilience as a proactive tool in urban governance. Resilience strategies have to be integrated into urban planning and take into account local nature-based solutions. Cities need to build partnerships that break siloes of policies and stakeholders, including measures to bridge gaps between the national and local levels. Partnerships should develop decentralised solutions, mobilise the private sector for financing urban resilience efforts, aim to empower the informal economy and support the poor and vulnerable as agents of change.

Resilience efforts in the European Union were discussed. The EU has a predominantly polycentric urban system, with territorial cohesion at the heart of EU regional and urban policy. The cohesion policy is backed by the main instruments of EU investment policy, including the European Regional Development Fund and the European Social Fund. The 14 priority themes of the EU Urban Agenda were shared and their coherence with the New Urban Agenda and the Sustainable Development Goals was highlighted. Integrated urban development strategies are developed by cities addressing economic, environmental, social, climate, and demographic challenges. Moreover, the EU has developed a holistic approach to resilience, in which a multi-level governance scheme facilitates transition processes in cities through a continuous process that connects bottom-up initiatives with top-down policymaking.

The participants were presented with the integration of urban resilience measures in Malaysia's land-use planning system. The governance system and available tools dealing with flood, landslide, coastal erosion and local urban challenges were shared. There exist several development guidelines which focus on the social impact assessment (SIA) as a cornerstone of resilient solutions. The importance of coherent local approaches with national policies for stakeholder engagement was underlined.

The panel emphasized the need for an integrated, multi-level and multi-stakeholder approach to enhance urban resilience to a range of shocks and strains at different scales in complex urban systems. The need for scientific and technological approaches for increasing resilience to climate challenges is important. Examples of citizen participation programmes in Gwangju Metropolitan City, including campaigns to promote environmental awareness in areas like low-carbon and green lifestyle, were introduced. It was explained that Gwangju's Strategy for Climate Change and Low Carbon Sustainable Development aims to guide the process of mainstreaming climate resilience and low carbon development into key sectors of the economy.

The consequences of serious earthquakes that affected the City of Kumamoto in 2016, including numerous casualties and total financial damages to infrastructure of over US$14.5 billion, were presented. Applying the lessons from the earthquakes, the municipality has launched full-scale reconstruction efforts focusing on major projects including the restoration of Kumamoto Castle. The city is also taking the chance to develop a new economic growth strategy based on support to small enterprises and farmers as well as enhancing its disaster prevention measures. It was announced that the 4th Asia-Pacific Water Summit will be held in October 2020 in Kumamoto City to discuss, among other issues, resilience against water-related disasters.

A representative of Ramboll informed about their infrastructure solutions to strengthen resilience in Asian

cities. These include ecosystem-based adaptation infrastructure for flood risk management, creating liveable public spaces that integrate natural systems, waste-to-energy recovery facilities, risk mapping tools and software solutions to upgrade air quality modelling systems.

It was stressed the speed at which Asia-Pacific cities can build their capacities to adapt - across governments, communities and businesses - will enable them to not only bounce back from disruption, but also to bounce forward as opportunities emerge. There is a need to accelerate the ability of cities to survive, adapt and thrive in the face of shocks and stresses driven by urbanisation, climate change and globalization. With more than 70 cities in the region now having released resilience strategies and nearly 90 chief resilience officers established across the world, the 100 Resilient Cities network is building the evidence base for how cities can respond to the challenges of today and tomorrow.

The Asian Cities Climate Change Resilience Network (ACCCRN) was mentioned as one platform that supports cities' capacities to plan, finance and implement resilience strategies. The network developed a fragility and climate vulnerability assessment and then supports peer-to-peer knowledge exchange. Strategies build on an integrated adaptation and mitigation planning framework.

DEEP DIVE DISCUSSION 2.1: *STRENGTHENING URBAN RESILIENCE THROUGH CIRCULAR ECONOMY APPROACHES*

The session was moderated by Ms. Loretta Hieber Girardet, Chief, Regional Office for Asia and the Pacific, UNDRR and the following served as panellists:

1. Mr. Raul Daussa, Circular Economy Cluster Manager, European Union – International Urban Cooperation Programme
2. Ms. Samantha Stratton-Short, Associate Director, Arup
3. Ms. Asih Budiati, United Cities and Local Governments Asia-Pacific (UCLG ASPAC)
4. Mr. Togo Uchida, Expert, Institute for Global Environmental Strategies (IGES), Japan
5. Mr. Boyd Dionysius Joeman, Head, Environment, Iskandar Regional Development Authority (IRDA), Malaysia
6. Mr. Piero Pelizzaro, Chief Resilience Officer, Municipality of Milan, Italy

Mr. Raul Daussa highlighted the need to transition from a linear take-make-dispose approach to a circular model, where biological as well technical materials are reused, recycled, and redistributed in production and consumption loops. The current trends in the linear model are shaped by climate change, increasing scarcity of resources and chemical elements, the 4th industrial revolution, and customer expectations. Key actors are transforming from producers to service providers and from passive users to active citizens.

Ms. Samantha Stratton-Short linked the circular economy to urban resilience, providing examples on water saving systems and the built environment, as in the case of the City of Montevideo with its reuse and repair hubs and strategic SuDS networks.

Ms. Asih Budiati briefed on the Indonesia comprehensive effort for the national plan "Indonesia clean from waste by 2025". Existing circular economy practices include "waste for wealth" solutions, such as: community-based waste bank, substitute waste with other means of payments (electricity bills, school tuition, insurance clinic, exchange for rice or other basic foods), landfill gas recovery, and intermediate resource recovery. The main challenges in implementation are the lack of funding and low knowledge and understanding of potential value of waste. International partnerships can be used for implementation of circular economy solutions locally and nation-wide.

Mr. Togo Uchida highlighted the example of Japan as a disaster-prone country, where economy, society and ecology are indivisible to build resilience. The main challenge for local governments is to maintain a good quality of urban environmental services while the population is decreasing and rapidly ageing. Localising SDGs through circular economy is gaining momentum in Japan through international development frameworks and multi-stakeholder platforms.

Mr. Boyd Dionysius Joeman mentioned that a low carbon society needs to take into account both the needs of the future and of today, as in the case of Johor Bahru's policy framework for "strong and sustainable metropolis of international standing". The strategy sees the city as a holistic ecosystem, optimizing resources through a green economy. Ten types of industrial symbiosis have been identified in about 500 industries from five clusters, with symbiotic networks and material flows.

Mr. Piero Pelizzaro showcased best practices from the City of Milan regarding urban metabolism, groundwater saving and reuse, wastewater management, and reuse of wastes starting from the fashion sector. There is a need to educate consumers to buy things that come from organic waste. Milan practiced recently the collection of "waste food" in supermarkets and restaurants to redistribute it to people in need. The involvement of business owners can be facilitated through tax benefits.

Mr. Arab Hoballah expressed his disappointment that sustainable consumption and production models remain marginal. The increasing middle class in Asia means the number of consumers will grow in the near future. There is not enough interest from policymakers and investors in SMEs but they are unseen champions with great potential. The economic argument for resource efficiency is still weak because there is confusion over roles and responsibilities and poor quality of data on material flows. Change will not occur by force and regulations, therefore a mindset for change is needed.

DEEP DIVE DISCUSSION 2.2: *BUILDING ECONOMIC RESILIENCE OF URBAN COMMUNITIES*

The session was moderated by Dr. Bernadia Tjandradewi, Secretary General, United Cities and Local Governments Asia-Pacific (UCLG-ASPAC) and the following served as panellists:

1. Mr. Rajivan Krishnawami, Regional Expert for Municipal Finance, Cities Alliance
2. Mr. Shanawez Hussain, Senior Research Fellow, BIGD, Bangladesh
3. Mr. Ariful Haque Chowdhury, Mayor, Sylhet City Corporation, Bangladesh
4. Mr. A. F. M. Ehteshamul Hoque, CEO, Narayanganj City Corporation, Bangladesh
5. Ms. Poonsap Tulaphan, Director, HomeNET, Thailand
6. Ms. Karibaiti Taoaba, Regional Director, Commonwealth Local Government Forum (CLGF) Pacific, Fiji
7. Mr. Erkhembayar Battulga, Director, Ulaanbaatar Environmental Department, Mongolia
8. Mr. Joseph Stables, Regional Infrastructure Adviser, United Nations Office for Project Services (UNOPS)

The panellists from Cities Alliance and Bangladesh discussed their experience with economic resilience. The Cities Alliance Joint Work Program (JWP) on Equitable Economic Growth aims to identify national actions that can enable local governments to proactively design, finance and pay for public goods over time, and to identify city actions that can reduce access gaps, leverage scarce grants and build investment plans into regular municipal budgets. Two cities in Bangladesh that are being supported through the project, Sylhet and Narayanganj, have chosen safe handling and disposal of waste from healthcare establishments for sustainable medical waste management (Sylhet) and promoting women's participation in economic activities through the provision of skills training, access to business capital and physical space, physical fitness and crèche facilities, and improving the ease of conducting business through access to municipal services by establishing City Digital Centres at the ward level (Narayanganj) as their priority areas. The cities are focusing on the positive interlinkages between the informal and formal economies and aim to increase resilience by strengthening these linkages using technology.

Ms. Poonsap Tulaphan stressed that informal workers must not be left behind. More than 50 per cent of workers in Asia-pacific cities are in the informal sector, but the region's cities have a negative perception of street vendors. There are initiatives to enable informal workers to access healthcare, for example a social protection scheme in Thailand in which the government is paying 30 per cent of the costs. Though there have been continued efforts to negotiate with municipalities for over two years, local officials consistently respond that the pavement is for pedestrians, not for vending.

Ms. Karibaiti Toaba stated that there are similar challenges in many Pacific countries. They are geographically dispersed, low lying and facing climate challenges and disaster risks, they have limited access to markets, weak institutional capacities and institutions, outdated or ineffective legislation inherited from the colonial period, little ability to raise revenues, local councils do not have enough land, and they are unable to afford the necessary infrastructure. CLGF are supporting local government consultations to work with communities and to build capacities through local development plans, in collaboration with the local government association. They have a project in three countries that aims to provide a holistic approach to Local Economic Development and develop strategies and action plans to enable all stakeholders to work together, but local government has been a barrier.

