The conference was organized under the auspices of the World Bank Groups Tokyo Development Learning Center (TDLC) program, a partnership of the Government of Japan and the World Bank though the Social, Urban, Rural and Resilience Global Practice, to facilitate demand driven global knowledge exchange and implementation support of solutions to complex development challenges.
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Executive Summary

The Second International Conference on Sustainable Development through Quality Infrastructure Investment (QII) held on February 2-3, 2017 and co-hosted by the World Bank Group and the Government of Japan (Ministry of Finance: MOF and Ministry of Land, Infrastructure, Transport and Tourism: MLIT) was a succession from the First Conference held a year ago which collectively defined and promulgated the value propositions for each of the five elements of QII: economic efficiency, safety, environmental and social sustainability, economic and social contribution, and resilience against natural disasters. Building on this First Conference and the QII initiatives driven by Multilateral Development Banks (MDBs), Official Development Aid (ODA) agencies, and Japan over the past year, the Second Conference primarily aimed to explore actual projects and discuss the details of QII implementation in addition to acquiring a deeper understanding of the desirable outcomes of QII.

How to Incorporate Quality Aspects into Infrastructure Projects?

Building the Foundations: Working Across Administrative Boundaries and Inter-Jurisdictional Coordination

In regard to working across administrative boundaries, there is no “one-size-fits-all” governance model and each city and metropolitan area must look for the governance model most suitable for their circumstances. Key points raised were role divisions between the metropolitan and local level, the existence of a metropolitan authority capable of assigning responsibilities, and establishment of a transparent, equitable, and predictable financing system. Enhancing legislative, institutional and analytical capacity of governments is the key to promote inter-jurisdictional coordination.

Making it Possible: Innovative Financing Mechanisms

There was empirical evidence given that private companies are willing to participate in infrastructure projects and urban infrastructure development does not necessarily have to be 100% publicly financed. However, in order to call in private financing, for instance, in a transport infrastructure project the government should support private investors in overcoming ridership risks, arrange appropriate risk sharing, and make available additional revenue sources to supplement fare box revenue. Aside from governments, global and regional risk mitigation facilities can also facilitate further mobilization of private sector financing. Participants also learned of specific mechanisms to mitigate payment risk in long
term loans such as Europe and Central Asia (ECA)’s credit enhancement and short-term loans.

**Attract Good Contractors: Renewed Procurement Frameworks**
Quality Infrastructure requires quality institutional arrangements. Attracting good contractors is particularly important, and participants were introduced to ongoing reforms in the procurement system of MDBs. The new procurement systems of the World Bank and Asian Development Bank (ADB) commonly emphasized value for money, private sector engagement, performance monitoring, and contract management.

**Benefit for All: Poverty Reduction and Inclusive Development**
Including citizens in the development process and ensuring that development impacts benefits of the whole society are key issues for sustainable development. Governments should make their ambitions and limitations clear and send out signals not only to the market but also to individuals to encourage citizen participation, and they must think thoroughly what is best for their constituents in order to benefit a wider group of people. The conference also provided evidence-based quantitative discussions on infrastructure accessibility which illustrated how access to Quality Infrastructure is still severely constrained. New approaches were also presented such as the Output-Based Approaches and Results-Based Financing (OBA/RBF) which contribute to social sustainability, ensuring infrastructure investments benefit the poor and excluded group, expanding markets to meet inclusion challenges. It was argued that OBA/RBF can unlock private funding to deliver infrastructure through commercial lending, private equity and other sources. A presentation on Universal Design (UD) proved that early consideration of UD at the design stage in infrastructure projects is critical and can extend the benefits not only to the disabled, but also to the elderly and other marginalized social groups.

Discussions around this topic not only touched upon the approaches for implementation but also provided a deeper insight into the value proposition of Quality Infrastructure. Regardless of size and scale, Quality Infrastructure can connect and restore communities when appropriately installed. By taking the approaches introduced above, cities can become more connected and inclusive.

**Preparing for the Worst: Resilience against Natural Disaster Risks**
Urbanization leads to concentration, which increasingly exposes cities to disaster risks. Participants learned that resilience must be incorporated at every stage of the infrastructure project cycle and risk reduction must be allied in all types of key assets. Prioritizing Disaster
Risk Management (DRM) investments is also an important but difficult issue, and the Infrastructure Prioritization Framework was proposed in the conference to address this question. The importance of alliances with the private sector was also discussed in the context of resilience, and it was emphasized that natural disaster risks should be transferred to the private sector to encourage actions to better prepare for and respond to natural disasters. In doing so, optimal risk allocation where the public sector covers risks that are unmanageable by the private sector is necessary for maximized value for money, and dialogues with the private sector will enable the public sector to better understand what the private sector can and cannot do.

**Special Sessions on Japanese Experience and Expertise**

**No One Left Behind: Territorial Development**

Quality Infrastructure can reduce disparities between leading areas and lagging areas by enhancing regional connectivity; integration through infrastructure development results in balanced economic output and convergence in living standards. Japan shared their experience on territorial development, explaining how spatial strategies have always been based on socio-economic backgrounds. Currently, given the background of a decreasing and aging population, Japan puts forward “Compactness and Network” as their vision for spatial development. Officials from the government and Japan International Cooperation Agency (JICA) emphasized that the planning process of infrastructure projects must be integrated in order to drive forward territorial development.

**Be Proactive: Operation and Maintenance**

Japanese experts explained that although the aging and deterioration of existing infrastructure were recognized only recently, operations and maintenance have always been critical. They argued that operations and maintenance should be emphasized more, especially the important factors such as life-cycle costs should be considered particularly in the design and procurement of infrastructure projects. By showing actual cases, experts showed how life-cycle-cost evaluations and front-loading non-human factors in the upstream stages of infrastructure projects can significantly reduce maintenance costs, thus reducing the overall costs as well.
Background and Objectives

The World Bank Group co-hosted the Second International Conference on Sustainable Development through Quality Infrastructure Investment (QII) with the Government of Japan as part of the program of the Tokyo Development Learning Center (TDLC).

