PROMOTING SUSTAINABLE URBANIZATION IN ASIA AND THE PACIFIC

Proceedings of the ADB–Asian Think Tank Development Forum 2016

27–28 October 2016, New Delhi, India

ASIAN DEVELOPMENT BANK

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National Institute of Public Finance and Policy
Indian Council for Research on International Economic Relations

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EXECUTIVE SUMMARY

With the theme "***Promoting Sustainable Urbanization in Asia and the Pacific,***" the fourth ADB-Asian Think Tank Development Forum was held on 27–28 October 2016 in the Taj Mahal Hotel in New Delhi, India.[1] There were about 100 participants comprised of representatives from 27 think tanks across 23 Asian countries, senior government officials, international development organizations, civil society, the private sector, and media. The National Institute of Public Finance and Policy (NIPFP) and the Indian Council for Research on International Economic Relations (ICRIER) co-hosted the event.

Participants deepened knowledge exchanges as they discussed the latest global and regional policy developments and country-specific experiences on sustainable urbanization, and agreed to strengthen networking arrangements during the two-day forum.

Forum Structure

The forum was organized into four sessions. After the opening on the first day, the session on economic outlook followed. The sessions on sustainable urbanization were conducted in the afternoon. For each session, a lead presentation laid down the general ideas under the theme, followed by presentations on country experiences, which were enriched further by the views of the discussants. Open discussions ensued after the presentations to encourage the participants to share their knowledge and/or experiences.

The morning session of the second day was enlivened by the active exchanges among think tanks and selected government representatives from the People's Republic of China, India, Sri Lanka, and Tajikistan through a fishbowl approach where selected participants discussed among themselves before the audience, who seems more neutral than listened on and later participated in the dialogue. For informal networking, the local hosts brought the participants to India's Rashtrapati Bhavan in the afternoon.

Opening

The participants were welcomed by the representatives of the organizers—the Asian Development Bank (ADB), National Institute for Public Finance and Policy, and the Indian Council for Research on International Economic Relations. The panel gave an introduction to the ADB-Asian Think Tanks Network, and how the annual development forum has served as an opportunity for ADB and the think tanks, especially the cohosts, to work together. The speakers expected the forum to be another success like the previous ones, for sharing important learnings and experiences with each other aside from promoting camaraderie among fellow policy makers and researchers.

Session 1. Regional Economic Outlook

The session discussed the challenging global economic environment. Downside risks to global growth are from the slow growth in international trade and domestic demand, potential volatility in financial markets, and the uncertainty brought about by the United States Federal Reserve's monetary policy actions and the unfolding of the United Kingdom's separation from the European Union. Presenters discussed their countries' growth direction and policy tools to ensure sustainable and inclusive growth. The session analyzed the impact of these

1 The ADB—Asian Think Tank Development Forum is the flagship annual event of the ADB-Asian Think Tanks Network (ATTN) used as the main platform to promote knowledge sharing and capacity building of think tanks. Established in October 2013, the ATTN is one of the activities under the Asian Development Bank's technical assistance on the Provision of Knowledge Products and Services to Developing Member Countries through Systematic Knowledge Sharing (TA 8392). Member think tanks are organizations receiving full or partial funding from the government and are affiliated with central ministries of finance, economy, or planning; and are closely involved in supporting governments in preparing medium- or long-term development plans and in responding to emerging policy issues.

challenges on the Asian region and countries, and policies to address these challenges.

Session 2. Challenges of Sustainable Urbanization

This session focused on urbanization as a mega trend. The main presentation noted that half of humanity lives in cities today and the figure is expected to increase to 60% by 2030. Nearly all of the urban expansion in the next decades will take place in the developing world, including developing Asia. Country presentations noted the challenges that rapid urbanization exert on basic services and infrastructure such as education, public health, water supply, sewage, housing, and transportation. The presentations focused on a few projects which had been successfully implemented in the countries to allow the cities to continue to thrive and grow. The road to sustainable urbanization could be long and taxing, but Asian countries need not worry if they are equipped with the right policies and resources. An integrated multi-level implementation framework is needed, transcending levels of government at the national, sub-national/regional and metro/cities.

Session 3. Financing for Sustainable Urbanization

This session highlighted that mobilizing funds to support sustainable urbanization remains a big challenge in Asia. The session discussed different financing instruments and models like taxation, land income, transfer payments, equity investments, loans and guarantees, and their advantages and limits; the roles of governments (central, provincial, and local levels), multilateral development banks, state-owned enterprises and public–private partnerships (PPPs). Discussions were policy–oriented and centered on lessons, experiences, and constraints within countries.

Session 4. Dialogue between Think Tanks and Government Clients

In this session, the moderator steered the discussion in terms of the value of think tanks in giving policy advice to governments and what think tanks should do to assume that role effectively. Selected think tanks described their respective mission and services while government representatives shared the value of think tanks from their perspective and how they can be relevant in other ways.

Closing

Similar to the previous forums, the 2016 ADB-Asian Think Tank Development Forum ended with some concrete suggestions for the 2017 forum and the way forward for the ATTN.

FORUM MESSAGES

Opening

Rathin Roy of the National Institute for Public Finance and Policy (NIPFP) welcomed the participants and described briefly the **ADB-Asian Think Tanks Network** and the importance of the knowledge sharing that happens at the forums. Although the Forum started out as an ADB initiative, he noted the growing commitment of the premier think tanks from all over the Asia and Pacific region to participating in the Forum. A number of pressing concerns were tackled through the years and think tanks shared insights and experiences. He shared that the forums inspire think tanks to work towards keeping themselves relevant and fostering a closer collaboration with each other.

Rajit Kathuria of the Indian Council for Research on International Economic Relations (ICRIER) expressed support for the forum whose success is expected by all concerned. Urbanization has increasingly become very important not only in India but in other places in the Asia and Pacific region. He noted that the rapid pace of urbanization cannot be stopped just as migration from rural to urban areas can neither be halted nor slowed down. Resource-intensive models of urbanization in the past are unsustainable due to harmful spillovers such as pollution and growing inequality. Models of financing urbanization need to be tested for possible replication in other locations. Meanwhile, think tanks are expected to provide and broker new ideas by collaborating among themselves. He enjoined everyone to be generous in sharing their ideas and expressed optimism that the challenges faced in pursuing urbanization can be addressed through the joint efforts of the think tanks in the region.

Naoyuki Yoshino of the ADB Institute emphasized the importance of land ownership and land use in rapid urbanization. This is particularly true in Japan and in some other countries where public use dominates over private ownership which can help tremendously in developing new growth areas. As an important element of urbanization,

promoting sustainable small and medium enterprises is needed as a support to rural-to-urban migration. The ensuing tremendous demand for housing from the migration will require capital. Financing home ownership and infrastructure investments are very important factors to bring about sustainable growth in the Asian region. Spillover tax revenues from infrastructure investment can increase the rate of return on infrastructure investment which can drive private finance. Environmental improvements are also important and can be achieved by raising small private funds for solar power and wind power projects.

Keynote Address

Minister Arun Jaitley of the Ministry of Finance of India delivered the keynote address. He observed that in global meetings, the way out of the current global slump is discussed in broad terms but specific solutions are lacking. He looked forward to the gathering of think tanks with their diverse opinions to analyze situations and provide specific recommendations.

He cited economic superpowers in Asia such as Japan and the Republic of Korea which grew fast by linking their markets to the markets of the rest of the world. Using the model of mass production and low cost, the People's Republic of China was able to achieve high growth as well. India is also getting close to achieving high growth.

India's population is pushing to urban areas. Urbanization has already started and will take place rapidly within the next two decades. Urban India will be hubs of growth and emerging urban centers, satellite towns, and new cities around metrocities have become growth drivers and sources of revenues. Although it is a welcome development, radical changes will have to happen. The country needs to be prepared in terms of infrastructure – water, power supply, road networks. These infrastructure support facilities will have to expand at substantial enough rates to make the living conditions comfortable for the thriving communities.

Several initiatives have been launched in consideration of the requirements of urbanization such as Smart Cities initiative which promoted substantial competition among cities to be rewarded with more resources. A large part of India's resources will have to be spent on urbanization because it takes decades before big townships establish themselves. Organized townships are needed to stop the trend of rural population getting into urban housing with unorganized construction. Government at central and state levels should take important steps in this direction.

Minister Jaitley stated that he will be delighted to discuss suggestions that are applicable to India's case. He extended his warm welcome to the think tanks and wished everyone a pleasant time in Delhi.

SESSION 1: REGIONAL ECONOMIC OUTLOOK

Xiaoming Huang of the Wellington Network of Asia-Pacific Research and Policy, Victoria University of Wellington, moderated the session.