Mr. Erkhembayar Battulga remarked that Ulaanbaatar is the coldest capital city in the world and 60 per cent of households live in ger districts. These are without infrastructure, so they have very low average water use. The existing distribution system sees potable water delivered on a daily basis, meaning people can only get water during a specified, tightly scheduled period. The city is introducing smart water distribution to enable people to get water any time they want without limitation, and people can use a bank card or mobile phone for payment. This is an example of where cities can solve problematic issues relating to basic service delivery, and therefore build economic resilience and reduce inequalities, by using technology.

Mr. Joseph Stables shared a UNOPS project in Sri Lanka on solid waste management strengthening of the capacity of the local government to collect green waste: the programme included informal scrap collectors who segregated out valuable materials in advance to reduce the volumes of waste sent to landfills. The infrastructure gap in the region's cities provides an opportunity to build capacities and transfer knowledge to communities, but the international development community often does not take advantage, with much infrastructure continuing to be built by international contractors. The huge investment in infrastructure that is needed provides significant opportunities to develop the capacities of national industries, but it is important to do so in an integrated, evidence-based, and planned way, that also includes the informal sector and builds the capacities of local governments.

DEEP DIVE DISCUSSION 2.3: *National Adaptation Plans, Climate Finance and Achieving SDG 13 in Cities*

The session was moderated by Mr. Liam Fee, Climate Change Specialist, UN-Habitat, and Ms. Laura Hammettand, Urban Resilience Consultant, UNDP and the following served as panellists:

1. Mr. Ahmad Farid bin Mohammed, Undersecretary of Climate Change Division, MESTECC
2. Ms. Katarzyna Rzucidlo, Climate Resilient Infrastructure Specialist, Green Climate Fund (GCF)
3. Dr. Sang In Kang, Chief Research Fellow, Korean Environment Institute (KEI), Republic of Korea
4. Mr. Hafizam Bin Mustaffa, Head of Operation, Melaka City, Malaysia
5. Ms. Cristiana Fragola, Director, Partnerships and Government Relations, Global Covenant of Mayors for Climate and Energy
6. Ms. Pochanie Kajonpredanon, Director, Department of Public Work, Town and Country Planning, Ministry of Interior, Thailand

Mr. Ahmad Farid bin Mohammed said in formulating the National Adaptation Plan (NAP), Malaysia has adopted a multi-stakeholder approach in which National Standing Committee is responsible for setting policy direction and the state level will ultimately be responsible for implementation. This shows a multi-level, vertical integration approach to NAP in Malaysia. It was also noted that many ministries are now heavily involved in the climate change conversation, which is a major change in recent years, and highlights horizontal coordination efforts. Melaka City has taken several steps to get high quality, highly localised data relating to mitigation and adaptation actions. Melaka provides a good case of cities taking actions autonomously, while also working with national and international partners.

Ms. Katarzyna Rzucidlo stressed that both NAP and project financing are crucial for long-term climate change strategies at the city level. A clear and well-articulated NAP is an essential tool to lead to finance – both at the national and local levels. Furthermore, finance is available, but well-designed projects at the city scale are lacking, and there is a particular need to improve city level evidence and data. This is because data is often too generic and insufficiently local. The GCF also emphasises that project proposals have to consider more thoroughly on the methodology used, ensuring effective participation of women and youth and complying with environmental and social safeguards principles. Projects also need to focus on the GCF strategic priorities relating to adaptation. To enable delivery partners, the GCF has published new indicators and guidance on its website. Finally, the GCF is in the process of strengthening the readiness window to give a greater focus on project development.

Ms. Cristiana Fragola said that the Global Covenant of Mayors GCoM) now represents 10,000 cities throughout the world. Climate actions depend on gaining 'political gravitas'. Developing plans is only part of the equation, national governments can support cities through fiscal and monetary incentives to take action. The GCoM also wants to use APUF-7 to highlight a new, forthcoming City Climate Finance Gap Fund for cities that will be worth €50 million, supported by Germany and Luxembourg. The Fund aims for a capitalization of at least €100 million which will unlock €4 billion in high-quality low-carbon and climate resilient infrastructure projects in cities.

Dr. Sang In Kang stressed that one of the major challenges of vertical integration is the political uncertainty in local and national governments, including limited term of office. It is through consensus that local, national, regional and global integration of knowledge are possible to fully understand climate change impacts but at the same time it is important to recognise that climate change impacts are locally specific. Climate change projects have huge investments costs, long-term and low returns, and this may be alleviated through risk transfer tools such as insurance. Another obstacle is the lack of local understanding and capacity. For example, the project implementation needs to be more transparent with integrated expertise across various disciplines. Mobilizing academic institutes such as universities and academia during project elaboration would be helpful, especially for local projects.

DEEP DIVE DISCUSSION 2.4: *Innovative Financial Mechanisms: Tools and Strategies to Support Community-led Leadership and Partnerships in Building Urban Resilience*

The session was moderated by Ms. Suranjana Gupta, Senior Policy Advisor - Community Resilience, Huairou Commission and the following served as panellists:

1. Ms. Bindu Shrestha, Founder & Chair, Community Women's Forum (CWF)
2. Mr. Saurabh Gaidhani, Associate Director, Asia Pacific, 100 Resilient Cities
3. Ms. Ong Bee Leng, Chief Executive Officer, Penang Women's Development Corporation, Malaysia
4. Ms. Somsook Boonyabancha, Secretary General, Asian Coalition for Housing Rights (ACHR)
5. Mr. Curt Garrigan, Chief, Sustainable Urban Development Section, ESCAP

Panellists highlighted the risks that vulnerable communities face from natural hazards and climate change. However, communities many times are not consulted or engaged during planning processes before and after disasters. Based on good practices from Asia-Pacific cities, community-led mechanisms can play a fundamental role on disasters' preparedness, relief and rehabilitation. First, self-organised communities are key to providing more effective responses. In times of crises after natural hazards, governments have to rely on the social connection with organised communities, because formal structures are disrupted. Such connection provides fast responses and access to information on affected populations.

Second, the engagement of grassroots groups should be beyond supporting relief in time of crises, they should be involved in organising communities to plan for resilience and rebuild a better future. Community-led rehabilitation processes are fundamental to avoid a double disaster: the natural disaster and the disaster of eviction. The trauma of experiencing a natural disaster will not be followed by more traumatic condition of increased poverty, vulnerability, and displacement of affected populations. Grassroots organisations have an important role to negotiate the relocation and rehabilitation processes with local governments to guarantee better outcomes for the affected populations.

Third, during relief and rehabilitation processes, it is important to channel internal and external funding to the communities, instead of directly to individuals, letting the communities to discuss how they will reconstruct their livelihoods and cities, to build resilience for the long-term.

Fourth, small scale interventions can be more impactful than large-scale resilience infrastructure projects.

Finally, self-organised communities have to work not only to reduce vulnerabilities and mitigate the effects of disasters, but also to transform the economic and political conditions that generate vulnerabilities in the first place. It is necessary to introduce new forms of development that are more resilient, inclusive, and has long-term thinking.

THEMATIC TRACK 3

Data and Technologies for Smart Cities

Leaders Dialogue: *Data and Technologies for Smart Cities*

The session was moderated by Dr. Stefanos Fotiou, Director, Environment and Development Division, ESCAP and the following served as panellists:

1. Mr. Teng Leng Lim, Deputy Director, Centre for Liveable Cities, Singapore
2. Dato' Sri Dr. Mohd Uzir Mahidin, Chief Statistician, Malaysia
3. Mr. Lal Chhandama, Director, Smart Cities Mission, Ministry of Housing and Urban Affairs, India
4. Ms. Kumiko Sugawara, Deputy Director, Bureau of Environment, Tokyo Metropolitan Government, Japan
5. Dr. Kalpana Viswanath, Co-founder, Safetipin, India
6. Mr. Tevita Kuruvakadua, CEO, iTaukei Land Trust Board, Fiji
7. Dr. Konstantin Matthies, Engagement Manager, AlphaBeta, Singapore
8. Ms. Wan Chantavilasvong, Lecturer, Urban and Regional Planning Department, Chulalongkorn University, Thailand

The Leaders Dialogues speakers represented public, private, local government, civil society and academia sectors. It began with an opening presentation by Mr. Lim Teng Leng of the Centre for Liveable Cities on the overview of Singapore's smart cities initiative, liveability framework and ASEAN Smart City Network (ASCN). It highlighted the importance of good urban governance and integrated master planning in city development. It was pointed out that the World Cities Summit and ASCN are useful platforms for bringing the different players of urban development together to collaborate.

The panel emphasized the importance of statistics and data for smart systems and examples of platforms engaging both the private sector and citizens, to inform policymaking (e-government) and contribute to measuring progress against the Sustainable Development Goals. India's 100 Smart Cities initiative, spearheaded by the central government which supports 5,151 projects worth US$29 billion proposed by the cities through consultation with citizens was presented. Speakers emphasized that future smart cities will leverage data-driven performance management and innovation. As an example, Tokyo's plan to reduce carbon emissions, which aims to achieve zero emission by 2050 sets specific targets to be carbon-free, including a 70 per cent reduction of emissions attributed to buildings. .

In Fiji, technology and land data are used with the help of partners such as ADB and various stakeholders, to create a more efficient and transparent land price index and leasing process. Speakers emphasized the need to strengthen urban governance and empower citizens with real-time data on public spaces, security information and provide citizens' feedback. This transparent and engaging process is critical to help prioritise decision-making in creating safe and secure public spaces, especially for women and other vulnerable groups.

Further, the panel emphasized the presence of business opportunities for solution providers in cities and the need to come up with good business models and bankable projects to overcome barriers such as lack of appropriate regulatory structures and coordination within government. Data in urban planning and to experience real-life informal sector when conducting research was considered critical to create awareness for people and to understand wider social issues.

On the issue of terminology,, the panel agreed that the definition of smart city is not important. What is important is having clear goals of improving the city and to understand that technology is a means to an end. The panel also discussed that, in making public goods attractive for investment by the private sector, government can adopt appropriate business models such as the use of cross-subsidisation to bundle development. The panel also noted the important role of governments in providing the platform for different stakeholders to jointly brainstorm solutions instead of the usual tender process. The panel also emphasized the importance of active engagement with the private sector, the people, and even cross-generation engagement to understand the aspirations of the youths. Government alone will not be able to overcome the urban challenges: what is needed is collaborations and engagements.