The highly successful First International Conference on Sustainable Development through QII held on January 20-21, 2016 defined and promulgated the value proposition for each of the five elements of QII: Economic Efficiency, Safety, Environmental and Social Sustainability, Economic and Social Contribution, and Resilience against Natural Disaster. Building on the emergent knowledge of implementing QII projects, the Second QII Conference aimed to share practical QII knowledge and implementation experience through sessions on QII initiatives driven by Japan, MDBs and ODA agencies over the past year. The primary objective of the conference was to share knowledge on advancing QII from concept to implementation at scale, including sessions on: financing mechanisms, procurement frameworks, urban resilience, urban development, social inclusion and overcoming inter-jurisdictional challenges inherent in many infrastructure projects. Furthermore, this conference aimed to facilitate dialogue and collaboration on QII initiatives among development partners such as MDBs as well as their clients who are implementing infrastructure projects.

Taking advantage of the conference being held in Tokyo, there were two special sessions on QII where Japan offers tremendous experience through its history of successful quality infrastructure development. Developing countries are increasingly recognizing the necessity of strategic infrastructure investment to reduce spatial disparities in development. Japan’s past experience of territorial development is of great relevance to developing countries: long-term planning and prioritization of infrastructure stock, supporting the growth of competitive mega regions/urban agglomerations whilst also boosting the development of other regions to ensure balanced development of the nation as a whole. The second special session covered operation and maintenance which are an important aspect of QII and has been at the heart of Japan’s success of long-term infrastructure planning, development and operations. This section not only laid out the underlying concepts but also provided a specific methodology to implement operation and maintenance for Quality Infrastructure.
Key Objectives

• Demonstrate the World Bank’s initiatives, experiences and views related to QII to the Japanese public, stakeholder, and other distinguished participants.

• Further promulgate and advance QII towards implementation at scale, with a focus on:
  1. Lessons learned following the First QII Conference, highlighting the challenges/barriers and opportunities to scale implementations of infrastructure projects in a sustainable manner;
  2. Addressing the financial barriers to implementing QII through public financing, Public-Private Partnership (PPP), co-financing and other mechanisms;
  3. Ensuring that the value of QII is properly accounted for and considered in large civil works projects through innovations in life-cycle costing and procurement frameworks;
  4. Discussing how urban resilience and urban development can be addressed beyond administrative boundaries in QII projects;
  5. Ensuring QII benefits all of society, addressing inclusion and last mile challenges with practical private sector engaged strategies; and
  6. Overcoming difficulties of inter-jurisdictional policy, governance, management and other challenges necessary to implement, operate, and maintain QII.

• Share Japanese practices on QII design, implementation and operations with a special focus on:
  1. Territorial development as an increasingly important theme for infrastructure development to ensure regional connectivity; and
  2. Operation and maintenance as a critical aspect of QII and how it can and should be incorporated into QII project design and financing.

• Further leverage partnerships with development partners.

• Produce an output report and other knowledge assets further codifying the growing body of practitioners’ knowledge on the implementation of QII projects.
Session 1: Opening Session

Welcoming Remarks, Yasusuke Tsukagoshi – Special Representative, Japan, World Bank Group

Mr. Yasusuke Tsukagoshi welcomed the participants and set out the objectives for the conference. First, a brief explanation was given on the First QII Conference which aimed to clarify the definition of Quality Infrastructure and its value propositions for economic efficiency, safety, environmental & social sustainability, economic & social contribution, and resilience against natural disaster. Building on the takeaways from the previous conference, the goal for this second conference was set to advancing the QII discussion from the concept stage to the implementation stage by sharing practical QII knowledge and implementation experiences. Mr. Tsukagoshi also referred to a special session on territorial development, which draws on the Japanese expertise and experience to further enrich discussions, as a key feature of this conference. He also highlighted a session on infrastructure maintenance, which would shed the new light on the importance of life-cycle cost approach.

Key Objective Setting and Building from the First Conference
Yoshiki Takeuchi – Director-General, International Bureau, Ministry of Finance

Mr. Takeuchi opened his speech by touching upon Japan’s recent initiatives in “Quality Infrastructure Investment” and discussions within the international community, cooperation with Multilateral Development Banks (MDBs) and expectations for the Conference. He mentioned Prime Minister Abe’s announcement on the “Partnership for Quality Infrastructure” in May 2015, with four pillars: expansion and acceleration of assistance by the Japan International Cooperation Agency (JICA); collaboration with the Asian Development Bank (ADB); an increase in provision of risk money by the Japan Bank for International Cooperation (JBIC); and, promotion of “Quality Infrastructure Investment” as an international standard.

While he showed recognition that the concept of “Quality Infrastructure Investment” has become increasingly recognized by the international community, he pointed out that it is essential to disseminate and give shape to the concept to promote “Quality Infrastructure Investment,” the fourth pillar proposed by Prime Minister Abe, as an international standard,
and to facilitate it, cooperation with not only bilateral but also multilateral organizations. Mr. Takeuchi reiterated how TDLC has built cooperative relationships with four cities in Japan (Yokohama, Kobe, Kitakyushu, and Toyama) last year through the City Partnership Program in view of the importance of solving urban development issues through tapping into Japanese expertise, and also how TDLC spreads Japan’s knowledge through “Technical Deep Dives,” a knowledge exchange program that invites government officials in developing countries or members of the World Bank staff to Japan. He encouraged TDLC to continue promoting a positive cycle of disseminating and materializing the concept of “Quality Infrastructure Investment.”