Asian Economic Outlook and Challenges Ahead

Juzhong Zhuang of the Asian Development Bank (ADB) highlighted in his presentation of the *Asian Economic Outlook and Challenges Ahead* that developing Asia's growth is steady at 5.7% in 2016 and 2017 despite global headwinds. This regional growth is supported by the upgrading of the growth in the People's Republic of China (PRC) as policy support eases growth moderation while India will maintain its growth due to steady progress in reforms. On the global front, commodity prices picked up, yet inflation remained subdued. Short-term risks to the outlook tilted to the downside due to the fragile external environment, the impact of growing protectionism, rising private debt, and more frequent and intense occurrence of natural disasters which indicate the world's increasing vulnerability to climate change.

Financial Integration and External Spillovers

Peter Rosenkranz of ADB presented *Financial Integration and External Spillovers*, highlighting that financial integration results in increasingly interconnected financial markets which may lead to additional vulnerabilities through risks arising from spillover effects and heightened global financial volatility. This emphasizes the importance of building economic resilience. Potential policy measures include assuring an adequate level of fiscal space for countercyclical fiscal policy responses; reducing macroeconomic and financial vulnerabilities with more effective macroprudential measures and financial regulations; and the growing role for regional institutions to monitor macroeconomic and financial conditions and provide financial safety nets. The degree of integration differs across financial markets: equity markets are more globally integrated than regionally; and debt markets exhibit a stronger regional comovement, which got particularly pronounced since the taper tantrum—the 2013 surge in United States (US) Treasury yields after the US Federal Reserve announced a gradual reduction in the

amount of money it was feeding into the economy. An econometric analysis revealed that the extent to which Asian economies are exposed to global shocks (approximated by shocks originating from the US) decreased after the global financial crisis compared with the period preceding it, while at the same time regional factors (approximated by shocks originating from the PRC) became more pronounced for Asia's economies.

India's Economic Outlook

N. R. Bhanumurthy of NIPFP presented *India's Economic Outlook*. India is currently the fastest growing economy in the world, with expected growth of 7.3% in first quarter of fiscal year 2017. Growth is largely due to the contributions of the manufacturing and services sectors. However, two important sectors—mining and construction—lag behind. Ambiguities in India pose challenges to the country's macroeconomic performance including changes in the gross domestic product (GDP) estimation methodology, frequent changes/revisions in the macroeconomic estimates, and the fiscal and monetary relationship. Risks to growth on the positive side include a big push to the agriculture and rural sector, smoothening of the fund flow mechanism, a good monsoon that is expected to bring down the food prices, and frontloading of public investments. The downside risks to growth include ambiguity in the federal fiscal transfers and global factors such as "Brexit", world oil prices, and the US Federal Reserve's interest rate policy which will weigh heavily on growth and exchange rate depreciation.

The People's Republic of China's Economic Development Under the New Normal

Zhang Qi of the Development Research Centre presented *The People's Republic of China's Economic Development Under the New Normal.* The PRC's economic stature attracted worldwide attention, especially since investments in fixed assets and growth of private investment in fixed assets decreased greatly from 2016, accompanied by consecutive contraction in exports and rapid rise in housing prices. Notwithstanding, it was emphasized that there is no cause to be pessimistic for the PRC's economic future as remarkable progress has been made in adjusting the growth pattern. She suggested viewing the economic slowdown in the context of the world economic regime as being in a critical period of entering the stable stage requiring the proper management of challenges and the introduction of policy tools to deal with the difficulties. In the context of "new normal", pushing forward the PRC's complicated and difficult structural reforms will be conducive to the attainment of middle- to long-term sustainable development.

Azerbaijan: New Economic Paradigm

Vusal Gasimli, of the Center for Analysis and Communication for Economic Reforms, presented *Azerbaijan: New Economic Paradigm*. He discussed the Strategic Vision and Roadmap for Azerbaijan, which is a nationwide effort to build a competitive, inclusive and sustainable economy. Azerbaijan will focus on developing the economy by ensuring coordination and supporting private sector agents, to drive productivity and innovation. At the same time, certain areas demand an active public sector role. The country's post–2025 vision describes the state it will eventually reach and the benefits for the people. Economic development is not an end in itself—its purpose is to improve the population's quality of life. By promoting a more diverse and sustainable economy based on a supportive yet lean public sector, this economic development program aims to provide citizens with a fulfilling life filled with opportunities.

The session was enriched by the ideas shared by the three discussants.

Policy coordinator analyst Ngu Wah Win of the Centre for Economic and Social Development shared that the 2015 elections in Myanmar ushered in many developments including the revitalization of agriculture to address poverty, the passage of the lead investment law, and the streamlining of the bureaucracy. Notwithstanding these changes, reforms still have to be pursued, particularly in the area of local and international trade by focusing on managing existing urban systems, increasing business productivity, and strengthening links between producers and consumers through urban planning and investments.

Ngu Wah Win

Executive director Ram Chandra Dhakal of the Center for Economic Development and Administration made a brief presentation on Nepal's economic progress. He noted that for Nepal to obtain high economic growth, it needs to improve competitiveness, raise productivity, and provide better infrastructure facilities, among others.

Ram Chandra Dhakal

Senior economist Ponciano Intal, Jr. of the Economic Research Institute for ASEAN and East Asia noted that the fate of the global economy will be affected by developments in developing Asia with the continued rise of Asia's share in the world's GDP; East Asia accounting for the highest share of global GDP in 2015; and the largest market growth expected to take place in Asia. He commented on the risks faced by the economies of India and the PRC and encouraged think tanks to ask difficult questions. He pointed out that regional integration is the direction of the global economy requiring understanding of each other's economies.

Ponciano Intal, Jr.

SESSION 2: CHALLENGES OF SUSTAINABLE URBANIZATION

Dushni Weerakorn of the Institute of Policy Studies moderated the session.

Challenges for Sustainable Urban Development in Asia

Michael Lindfield of the Urban Infrastructure Services presented *Challenges for Sustainable Urban Development in Asia*. He stated that the road to sustainable urbanization could be long and taxing, but Asian countries have both the resources and, increasingly, the capacities to put in place the right policies and resources. An integrated multi-level implementation framework is needed, linking levels of government at the national, sub-national/regional and metro/cities levels, and focusing on improved structures for financing and funding. Examples of such structures exist, but it is rare to see a coordinated approach to implementing all elements of best practice. Hence, Asian cities need to more carefully address the capacity and integration of their planning, project development, and financing mechanisms to enhance their ability to provide their citizens with an improved quality of life.

Getting the right mix of the following elements can help governments overcome the challenges of sustainable urbanization: (a) informed and coordinated policy and planning institutions, as the framework needs to provide an enabling environment that will have a strategic plan, complementation of strategies of the various levels of government and encompasses all types of infrastructure; (b) effective project development practices/institutions that can accommodate both small-scale and large-scale projects determining urban economic, social and/or environmental outcomes; and (c) effective financing institutions, whereby options in funding urban infrastructure such as loans and public–private partnerships may be considered, as well as explore options such as capital markets and other available project financing mechanisms. The involvement of planning, project development and financing stakeholders would be important.

"the road to sustainable urbanization could be long and taxing, but Asian countries have both the resources and, increasingly, the capacities to put in place the right policies and resources."

Challenges of Sustainable Urbanization: The Case of Thailand

Nonarit Bisonyabut of the Thailand Development Research Institute presented *Challenges of Sustainable Urbanization: The Case of Thailand*. He cited the issues of bigger cities on transportation, education, and health care despite having the advantage of the economies of scale as compared with those of small cities which face higher prices of services due to the absence of economies of scale. The government of Thailand currently has programs that address the challenges of urbanization and promote social inclusion, both in mega and small cities.

"solutions must focus on connectivity, market-based services, and programs for the vulnerable."

In mid-2015, the government implemented the Child Support Program that provides grants of $20 per child from poor families. The scheme, administered by the Ministry of Social Development and Human Security, aims to ensure that children from low-income families will go to school. To deliver the service and spend resources efficiently, the government invested in "networks" or "clusters" of schools to allow students from small cities and towns to take advantage of access to better quality education. The mechanism is one of the several ways of improving public sector efficiency in Thailand. For everyone to experience the benefits of urbanization, solutions must focus on connectivity, market-based services, and programs for the vulnerable. Without including the underprivileged in the picture, poverty will continue to hinder any form of progress.

The State of Urbanization in Pakistan

Shujaat Farooq of the Pakistan Institute of Development Economics could not come to the Forum, but prepared a presentation on *The State of Urbanization in Pakistan.* He shared that urbanization there has been an arduous process as people preferred to stay in the rural areas rather than in the urban areas. Lacking a common definition of urbanization, various censuses use different definitions for urban settlements. Nevertheless, he suggested that the focus of policy research and thinking must be the cities and city governments which should be empowered on public service delivery and financial matters.

Daniiar Bakchiev

The first discussant of the session, **Daniiar Bakchiev** of the National Institute of Strategic Studies, pointed out three main issues of sustainable urbanization: (a) the availability of reliable data and information on emerging and persistent urban problems in big and small cities for effective policy making; (b) demographic and sociocultural factors in urban and rural societies affecting relationships; and (c) balance between private and public sectors.