DEEP DIVE DISCUSSION 3.1: *TRANSPORTATION AND MOBILITY INFRASTRUCTURE*

The session was moderated by Mr. Emani Kumar, Executive Director, ICLEI South Asia - Local Governments for Sustainability and the following served as panellists:

1. Mr. Damir Baybossynov, Chief Expert, Nur-Sultan, Kazakhstan
2. Dr. Kalpana Vishwanath, Co-found, Safetipin, India
3. Mr. Andres Dzikus, Coordinator, Urban Basic Services, UN-Habitat
4. Dr. Dahlia Rosly, Member of Advisory Council, Malaysian Institute of Planners, Malaysia
5. Mr. Mandan Regmi, Economic Affairs Officer, Transport Division, ESCAP

As the world continues to urbanize, it is expected that about 90 per cent of urban growth is expected to happen in Asia and Africa in the coming years. Hence there is a great opportunity to build optimal connective and productive cities. Since most of the cities have been automobile-centric for much of the twentieth century, the twenty-first century will require a new model for developing cities which should be environmentally healthy without congestion, and more inclusive through efficient transportation, including last mile connectivity etc. Integrated land-use planning that enables closer workplaces, recreational places, appropriate densities, connected cities, etc., is a critical strategy.

Mr. Damir Baybossynov stated that it is important to have a dedicated agency to look after mobility sector. The city of Nur-Sultan has established a dedicated company to manage transport issues, collecting all the relevant data related to transport, traffic, etc. Ongoing mobility initiatives in Nur-Sultan include dedicated bus lanes and Intelligent Transportation System to manage traffic jams. Electronic payment for transport is also being promoted in the city. Nur-Sultan also plans to promote electric mobility by introducing electric buses and network of charging stations in hopes of reducing emissions. SERGEK project has helped to reduce the traffic congestion and car accidents.

Dr. Kalpana Vishwanath stated that an ideal model of cities should be gender sensitive to promote safer public transport and least mile connectivity for women. Public transport and its waiting areas are identified as one of the most sexually harassment prone areas for women. The policies being developed should encourage non-medical transportation, gender sensitization, women's voice in planning process, mandatory inclusion of safety audits of public transportation and public spaces in cities.

Dr. Dahlia Rosly explained that urbanisation is on the rise in Malaysia, hence there is a need for sustainable transport. National transport policy of Malaysia gives strategies which include the advancement of green transport system and safety, and proper management of the transport infrastructure. Strategies of green transport ecosystem, institutionalising the green transport terminals, and long-term planning of urban centres have also been included. Integration of guidelines with land use and public transportation is important to encourage self-contained development. Executing low carbon mobility initiatives by encouraging electric vehicles has been considered in the policy.

DEEP DIVE DISCUSSION 3.2: *Harnessing 4th Industrial Revolution (4IR) for Sustainable Emerging Smart Cities*

The session was moderated by Mr. Teng Leng Lim, Deputy Director, Centre for Liveable Cities and the following individuals served as panellists:

1. Mrs. Indra A/P C. Jeyarajah, Deputy Undersecretary, Policy and Inspectorate Division, Malaysia
2. Dr. Raslan Ahmad, Senior Vice President, Sustainable Development Technologies Division, Malaysia Industry-Government Group for High Technology (MIGHT), Malaysia
3. Mr. Hirotaka Koike, Policy Researcher, Institute for Global Environment Strategies (IGES), Japan
4. Mr. Omar Siddique, Economic Affairs Officer, Environment and Development Division, ESCAP

Mrs. Indra Jeyarajah presented the Malaysian Smart Cities Framework, set for implementation from 2019 until 2025 which was developed by the Ministry of Housing and Local Government (MHLG) to serve as a national reference and guideline especially for cities and their local governments, and other relevant agencies and stakeholders in developing and implementing smart city initiatives. This comprehensive framework comprises all three tiers of government, as well as private sector participation to streamline and coordinate smart cities development in Malaysia. This is also to ensure a more informed decision making by the Government which takes into consideration views from all the relevant stakeholders. The incremental approach to smart city development in the country, the importance of SMART performance indicators for cities in this area and the importance of data integrity and digital security were highlighted.

Dr. Ahmad discussed the recently published the Industry 4wrd – Malaysia National Policy on Industry 4.0. The action plan outlines the government's commitment to capture Malaysia's Industry 4.0 interests to ensure the country is well prepared for the 4th Industrial Revolution. MIGHT, one of the key initiatives under his leadership involves the establishment of Malaysia Smart Cities Alliances (MSCA). The programme is designed as an advocacy platform for key stakeholder engagement to create greater awareness on smart city technologies, applications, policies and best practices. Significantly, this collaborative-effort ensures that smart city development across Malaysia is aligned with the objectives of Sustainable Development Goals (SDGs) driven by industry best practices.

Mr. Hirotaka Koike reflected on Japan's experience with harnessing the 4th Industrial Revolution at the city level, highlighting the importance of people-centred technological development that also supports ecologically responsible outcomes for citizens and the environment. City level partnerships supported by IGES in this area were also presented which included the experiences of Kitakyushu city.

Mr. Omar Siddique highlighted the importance of a smart systems approach to the 4th Industrial Revolution in cities. To achieve this, emphasis was made on the importance of the interoperability of data collected using frontier technologies such as blockchain, IoT and cloud computing, i.e. data collected across different sectors such as transport, waste and energy need to speak to each other for integrated urban planning. Good practices for cities in this regard were referred to such as the Petaling Jaya city integrated data platform in Malaysia, which allows for data collected across multiple sensors is centralized into a single user interface for city planners and administrators. The role of security was emphasized when it comes to cities' digital infrastructure and to consider developing cybersecurity strategies and countermeasures as Singapore had done in 2016 to safeguard service delivery systems which are relying more and more on digital technologies such as IoT and cloud data storage.

DEEP DIVE DISCUSSION 3.3: *Low Carbon, Climate Smart and Green Buildings*

The session was moderated by Mr. Curt Garrigan, Chief, Sustainable Urban Development Section, ESCAP and the following served as panellists:

1. Ms. Serina Hijjas, Vice President, Malaysia Green Building Council, Kuala Lumpur, Malaysia
2. Prof. Deo Prasad AO, Chief Executive Officer, CRC for Low Carbon Living LTD, Sydney, Australia
3. Dr. Junichi Fujino, Principal Researcher and Programme Director of City Taskforce, Institute for Global Environmental Strategies (IGES), Japan
4. Mr. Tan Szue Hann, Assistant Secretary, Singapore Green Building Council, Chairman, Sustainability, Singapore Institute of Architects, Singapore
5. Ms. Puja Sawhney, SCP Expert for South Asia, SWITCH-Asia SCP Facility, Thailand
6. Mr. Baylong Tham Wai Leong, Director, Penang Green Council, Malaysia

Ms. Nora Steurer delivered a presentation on the growing opportunities of green buildings in the Asia-Pacific region. The work of the Global Alliance for Buildings and Construction (GlobalABC) was presented, including its regional roadmaps and Global Status Report. Building a collaborative regional roadmap towards a zero-emission, efficient, and resilient buildings and construction sector for Asia-Pacific could raise ambition levels through priority actions in urban planning, new buildings, retrofits, operations, systems, materials, resilience and clean energy.

Dr. Serina Hijjas presented on the progress of green buildings in Malaysia and introduced the Malaysia Smart City Framework which promotes energy efficiency, zero emission and mandatory building energy codes. The Framework serves as an implementation roadmap for cities, states and local authorities embarking on the smart city agenda. The action plan required to roll out the Framework is divided into three phases (2019-2020, 2021-2022 and 2023-2025) over the next seven years.

Dr. Junichi Fujino emphasized the systematic factoring in of energy costs into building prices through disclosure, monitoring, and verification as an essential step in green building programmes. Local economies can also benefit from energy efficiency from the building sector by utilizing local energy such as solar, hydro and wind, further reducing carbon emissions and contributing to better health. Energy efficient housing in Nagano, Japan was provided as an example which uses common technology to tackle energy costs. The city of Tokyo has shared best practices with Kuala Lumpur to incorporate innovative technology to help the city to meet the target of 70 per cent reduction of carbon emissions by 2030.

Prof. Deo Prasad discussed the importance of exchanging knowledge of zero emissions technology, and governments should ensure this is done efficiently. Governments need political will and policies to drive change using mechanisms for better buildings. An example was provided of failed uptake of photovoltaics as government funding and policy support diminished despite high demand.

Ms. Puja Sawhney also emphasized that knowledge is key to changing the mindsets of the people in order for policy and funding to be used optimally. Collaboration is extremely important to connect stakeholders and the example was given of the SWITCH-Asia sustainable housing project. Buildings, including government-owned buildings, need to first go green to lead by example, followed by greening the supply chain, and government-private sector investment in research and development. Additionally, incorporating the vulnerable communities by pursuing inclusive developments will be critical for success.

Dr. Baylon Tham Wai Leong explained about Penang being the first State in Malaysia to incorporate certification to greening the building. Penang's Green Building Index (GBI) scheme looks at local climate, culture, tradition and surrounding environment. The scheme eventually helps with the State's economic prosperity.

Mr. Tan Szue Hann explained about the multiple versions of building typologies to cater to the market. He demonstrated the various architectural designs of public, residential housing and hotels which follow the Singapore's Green Marks scheme for green buildings. Examples of circular economy was given which use material wastes for upcycling products and building materials.

DEEP DIVE DISCUSSION 3.4: *SMART GOVERNANCE AND SOCIETY*

The session was moderated by Mr. Jacob Kalmakoff, Business Engagement Specialist, UN-Habitat and the following served as panellists:

1. Mr. Toru Hashimoto, Director-General, Yokohama City, Japan
2. Ms. Mellyana Frederika, Programme Specialist and Urban Planner, Programme Specialist, UN Pulse Lab Jakarta, Indonesia
3. Mr. Azih bin Yusof, Chief of ICT Consultant/Director of ICT Consultation, Malaysia Administrative Modernisation and Management Planning Unit (MAMPU), Malaysia
4. Ms. Sunghoon Kris Moon, Urban Development Specialist, Urban Sector Group, Asian Development Bank (ADB)
5. Ms. Cathryn Anila, Co-Founder, Vanguards for Change

The discussion was centered on a key question: "What does a smart society and smart governance look like in an increasingly urbanizing world?"