Ede Jorge Iijasz-Vasquez – Senior Director, World Bank Group

Mr. Iijasz-Vasquez reiterated that the Second QII Conference will move on from discussing the definition of QII, which was the primary objective of the First QII Conference, to exploring actual projects and discussing the details of QII implementation with support from regional development banks and ODA agencies such as JICA. He stressed that discussions around QII are not about good infrastructure and bad infrastructure but about a spectrum of possible choices, and he expressed his high expectations that the nine projects introduced in the conference will provide implications on how to modify existing projects to include the concept of QII. Another point mentioned by Mr. Iijasz-Vasquez was the need to discuss the necessary factors for QII implementation such as alliances between the public and private, longevity and lifetime functionality, and resilience against natural disaster.

Finally, Mr. Iijasz-Vasquez reiterated Mr. Tsukagoshi’s point earlier on the two sessions specially prepared to leverage the development experiences of Japan, stressing the comparative advantage of Japan on both topics: (1) Territorial Development session and (2) Operations and Maintenance session. The former session illustrates how infrastructure must be designed as a network of infrastructures and not as individual projects. The latter session provides participants with an insight into the heart of Japan’s success.
Session 2: Territorial Development as a New Dimension for Infrastructure Development

Sumila Gulyani – Global Lead, Urban Strategy and Analytics, World Bank Group

Ms. Sumila Gulyani from the World Bank Group facilitated the panel discussion as the moderator. In her opening words, she gave structure to the session, the World Bank’s perspective on the issue, and introduced Japanese cases including JICA initiatives.

Ede Jorge Iijasz-Vasquez – Senior Director, World Bank Group

Mr. Iijasz-Vasquez introduced the perspective that territorial development is essential for the balanced development of a country. He shared the key messages of a recent World Bank report which claims that economic output must be balanced throughout the country and that economic integration helps capturing the benefits of concentration and convergence in living standards. His message was that although different types of infrastructure tend to be looked at as separate issues, various infrastructure must be well connected to each other in order to achieve the two outcomes listed above. As for specific methodologies for such well-connected Quality Infrastructure, Mr. Iijasz-Vasquez claimed that there is no one solution and that the endowments and limitations of the specific territory must be understood. Territorial development policies must be prioritized and sequenced, and only then can infrastructure be developed in a well-integrated and connected manner. He also highlighted that having a good system to secure land tenure and property rights are fundamental. Mr. Iijasz-Vasquez showed a number of examples from China, Brazil, India, Bangladesh, Malaysia, Mozambique, etc. to illustrate the points.
Takeshi Mugishima – Assistant Vice-Minister, Ministry of Land, Infrastructure, Transport and Tourism

Mr. Mugishima provided a comprehensive explanation of Japan’s spatial policy and its history. His key message was that Japan’s spatial strategies have always been based on the socio-economic backgrounds of that time and that “Compactness and Network” is the keyword for today’s spatial strategy.

Different issues were given attention in the three stages Japan experienced after the war: shortage of residence and infrastructure during the rapid economic growth period, motorization and increased awareness to the environment during the steady growth period, and population decrease and aging during the era of maturity. Consequently, Japan’s initial national spatial policies aimed for land development based on local centers in order to accommodate the increasing population, and then the goal for the recent National Spatial Strategy established in 2008 shifted to achieving better quality of life with less inequality for the gradually decreasing and aging population. The current policies also put emphasis on the stock effects of infrastructure and aim to strategically manage and fully leverage the existing infrastructure, thus enhancing the safety and security, quality of life, and productivity of the country as a whole. This vision has led to the keyword mentioned above: “Compactness and Network.” Mr. Mugishima lastly commented that collaboration between the public and private has been integral to Japan’s successful infrastructure development.

Hiroshi Kato – Senior Vice President, Japan International Cooperation Agency

Mr. Kato characterized Japan as a typical case where infrastructure was developed in an integrated manner. His presentation focused on one of JICA’s operations in Thailand aiming to achieve an integrated development. He explained that, in Bangkok, rapid development of urban infrastructure occurred in the 1970s, followed by the industrial development of the Eastern Seaboard in the 1980s. Since the 1990s, the trend has moved on to building sustainable cities, and in order to achieve this, he emphasized that the planning process must also be done in an integrated manner. Lastly, he explained that JICA neutrally acted to bring both the national and local government to the table for discussion, which does not happen easily without such a third-party agency.
Q&A Session

Q.1: What is your vision on applying this “Compact and Network” concept to development in Africa?

A.1: (Mr. Mugishima) The concept is about finding the desirable density and then connecting the dots. I believe this concept can be applied to any site.

(Mr. Kato) JICA is also conducting a regional Master Plan study for Africa. We are trying to come up with a method to revitalize the medium-sized cities that are connected with the mega-cities, and this goes in line with the concept of “Compact and Network”.

(Mr. Ijjasz-Vasquez) Urbanization is happening rapidly. It is necessary for development, but it is not sufficient. Of course we must incorporate the concept of “Compact and Network” to our development projects in order to maximize the benefits we can get from urbanization.
Session 3: Operation and Maintenance as Key Aspects for QII

Yuko Okazawa – Operations Officer, World Bank Group

This session was moderated by Ms. Yuko Okazawa from World Bank Group TDLC. Panelists discussed the importance of operation and maintenance in QII based on evidence. Japan’s cross-ministerial efforts on infrastructure maintenance, renovation, and management were key components of this session.

Prof. Koichi Maekawa – Lead Researcher, Infrastructure Asset Management under the Cross-ministerial Strategic Innovation Promotion Program (SIP) on Infrastructure Maintenance, Renovation and Management, Cabinet Office | Professor, Graduate School of Engineering, the University of Tokyo

Prof. Maekawa delivered an excellent lecture on how Operation and Maintenance (O&M) is important for the quantitative analysis of the life-cycle costs for infrastructure. He not only provided an overview of the concept of life-cycle costs but also provided a specific method to perform such evaluations.