Tran Kim Chung of the Central Institute for Economic Management noted that the three presentations are saying that cities are engines of growth for both the regional and national levels; economic activities in cities are a visualization of market economics; and positive externalities from urbanization include economies of scale, shared labor force, and creation/exchange of ideas. A proposed urban policy educating the mindset of the cities' population on sustainable urbanization and promoting the use of improving the quality of structure and infrastructure to become greener, cleaner, and more energy–efficient is currently pursued in Viet Nam.

Tran Kim Chung

Enkhbaigali Byambasuren of the Analysis Group thinks that Thailand's experiences on traffic congestion and difficulty in ensuring education and health care for the economically challenged sectors of the population are common to most Asian developing countries.

Enkhbaigali Byambasuren

SESSION 3: FINANCING FOR SUSTAINABLE URBANIZATION

M. Teresa Kho of ADB India Resident Mission moderated the session.

Financing for Sustainable Urbanization

Rana Hasan of ADB presented *Financing for Sustainable Urbanization*. He stated the challenge is how to step up the quantum of infrastructure investment while ensuring that these support sustainable and shared growth. He described the infrastucture needs in Asia in the following terms: 427 million people in the region lack access to electricity, 700 million people still do not have access to clean water, 1.7 billion people lack access to basic sanitation; 360 million people lack access to safe drinking water; and about 523 million people live in urban slums. To generate infrastructure investment, he suggested increasing government revenues through tax and other reforms; reorienting public spending toward infrastructure; and expanding public spending while keeping public debt sustainable. Improvements in project planning and implementation must also be pursued alongside improvements in regulatory and institutional frameworks to attract private participation. Managing urban infrastructure needs to underscore that cities are key in tackling climate change and generating jobs. More than 80% of global GDP is generated in cities, creating a significant number of jobs and tax revenues. Cities also consume two-thirds of the world's energy and account for more than 70% of global greenhouse gas emissions.

"the challenge is how to step up the quantum of infrastructure investment while ensuring that these support sustainable and shared growth."

Financing for Sustainable Urbanization: PFI/PPP in Japan

Keiichiro Oda of the Research Institute of Economy, Trade and Industry presented *Financing for Sustainable Urbanization: Private Finance Initiative/Public–Private Partnerships in Japan*. PPP has been pivotal in providing the needed urban infrastructure in Japan. Most infrastructure facilities in Japan were traditionally constructed and operated by the public sector through public funding using conventional procurement methods. Although heavily regulated, private companies were allowed to construct and operate electricity, gas and urban railways. PPP is defined as a long-term contract that allows the agent concessions in the operating stage and bundling of two tasks—building and operating. PPP improves the investment level

compared with conventional procurement. It has conflicting effects on incentives: it encourages investments that improve operating efficiency, but also encourages investments that somehow deteriorate social benefits. Japan promotes PPP with concession as an incentive scheme to encourage private sector's investments in infrastructure. The information from the monitoring of goventment funds combined with information from financial markets can correctly convey to other investors appropriate investment options and avoid adverse effects to society.

Financing Innovation as the Key to Urban Development in the People's Republic of China

Qiu Aijun of the China Center for Urban Development under National Development & Reform Commission, the PRC presented *Financing Innovation as the Key to Urban Development in the People's Republic of China*. She discussed the results of their study which showed that: (a) government planning is a prerequisite for attracting financing; (b) multiple stakeholders provide the basis for diversified financing; (c) policy innovation should catch up accordingly; and (d) reform measures must be feasible. The PRC's urbanization had been rising by an average of 1.3% annually since 2000 and has reached 56.1% in 2015, from 17.9% in 1978.

"government planning is a prerequisite for attracting financing."

Urban financing was pursued with a number of policies that included: (a) allowing local government to reserve and lease urban land to real estate developer; (b) encouraging private investment in basic industries and infrastructure; (c) encouraging PPP in urban infrastructure and utilities; (d) relaxing controls on insurance capital to facilitate projects in infrastructure, livelihood, and urbanization; and (e) putting up various kinds of urban development funds from the central level to the local level, such as the Bohai Industry Development Fund in 2006, National Railway Development Fund, and Henan New Urbanization Development Fund. One successful project that used some of these financing strategies was the town development called Number One Farmer's City in Longgang, Zhejiang province where around CNY10 million of infrastructure fees were submitted by individual investors, beefing up government resources within six months in 1984. From being a small town with around 6,000 citizens in 1984, Longgang has developed into a city with over 300,000 citizens in 2014, and has been named an administration town.

Financing Sustainable Urbanization: the Case of the Republic of Korea

Jeong-Ho Kim of Korea Development Institute School of Public Policy and Management presented *Financing Sustainable Urbanization: the Case of the Republic of Korea.* The country's rapid urbanization was accompanied by high energy consumption levels resulting in high levels of greenhouse gas emissions. The Republic of Korea used a "Low Carbon, Green Growth Strategy" in 2007 which sought to mitigate climate change by promoting energy dependence, creating new engines for economic growth, encouraging the use of green technologies, and improving the quality of life. Urban infrastructure financing schemes under the strategy included government grants and subsidies, central and local government taxes, loans and borrowings, user charges and fees, PPPs, and carbon finance. Professor Kim discussed the environmental and financing implications for rapidly urbanizing countries based on the Republic of Korea's experience.

"ADB could take a leading role in promoting regional financing measures."

Discussants of this session were **Khan Ahmed Sayeed Murshid** of the Bangladesh Institute of Development Studies, **Carunia Mulya Hamid Firdausy** of the National Center for Economic Research, and **Saikat Sinha Roy** of the Jadavpur University. DG Murshid shared that for Bangladesh where urbanization is rapid and largely concentrated in Dhaka and Chittagong, the demand for additional infrastructure and services is acute. Dhaka has not been well planned and confronts huge problems relating to housing, transport, utilities, and social services like health. Dhaka is almost at the bottom. Possible approaches to Dhaka's problems include decentralization; establishment of a countrywide road network for faster commutes; imposing restrictions on undesirable industries and businesses or incentivizing more desirable ones; and placing greater focus on secondary towns and the use of efficient energy. Since there is no traditional financial mechanism in place yet, attracting private investments through high quality project proposals and ensuring safe, reasonable return of investment must be pursued.

Khan Ahmed Sayeed Murshid

Carunia Mulya Hamid Firdausy

Saikat Sinha Roy

The other two discussants believe that the root causes of urbanization and its implications should be considered. There is a lot of medium-term demand for urban infrastructure, but both the central and local governments have limited financing capacity. It is important to seek other sources of financing, like PPP, develop other innovative financing schemes, and encourage greater private sector participation in infrastructure investments. Problems associated with PPP such as conflicting regulations, lack of management, and excessive bureaucracy should be minimized. Financial sources for sustainable urbanization in each country need to be handled through regional financial cooperation. ADB could take a leading role in promoting regional financing measures to address the problems.

SESSION 4: DIALOGUE BETWEEN THINK TANKS AND GOVERNMENT CLIENTS

From left to right:
Dushni Weerakoon, Qiangwu Zhou, Shaibal Gupta, G. Ramesh, Aromar Revi, Samir Saran, and Rajat Kathuria

Rathin Roy of NIPFP moderated the session.

He started the discussion by reminding the forum that one of the important tasks of government-linked think tanks is to provide governments with policy advice that are anchored on well-researched studies. To be effective, think tanks need to be aware of potential challenges and constraints to the countries, sound these out well-ahead before the threats occur, and propose implementable policy options.

The interactive discussion among the think tanks had two objectives: (i) to consider the role of think tanks in governments' policy formulation; and (ii) to introduce the activities of think tanks. The initial discussion happened among a few selected think tanks and the rest of the forum participants joined at a later time.

Panelists who discussed their think tank organizations' respective missions and services were **Dushni Weerakoon** of the Institute of Policy Studies, **Qiangwu Zhou** of the International Economics and Finance Institute, **Shaibal Gupta** of the Asian Development Research Institute, **G. Ramesh** of the Indian Institute of Management, **Aromar Revi** of Indian Institute for Human Settlements, **Samir Saran** of the Observer Research Foundation, and **Rajat Kathuria** of ICRIER.

Client government agencies of think tanks were represented by **Sarath Amunugama**, Ministry of Special Assignments of Sri Lanka; **Yu Hong**, Ministry of Finance of the PRC; and **J. B. Singh**, Reserve Bank of India.

For the government representatives, think tanks are innovators and sources of new ideas. Policy advice is best left to think tanks, while governments must handle policy formulation and implementation. Think tanks need to consider how to communicate with governments more effectively in order to develop more effective partnerships for change. It was noted that the Reserve Bank of India engages think tanks for collaborative discussion on critical issues on the economy, as part of its decision-making process. The panel of government representatives

Sarath Amunugama

Yu Hong

J. B. Singh

also shared that in some instances, build capacity and expertise in critical areas.