Mr. Toru Hashimoto shared about efforts by the City of Yokohama in dealing with rapid growth of the population. The strategy that the city undertook before introducing smart city concepts was by identifying three strategic local cities being well-connected with public transportation and bridges. Mr. Hashimoto also shared about the importance of engaging citizens by starting with citizens' daily life, such as a visualization of household energy consumption.

Ms. Mellyana Frederika advocated for ethical use of data in line with the protection of individual privacy. How cities can make use of the most available data set which is public information was discussed. An example of Jakarta was provided and their use of data from Twitter and CCTV cameras to understand the movement of citizens and identify accident-prone areas to improve traffic safety. Ms. Frederika mentioned one of the challenges faced by ASEAN cities is the lack of alternative data sets that are manual and not automatically uploaded. The importance of human centric design to complement data analysis was also brought up.

Mr. Azih bin Yusof shared the smart city framework from Malaysia that included components such as smart government, smart people, smart economy, smart living, smart environment, smart digital infrastructure and smart mobility. The key challenges identified were pollution and environmental degradation, traffic congestion, inefficient deployment of urban services, and increased threat of crime among others. To overcome these challenges, smart governance and digital governance were proposed as frameworks to establish accountability and facilitate roles and decision

Ms. Sunghoon Kris Moon discussed ways to use technology to make cities liveable (healthier, safer, more productive and inclusive for citizens for both developing and developed cities. The importance of a concerted effort by all sectors such as public and private sectors, NGOs, and academic to make cities liveable was discussed. Some recommendations highlighted by Ms. Sunghoon included that cities should start where data sets are available, digitalize manual data sets, and partner with private sectors such as Uber and Twitter to supply cities with data.

Ms. Cathryn Anila representing the voice of youth and children discussed about the importance of creating child friendly cities and self-governance. It was noted that only in an informed society can smart and safe city be built. Ms. Anila also highlighted the need to be aware and conscious of both the positive and negative consequences of using data in an increasingly connected environment.

THEMATIC TRACK 4

URBAN FINANCE

Leaders Dialogue: *Financing Urban Transformation*

The session was moderated by Ms. Sri Sofjan, Senior Programme Advisor and Strategist, Huairou Commission and the following served as panellists:

1. H.E. Abdul Baqi Popal, Deputy Minister of Municipalities Independent Directorate of Local Governance, Government of the Islamic Republic of Afghanistan
2. Ms. Nurzat Abdyrasulova, President Unison Group, Kyrgyzstan
3. Mr. Robert Guild, Chief Sector Officer, Sector Advisory Group under Sustainable Development and Climate Change Department, Asian Development Bank (ADB)
4. Dr. Greg Munro, Secretary-General, Commonwealth Local Government Forum (CLGF)
5. Mr. Datuk Seri Jebasingam Issace John, Chief Executive, Northern Corridor Implementation Authority (NCIA), Malaysia
6. Mr. Victor Edward, Head, Center of Competence Division, PT SMI (Persero), Indonesia

Many of the investments needed to achieve the 2030 Agenda for Sustainable Development are made at the subnational level, especially by cities. Panellists agreed that local authorities have a responsibility to ensure that every citizen has access to affordable housing and essential services, and that their housing is safe and sustainable. Increasingly, cities also need to prepare for climate change and support a transition towards resource efficiency and renewable energy, which support reduction in greenhouse gas emissions in line with 1.5 degrees Celsius targets in the Paris Climate Agreement. Attention must also be given to urban financing focused on provision of infrastructure and services to informal settlements to ensure that no one is left behind.

Governments at the subnational level need to be able to access and mobilise diverse sources of financing to make long-term investments in sustainable urban development. Yet many cities are also constrained in their ability to raise and retain local revenue sources, take on debt and engage in public-private partnerships (PPPs). Project implementation and public financial management capacities may also be limited.

On the opportunities side, many local governments are exploring a range of advanced market-based finance tools, such as land-based finance, equity finance, pooled finance, municipal bonds and public-private partnerships. These mechanisms, supported often by special purpose vehicles set up at the national level, can help raise the long-term finance needed for capital investments in cities' enormous infrastructure needs. Municipal bond market is currently small but there is more potential. The capacity to support urban debt means that subnational authorities must consistently maintain a reliable surplus of revenues over expenditures. In this respect, many subnational governments are exploring how they can effectively mobilise urban revenues. This includes the use of traditional means such as property tax, which are contingent on a functioning land market, as well as new alternative financial instruments.

Engaging pension and insurance funds are a significant opportunity given they hold an estimated US$800 trillion in assets globally and are only one per cent exposed to infrastructure investments. Efforts should focus on improving the environment for these institutional investors to deliver financing in cities.

Engaging pension and insurance funds are a significant opportunity given they hold an estimated US$800 trillion in assets globally and are only one per cent exposed to infrastructure investments. Efforts should focus on improving the environment for these institutional investors to deliver financing in cities.

There are however also risks and challenges associated with many of these strategies. Municipal bonds and public-private partnerships are complex financial instruments. Badly designed public-private partnerships for example can carry significant risks for the public in terms of reduced or more costly service coverage, poor quality of service or contingent fiscal liabilities. Some subnational governments may not be particularly transparent or well-managed. Good governance, transparency and integrity are non-negotiable for the success of new finance approaches. Sometimes project implementation capacity is also weak. Blockchain and digitization technologies can help support greater transparency and right to information in this regard.

Many development partners are also supporting urban finance, notably the Global Coalition for Municipal Finance, which engages ministries of finance and local authorities on reducing the "national–local" collaboration gap when it comes to urban finance.

Subnational entities are arguably best placed to act holistically on the Sustainable Development Goals in their territories in a way that is inclusively accountable to citizens. Strengthening public finance and capacities at the sub-national level will be essential if they are to meet this challenge.

DEEP DIVE DISCUSSION 4.1:
Applying New Blends of Finance for Sustainable City Development

The session was moderated by Mr. Emani Kumar, Executive Director, ICLEI South Asia - Local Governments for Sustainability and the following served as panellists:

1. Ms. Sorin Chung, Financial Management Specialist, Southeast Asia Regional Department, Asian Development Bank (ADB)
2. Ms. Menchie Lomboy De Guzman, Mayor, City of Bauang, Philippines
3. Mr. Mohamed Rozani Bin Mohamed Osman, Senior Financial Sector Specialist, The World Bank, Malaysia
4. Ms. Josephine Castillo, Leader, DAMPA, Tacloban-Leyte, Nepal
5. Mr. Maniram Singh Mahat, Executive Director, Town Development Fund, Nepal
6. Mr. Nagachethan S M, Senior Vice President & Product Head, Chaitanya (CRIDS), India

Ms. Sorin Chung from ADB delivered a presentation on using concessional funding to catalyze private capital investment into projects. It is important for projects to ensure financial returns, meaning that risks taken by the private sector should be lower than their expected returns. Therefore, the key starting point is to identify the risks and figure out mitigation solutions to lower the risk profile through various risk-sharing mechanisms such as involving institutions and philanthropic funds. In this way, a project can be made more bankable.

Honorable Menchie Lomboy De Guzman, Mayor of Bauang, Philippines talked about how public-private partnership (PPP) serves as a contractual arrangement between the government and private sector to deliver public infrastructure and services. In PPP, the private sector provides capital investment (land, facility), as well as operations and maintenance, whereas the government passes ordinance, prepares the concept design and technical specifications, and monitors the implementation of the project during its construction.

Mr. Mohamed Rozani Bin Mohamed Osman, Senior Financial Sector Specialist from the World Bank Malaysia Country Office, spoke about the problems faced today regarding blended finance. In his opinion, one of the biggest problems is simply awareness. People who are developing financial products are not aware of the needs – the demand and supply sides are not talking to each other, and not tuned to the financial market. Therefore, the two sides need to come together and find a way to work together. It was also emphasized that there needs to be a focus on one outcome when doing projects. This is because the positive impacts of successful projects can go beyond just infrastructure, but also social dimensions and contribute to the municipality's financial sustainability.

Ms. Josephine Castillo stressed the need for grassroots and community organisations to be financially sustainable. An example of the Community Resilience Fund in Tacloban-Leyte, Nepal was given, which specially aims at aiding the post-disaster reconstruction of local community's houses, as well as community gardens to help with food security. The funding is gathered from national government, the municipality as well as multiple stakeholders.

Mr. Maniram Singh Mahat raised a question: Why do we need blended finance if governments have enough funding? The answer given is that under today's infrastructure financing gap, there must be greater financial sustainability. To support this argument multiple examples were given of using blended finance in developing transport and housing in Nepal. It was also stressed that facilitating a dialogue is needed between different organisations, including the private sector. More importantly, financing sources will only come in if there is a sound and viable project proposal.

Mr. Nagachethan S M talked about using blended finance to aid rural-urban migration. For migrants and their housing issue, it is very difficult for financial institutions to provide financing directly to migrants as they move around, and thereby pose higher risks of default. It was proposed that it is time to come up with a bond which engages multilateral organisations such as ADB and IFC, to fund municipalities and support housing for rural migrant workers.

After discussion and Q&A, the panel came to a conclusion that in order to make blended finance work, multiple elements are required, including but not limited to sound and viable project proposals, risk mitigation solutions, monetary or reputational incentives for private sector, technological tools, awareness and capacity building, as well as dialogues among stakeholders and investors for cities to reduce dependence and sustain on their own.