The Tokaido Shinkansen is famous for its extremely high quality, but this quality was achieved by two legendary engineers who took part in the project. The standard of the Tokaido Shinkansen is exceptionally high even by Japanese standards. As this example shows, decades ago in Japan, the way to create quality infrastructure that can last over 50 years was to rely on the top 10% chief engineers. Today, Japan has a large amount of infrastructure stock, but the future projection for maintenance costs is 190 billion JPY. The issue of maintenance became conspicuous even to the public when a tunnel collapsed and incurred death casualties in 2012, which was the first case in Japan where infrastructure failed without any external forces such as natural disasters.

Life-cycle cost evaluation is one effective way to reduce maintenance costs significantly, and Prof. Maekawa introduced the concept of front-loading. Front loading, or proper design to reduce overall cost at the upper stream of infrastructure projects, ensures higher quality, lower investment and safer infrastructure and less reliance on individual skills. In the example of Haneda Airport, Prof. Maekawa showed how intentionally creating a weak spot which will
break first in case the infrastructure loses to external pressure succeeded in reducing estimated costs from 9,000 million USD to 6,000 million USD and in shortening the project length by 20%. However, Prof. Maekawa reminded the participants that new construction methods and arrangements may be necessary to implement this concept. In the Haneda Airport example, 90% of the construction materials were plant-based materials, which was the first attempt in Japan. Furthermore, the initial costs were 10 times higher, financial arrangements were changed, and a longer-term contract was concluded. In his lecture, Prof. Maekawa also provided an innovative example in China where the new Self-Compacting Concrete (SCC) was used. Before the 1990s, greater effort at the downstream of projects headed by first-class engineers was a prerequisite to ensuring higher quality in infrastructure, but this was rarely possible. Although SCC is more expensive than conventional concrete, it performs best when nothing is done to it, thus reducing labor and maintenance costs. Since it pays off in the longer-term, ensuring that a long-term contract with the construction company in place was crucial for this example as well.

Takehiko Mori – Counsellor for Global Strategies, Minister’s Secretariat, Ministry of Land, Infrastructure, Transport and Tourism

After recapping on the five key elements for Quality Infrastructure, which are economic efficiency, inclusiveness, safety and resilience, sustainability, and convenience and comfort, Mr. Mori introduced Japan’s initiatives on Quality Infrastructure and how Japan aims to contribute to the local society and economy through these initiatives. He stressed that it is crucial for local engineers to be able to perform maintenance themselves in order to sustain a certain standard of service delivery. He showed an example of a Japanese ODA loan to Congo where Japan not only constructed a bridge but also left the local engineers a maintenance manual, allowing the local constructors to maintain the bridge safely for more than 30 years. He concluded by commenting that O&M has always been important, though the importance was not so evident until recently. He proposed that O&M aspects must be emphasized in the design stage of infrastructure development and that procurement contracts should also take O&M into consideration.
Q&A Session

Q.1: In what stages of the project can we incorporate the concept of front-loading?

A.1: (Prof. Maekawa) It should be incorporated into every stage, but particularly to the planning and design stage. It is not difficult at all. For example, in some projects in Japan, the engineer responsible for O&M was included in the planning and design process, and that was sufficient. Furthermore, that engineer began to teach next-generation engineers to include O&M into the early stages of a project, thus creating a positive cycle. (Mr. Mori) Related to the long-term capacity building for the local engineers, I would like to comment that Japanese construction companies not only export their technical expertise but also their corporate culture. They have morning greetings, safety confirmation procedures, and meetings for confirming main maintenance points. Japanese companies are contributing to building local capacity both in construction and maintenance stages.
Session 4: Quality Infrastructure Initiatives for Poverty Reduction and Inclusive Development

Phil Karp – Lead Knowledge Management Specialist, World Bank Group

Mr. Phil Karp from the World Bank Group opened the session focusing on how Quality Infrastructure can contribute to poverty reduction and inclusive development. Participants discussed the challenges and opportunities for the implementation of such Quality Infrastructure projects.

Sumila Gulyani – Global Lead, Urban Strategy and Analytics, World Bank Group

Ms. Gulyani’s presentation was centered around one basic question: “Are they being served?” She put forth an evidence-based discussion on infrastructure accessibility by introducing a unique analytical framework visualized as a polygon.

Based on a survey of 14,200 households in 15 Kenyan cities, she first explained that accessibility to different types of infrastructure varies even in the same city. In the Kenyan example, public transport, phone, and electricity had high accessibility, but other types of infrastructure such as street lights, garbage collection, and sewage disposal had very low accessibility. Next, she illustrated how the percentages can be very different when stricter conditions are applied. When compared to the accessibility rates shown before, which was termed “nominal accessibility”, the accessibility rates to infrastructure that works and is used, which was termed “effective accessibility”, dropped for a number of categories, especially public transport. When further adjustments are made for the quality aspects of infrastructure, the numbers drop significantly for electricity, water, and toilets as well.

Ms. Gulyani also addressed the question of who is being underserved. By showing comparisons between the poor and the non-poor and between the formal settlement dwellers and informal settlement dwellers, she illustrated that the drop from nominal accessibility to effective accessibility is more significant in the latter comparison. Participants were able to newly learn that effective accessibility to infrastructure is more defined by housing type rather than by financial status.
Carlos Alberto Álvarez Barrera – Deputy Director, Medellin International Cooperation Agency

By introducing what has been done in Medellin, Colombia, Mr. Álvarez Barrera showcased how Quality Infrastructure can connect communities and reduce poverty. The most prominent example was the introduction of the cable car system. Being located in a topographically complex area, the city of Medellin put great effort into connecting different parts of the city by developing an integrated multi-modal transport system consisting of the metro, tram, public bicycles, and other modes. In order to connect the communities located in the mountains to the city center, Medellin came up with the innovative idea of using cable cars as a major mode of vertical transport. This allowed previously isolated communities to link to Medellin city and paved the way for a more inclusive development. Mr. Álvarez Barrera also introduced an example of a small bridge which successfully connected the two sides of the river not only geographically but also in terms of community. The key message in his presentation was that, regardless of size and scale, infrastructure can connect and restore communities, thus allowing for inclusive development and poverty reduction.