Government offices in Sri Lanka work very well with think tanks, which provide evidence-based research to support the formulation of more responsive policies by the government. In the PRC, senior leaders call for meetings with think tanks, which serve as opportunities to discuss policy research areas.

On urbanization, the possiblity of creating new cities with much improved services was brought out. To encourage greater private sector participation, their share in operating profits must be ensured.

Think tanks can improve their relationship with governments by participating in government-initiated activities or responding to requests for proposals to identify possible solutions to priority issues.

CLOSING

Updates on ATTN and Next Steps

Dongxiang Li of ADB discussed updates on the ATTN including changes to the website. He introduced new members from the Afghanistan Research and Evaluation Unit (Afghanistan), Center for Analysis and Communication for Economic Reforms (Azerbaijan), Economic Research Institute for ASEAN and East Asia (Regional), and Institute of Strategic Planning and Economic Development (Turkmenistan).

The ATTN members supported the choice of Sri Lanka as the cohost for the 2017 forum. Director Dushni Weerakorn was happy to accept the cohosting task on behalf of the Institute of Policy Studies of Sri Lanka. In addition to expressions for ADB's continued support to the ATTN, the think tanks suggested deepening the partnership by conducting joint research or research alliances. A biennial side event meeting for think tanks during ADB's Annual Meetings for greater outreach and development effectiveness was also suggested.

The participants agreed to continue the theme of urbanization in the next forum as sustainable urbanization is a concern for all developing member countries. Although in different stages of urbanization, developing member countries have common concerns that need to be addressed like rapidly growing population, need for clean water sources, worsening pollution, and infrastructure support.

"developing member countries have common concerns that need to be addressed like rapidly growing population, need for clean water sources, worsening pollution, and infrastructure support."

Participants' Feedback

Most of the respondents (95%) agreed that the forum objectives were achieved at the end of the forum; 96% found the forum content to be substantive; 92% saw the knowledge shared at the forum as being useful to their work; 92% indicated that they will pursue linkages with the other think tanks after the forum; and 96% assessed the overall quality of the forum as good or excellent. All of the participants expressed that ADB should continue to support the ATTN.

APPENDIXES

APPENDIX 1. FINDINGS: FINANCING SUSTAINABLE URBAN DEVELOPMENT IN ASIA AND THE PACIFIC

I. Challenges for Sustainable Urban Development

The challenges of sustainable urban development in Asia, should be considered in the context of the Sustainable Development Goals. One—Goal 11—explicitly involves the pursuit of sustainable cities. But almost all the other goals directly or indirectly involve action in cities. The task is to conceptualize a way in which the myriad issues and challenges relating to the implementation of these goals may be addressed. To do so, the three basic dimensions of analysis used by the document that provided the basis for the thinking on sustainability is considered—the Brundtland Report of 1987.[1] These three dimensions are familiar: the environment, society, and the economy.

It is this framework that structures the discussion that follows. The types of investments that cities need to undertake to bolster their stocks of environmental, social, and economic capital in a sustainable way are examined below. The discussion seeks to identify key characteristics of institutions that will (a) establish the enabling framework for these investments; and (b) be able to implement the investment. It will also examine the funding and financing[2] policies for such investment. This discussion will draw on the papers presented at the ADB-Asian Think Tank Development Forum 2016 (ADB-ATTDF 2016) and on broader reviews of best practice in these areas.[3]

Cities provide up to 80% of the economic base—but large disparities have emerged as poverty has urbanized—over 200 million people live in poverty in Asia's cities and many more are vulnerable to economic and environmental shocks.[4]

The key challenges that these institutions need to address are set out in the following sections.

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1 UN World Commission on Environment and Development. 1987. *Our Common Future.* (Brundtland Report). Oxford: Oxford University Press.

2 Throughout this document an important distinction is drawn between "financing" a project—mobilizing the resources to make the capital investment—and "funding" a project—the sourcing of funds to repay the financing.

3 The ADB-Asian Think Tank Development Forum 2016 was held in Delhi, India on 27-28 October 2016. Presentations during the event revolved around the theme of "Promoting Sustainable Urbanization in Asia and the Pacific". http://www.adb-asianthinktanks.org/2016ATTN

4 ADB. 2012. *Urban Operational Plan.* Manila.

A. Asia's Surging Cities—The Scale of Urbanization and the Graying of Cities

The projects from UNHabitat show that 11 out of 19 megacities were in Asia in 2007 and only two—Tokyo and Mumbai—were in the top 5, although it is projected that in 2025, these numbers will increase to 16 cities in Asia out of a total of 26 megacities, with 4 out of the top 5[5] coming from the region.

While the planet is already majority urban, by 2030 urban dwellers in Asia will also be a majority. This prospect is broadly good for economies—but the reality on the ground is much more challenging. It means that:

- 44 million more people in urban areas every year: 120,000 each day.
- these people will require over 20,000 new dwellings, 250 kilometers of new roads and more than 6 megalitres of potable water EACH DAY.[6]

This being said, as emphasized in the Thai presentation at the ADB-ATTDF 2016, Asia's cities are also greying as population growth rates decline and people live longer.[7] This changes the profile of investment priorities, for example, putting more emphasis on mobility and health, and posing problems of consolidating schools which will in the future be larger than necessary.

B. The Rise of the Urban Region and Secondary Cities

Systems of cities are evolving. The economic power of cities implies a responsibility for developing structures that are inclusive of their hinterlands. But the challenge of managing a multi-jurisdictional urban economic region—sometimes a multicountry region, for example, the Singapore urban region which extends to Malaysia and Indonesia—with a number of large, interrelated economic cities is unprecedented. As such the important issues are:

- Environment: serious pollution generated in other countries or regions can adversely impact neighboring countries; managing environmental issues in the Pearl River Delta with over 60 million inhabitants—even though under the jurisdiction of one country (PRC)—is daunting.[8]

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5 UN-HABITAT. 2008. *State of Asia's Cities*. Nairobi.

6 B. Roberts and T. Kanaley, eds. 2006. *Urbanization and Sustainability in Asia*. Manila: ADB.

7 APEC Policy Support Unit. 2014. *Shaping the Future through an Asia-Pacific Partnership for Urbanization and Sustainable City Development*. Singapore.

8 For the Pearl River delta, Guangdong and Hong Kong, China collaborate on the Cleaner Production Partnership Program, see http://hong-kong-economy-research.hktdc.com/business-news/article/Hong-Kong-Industry-Profiles/Environmental-Protection-Industry-in-Hong-Kong/hkip/en/1/1X000000/1X09TYPH.htm accessed 27 December 2016.

- Economy: preventing wasteful duplication of investments and coordination in relation to incentives and standards.[9]
- For social development: governments are struggling with how to deal with disparities of income deriving from rural-urban divides or from technological change "stranding" obsolete enterprise assets and their dependent workforces (for example, state enterprises in the PRC).[10]

These urban regions can contain a large number of secondary cities. Such cities are growing, on average, faster than megacities, but have less capacity to manage such growth.[11] The pressures on medium and small cities in Thailand were also emphasized in the Thai presentation.

C. Asia's Urban Environmental Challenges

Asia's cities are one of the key theaters in the battle to ensure the survival of the planet and they are highly vulnerable to climate change:

- Cities use about 67% of energy and generate more than 70% of greenhouse gases (GHGs) emissions to produce about 80 % of the GDP—over half the global business-as-usual increment will come from Asia's cities.[12]
- CO_2 emissions per capita in many Asian cities as high as in cities in high income countries, and pollution in said Asian cities is much worse.
- The rapid population growth of cities in Asia (often 3% per annum) compounds Asia's global environmental impact.[13]
- Many Asian cities, particularly the larger and wealthier ones, are located on flood plains at the mouths of rivers and/or are dependent on water supplies from catchments severely impacted by climate change. Such circumstances compound existing earthquake, subsidence and deforestation impacts.
- The rise in pollution and sea levels puts hundreds of millions of people and trillions in economic output at risk.[14]

There is thus an urgent need for efficiency gains, reduction in pollution and GHGs, and integrated planning for adaptation and mitigation achieved through higher density, energy-efficient development served by efficient public transport.

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9 For example, over–investment in the PRC set out in A. Ansar, et al. 2016. Does infrastructure investment lead to economic growth or economic fragility? Evidence from the PRC. *Oxford Review of Economic Policy*, Vol. 32, No. 3, pp. 360–390.

10 K. Imai, and B. Malaeb. 2016. *Asia's Rural-Urban Disparity in the Context of Growing Inequality*. Research Institute for Economics and Business Administration, Kobe University, Working paper, Kobe.

11 B. Roberts. 2015. *Systems of Secondary Cities.* Cities Alliance. Brussels.

12 http://www.worldbank.org/en/topic/urbandevelopment/overview#1 (Accessed 27 December 2016).