DEEP DIVE DISCUSSION 4.2: *CLIMATE FINANCE*

The session was moderated by Ms. Christiana Fragola, Director, Partnerships and Government Relations, Global Covenant of Mayors for Climate and Energy and the following served as panellists:

1. Mr. Gaetan Hinojosa, Senior Finance Specialist, South Pole
2. Ms. Elisapeta Veikoso, Senior Urban Planner, National Spatial Planning Authority Office, Tonga
3. Mr. Tiago De Jesus Ribiero, Urban Development Specialist, Asian Development Bank (ADB)
4. Mr. Sourabhav Gaidhani, Associate Director, Asia Pacific, 100 Resilient Cities
5. Mr. Daniyar Azymkhanov, Founding Director, Kazakhstan Green Building Council

Mr. Gaetan Hinojosa stated that thinking outside the box is needed to be more innovative in getting finance. South Pole has numerous initiatives such as City Finance Lab, supported by the European Commission, which develops innovative financing mechanisms. Collaboration with the City of Lisbon was made to set up a green participatory budget with funding for low carbon projects that people can vote on. In addition, South Pole has a project in India in partnership with ICLEI which provides technical assistance for bankable projects with financing by consumers.

Ms. Elisapeta Veikoso talked about Tonga's climate change trust fund which provides finance for community-based adaptation and mitigation projects. It also provides supplementary financial support to other organisations (e.g. churches, NGOs, CBOs). Funded originally by a pilot programme for climate resilience under ADB, the trust fund has received to date more than one hundred applications. The screening of the proposals is a challenge for the government which will take time to review. Lack of data is really a serious issue in the Pacific as there is no baseline data and sharing of information.

Mr. Tiago De Jesus Ribiero described ADB's newly released urban strategy called Strategy 2030. By 2030, 75 per cent of operations (sovereign and non-sovereign) will be supporting climate change adaptation and mitigation. ADB's own source climate finance will reach US$80 billion by 2030, while the Pacific department has more than US$140 million presently. The ADB views the Pacific as a priority because the adaptation challenges are so great. Improved data is an essential ingredient to bridging the finance gap. With reliable data, cities can take better, more informed decisions. The private sector could help us move away from a grant-giving mindset and the national and city governments will use their own money to prepare good projects.

Mr. Sourav Gaidhani raised concerns about institutional capacity because finance mechanisms are often complex for city governments to understand. The example of NABARD in India was made which is the main national entity for accessing multilateral climate finance. It was also shared an example of a project in Surat, Thailand, which is experiencing severe deterioration of environmental conditions and water security. With a partnership with the City of Rotterdam, 100 Resilient Cities has been supporting a capacity building project on rainwater harvesting and improved water catchment areas.

Mr. Daniyar Azymkhanov talked about water and food security problems in Kazakhstan. As part of its NDC, Kazakhstan has committed to transition to a green economy and has set a 15 per cent GHG reduction target. At present, US$1 billion has been approved for Kazakhstan mostly in mitigation projects by multilateral development banks.

DEEP DIVE DISCUSSION 4.3: *FINANCING INCLUSIVE CITIES – MAKING THE RIGHT TO THE CITY REAL*

The session was moderated by Mr. Alexandre Nash, Urban Development Specialist, Southeast Asia Regional Department and the following served as panellists:

1. Ms. Somsook Boonyabancha, Chairperson, Asian Coalition for Housing Rights, Thailand
2. Ms. Renu Khosla, Director, Centre for Urban Excellence, India
3. Mr. Fahim Ali, Executive Officer, Urban Planning and Finance, Rawalpindi City Government, Pakistan
4. Dr. Matt Benson, Programme Director, Think City, Malaysia
5. Mr. Ashekur Rahman, Head, Poverty and Urbanisation Inclusive Growth & Resilience Cluster, UNDP

Ms. Somsook Boonyabancha shared the experiences of Community Organisations Development Institute (CODI) in Thailand and the Asia Coalition for Housing Rights (ACHR) regionwide. It was highlighted that the current financial architecture was not aligned with issues of the urban poor. Too much money was focused on big city development but not enough money to solve basic issues such as housing, infrastructure or poverty. CODI through its model showed how poor people are bankable and creditworthy by making them work as a group to get access to funding, and support capacity development to unlock "social wealth". The funding came from government in the form of community loans and government subsidies. It enabled land acquisition by the people and supported housing development in more than 1,000 projects in approximately 400 cities in Thailand.

Ms. Renu Khosla explained how the NGO "CURE" used a range of different financing options that worked for the poor and localised and customised products for people. The key was it had to be simple, responsive to the needs of people, easily accessible, reliable when needed and most of all it needed to be flexible – allowing people to pay back when they could. Models they adapted included revolving fund and collective savings for common infrastructure. Often, they did not directly finance but provided enabling infrastructure – for which people were happy to pay for their own houses. It was also mentioned livelihood funds that go towards upgrading skills and better marketing – and the importance of not only providing money but also knowledge. The 'Aspiration Fund' to strengthening communities for resilience was informed.

Mr. Fahim Ali remarked that government budgets are always limited. In Pakistan, there is a shortage of 10 million housing units and many informal settlements. One example was provided of a response to a dengue epidemic in his locality for which the local government received a conditional loan to finance solid waste management improvements. The local government went further and applied a multi-prong strategy, mobilizing its own resources and strengthening local revenue generation (e.g. updated data base and developed inhouse capacity for tax collection, etc.) Mr. Ali also pointed out that for Pakistani local governments it was not easy to engage with multilateral banks as they need to go through the central government.

Mr. Matt Benson introduced Think City which started out as a grant organisation in Penang that worked on urban regeneration in brownfield sites. It was stressed that Asia-Pacific needed to move away from urban sprawl – he opined that ideally everyone in a city should be able to reach most places in a city within 20 minutes. Approaches to renewal was described of Penang's US$4 million initial project investment which brought big multiplier effects. A PPP was highlighted with an arrangement between Georgetown, Think City and ACHR where security of tenure was given to residents in historic buildings. It was noted that land value capture was successful around the world, but not in Asia. Private business will only invest if enabling environment is set; government can set everything up and private investors can then do what they are good at.

Mr. Ashekur Rahman shared various experiences from the US$100 million poverty reduction programme of UNDP in Bangladesh. It was noted that capacity of local governments needed improvement as well as data availability. Although there were local budget increases in the last years, most local government budget still comes from national government and that dependence was limiting. City officials do not want to conduct pro-poor urban development – they are more interested in big item infrastructure development. However, pro-poor infrastructure is better value for money as it has multiple social returns. The programme has helped to develop poverty reduction strategies to improve governance and financing mechanisms. A big component was on housing whereby a community housing development fund was started with community savings and then with the help of UNDP reached out to other lending opportunities for upgrading.

DEEP DIVE DISCUSSION 4.4: *LEVERAGING SMART TECHNOLOGY FOR FUTURE CITY FINANCE*

The session was moderated by Mr. Paul Martin, Regional Technical Advisor, UNCDF and the following served as panellists:

1. Dr. Suraya Ismail, Director of Research, Khazanah Research Institute, Malaysia
2. Ms. Celine D'Cruz, Co-found and Vice President, Slum Dwellers International, India
3. Mr. Leo Chris Lu, Managing Director, Ad Nano, U.S.A.
4. Mr. Pankaj Khanna, Senior Consultant, Development Alternatives Group, India
5. Mr. Manoj Sharma, Chief, Urban Sector, Asian Development Bank (ADB)

Mr. Paul Martin, Regional Technical Advisor of ADB, Philippines, introduced the session by emphasizing the importance of transparency through the application of technologies on the cities' revenues. There are new trends of how people work in terms of virtual spaces and technologies also impacting the way municipal finance is managed.

Dr. Suraya Ismail explained about her organisation functioning as Malaysia's command centre for integration of various digital information and serving as a hub for city management. Digital infrastructure is important for different technologies to be merged together. They are adding value and making life better for people with improving road congestions, eco-systems and social services. They have provided data to cities with which city councils can in turn provide value added services. The cities are empowered and can mitigate flooding with the use of sensors and visualization tools.

Ms. Celine D'Cruz stated that technology has a stigma among the poor as being only for the wealthy and educated people, but that it can help bring out the aspirations of the urban poor. Poor communities lack information and data because there is a digital gap between the poor and their access to technology. The importance of creating settlement profile for the urban poor will help put them on the map and be better able to identify infrastructure needs such as lighting, tap water and accessibility. Therefore, information provides pathways for poor people to negotiate with the local councils in demanding basic services.

Mr. Leo Chris Lu reminded all of the power of nano technology, data and access to information to improve communities, reduce carbon footprint and save money. Mobile smart phones are powerful tools to bring convenience to life. Wired and intelligent city is dependent on data and ensuring technological investments should benefit people. Real estate market data of brownfields can show what can be done optimally with investments. There is a need to look beyond public policy and see how affordable technology can benefit cities.

Mr. Pankaj Khanna equated sustainable built environment with metabolism. Metabolism analogy applies to city as well with construction, demonstration and waste. For example, data on construction waste volumes are lacking as landfills are becoming a huge environmental problem for cities. A protocol is required for local councils to audit demolition waste in terms of what type of waste and volume are produced. Water supply information through data tracking and monitoring is also needed to bring about solutions.

Mr. Manoj Sharma introduced his organisation's strategic plans and programmes to support infrastructure development in cities. Their aim is to improve efficiencies, revenues and quality of services for the urban poor in cities through improving efficiency and providing infrastructure. Financial sustainability of cities is important and case studies from the Pacific using blockchain for land management and Dhaka to bring about transformational change with water utility through the use of technology. Further examples were given such as Carnegie Mellon University's research on autonomous vehicles to help reduce traffic congestion and air pollution in Pittsburgh, U.S.A. and Seoul's public transportation system using real time big data and data analytics to determine optimal bus routing.

DECLARE YOUR ACTIONS

The 'Declare Your Actions' session provided a space for stakeholders to announce their flagship initiatives to take forward the outcomes of APUF-7, revisiting the visions and solutions discussed during the forum.

The session was divided into three parts. The first part was to hear representatives of five stakeholder constituencies who held assemblies in advance of the main forum (business, local governments, grassroots and urban poor networks, women, and children and youth) to declare their actions. The second part was to showcase individual voluntary commitments made by selected cities and institutions and the third part was to announce the establishment of the Penang Platform for Sustainable Urbanisation, comprising the 'action platform' to take forward the outcomes of APUF-7.

Stakeholder Assemblies

From the representatives of stakeholder assemblies, participants heard statements on commitments and actions based on their discussions held on the day before APUF-7 and during the forum itself. Ms. Maimunah Mohd Sharif, United Nations Under-Secretary-General and Executive Director, United Nations Human Settlements Programme (UN-Habitat) moderated the session.