Paul Kriss – Global Lead, City Infrastructure and Services, World Bank Group

Mr. Kriss viewed infrastructure as a platform to bring the poor into the society, and most importantly, he pointed out that infrastructure development requires governments and municipalities to think systematically about how to involve and better aid the low-income groups in their local contexts. Mr. Kriss believes that this process of planning and thinking is integral for enhanced development impacts, and he also added that this process is increasingly important for developing countries since they do not have much resource to waste. Having made his point, Mr. Kriss strengthened his argument by showing cases in India, Tunisia, and Bangladesh.
where thorough planning with consideration to local context led to better outcomes.

Barjor Mehta – Global Lead, City Management, World Bank Group

The moderator asked Mr. Mehta what governments in developing countries can do, aside from making good designs and good choices for infrastructure, to maximize impacts of infrastructure development, particularly in addressing poverty. Mr. Mehta started by commenting that governments always face dilemmas on investment decisions; what do I do and where do I address? Any government faces budget constraints, and the lack of available resources is particularly severe in developing countries. To answer the moderator’s question, Mr. Mehta claimed that governments should make clear both their ambitions and limitations and send out signals not only to the market but also to individual households. When this is done properly, private firms and citizens are more likely to commit to short/medium-term goals in line with the long-term vision. Furthermore, he required development partners such as MDBs and bilateral agencies to be more flexible on long-term goals in order to commit to the short/medium-term goals.

Q&A Session

Q.1: What are the biggest barriers for carrying out Quality Infrastructure Initiatives for poverty reduction and inclusive development?
A.1: (Mr. Kriss) Guiding decision-makers to look at the quality aspects of infrastructure instead of the quantity aspects is one major challenge. Government officials want results immediately, and they are reluctant to take the trouble of thinking through what is required for their city. For example, Andhra Pradesh in India were very ambitious and proposed to create a new road consisting of six lanes. In fact, with some attention to the quality aspects, four lanes may have been sufficient. Another major challenge is ensuring that projects are carried out properly and the money does not disappear. For example, in Bangladesh, the bidding system and the evaluation system are full of corruption. Money must be put into ensuring that the bidding system is just and the construction quality is acceptable.

Q.2: (Moderator) We often hear the debate around “Cheap Infrastructure VS Quality Infrastructure”. Do you think this dichotomy is the correct way to frame the problem?
A.2: (Mr. Mehta) It is only a matter of prioritization. When I was a student, I was a poor student. So I put education at the top of my priority list and nothing required me to put quality of
life at the top. The same analogy can be applied to infrastructure development; the suitable objective should be set for each differing stage of the entire infrastructure development process.

Q.3: (Accra, Ghana) In Accra, everything must go through the national level, and projects always stop there. They are not finished because we do not have enough capacity and the money is used up in the process. All of our time is used for discussions and assessments. In such a situation, how can cities become better able to actually act and make things happen?

A.3: (Ms. Gulyani) GSURR believes deeply in working with both the national and local governments. We can work with national governments to suggest a decentralized structure, but we cannot force them to adopt the idea. I understand your concern.

(Mr. Kriss) I am sorry to say this, but the only way for you is to keep fighting.

(Mr. Mehta) You must build trust. Oftentimes, national governments claim that municipal governments only borrow and do not return. In order to gain trust, you must do things yourself. First, keep fighting for it and show that you can deliver. Build confidence inside your organization, and then try to foster external confidence.

Q.4: Do you believe that a metric for network effects would be useful in discussing Quality Infrastructure? For example, if I have several projects, should I take into account whether another project complements the original project? Should we try to maximize this network effect?

A.4: (Mr. Kriss) The answer is of course yes, and cities like New York probably consider network effects, but for us working mainly in developing nations, we have many limitations. Under the constraints, it is difficult for us to consider network effects in the feasibility study.

Q.5: Ms. Gulyani, I thought your framework is very useful for decision making. Have you thought about your next step of your research? Implementation? Also, should we really be investing in informal settlements?

A.5: (Ms. Gulyani) It is important to base technical plans on data and facts. After the decision making, it is a political process, and I do not plan on entering that realm. About the informal settlements, the challenge is to upgrade the settlements, but preventing future informal settlements from emerging is even more important in order to secure higher accessibility to quality infrastructure.
Session 5: Recapping Discussions from Day 1

Ede Jorge Ijjasz-Vasquez – Senior Director, World Bank Group

“The Second International Conference on QII opened yesterday with a special session on territorial development. Discussions were centered on how to develop territories that are lagging behind, and in order to do so, it was mentioned that we must look at the network of infrastructure projects instead of looking at each individual project. Japanese presenters also provided valuable inputs for the conference. For example, Prof. Maekawa introduced participants to “front-loading”, which was a wonderful example of how the concept of Quality Infrastructure can actually be put into practice. Presenters from the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) provided very good examples of Quality Infrastructure Initiatives.”

Mr. Ijjasz-Vasquez observed that participants were now on the same page regarding the definition of Quality Infrastructure and had acquired a better understanding of its value propositions. He laid out the objectives for the sessions on the second day of the conference: is there a different dimension of looking at the financing of Quality Infrastructure? What are development partners such as MDBs doing? Mr. Ijjasz-Vasquez explained that the World Bank as one of the MDBs will show a new mechanism where not necessarily the cheapest infrastructure will be selected.
Session 6: QII Initiatives of Development Partners

Carmen Nonay – Practice Manager, World Bank Group

Ms. Carmen Nonay from the World Bank Group facilitated this session on what MDBs are doing to mainstream the concept of Quality Infrastructure and how governments can leverage partnerships with MDBs.