13 United Nations. 2004. *World Urbanisation Prospects.* 2003 Revision. New York.

14 World Resources Institute. *Aqueduct Tool.* floods.wri.org (Accessed 26 December 2016).

Urban Economic Giants

Asian cities have economies the size of nation states.[15] This provides a huge opportunity relating to meeting the challenges set out above. Urban dwellers have the resources to pay for the needed infrastructure. While there may be resources to pay for the needed infrastructure, there are three problems with accessing those resources:

- National systems of raising revenue and intergovernmental fiscal transfers often disadvantage and/or disincentive cities in relation to funding the needed investments.
- Systems of sharing/distributing resources and funding responsibilities across the constituent jurisdictions of a metro area —let alone an urban region—are totally inadequate; and
- Much of the urban economy in many countries is informal and provides a difficult environment for fostering sustainable development in general and the operation of conventional fiscal mechanisms and incentives in particular.[16]

So what can be done?

II. What Must Cities Do to Promote Investment for Inclusive, Resilient and "Planet Positive" Growth

There are three key areas in which integrated investments are needed to promote sustainable cities. These are:

- **Local land use and transport**. City land use and public and private transportation planning decisions directly influence whether all citizens and businesses will have mobility choices that allow them to save energy and money. Local infrastructure needs to be designed to be resilient to expected climate impacts.
- **Building construction and energy efficiency**. Through zoning codes, infrastructure provision, building codes, and the permit issuance process, cities can encourage building designs that are affordable, resource-efficient, and energy-efficient. Again, building standards need to be such that they promote resilience in the face of likely threats and energy sources need to be designed to lessen the risk that they will be disabled by a given impact.
- **Local economic activity**. City initiatives can encourage, and catalyze, inclusive economic development in resilient, low-energy, zero-carbon directions, by both incentive and example.

Returning to the three major dimensions of sustainability, the focus is now on the investments actually needed to make sustainable cities happen.

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15 See Footnote 6.

16 See discussion in D. Brown and G. McGranahan. 2015. *The Urban Informal Economy, Local Inclusion, and Achieving a Global Green Transformation.* Habitat International. Vol. 53. pp. 97-105.

A. Investments for Green Cities

Sample investments for green cities are:

- low-cabon transport;
- energy-efficient buildings;
- city greening (parks, etc.);
- green, resilient infrastructure ("hardening" infrastructure against climate and other impacts);
- eco-industrial complexes; and
- e-governance systems.

Crucially, the integration of a transport corridor with higher density development in a coordinated set of resilient investments is critical to making green cities work and to facilitate green investments.

B. Investments for Inclusive Cities

To be sustainable, and prevent the rise of intolerant, growth-threating divisiveness, investments in inclusive social development are needed. The poor are most vulnerable to environmental problems and the effects of climate change—a complicating factor as, for example, in Manila and Jakarta, many poor people live in danger along major drainage canals. While more than a billion of people have been lifted out of poverty, majority of the world's poor still live in Asia and the Pacific.[17] Inequality has, however, increased.[18]

Sample investments for inclusive cities are:

- land development, housing and settlement upgrading;
- support for livelihood and commerce;
- local transport links/nonmotorized transport;
- community facilities (health, basic education); and
- local infrastructure, e.g., water, sanitation.

Crucially, the effective use of nongovernment organizations to engage with communities in order to address the multidimensional nature of poverty is essential for successful projects that build a community's income and resilience (e.g., the STEP-UP project in Manila).[19]

C. Investments in Competitive Cities—Growing a City's Assets

What are the crucial investments to build competitive cities? These investments will build, and enable more efficient use of, household, enterprise and community assets. Many will be infrastructure in one form or another.

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17 ADB. 2016. *2015 Annual Report: Asian Development Bank. Scaling Up to Meet New Development Challenges*. Manila.

18 See Footnote 6.

19 ADB. 2008. *Urban Innovations. Strategic Private Sector Partnerships for Urban Poverty Reduction (STEP-UP) in Metro Manila*. https://www.adb.org/sites/default/files/publication/27887/urban-poverty-philippines.pdf

Sample investments to build competitive cities are:

- economic infrastructure (eg. logistics);
- skills development;
- technology development/dissemination;
- enabling institutions and regulatory systems; and
- business systems (specialized financing institutions, etc.).

Economic development agencies play an important role in ensuring that such investments meet the needs of the current and potential industry clusters in an urban area. These agencies need to be active partners with, and include representatives of both government and key private sector groups. Such a group was established in Cairns, Australia and played an important role in the development and resilient recovery from international tourism downturns (the SARS outbreak) and a disaster (a cyclone).

D. Institutions Are Central

Within each of the three dimensions of sustainable development, institutions are central to effective planning, determining investment priorities for the urban area, and designing, financing, funding, and operating the resulting infrastructure. What are the characteristics of institutions which exhibit best practices in these tasks? And what are the challenges that stand in the way of implementing such practices? These questions are addressed in the following section.

III. Best Practice in Integrated, Multi-level Investment Institutions

Based on research[20] conducted for the Australian government, analyzing infrastructure delivery and financing institutions across the both high– and low–income APEC economies, a best practice infrastructure framework across national, state/provincial and local levels should include the following elements:

- effective policy and planning systems that allow responsive coordination across levels, sectors and jurisdictions.
- agencies with clearly defined responsibilities and available funding for project development and performance-based implementation.
- a system to allow integration of the framework with appropriate government and capital market financing mechanisms.

Each of these elements will be discussed in turn and examples from the ADB-ATTDF 2016 used as illustrations of good practices in each area.

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20 This section sets out a framework for analysis using the Australian Department of Foreign Affairs and Trade-funded APEC Urban Infrastructure Network framework: see https://www.rmit.edu.au/about/our-education/academic-colleges/college-of-business/industry/australian-apec-study-centre/projects/urban-infrastructure-network (Accessed 26 December 2016).

A. Policy and Planning Practice

A best practice framework needs to provide an enabling environment in terms of:

- Form of the strategies/plans:
    - includes agency responsibilities;
    - matches responsibilities with budget allocations;
    - embody mechanisms for involving both the private sector and the community; and
    - embody mechanisms for enforcement.
- Effective strategies/plans:
    - have a national strategy complementing strategies of other levels of government;
    - have mechanisms to enhance collaboration between agencies in preparing strategies;
    - are applicable across sectors (rail, urban development, etc.) and jurisdictions (adjacent local governments);
    - provide guidance on the implementation of other important strategies (e.g., climate change);
    - have flexible, performance-based structures; and
    - are responsive to changing circumstances.

National and state/provincial economic planning, infrastructure, and environmental agencies, in particular, are involved in providing this enabling framework. The PRC provided an example of a comprehensive urban development approach, while Japan has a strong capacity to plan across sectors. The operation of effective planning agencies at the local level needs to be integrated with the policies and plans of these agencies.

B. Project Development Practice

A best practice framework needs to provide an enabling environment:

- Small-scale projects which have:
    - an adequate planning context;
    - an asset management plan identifying the investment and a budget for it;
    - been subject to cost-benefit analysis.
- Large-scale projects determining urban economic, social and/or environmental outcomes, which have:
    - concepts developed in the context of comprehensive socio-economic assessments;

- performance criteria developed so investment solutions are not predetermined;
- prefeasibility studies done to assess investment options and potential implementation and financing structures;
- feasibility study and due diligence processes which preserve the potential for options for innovative project solutions from contractors and financiers;
- market sounding and bid preparation processes responsive to market conditions;
- bid processes which are efficient and effective–ensuring competition but providing incentives for physical and financial innovation; and
- transparent bid assessments based on defined performance criteria and including cost benefit analysis.

National and state/provincial economic planning and infrastructure agencies, in particular, are involved in providing this enabling framework. The existence of specific project development funds, to enable quality preparation of projects, is sometimes required. In the case of the Republic of Korea (the PIMAC group within the Ministry of State and Finance) is a successful example of such an entity. The operation of effective urban/local development corporation and infrastructure agencies needs to be integrated with the project development structures of these agencies. As discussed, the PRC's Urban Development Investment Companies, such as in Suzhou, are such examples.

C. Finance and Funding Practice

A best practice enabling framework in respect of financing and funding needs to provide an enabling environment for:

- intergovernmental fiscal transfers which correspond to infrastructure funding needs of each level of government and encourage governments to fully utilize their revenue base and to leverage this base;
- encouraging the flow of long-term finance to infrastructure;
- the development of capital market and debt mechanisms encompassing the diverse needs of urban governments;
- encouraging international capital flows (private and multilateral development bank) for urban infrastructure investment;
- the establishment of national challenge funds and other funding instruments designed to leverage effective and innovative government investment;
- appropriate institutional arrangements at metropolitan level for implementation—e.g., mandates to acquire land and structures to share revenue and expenses.