Dato' Ar. Yew Tung Seang, Mayor of Penang speaking on behalf of local governments assembly acknowledged the value of *The Future of Asian & Pacific Cities 2019* report in providing information on urban development for local governments. The role of local governments is more critical than ever before and decentralization will help improve cities, and cities are committed to work closely with the central governments and stakeholders. The local governments are committed to accelerate and implement the 2030 Agenda for Sustainable Development and localisation of SDGs, financing mechanisms to overcome budgetary limitations, and ASEAN Mayors Forum to work together to create stronger impact on the ground.

Ms. Ong Bee Leng, Chief Executive Officer, Penang Women's Development Corporation (PWDC) speaking on behalf of the women's assembly emphasized the importance of gender equality and women's empowerment for governance. The institutionalising of gender equality and more policies for women's empowerment can ensure effective and consistent enforcement of policies. One commitment illustrated was a Memorandum of Agreement that was signed on gender mainstreaming collaboration framework in Malaysia to show commitment to action.

Ms. Ruby Pepeleras, Coordinator, Urban Poor Coalition Asia speaking on behalf of grassroots assembly stated that the urban poor are productive citizens of society who keep cities functioning. Grassroots have done much to collect data for city-wide mapping, organise community finance systems, empower women and help informal settlements with housing.

Ms. Maria Gina Lizares, Mayor of Sipalay speaking on behalf of business assembly stated that businesses are contributing to sustainable urbanisation in their own way. Many businesses are in the cutting edge of innovation but are more than just service providers. Mayors expressed the need to collaborate more with businesses which is continuing to understand the developmental challenges of cities.

Mr. Kishan Deepak Buxani, Secretary General, Asia World Model United Nations (MUN) III speaking on behalf of children and youth assembly declared that the youth are committed to SDGs and urged governments, private sector, media and relevant stakeholder to be accountable to their actions. Participants were asked to be responsible, go beyond acknowledgements and think about the future generation, children and actions.

VOLUNTARY COMMITMENTS

For the first time, APUF-7 also registered voluntary commitments as one of the outcomes of the Forum. The commitments, which must deliver concrete results by 2023, will serve to increase investments and impactful initiatives for the implementation of sustainable urban development at various levels. Spotlighting and stocktaking of APUF-7 commitments will take place at various global and regional fora, including in 2020 at the 10th World Urban Forum, 7th Asia-Pacific Forum on Sustainable Development and the World Cities Summit.

Ms. Maimunah Mohd Sharif, United Nations Under-Secretary-General and Executive Director, United Nations Human Settlements Programme (UN-Habitat) moderated the session.

Ms. Tupao Moala, Ministry of Land, Climate, Environment and Natural Resources, Tonga declared that the Pacific urban coalition established the Pacific Regional Urban Sector Working Group to build new partnerships and accelerate their efforts towards implementation of the Pacific New Urban Agenda adopted at the Fifth Pacific Urban Forum, from 3 to 4 July 2019 in Nadi, Fiji.

Ms. Zohra Ahmadi, Mayor of Nili, Afghanistan announced on behalf of all members participating in the Asia-Pacific Mayors Academy that the Academy provides a platform and network to discuss a range of urban challenges, tools and solutions to help sustainable urban development projects in cities of the region.

Mr. Kazufumi Onishi, Mayor of Kumamoto, Japan declared that his city would contribute with urban development initiatives, disaster prevention plans, and emergency response strategies developed by his city to be shared with the rest of the world. It was informed that Fourth Asia Pacific Water Forum will be held from 19 to 20 October 2019 in Kumamoto to further share valuable lessons and initiatives on urban development know how and techniques.

Dr. Bernadia Tjandradewi, Secretary General, United Cities and Local Governments Asia-Pacific (UCLG-ASPAC) shared that her organisation is working on many fronts to help increase capacities for local governments to localise SDGs. It was shared that UCLG-ASPAC, UN-Habitat and PWDC have signed an agreement on mainstreaming gender in local governments in Malaysia.

Dr. Rudolf Niessler, Principal Advisor for International Relations, Director-General for Regional and Urban Policy, European Commission announced that the European Union has made a global commitment to work with partners determined to support cities in developing concrete actions for climate change, governance and sustainable development. EU reconfirmed and renewed its engagement with Asian and Pacific cities through International Urban Cooperation (IUC) programme to support city-to-city cooperation in many countries.

Ms. Sunghoon Kris Moon, Urban Development Specialist, Urban Sector Group, ADB declared that US$2.5 billion will be provided for urban infrastructure projects from 2020 to 2024 with expertise to share knowledge and good practices and build capacities of developing member countries.

Mr. Dr. Junichi Fujino, Principal Researcher and Programme Director of City Taskforce, Institute for Global Environmental Strategies (IGES), Japan announced the Voluntary Local Review (VLR) report which they developed with three Japanese cities as an online platform. IGES is committed to promoting the VLR and encouraged other cities to join.

Supporting cities and regions to conduct VLRs

Institute for Global Environmental Strategies

To provide at least 10 cities and regions capacity development and technical assistance to conduct Voluntary Local Reviews by 2021

Sustainable Development Education and Literacy

Universiti Putra Malaysia

To embed teaching about sustainability across all of its major courses, including urban planning and development by 2022

Commitment to Making Cities More Livable

Asian Development Bank

To provide US$2.5 billion annual financing for urban infrastructure projects from 2020 to 2024 which will support cities to improve the coverage, quality, efficiency, and reliability of services in urban areas; strengthen urban planning and financial sustainability of cities; and improve urban environment, climate resilience, and disaster management

Localising SDGs for Asia-Pacific Cities

United Cities and Local Governments Asia Pacific

To supporting at least 50 cities and provinces to develop SDG aligned local plans, climate change action plans, local disaster plans and/or participatory design and construction of public spaces by 2022

Better Knowledge on Urban Post-earthquake Restoration

Kumamoto City, Japan

To contribute to the further development of the international community as an SDG city by sharing the urban development initiatives, disaster prevention plans, and emergency response strategies that the city developed through experiences in the Kumamoto Earthquake on both the international and domestic levels by 2023

7 ASIA PACIFIC URBAN FORUM COMMITMENTS

Sustainable Development for Local Governments in the Asia-Pacific Region

CityNet Secretariat

To accelerate engagement of capacity building activities of its 154 members to localise the SDGs through in sustainable infrastructure, climate action, disaster risk reduction, affordable housing, smart cities, and waste management to support localisation of the SDGs by 2021

Green, Low Emission Urban Development

Seberang Perai City Council, Malaysia

To become a low carbon city that: utilises 15% renewable energy; requires the installation of all street lights to be LED lights; increase its' recycling rate to 70% and reduce garbage by 50% per capita; and plant 100,000 trees by 2022

A New Partnership for Action to Implement the New Urban Agenda and the Urban SDGs in the Pacific

Pacific Island Forum Secretariat and Pacific Urban Forum partners

To ensure successful implementation of the outcomes of the Pacific Urban Forum by 2023

The Penang Platform for Sustainable Urbanization

UNESCAP and UN-Habitat, on behalf of 15 member organisations

To provide joint technical assistance to at least 10 cities for localising the SDGs by 2023, including by applying the policy pathways from The Future of Asian & Pacific Cities Report

Mayors Academy for Sustainable Development

Nili City, Afghanistan on behalf of Academy partners

To build the capacity of at least 20 mayors and create a network of sustainability champions in the region with partners by 2021

International Urban Cooperation Programme Asia, Phase II

European Union - International Urban Cooperation Programme

To share knowledge, create innovative solutions, generate new economic opportunities by supporting cooperation on sustainability for at least 30 Asian cities by 2023

For more information please visit https://www.apuf7.org/initiatives/voluntary-commitment or contact escap-edd-suds@un.org.

Penang Platform for Sustainable Urbanisation (PPSU)

The launch of the Penang Platform for Sustainable Urbanisation highlighted a dynamic new partnership to leverage the strengths of cities and leading urban development organisations to support local, regional and national governments in achieving the Sustainable Development Goals (SDGs) and New Urban Agenda in Asia and the Pacific.

Connecting cities with tailored technical assistance, generating action-oriented research and evidence on urban solutions, and enhancing access to innovative financing models are important focus areas of the Penang Platform for Sustainable Urbanisation. The Platform will support collaboration among partners to take forward the outcomes of APUF-7 and the policy pathways identified in *The Future of Asian & Pacific Cities 2019* report for safe, inclusive, resilient and sustainable cities across the region.

Ms. Norliza Hashim, Executive Director, Urbanice Malaysia introduced the PPSU to APUF-7 participants and explained its objective, membership and modality on behalf of the 22 founding members to declare their contributions. The following representatives provided their statements to commit to PPSU.

1. Dato' Ar. Yew Tung Seang, Mayor of Penang, Malaysia
2. Mr. Emani Kumar, Executive Director, ICLEI South Asia - Local Governments for Sustainability
3. Ms. Aisa Tobing, Deputy Secretary General, CityNet
4. Ms. Karibaiti Taoaba, Regional Director, Commonwealth Local Government Forum (CLGF) Pacific, Fiji
5. Mr. Sourabhav Gaidhani, Associate Director, Asia Pacific, 100 Resilient Cities

Please see Annex 1 for details the mechanism of PPSU

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CLOSING SESSION

The following distinguished delegates delivered their closing remarks.

1. Dr. Stefanos Fotiou, Director, Environment and Development Division, ESCAP
2. Ms. Maimunah Mohd Sharif, the United Nations Under-Secretary-General and Executive Director of the United Nations Human Settlements Programme (UN-Habitat)
3. H.E. Ms. Hajah Zuraida Kamaruddin, Minister of Housing and Local Government, Malaysia
4. H.E. Mr. Chow Kon Yeow, Chief Minister of Penang

The speakers expressed their strong commitments to increase financing for sustainable urban development, capacity development, and participation of mayors in various platforms that will make cities more liveable and sustainable. It was encouraged that cities adopt the 15 development pathways recommended in the *The Future of Asian & Pacific Cities 2019* report and to work closely with stakeholders to make commitments made at APUF-7 a reality. They also looked forward to taking actions through the Penang Platform for Sustainable Urbanisation (PPSU), working towards capacity of mayors and creating a network of champions for sustainability through the Asia-Pacific Mayors Forum, expanding the localisation of SDGs by providing technical support to cities, and taking forward the APUF-7 outcomes and issues to future inter-governmental meetings from next year, including the tenths session of the World Urban Forum (8 to 13 February 2020, Abu Dhabi), seventh session of the Asia-Pacific Forum on Sustainable Development (25 to 27 March 2020, Bangkok), seventy-sixth session of the Economic and Social Commission for Asia and the Pacific (18 to 22 May 2020, Bangkok), and Committee for Environment and Development (18 to 20 November 2019, Bangkok).