Naoki Yamashita – Deputy Director, Multilateral Development Banks Division, International Bureau, Ministry of Finance

Mr. Yamashita first explained Japanese initiatives on QII. Japan believes that an enormous demand for infrastructure exists globally, and the Japanese government hopes to meet this demand with Quality Infrastructure. Japan’s Prime Minister Abe announced that they are working towards partnerships for QII initiatives and further assistance from JICA and ADB. He is looking to further expand existing partnerships such as JICA collaboration, JBIC risk money, and private sector involvement. Regarding the partnerships with the private sector, the Japanese government not only aims to promote overseas business by Japanese firms but also to share the high-level development expertise they possess.

Mr. Yamashita next moved on to the topic of collaboration with multilateral organizations. He explained how Japan is trying to leverage partnerships with MDBs to diffuse and mainstream the concept of QII through conferences or taking part in specific projects operated by MDBs. He stressed that Japan is gaining international consensus over time, and that other high-level agreements such as G20 also include the concept of Quality Infrastructure. In addition to mainstreaming the concept, Japan is trying to step into the practicalities as well.

Lastly, Mr. Yamashita mentioned TDLC’s important role as the secretariat for Japanese initiatives on QII. In particular, the CPP allows World Bank staff and client delegates to learn from and leverage the experience and expertise of four CPP selected Japanese cities (Kitakyushu, Kobe, Toyama and Yokohama).
Hideya Kobayashi – Senior Director, Operations Strategy Department, Japan International Cooperation Agency (JICA)

Mr. Kobayashi started off by showing that JICA’s loan commitment in the last fiscal year recorded the highest in history. Aids have increased following Prime Minister Abe’s declaration to prioritize Quality Infrastructure. He also showed that recent achievements by JICA have been made mainly in the infrastructure sector. 48% of aids were directed to transportation infrastructure, and 20% were directed to energy. A total of 68% was directed to infrastructure development. Also, in terms of region, 70% of aids went to Asian countries. Mr. Kobayashi then presented two cases to illustrate JICA’s efforts in providing a sufficient quantity of Quality Infrastructure. The first case was the Myanmar east-west economic corridor, and Mr. Kobayashi highlighted that JICA has been providing assistance in capacity building of bridge engineers in addition to the upgrading of the bridge itself. The second case was the Economic Corridor Development in Africa in collaboration with ADB. Again, Mr. Kobayashi highlighted that JICA works not only on physical infrastructure but also soft-infrastructure such as One Stop Border Post (OSBP).

Tomoyuki Kimura – Deputy Director General, Strategy, Policy and Review Department, Asian Development Bank (ADB)

Mr. Kimura provided a holistic view of ADB’s work on Quality Infrastructure, which is crucial as underlined in the 2030 plan. He explained that ADB currently has high-technology projects which overlap with the definition of Quality Infrastructure. High-technology projects, thus Quality Infrastructure projects, are projects which: (1) create or improve ways of serving client needs in terms of efficiency and productivity; (2) address climate mitigation, adaptation, and resilience to disaster risks; (3) introduce innovation in processes, methods, or techniques; (4) reduce environmental costs and social costs; (5) improve economic efficiency including low life-cycle costs, durability, and long-term performance efficiency; (6) create market opportunities for scaling up; and (7) maximize synergies through collaborations. That being said, Mr. Kimura also mentioned that ADB faces QII-related challenges in expertise, evaluation, procurement, financing, and incentive design. In order to overcome these challenges, ADB is working to (1) create cross-departmental and sectoral teams to plan and design projects with high readiness, (2) use appropriate procurement methods to engage quality contractors and high quality plant
and equipment, (3) move away from least cost analysis into life-cycles, resilience, and value for money, and (4) capture the prevalent and future trends. In addition to ADB’s own initiatives, Mr. Kimura introduced a number of partnerships. He mentioned an agreement with JICA on a $16 billion five-year partnership. He also mentioned partnerships with Bill & Melinda Gates Foundation for cross-sectoral and thematic collaborations, with Rockefeller Foundation to support climate adaptation for infrastructure projects, and with Sustainable Energy Association in Singapore. He lastly showed examples of ADB initiatives on Quality Infrastructure such as the Melamchi Water Supply Project in Nepal, the Jaffra-Killinochi Water Supply Project in Sri Lanka, the SASEC Chittagong Cox’s Bazar Railway in Bangladesh, and the Solar Rooftop Program for Distributed Renewable Energy in India.

Ayayomi Babalola – Division Manager (PICU1), Transport and ICT Department; VP Complex of Private Sector, Infrastructure and Industrialization, African Development Bank (AfDB)

Mr. Babalola provided a walkthrough on AfDB’s activities on Quality Infrastructure. He introduced that AfDB’s Transport, Urban & ICT sector has more than 100 projects in 44 African countries in 2016. 40% of the portfolio goes to regional cross-border roads. He expressed that AfDB agrees that economic efficiency, sustainability, safety and resilience are key definitions of Quality Infrastructure, but AfDB also considers contributions to local communities as another key dimension. In order to achieve this, AfDB is working on participatory and inclusive processes, early social engagement in the preparation stage in order to identify necessary social amenities, and incorporation of community components such as access roads, markets, water boreholes, social services, job training for women and youth.

Q&A Session

Q.1: (Moderator) How can MDBs collaborate to mainstream QII?

A.1: (Mr. Kimura) I think the most important point is to sensitize the clients on the ultimate cost of QII.

(Mr. Kobayashi) The concept of QII is gradually becoming prevalent in the global society. However, QII is expensive for our clients. In order for them to adopt QII initiatives, there must be some additional push. I think capacity building at every level of development projects will increase the chances of QII initiatives being adopted by client countries.

(Mr. Babalola) QII requires a substantial amount of resources. We need external input. Especially the G7’s input is valuable for us. In order to gather more resources, we need
to make countries, particularly G7 countries, realize the importance of QII. (Mr. Yamashita) When I worked for the Embassy of Japan in Thailand for three years, I experienced bilateral cooperation in infrastructure investment. There I realized that we need to gain understanding of the benefits of QII from client side. Also, Japanese agencies and companies must think what is best for the client country, not necessarily the best quality they can achieve. Capacity building must run parallel as well. Also, collaboration of bilateral and multilateral development agencies is important.