National and state/provincial economic planning and financial regulatory agencies, in particular, are involved in providing this enabling framework. The operation of effective urban/local governments and development corporations needs to be integrated with the funding and financing opportunities provided by the framework set by these agencies. It is to these issues we turn in the following section.

IV. Funding and Financing

To support this national priority, key reforms are needed to ensure effective use of local and regional finances and assets. These reforms, in turn, need to be supported in depth with (a) national legislation enabling the development of more effective financing instruments and (b) building capacities to utilize those instruments well at local level—(see Figure). These two levels constitute the two key levels of intervention in respect of building the capacity of urban areas to provide the underlying infrastructure[21] for sustainable development.

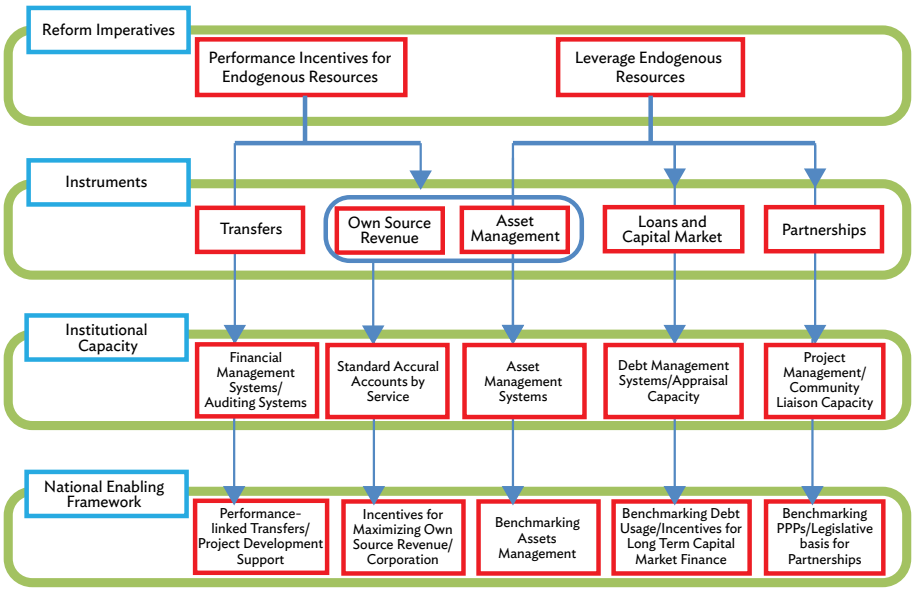
The main financing streams for urban infrastructure investments fall into five categories:[22] transfers from other levels of government; own source tax and user charges revenue; revenues from assets; external financing (loans and access to capital market instrument); and partnerships.

The ADB-ATTDF 2016 provided excellent examples of interventions at the two levels of institutional and capacity development—the enabling level and the implementation level—and across financing streams. These will be discussed in the following relevant sections.

21 In this section, infrastructure is defined in the widest sense including social infrastructure (e.g., schools etc.) and systems (e.g., local economic development support etc.).

22 UN-HABITAT. Forthcoming 2017. *Sustainable City Finance for Development*. Nairobi.

Figure: Framework for Central and Local/Regional Finance



Note: PPP = Public–Private Partnership.
Source: UN-HABITAT. Forthcomng 2017. *Sustainable City Finance for Development*. Nairobi.

A. Own source revenue

National enabling frameworks need to follow best practice principles, supported by effective programs, for structuring efficient endogenous resource mobilization: property taxes linked to potential use value of the site, administrative fees, utility charges—the scope of, and rates for, such fees and charges; and for building capacity to identify both the tax/fee base and to collect the mandated level of revenue that impact the actual yield of the source.

Urban implementation arrangements need to respond effectively to maximize yields from local taxes, recover as much of the cost of service provision as is feasible and equitable. Further, such revenue should be used flexibly to maximize the leverage of other government and private funds contributing to infrastructure provision.

In the PRC, the city of Taizhou has used an innovative combination of redevelopment and capture of land value increase through initial fee and continuing taxation of rental income from the development. The cost recovery for services is generally poor, but the Phnom Penh water system in Cambodia, and the Manila Water concession in the Philippines demonstrate that it is possible to achieve high levels of cost recovery for both capital and operations costs provided user charges are matched by effective service delivery.

Two other examples in the PRC (Longgang and Yuanzhou) demonstrated excellent and innovative ways of multi-jurisdictional collaboration on land value capture and pooling. While these cases remain isolated, such arrangements as the Indian Jawaharlal Nehru

National Urban Renewal Mission (JNNURM) can incentivize such arrangements. In respect of promoting green investments, the property tax instruments can be used in reverse—providing tax concessions for qualifying activities as in the example of the Republic of Korea. However, care should be taken not to undermine the local government tax base with such concessions however.

B. Effective asset management

National enabling frameworks are also needed to provide incentives for effective use of land and other assets (for example, water treatment plants, parks) under the control of local governments; and national resources are needed to provide capacity building and technical support for local governments in this area. These often provide important opportunities for leveraging private sector resources and development that will either provide facilities through partnerships (see below) or additional tax revenues.

At the implementation level, clear responsibility for the sustainable maintenance of assets needs to be established. Examples of good practice in corporatization and leveraging are relatively common, while not being systematic. Cities in the PRC have corporatized their water supply companies, for example. In Iloilo, Philippines, a dilapidated market is being redeveloped, also on a PPP basis, with a private developer.

C. Transfers

In many countries, ***national and state/provincial transfers make up the bulk of local government revenue***. From an economic point of view, this situation is not desirable, but the right mix in any country depends on the legislative context which determines the revenue-raising powers of each level of government. Changes to such structures are difficult in the short term. The structure of such transfers, reasonably enough, normally contains a large component based on population size. Adjustments are often made for the wealth of the area, with poorer areas getting more on a per capita basis. These structures, however, provide no incentive for innovation and enhancing the performance of own source revenue generation.

On top of such funds, many governments provide other grants to local governments. These should be assessed for their potential to encourage more efficient and innovative cities. Partly or fully restructured as challenge funds—providing resources for cities, programs and projects which demonstrate performance in leveraging resources, mobilizing revenue or innovative partnerships—they have great potential to encourage such performance. The structure of the JNNURM in India went some considerable way to achieving this ideal. Another example was provided—the transfers provided by the national government in the Republic of Korea to support the green growth agenda.

At the implementation level, the capacity to use and leverage transfers needs to be established. Examples of urban institutions structured to effectively utilize such transfers exist, although they are rare in Asia. In

Australia, the City West Development Corporation provided an effective organizing locus for federal (Better Cities Fund), state and local resources required to redevelop the Pyrmont area of Sydney.

D. Mobilization and use of exogenous resources

National enabling frameworks are essential to effectively mobilize the potential revenue stream. Restrictions on local government borrowing, while necessary, should not involve onerous costs to local governments so that they may establish their eligibility to borrow. The ability of both local governments and financial institutions to engage in activities designed to enable small local governments to borrow (e.g., pooled lending) needs to be established. The eligibility criteria and structures for local government access to capital markets (e.g., for issuing bonds) determine the cost of access and thus the development of the capital market in relation to financing local investment. Korean examples of government loans designed to promote green growth were provided. The PRC has allowed a number of local governments to issue bonds.

Local government needs to have the capacity and incentive to build the appropriate structures for such access. The use of Urban Development Investment Companies in the PRC was highlighted by the case of Suzhou's City Construct Investment Development Company.

E. Partnerships

National enabling frameworks are also essential to effectively engage with partners that can mobilize the potential revenue stream: the mandate of local governments to enter into partnerships, and their capacity to manage them once undertaken is often limited, and needs clear guidelines and support to build capacities in the required areas. National institutions are also sometimes needed in the absece of appropriate private sector institutions.

For example, Japan's use of the Japan Development Bank lending to catalyze activity under the 2013 Public–Private Partnership (PPP) legislation was instructive. In addition, other types of national intervention may be needed. Again in Japan, national legislation was required to facilitate the use and development of land adjacent railway lines by railway companies in order to cross-subsidize the capital investment costs of developing and upgrading railways. In the Republic of Korea, PPP legislation was also instrumental in catalyzing private investment in urban areas.

At the urban level, local implementation agencies capable of routine use of PPP modalities are rare. The case of Suzhou in the PRC is an exception and this model should be assessed for use in other countries. It is particularly the case if these agencies can be used to take a more considered and long-term approach to the planning and implementation of investments required to achieve a more sustainable and resilient urban area.

V. Conclusion

It becomes apparent that, in order to provide the required policy settings for sustainable urban development, policy development is required at two levels. These are:

- National and sub-national policy changes to incorporate the most appropriate practice that enable sustainable urban development—in particular, in relation to urban finance, and within this area, to capital markets and intergovernmental fiscal transfers. This level also encompasses context issues relating to regional integration given the importance of the efficient development of complimentary urban economies and of (usually) urban-focused logistics networks.
- Sub-national and local policy change to incorporate good practice in the efficient functioning of urban institutions and the investment activities they undertake—particularly in relation to land markets, the involvement of the private sector, and the incentives, mandates, and coordination mechanisms among agencies across sectors and levels of government.