Other key messages to accelerate the achievements of New Urban Agenda and SDGs included: (a) sharing, learning and implementing of good practices at APUF-7; (b) making cities more inclusive, safe, resilient and sustainable, with better governance by improving the capacity of city managers to be smart; and (c) adjusting urban systems and framework to align with visions and targets set forward in the SDGs. It was emphasized that work across silos with integrated systems is more efficient and effective in delivering urban solutions.

The speakers noted that the political will and resilience are essential to fulfill the goals of SDGs. Political will should also be backed up by resilience to keep the stamina going. It was noted that more efforts are needed in electing women mayors and bringing womens' perspectives in decision-making and nation-building.

Lastly, a special message was delivered by a representative of the Department Urban Planning and Municipalities, United Arab Emirates. The representative provided a briefing on the Tenth session of the World Urban Forum, to be held from 8 to 13 February 2020 in Abu Dhabi, United Arab Emirates.

PHOTO GALLERY

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STAGE

ANNEX 1
PENANG PLATFORM FOR SUSTAINABLE URBANISATION (PPSU)

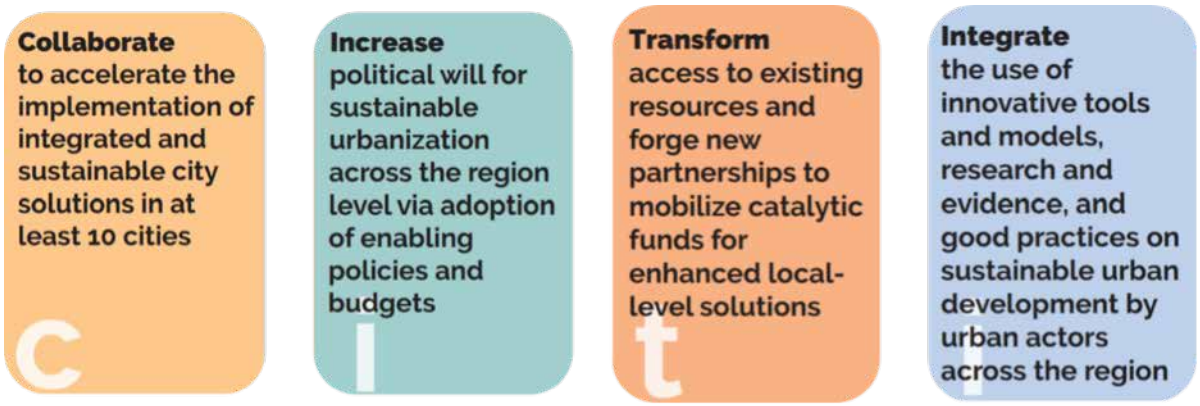
A DYNAMIC PARTNERSHIP TO ACCELERATE LOCAL ACTION IN ASIA AND THE PACIFIC

I. INTRODUCTION AND OBJECTIVES

The sustainability challenge in Asia-Pacific will be won or lost in cities. Massive shifts—demographic, economic, social, and geopolitical—are already underway and pose serious challenges for the environment, livelihoods and social well-being. At the same time, the opportunities presented by urbanisation to lift countries out of poverty and on to sustainable development trajectories are tremendous. The future of Asia-Pacific societies is to a large extent dependent on the way cities are planned, financed and managed. The challenge for the region continues to be how these transformative urban processes can be leveraged for sustainable development outcomes at all levels and peoples.

The urban challenges facing Asia Pacific cities range from building resilience to climate change and disasters; to include reducing unsustainable resource use and overcoming high levels of gender-, age- based, socio-economic and spatial inequalities. These inter-related challenges require holistic sustainable development pathways that leverage the opportunities provided by smart technologies, nature-based solutions, new renewable energy systems, and innovations in land-based financing, affordable housing and sustainable infrastructure planning. All of this requires a deep paradigm shift, adopted by member States in the New Urban Agenda, on multi-level urban governance, integrated urban planning, and fiscal empowerment of local authorities.

Within this context, the Penang Platform for Sustainable Urbanisation (PPSU) brings together an alliance of partners to pursue the following *"CITI" objectives* in Phase 1 (2019-2023):



The CITI objectives will be revisited at the first Leadership Forum meeting to ensure they are fit-for-purpose and align with the emerging priorities of the region's cities, countries and Platform members.

II. KEY FOCUS AREAS

In order to achieve CITI objectives above, the PPSU will work as an "action platform" across four focus areas. These areas may be revised to take into account the priority recommendations emerging from the launch of the PPSU at the Seventh Asian Pacific Urban Forum to be held from 15-17 October 2019 in Penang, Malaysia. In addition, further revisions are envisaged as new partners join the platform and opportunities emerge to further enhance the platform's impact:

1. *Elaborate and implement joint frameworks for action on sustainable urban development in selected cities.* The complexity of the sustainable urban development challenge has led to a plethora of urban governance, planning, resilience, sustainability, and other initiatives, each with its own strengths. While this diversity is welcome, it can prove daunting for city-level actors who face a fragmented technical and financial support landscape. Platform members agree to work together in selected cities to harmonize, align, simplify, and coordinate their support into a tailored unified city support program. This will both address fragmentation and create opportunities for synergistic support.[2]

[2] Please see an initial list of potential focus cities in Annex 1. This list will be revised over time based on city demand and identified potential for alignment between PPSU member organisations.

2. *Provide tailored technical assistance, capacity development, and advocacy to adapt global best practices and models for Asia-Pacific cities.* While many models and practices have been validated around the world, countries, regions and cities across Asia-Pacific have struggled to identify which are most pertinent and then effectively adapt and replicate them in the local context. PPSU will align on priority models, practices and pathways for sustainable urban development that respond to the challenges facing Asia-Pacific cities and develop a coordinated menu of technical and capacity support packages provided by one or more members to empower cities to translate and implement global best practices and models. As appropriate, members will also advocate for national and regional-level adoption of successful models and practices.

3. *Facilitate access to catalytic funding, through conventional and innovative local finance mechanisms.* PPSU will connect cities and communities to public and private financiers with shared commitments to boosting resilience and sustainability. New and innovative financing mechanisms and instruments will be explored including bonds, venture philanthropy networks, and other sources of pooled and blended finance. In addition, an Asia-Pacific city 'challenge fund' could be established to support catalytic investments to implement the individual and joint commitments made in APUF-7. This will offer flexibility to accelerate action on the ground without the challenges of traditional multilateral institutional funds.

4. *Generate action-oriented research & evidence to foster exchange and learning on emerging sustainable urban development solutions.* The urban development context across the region is constantly evolving, as are the potential solutions across a range of urban development functions and themes. Big data, smart technologies, rapidly shifting energy and transport solutions, and innovative civic engagement mechanisms and coalitions are just a few examples. PPSU will work with cities to identify priority areas where gaps in the evidence and practice exist, and promote pilots, research, exchanges, and other methods to address those gaps and inform urban practice and policy at all levels.

These four focus areas will reinforce each other to provide a comprehensive package of services to support the transformational changes of cities. For an illustrative list of proposed activities under each of these areas, please see Annex 2.

III. Membership

The PPSU is a *"an inclusive platform for collaboration towards sustainable urbanisation in the Asia-Pacific. The platform leverages the comparative strengths of the leading urban development organisations to support local, regional and national governments in implementing sustainable urbanisation to achieve the Sustainable Development Goals and the New Urban Agenda."* Membership is open to a wide range of public, private, and civic organisations and institutions across the region that:

- Endorse the PPSU mission and objectives
- Abide by the platform's principles (see below); and
- Commit to a minimum of one action, activity, or program with at least two other PPSU members that supports

The 15 founding members of the PPSU include:

The PPSU intends to expand and diversify its membership further, including entities such as urban planning institutions and professionals' associations, academia and private sector networks.

Principles

Recognizing that each PPSU member organisation may approach sustainable urbanisation from a different lens and comparative advantages, the partnership will seek to find ways to leverage, develop, enhance and reinforce members' efforts in a coherent manner. Shared principles include:

1. Avoiding duplication and fragmentation by committing to harmonization, alignment, coordination, and collaboration for city-level actions in line with national priorities

2. Identifying and pursuing opportunities to utilize existing and additional resources toward joint activities and interventions to achieve scale
3. Pooling expertise and mobilizing joint human resources for technical assistance, capacity development, research and advocacy
4. Committing to holistic/integrated sustainable development pathways and programs, and minimizing siloed or vertical approaches and interventions
5. Recognizing the imperative to establish inclusive and effective governance and implementation mechanisms that mobilize a broad range of urban stakeholders across the public, private, and civil society sectors working at community, city, province, national, and regional levels

ANNEX 2
Voluntary Commitments

The Seventh Asia-Pacific Urban Forum (APUF-7) will be held from 15-17 October 2019 in Penang, Malaysia, to mobilize partners from across the region to focus on accelerating implementation of a sustainable urban future for Asia and the Pacific. For the first time, APUF-7 registered Voluntary Commitments as one of the outcomes of the Forum to increase concrete investments and impactful initiatives for the implementation of sustainable urban development at the local, national and regional levels. APUF-7 Voluntary Commitments will be a key legacy of the Forum and a means for implementing SDGs at the city level and the transformative commitments of the New Urban Agenda. They also provide an opportunity for institutional stakeholders to forge new partnerships for a common goal: accelerating the achievement of sustainable urban development in the Asia-Pacific region.[3] Submissions for the voluntary commitments continued after APUF-7 and have been collected (see below).