Q.2: I did not hear anything about the issue of corruption and governance. A huge chunk of money can easily be eluded along the way. What can we do to address this challenge?
A.2: (Mr. Babalola) We always emphasize the governance structure. The evaluation criteria include transparency and organizational structure. We also do this at the sector level. We are trying as much as we can to improve the situation.
(Mr. Kimura) ADB has zero tolerance on corruption. We look at the overall governance such as structure, procedures, and transparency. After that, we look at the capacity of the team. We try to ensure that no corruption occurs.
Session 7: Innovative Financing Mechanisms for QII

Sanae Sasamori – Senior Infrastructure Finance Specialist, Global Infrastructure Facility (GIF)

This session was moderated by Ms. Sanae Sasamori, Senior Infrastructure Finance Specialist, Global Infrastructure Facility (GIF). Today, 70% of financing comes from the public sector, 20% from the private sector, and 10% from ODAs. Public sector financing undoubtedly plays a central role, but with fiscal constraint for the borrowing countries, how can we bring private financing into infrastructure development to fill the infrastructure gap? This session focused on non-traditional means of financing QII initiatives such as PPP and co-financing.

Ryutaro Nishizaki – Director, Infrastructure and Environment Finance Group, Social Infrastructure Finance Department, Japan Bank for International Cooperation (JBIC)

Mr. Nishizaki talked about JBIC’s QII initiatives by taking a closer look at the financing of railway projects. In 2016, the JBIC act was amended and JBIC’s capabilities for QII were enhanced by the establishment of “Special Operations” that enables JBIC to take further risks inherent in infrastructure projects in emerging economies. Furthermore, they are now able to subscribe project bonds in addition to their conventional form of service of Export Loans which facilitate exports of Japanese goods, and Overseas Investment Loans which enhance investments in overseas projects by Japanese companies. JBIC introduced the case of the Intercity Express Program in the UK where JBIC provided Overseas Investment Loan together with European Investment Bank (EIB) and commercial banks to Hitachi Ltd’s subsidiary who leases rolling stocks and provides 30-year maintenance services under the PPP. Mr. Nishizaki highlighted how private firms are capable of taking strong initiatives when given appropriate support and risk mitigation. He summarized major challenges of financing to urban infrastructure such as the railway sector including (1) variety of transportation modes and target users, (2) substitutability with other means of transportation and difficulty in forecasting ridership volume, and (3) nature of public goods (e.g. large Capital Expenditure (CAPEX) and long investment period), but concluded that private companies are willing to participate in railway projects if they are given support from the government to overcome ridership risks, appropriate risk sharing is arranged, and additional revenue sources are made available to supplement fare box revenue.
**Jason Lu – Acting Head, Global Infrastructure Facility (GIF)**

Mr. Lu introduced GIF as a multi-funded platform to bring host governments, MDBs, and private sectors to work together in mobilizing private sector financing. He mentioned two windows: the upstream window and the downstream window. For the upstream window, the project preparation facility has been active for more than a year now, but two major risks are the lack of bankable pipeline projects and how to make the window attractive for private investors. Currently, GIF is working on partnerships with technical partners in providing the Downstream Financing Window (DFW) facilities, in which the principle is to create a patient risk-taking capital reserve. GIF believes that it can add unique value to this facility through strong synergies with GIF project preparation windows, maximum catalytic and leveraging effects realized from the GIF partnership model, and its independence from WBG/MDB’s balance sheets which will enable more responsiveness to de-risking the needs of private investors. Mr. Lu referred to a recent World Economic Forum (WEF) study which recommends the establishment of a global/regional risk mitigation facility and expressed his belief that GIF can be such a platform to promote risk-taking and coordination. GIF proposes four facilities in the hopes of becoming a creative and innovative instrument for risk mitigation in the future: capital market catalytic fund, regulatory risk cover facility, counterpart risk cover facility, and contingent refinancing facility.

**Hitoshi Miyake – Joint General Manager, Structured Finance Department, Sumitomo Mitsui Banking Corporation (SMBC)**

Mr. Miyake touched upon the two projects to which they provided finance in the urban rail sector. The first project was the Sao Paulo Metro Line 4. A 32-year PPP concession contract was closed, and the civil works for this project were conducted by local contractors whereby SMBC and JBIC provided co-finance. The project had a two-tiered structure where manufacturing of rolling stocks and operation & maintenance were provided by private investors under the PPP with Inter-American Development Bank (IDB)’s A/B loan financing. The second project was the Lima Metro Line 2 which was initially financed with a 6-year revolving construction facility for the payment of construction costs, and these costs were consecutively refinanced by a long-term financing including a project bond and a term loan. SMBC observed from these two cases that urban infrastructure development does not have to be 100% publicly financed but can rely on
commercial finance via Export Credit Agency (ECA)/project financing up to a certain degree. The specific implications he drew from the cases as the drivers of success were that demand risk was not assumed by the private sector, financing was made in US dollars (hard currency), and ECA’s credit enhancement and short term loans such as construction revolving facility were available to mitigate payment risk in long term loans. Given that the role of developing infrastructure in emerging countries has been confined to commercial financiers who are cautious of overseas projects due to geopolitical risks, adverse wind against long-term financing/swap, and increased costs of funding, SMBC pointed out that commercial banks must study further the expansion of investor universe, asset recycling, shorter financing and refinancing, and funding via covered bonds. He also mentioned that MDBs/ECAs’ swap insurance, Principles for Responsible Investment (PRI) or Extended Political Risk Insurance (EPRI)/Extended Partial Risk Guarantee (EPRG) at the time of refinancing, guarantee of refinancing risk, and support on local currency financing would be helpful instruments.

**Q&A Session**

Q.1: (Mr. Kriss) Mr. Miyake, what do you think is the difference between sovereign and non-sovereign financing? Also, what specific measures were taken against currency risks in Peru and Sao Paulo?