The ADB-ATTDF 2016 has put forward a framework for consistently addressing the key issues of effective policy and planning, quality project development and efficient financing. The next Forum could utilize this framework to:

1. assess the policy status of Asian institutions at both the context/enabling and implementation levels;
2. develop a catalogue of good practice in these areas; and
3. recommend mechanisms to support the dissemination and implementation of (appropriately adapted) best practice across the region.

APPENDIX 2. AGENDA

Opening (Day 1)

Time	Speaker
9:30 a.m.	REGISTRATION
10:30 a.m.–10:45 a.m.	**Emcees: Samreen Badr and Meghna Paul**, National Institute of Public Finance Policy (NIPFP) WELCOME REMARKS **Rathin Roy**, executive director, NIPFP **Rajat Kathuria**, director and chief executive, Indian Council for Research on International Economic Relations (ICRIER) **Naoyuki Yoshino**, dean, ADB Institute
10:45 a.m.–11:00 a.m.	KEYNOTE ADDRESS **Arun Jaitley**, minister of finance, India
11:00 a.m.–11:30 a.m.	PHOTO SESSION AND COFFEE BREAK

Session 1: Economic Outlook

Chair: Xiaoming Huang, Victoria University of Wellington Network of Asia-Pacific Research and Policy

Time	Speaker
11:30 a.m.–12:00 p.m	*Regional Economic Outlook* **Juzhong Zhuang**, deputy chief economist and deputy director general, ADB *Financial Integration and External Spillovers* **Peter Rosenkranz**, economist, ADB
12:00 p.m.–12:30 p.m.	Selected countries' responses to challenges *India's Economic Outlook* **N. R. Bhanumurthy**, professor, NIPFP *The People's Republic of China's Economic Development Under the New Normal* **Zhang Qi**, senior research fellow and deputy director general, Development Research Center *Azerbaijan: New Economic Paradigm* **Vusal Gasimli**, executive director Center for Analysis and Communication for Economic Reforms
12:30 p.m.–1:00 p.m.	Discussants **Ngu Wah Win**, policy coordinator analyst, Centre for Economic and Social Development **Ram Chandra Dhakal**, executive director, Center for Economic Development and Administration

	Ponciano Intal, Jr., senior economist, Economic Research Institute for ASEAN and East Asia
1:00 p.m.–1:30 p.m.	OPEN DISCUSSION
1:30 p.m.–3:00 p.m.	LUNCH

Session 2: Challenges of Sustainable Urbanization

Chair: Dushni Weerakoon, deputy director, Institute of Policy Studies

Time	Speaker
3:00 p.m.–3:20 p.m.	*Challenges for Sustainable Urban Development in Asia* **Michael Lindfield**, director, Urban Infrastructure Services
3:20 p.m.–3:30 p.m.	Country presentations *Challenges of Sustainable Urbanization: The Case of Thailand* **Nonarit Bisonyabut**, research fellow, Thailand Development Research Institute *The State of Urbanization in Pakistan* **Shujaat Farooq**, assistant professor, Pakistan Institute of Development Economics Discussants **Daniiar Bakchiev**, deputy director, National Institute of Strategic Studies **Tran Kim Chung**, vice president, Central Institute for Economic Management **Enkhbaigali Byambasuren**, president, Analysis Group
4:10 p.m.–4:30 p.m.	OPEN DISCUSSION
4:30 p.m.–4:50 p.m.	COFFEE BREAK

Session 3: Financing for Sustainable Urbanization

Chair: M. Teresa Kho, country director, India Resident Mission, ADB

Time	Speaker
4:50 p.m.–5:10 p.m.	*Financing for Sustainable Urbanization* **Rana Hasan**, director, ADB
5:10 p.m.–5:40 p.m.	Selected countries' financing schemes *Financing for Sustainable Innovation PFI/PPP in Japan* **Keiichiro Oda**, senior fellow, Research Institute of Economy, Trade and Industry *Financing Innovation as the Key to Urban Development in the People's Republic of China* **Qiu Aijun**, deputy director, China Center for Urban Development *Financing Sustainable Urbanization: The Case of the Republic of Korea* **Jeong-Ho Kim**, professor, Korea Development Institute School of Public Policy and Management
5:40 p.m.–6:10 p.m.	Discussants **Khan Ahmed Sayeed Murshid**, director general, Bangladesh Institute of Development Studies

	Carunia Mulya Hamid Firdausy, senior fellow, National Center for Economic Research
	Saikat Sinha Roy, professor, Jadavpur University
6:10 p.m.–7:30 p.m.	OPEN DISCUSSION
7:30 p.m.	DINNER (hosted by NIPFP), Annex Court, India International Centre

Session 4: Dialogue between Think Tanks and Government Clients (Day 2)

Chair: Rathin Roy, executive director, National Institute of Public Finance Policy, India

	Speaker
9:00 a.m.–9;30 a.m.	REGISTRATION
9:30 a.m.–10:20 a.m.	Think Tanks' Respective Missions and Services/Activities
	Dushni Weerakoon, deputy director, Institute of Policy Studies
	Qiangwu Zhou, director general, International Economics and Finance Institute
	Shaibal Gupta, director, Asian Development Research Institute
	G. Ramesh, associate professor, Indian Institute of Management
	Aromar Revi, director, Indian Institute for Human Settlements
	Samir Saran, vice president, Observer Research Foundation
	Rajat Kathuria, director and chief executive, ICRIER
10:20 a.m.–11:20 a.m.	Feedback from Government Agencies
	Sarath Amunugama, minister, Ministry of Special Assignments, Sri Lanka
	Yu Hong, deputy director general, Ministry of Finance, People's Republic of China
	J. B. Singh, Reserve Bank of India, India
11:20 a.m.–11:40 a.m.	OPEN DISCUSSION
11:40 a.m.–12:00 p.m.	COFFEE BREAK

Closing

Chair: Dongxiang Li, lead regional cooperation and integration specialist, ADB

Time	Speaker
12:00 p.m.–12:30 p.m.	Updates on ATTN and Next Steps
12:30 p.m.	LUNCH
Afternoon 2:00 p.m.–5:30 p.m.	Informal Networking Activity (Visit to Rashtrapati Bhavan or India President House)

APPENDIX 3. LIST OF PARTICIPANTS

THINK TANKS

Afghanistan
- Chona Echavez, deputy director, Afghanistan Research and Evaluation Unit
- Leah Wilfreda Pilongo, senior researcher, Afghanistan Research and Evaluation Unit

Armenia
- Melik Gasparyan, chief executive officer, AVAG Solutions

Australia
- Shiro Armstrong, senior fellow, East Asian Bureau of Economic Research

Azerbaijan
- Vusal Gasimli, executive director, Center for Analysis and Communication for Economic Reforms

Bangladesh
- Khan Ahmed Sayeed Murshid, director general, Bangladesh Institute of Development Studies

Cambodia
- Chem Phalla, deputy director, Cambodia Development Resource Institute

People's Republic of China
- Qiu Aijun, deputy director general, China Center for Urban Development
- Zhang Qi, deputy director general, Development Research Center
- Qiangwu Zhou, director General, International Economics and Finance Institute
- Xi Chen, International Economics and Finance Institute
- Jinghang Jia, International Economics and Finance Institute

Georgia
- Lasha Labadze, executive director, ISET Policy Institute

India
- Rathin Roy, executive director, National Institute of Public Finance and Policy
- N. R. Bhanumurthy, professor, National Institute of Public Finance and Policy
- Rajat Kathuria, director and chief executive, Indian Council for Research on International Economic Relations

Indonesia
- Carunia Mulya Hamid Firdausy, senior research fellow, National Center for Economics Research, Indonesian Institute of Sciences LIPI

Japan
- Keiichiro Oda, senior research fellow, Research Institute of Economy, Trade and Industry

Republic of Korea
- Jeong-Ho Kim, professor, Korea Development Institute School of Public Policy and Management

Kyrgyz Republic
- Daniiar Bakchiev, deputy director, National Institute of Strategic Studies

Mongolia
- Enkhbaigali Byambasuren, president, Analysis Group

Myanmar
- Ngu Wah Win, policy coordinator analyst, Centre for Economic and Social Development

Nepal
- Ram Chandra Dhakal, executive director, Center for Economic Development and Administration

New Zealand
- Xiaoming Huang, professor, Wellington Network of Asia-Pacific Research and Policy, Victoria University of Wellington

Philippines
- Jose Ramon Albert, research fellow, Philippine Institute for Development Studies

Sri Lanka
- Dushni Weerakoon, deputy director, Institute of Policy Studies

Thailand
- Nonarit Bisonyabut, research fellow, Thailand Development Research Institute