APUF 7 Voluntary Commitments are strategic level goals that will result from the implementation of new initiatives from a variety of institutions from within and outside the Asia-Pacific region. These strategic goals should be SMART:

- Specific: well defined goals with unambiguous targets;
- Measurable: they should include at least one quantifiable result and specific criteria that measure progress towards the accomplishment of the goal;
- Achievable: the results can be accomplished with a high degree of confidence;
- Realistic: ensuring that there is specific capacity and resources to achieve the goal;
- Time-bound: have a clear time horizon and include a couple of milestones.

APUF 7 Voluntary Commitments, must deliver concrete results by 2022, which corresponds with the mid-term review of the SDGs, the second Quadrennial Report of the UN Secretary General on the implementation of the New Urban Agenda and precedes the convening of APUF-8 in 2023. The commitments might extend beyond 2022 but in this case, there should be a specific measurable result of the commitment by the year 2022.

The follow-up progress of APUF-7 Voluntary Commitments will build on collective accountability and self-reporting exercises at the 10th World Urban Forum in February in Abu Dhabi in 2020 as well as the annual Asia Pacific Forum on Sustainable Development hosted by ESCAP every year in March, as well as other regional, national and locals to be determined.

The commitments collected by the end of 2019 are listed as follows:

[3] North and Central Asia; South and South West Asia ; South East Asia; North East Asia; and the Pacific. For the complete list of ESCAP member States please access https://www.unescap.org/about/member-states

	TITLE OF VOLUNTARY COMMITMENTS									
	SUSTAINABLE DEVELOPMENT EDUCATION AND LITERACY (JAN 2020-JAN 2022)	ADB'S COMMITMENT TO MAKING CITIES MORE LIVABLE (JAN 2020-DEC 2024)	LOCALISING SUSTAINABLE DEVELOPMENT GOALS (SDGS) FOR ASIA-PACIFIC CITIES (JAN 2018-APR 2022)	POST-KUMAMOTO EARTHQUAKE RESTORATION AND WHAT WE LEARNED FROM IT (OCT 2019-2030)	SUPPORTING CITIES AND REGIONS TO CONDUCT THE VOLUNTARY LOCAL REVIEWS (MARCH 2018- SEP 2021)	CITYNET VOLUNTARY COMMITMENT FOR SUSTAINABLE DEVELOPMENT IN THE ASIA PACIFIC REGION (JAN 2020-DEC 2020)	SEBERANG PERAI CITY COUNCIL (JAN 2019-DEC 2030)	A NEW PARTNERSHIP FOR ACTION TO IMPLEMENT THE NEW PACIFIC URBAN AGENDA AND THE URBAN SDGS IN THE PACIFIC	TRANSFORMATIVE URBAN PATHWAYS TO ACHIEVE THE 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT	MAYOR'S ACADEMY FOR SUSTAINABLE DEVELOPMENT
LEAD ENTITY NAME	Universiti Putra Malaysia	Asian Development Bank	United Cities and Local Governments Asia Pacific (UCLG ASPAC)	Kumamoto City, Japan	Institute for Global Environmental Strategies (IGES)	CityNet Secretariat	Dato' Sr Hj Rozali Bin Hj Mohamud	Pacific Urban Forum partners	UN ESCAP	Nili city, Afghanistan on behlaf of the Asia-Pacific Mayors Academy for Sustainable Development
LEAD ENTITY TYPE	Academic institution	Intergovernmental Organization	Intergovernmental Organization	Subnational Government	Scientific community	Non-governmental organization (NGO)	National Government	Partnership	International organization	Local government
COMMITMENT-DETAILS	Universiti Putra Malaysia commits that by 2022 will embed teaching about sustainability across all of its major courses.	ADB will help cities in its developing member countries (DMCs) to become more livable in line with its Strategy 2030 and Operational Plan on Livable Cities. Specifically, ADB's support will be in the following three areas: 1) coverage, quality, efficiency, and reliability of services in urban areas improved; 2) urban planning and financial sustainability of cities strengthened; and 3) urban environment, climate resilience, and disaster management of cities improved.	UCLG ASPAC is scaling up its work on localising SDGs, by expanding our programme on SDGs[1] mainstreaming in and implementation of local plans, climate change mitigation and adaption, policy advocacy on sanitation, disaster risk reduction especially on target e of Sendai Framework for Actions, promotion and expansion of public space and women empowerment. The initiatives are co-funded by various donors, including the European Union (EU) (for SDGs localisation in Indonesia and Pakistan and the Climate Change Resilience), Bill and Melinda Gates Foundation on sanitation advocacy, UN-Habitat on public space, and implemented in partnership with local governments (LGs), local government associations (LGAs), local community stakeholders, national government agencies and international development institutions. Advocacy on human-rights based approach (HRBA) on SDGs is carried out in partnership with Raoul Wallenberg Institute of Human Rights and Humanitarian Law (RWI) and the City of Gwangju, the Republic of Korea. The strategic goal is to accelerate the SDGs achievements, through SDGs localisation, in targeted cities.	As an SDGs advanced city, Kumamoto would like to contribute to the further development of the international community by sharing the urban development initiatives, disaster prevention plans, and emergency response strategies that we developed through our experiences in the Kumamoto Earthquake on both the international and domestic levels.	This commitment aims to provide cities and regions as well as entities supporting them with capacity development and technical assistance to conduct Voluntary Local Reviews. The VLR has two dimensions; one is to go beyond traditional administrative silo at the local governance and create a meaningful engagement with local stakeholders. Second is to advocate voices of local and regional actors to national level with SDGs languages, in particular within the VNR processes. Through this commitment, local and regional actors would be better equipped with frameworks and tools to conduct robust and inclusive monitoring, and follow up and review exercises, which shall contribute to create a better space within the Voluntary National Review processes. The measurable impact would be to assist 10 entities to support the Voluntary Local Reviews and organized three to give offline VLR lab to bring actors together to share knowledge and expertise.	CityNet commits to raise awareness about the importance of local government in the implementation of the Agenda 2030 along with challenges, opportunities, and practices. In 2020, CityNet will continuously engage with partner organizations including NGOs and institutions to deliver and improve urban policy development by conducting capacity building workshops focusing on the infrastructure, climate change, disaster, housing, smart cities, waste management, and recycling. In addition will conduct research development with urban think thanks located in the Asia Pacific region to understand the local level since we believe that local government plays a crucial role on the implementation of the Sustainable Development Goals (SDGs).	i. Seberang Perai City Council is committed to uphold Penang 2030 "A Family focused Green and Smart State That Inspire The Nation". ii. Seberang Perai City Council is committed to a green and low emission development. iii.Seberang Perai City Council is committed to be resilient city. iv) Seberang Perai City Council is committed to being inclusive, equitable and to be people - centered developments. v) Seberang Perai City Council is committed to be competitive and a Smart City.	To ensure the successful implementation of the outcomes of the Pacific Urban Forum, the event organizers as well as some of the institutional participants of the Forum are committed to: - Continue the collaboration and to provide staff time and other resources to support the countries and urban stakeholders of the Pacific Region in achieving their sustainable urban development commitments (as expressed in the outcome declaration of the PUF). - Leverage their respective work programmes in support of the overall purpose of the partnership - to create interconnectivity across the pillars of the New Pacific Urban Agenda and leverage the partnership to generate added value. - To collaboratively implement and mobilize resources - Coordinate their activities for enhanced efficiency - Work towards a joint office - Work towards the recognition of the PUF as an official body of the PIFS - Support the institutionalization of Sustainable Urbanization in the Region in collaboration with the Pacific Island Forum Secretariat - Advocate for sustainable urbanization in the region through enhanced visibility and possibly a joint website	ESCAP commits to the following: 1. To take forward the recommendations in The Future of Asian and Pacific Cities report, with partners through the Penang Platform for Sustainable Urbanization. We look forward to the collaborations facilitated by this platform accelerating progress towards sustainable urban development across the region. 2. We commit to working to build the capacity of mayors and creating a network of champions for sustainability through the Asia Pacific Mayors Academy, in collaboration with our partners- UN Habitat, UN University, UCLG-ASPAC, Association of Pacific Rim Universities and the Institute for Global Environmental Strategies; 3. We commit to expanding our efforts to localize the SDGs by providing technical support to cities with frameworks and 4. We commit to bringing forth the outcomes of this forum to ESCAP's intergovernmental process, including at the Asia Pacific Urban Forum in March 2020, at the Commission Session in May 2020 and at the Committee on Environment in November 2020.	Building the capacities of selected Mayors to develop and implement plans, policies and actions for sustainable development.
PARTNERS	In partnership with UN Habitat (United Nations Entity) and Ministry of Education Malaysia (National Government)	National and subnational government, civil society organization, academic institution, private sector	In partnership with various organisations, including international organisations, foundations, universities, research institutions, local governments and local governments associations		UCLG-ASPAC (Subnational governments) - CITYNET (Subnational governments) - ESCAP (UN)	Delivered through the CityNet network that includes 154 members consisting of local authorities and urban stakeholders, mostly from Asia Pacific region		UN-Habitat, CLGF, Compass, EAROPH, ESCAP, ICLEI, UN-Women, Monash Sustainable Development Institute, Global Compact Cities Programme, (MSSD?)	Partners of the Future of AP Cities Report	UN Habitat, UN University, UCLG-ASPAC, Association of Pacific Rim Universities and the Institute for Global Environmental Strategies
BENEFICIARIES-COUNTRIES	Malaysia	ADB Developing Member Countries (DMCs)	Bangladesh, Indonesia, Malaysia, Nepal, Pakistan, Vietnam, Republic of Korea, etc	Not applicable	Indonesia and Malaysia	Asia-Pacific region	Malaysia	Pacific	Asia-Pacific region	Asia-Pacific region
BENEFICIARIES-CITIES	Kuala Lumpur	TBC	Indonesia (16 provinces, 14 cities), Pakistan (2 provinces), Nepal (all cities and 5 pilot cities), Bangladesh (all cities and 5 pilot cities), etc	Not applicable	TBC	Asia-Pacific region	Penang	TBC	TBC	Mayors Academy cities TBC
BENEFICIARIES-OTHERS	Students, Industries in the region and public	National and subnational government, civil society organization, academic institution, private sector	Local governments associations	Under review	Entities supporting the local and regional governments.		To provide urban service, development planning and infrastructure efficiently, effectively and responsive to the needs of the community in Seberang Perai.	TBC	TBC	TBC

Co-Organizers

Host City