Turkmenistan
- Saparmyrat Shalyyev, Institute of Strategic Planning and Economic Development, Department of Investments and Construction Complex, Ministry of Economy and Development

Uzbekistan
- Umida Islamova, research coordinator, Center for Economic Research

Viet Nam
- Tran Kim Chung, vice president, Central Institute for Economic Management

REGIONAL THINK TANK
- Ponciano S. Intal, Jr., senior economist, Economic Research Institute for ASEAN and East Asia

GOVERNMENT REPRESENTATIVES

People's Republic of China
- Yu Hong, deputy director general, Ministry of Finance

India
- J. B. Singh, Reserve Bank of India

Sri Lanka
- Sarath Amunugama, minister, Ministry of Special Assignments

Tajikistan
- Tavakal Malikov, head, Ministry of Economic Development and Trade

OTHER PARTICIPANTS

- Ahrar Husain, dean, Faculty of Education, Jamia Millia Islamia University
- Anand Gupta, director, Economic Management Institute
- Anindya Chowdhury, general manager—Gas, Shell India Markets Pvt. Ltd.
- Anindya Chatterjee, regional director, International Development Research Centre
- Anshuman Bhargava, director, United Nations Economic and Social Commission for Asia and the Pacific
- Basantha Sahu, assistant professor, Indian Institute of Foreign Trade
- Byasadev Naik, assistant director, Ministry of Agriculture
- Gautam Vhora, managing director, Kaagaz International
- George Joseph, consultant, United Nations Economic and Social Commission for Asia and the Pacific
- Gopal Swarup, architect and author, Creative Consultants
- Guillaume Choquet, first secretary, Embassy of Belgium
- Harsha Hazarika, economic affairs analyst, Embassy of Belgium
- J. D. Agarwal, chairman of the board of governors, Indian Institute of Finance
- K. Pandey, professor (urban management), Indian Institute of Public Administration
- Kshamta Chauhan, program coordinator, Amity International Business School
- M. Verma, director, International Trade and Law Institute
- Mukul Kumar, chief executive officer, Muvin Infotech
- Pallavi Kalita, trade and macroeconomic analyst, European Commission
- Praveen Dhawan, board member, Voluntary Organisation in Interest of Consumer Education
- Ramgopal Agarwala, chairman, Pahle India Foundation
- Ranjana Kumari, director, Centre for Social Research
- Rojit Magotra, assistant director, Integrated Research and Action for Development
- S. Bindra, director for research, Amity Institute of Public Policy & Amity Institute of International Studies
- S. Garkoti, former deputy director, Indian Council of Social Science Research
- Shrawan Kejariwal, professor-Group of Adult Education, Jawaharlal Nehru University
- Subhan Khan, chief scientist (Retd.), The Council of Scientific and Industrial Research (CSIR)-National Institute of Science, Technology and Development Studies (NISTADS) & Founder Chancellor, Maithan University
- Sudhir Jain, professor & ex-head, Indian Institute of Technology, Delhi
- Tabassum Jamal, senior principal scientist, National Institute of Science, Technology and Development Studies
- Tanaji Chakravorty, urban economist, School of Planning and Architecture
- Vijay Saluhan, senior fellow, Institute of Global Studies
- Wolfgang Hornig, financial counsellor, Embassy of the Federal Republic of Germany

ASIAN DEVELOPMENT BANK

Economic Research and Regional Cooperation Department

- Aleli Rosario, senior economics officer
- Dongxiang Li, lead cooperation and integration specialist
- Juzhong Zhuang, deputy chief economist
- Rana Hasan, deputy director general
- Marlene Tablante, consultant
- Michael Raymond Lindfield, resource person
- Peter Rosenkranz, economist

Sustainable Development and Climate Change Department

- Jose Carlo Valencia, consultant
- Juan Miguel Marasigan, consultant
- Karen Lapitan, consultant
- Michael Henree Babista, consultant

NATIONAL INSTITUTE OF PUBLIC FINANCE AND POLICY

- Ajay Kumar
- Alka Matta
- Amita Manhas
- J. S. Rawat
- Jagdish Arya
- Kavita Issar
- Meghna Paul
- Naveen Bhalla
- Parvinder Kapur
- S.C. Sharma
- Samreen Badr
- Vikram Singh Chauhan

INDIAN COUNCIL FOR RESEARCH ON INTERNATIONAL ECONOMIC RELATIONS

- Krishan Kumar
- Manmeet Ahuja
- Neha Arora
- Rajesh Chaudhary, Jr.
- Rajkumar Shahi
- Samridhi Bimal

National Institute of Public Finance and Policy

The National Institute of Public Finance and Policy (NIPFP) is a center for research in public economics and policies. Founded in 1976, the Institute undertakes research, policy advocacy and capacity building in areas related to public economics. One of the major mandates of the Institute is to assist the central, state and local governments in formulating and reforming public policies by providing an analytical base. The Institute was set up as an autonomous society, at the joint initiative of the Ministry of Finance, Planning Commission, several State governments and distinguished academicians. It is registered under the Societies Registration Act, 1860.

In its 40 years of existence, the Institute has emerged as a premier think tank in India, and has made significant contributions to policy reforms at all levels of the government. It has maintained close functional links with the central and state governments, and has built linkages with other teaching and research institutions both in India and abroad. Although the Institute receives an annual grant from the Ministry of Finance, Government of India, and various State governments, it maintains an independent, non government character in its pursuit of research and policy.

Indian Council for Research on International Economic Relations

The Indian Council for Research on International Economic Relations (ICRIER) is one of India's leading think tanks. It was established in August 1981 as a not-for-profit research organization to provide a strong economic basis for policy making. Under the current Chairperson, Dr. Isher Judge Ahluwalia, ICRIER has continued and reinforced the pursuit of its original vision and in the process, significantly expanded the scope of its research activities.

ICRIER is ably supported by a Board of Governors, which includes leading policy makers, academicians, opinion makers and well-known representatives of the corporate world. ICRIER's success lies in the quality of its human capital. Led by Dr. Rajat Kathuria, Director and Chief Executive, ICRIER's research team consists of highly qualified professors, senior fellows, fellows, research associates, assistants, and consultants.

ICRIER conducts thematic research in the following eight can delete thrust areas: Macromanagement, Financial Liberalization and Regulation; Global Competitiveness of the Indian Economy—Agriculture, Manufacturing and Services; Challenges and Opportunities of Urbanization; Climate Change and Sustainable Development; Physical and Social Infrastructure including Telecom, Transport, Energy and Health; Promoting Entrepreneurship Skill and Development; Asian Economic Integration with focus on South Asia; and Multilateral Trade Negotiations and Free Trade Agreements.

International conferences, seminars, public policy workshops, public lectures and publications form an integral part of ICRIER's outreach activities. It maintains a wide network of resource persons from India and abroad. It strives to attract well-qualified researchers, provides them a stimulating and scholarly work environment, and encourages researchers to work in teams. ICRIER's research is widely cited by both academia and the popular press, and has over the years provided critical inputs for policy making.

In the University of Pennsylvania's 2015 Go To Think Tank report, which sampled and ranked almost 7,000 think tanks worldwide, ICRIER was the highest–ranked Indian think tank in terms of impact on public policy.

APPENDIX 5. PHOTO GALLERY

OPENING

SESSION DISCUSSIONS


PROMOTING SUSTAINABLE
RBANIZATION IN ASIA
D THE PACIFIC
hi, India
tober 2016
THINK
TANK


ADB-ASIAN THINK TANK DEVELOPMENT FORUM
PROMOTING SUSTAINABLE
URBANIZATION IN ASIA
AND THE PACIFIC
New Delhi, India
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PROMOTING SUSTAINABLE
URBANIZATION IN ASIA
AND THE PACIFIC
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AND THE PACIFIC


PROMOTING SUSTAINABLE
URBANIZATION IN ASIA
AND THE PACIFIC


AND THE PACIFIC

INFORMAL NETWORKING

Promoting Sustainable Urbanization in Asia and the Pacific

Proceedings of the ADB–Asian Think Tank Development Forum 2016

This publication documents the annual knowledge-sharing event of the ADB–Asian Think Tank Network. The forum, which was held in New Delhi, India, featured presentations on regional economic outlook, sustainable urbanization, and financing urbanization; and a dialogue among government representatives and think tanks. The network aims to promote knowledge sharing and capacity building of think tanks, particularly those involved in supporting governments in formulating and implementing medium- or long-term development plans and in responding to emerging issues. For more information about ATTN, please visit its website: *http:// www/adb-asianthinktanks.org/*

About the Asian Development Bank

ADB's vision is an Asia and Pacific region free of poverty. Its mission is to help its developing member countries reduce poverty and improve the quality of life of their people. Despite the region's many successes, it remains home to a large share of the world's poor. ADB is committed to reducing poverty through inclusive economic growth, environmentally sustainable growth, and regional integration

Based in Manila, ADB is owned by 67 members, including 48 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.

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