A.1: (Mr. Miyake) Commercial banks do not necessarily have strong negotiation power against governments whereas MDBs do. This is one of the biggest differences between sovereign and non-sovereign financing, and we often look for political insurance or something similar to that. Regarding your second point, one measure we took was to look at long-term swap availabilities.

Q.2: A large amount of human resources, experience, and expertise is required to go beyond discussing and actually settle a deal. How do you plan to develop such human resources in the next few years or decades?

A.2: (Mr. Miyake) It is true that we need on-the-job training, and human resource development does take time. To be honest, we do not have a perfect solution either.

(Mr. Nishizaki) We have budget constraints and cannot hire indefinitely. We have a certain level of expertise in the power and water sectors, so we are looking to apply part of the expertise to the growing transport sector. Also, in terms of human resource development, we try to make our staff work with external partners in order to become better able to settle deals.
Session 8: Procurement Frameworks Enabling QII Approaches

Koichi Omori – Senior Communications Officer, World Bank Group

Koichi Omori from the World Bank Group was in charge of this session which discussed how to ensure that the value of QII is properly accounted for, and innovations in life-cycle costing and procurement frameworks.

Christopher Mark Browne – Chief Procurement Officer, World Bank Group

Mr. Browne introduced participants to a procurement system reform that is in progress within the World Bank. The reform started in 2012 under the belief that the development of Quality Infrastructure requires quality institutional arrangements. The need for reform arose given one of the biggest challenges World Bank faces today; good companies are starting to step away from World Bank projects. Historically, many procurements have been based solely on price and quality has been merely a secondary criterion. Furthermore, this type of simplistic procurement system can be found in any country; no tailor-made procurement system exists.

Mr. Browne raised innovative points of the Bank’s new procurement system which he hopes will help attract good contractors again:

- requirements for a Project Procurement Strategy for Development (PPSD)
- enables value for money as a core procurement principle in all procurements
- provides more options for tailored procurement approaches
- permits hands-on expanded implementation as an option for the highest risk operations
- promotes strategic engagements with providers
- enables the use of sustainable procurement criteria in procurement
- improves the approach to resolve procurement-related complaints
- further involves contract management of procurements with high value and high risk

Mr. Browne then listed strategic alignment of objectives, good governance, fit for purpose, and value for money as requirements for a procurement system that would better enable the delivery of Quality Infrastructure. After diving into the details of each requirement listed above, he summarized that the World Bank’s new procurement system would provide more choice and greater flexibility to deliver the desired outcome, focus on value for money, facilitate
increased earlier engagement with private firms, provide hands-on support as needed, and put emphasis on performance monitoring and contract management.

**Manmohan Parkash – Advisor, Operations Services and Financial Management Department | Head, Operations Management Unit, Asian Development Bank (ADB)**

Mr. Parkash explained that ADB is creating a new procurement system aimed to become more simple and succinct. The proposed procurement policy is tiered with core procurement principles at the top. The list continues down to fit for purpose, eligibility, accountability & integrity & conflict of interest, complaints mechanisms, alternative procurement arrangements, e-procurements, and procurement plans. One key aspect of the new procurement system is that value for money should be prioritized by considering life-cycle costs and fit-for-purpose in addition to only initial costs. Mr. Parkash closed his presentation by commenting that, in order to embed quality into procurement, we must include quality elements into the qualification criteria and display them in a clear-cut manner. Then, we must help clients in their application and also put effort into contract management because getting the contract is not the goal. The goal is to implement the project.

**Takao Ikegami – Consultant, World Bank Group**

Mr. Ikegami briefly provided an overview of the World Bank’s QII initiatives in collaboration with Japanese agencies such as JICA, JBIC, and Japan Overseas Infrastructure Investment Corporation for Transport & Urban Development (JOIN), and with MDBs such as ADB and IDB. He reiterated that economic efficiency, safety, disaster resilience, environmental and social sustainability, economic and social contributions to the local community are the key elements of Quality Infrastructure, and further proposed that expansion and acceleration of JICA partnerships, collaboration with ADB, increase in the provision of risk money from agencies like JBIC, and global mainstreaming and standardization of QII are the four pillars supporting QII partnerships. He expressed that the World Bank looks to promote QII initiatives mainly in the urban areas and commented that the proposal is being written up; work is in progress.

**Q&A Session**

**Q.1:** I have been following the new procurement guidelines proposed by the World Bank.
Although it includes good concepts, as a practitioner, I would like to know how you actually rate the bidders.

A.1: (Mr. Browne) We do not wish to create a very rigid guideline that must be followed step by step. However, in order to address the concerns that you have expressed, we are planning to compile case studies of how evaluation takes place for different projects.
Session 9: QII for Disaster Resilience

Naho Shibuya – Disaster Risk Management Specialist, Tokyo Disaster Risk Management Hub, World Bank Group

Ms. Naho Shibuya from the World Bank Group moderated this session on the challenges and opportunities for scaling up resilient infrastructure investment as a core element of QII.

Jolanta Kryspin-Watson – Lead Disaster Risk Management Specialist, World Bank Group

“Urbanization leads to concentration, which increasingly exposes cities to disaster risks.” Ms. Kryspin-Watson presented her views on how resilience should be incorporated into infrastructure development. In the past, rapid and haphazard urbanization and infrastructure investments have led to a concentration of assets and people at risk.

Ms. Kryspin-Watson highlighted that investing in resilience will bring Triple Dividends: (i) saving lives and avoiding losses, (ii) unlocking economic potential, and (iii) generating development co-benefits. Resilient approaches are incorporated across the different stages of the project cycle, including: design, preparation, implementation, and supervision of projects. Engineering designs, procurement, construction, and arrangements of O&M are part of the project but so are capacity and institution building, policy advice, and technical assistance to ensure outcomes and development impact beyond the project. She then emphasized that locational mitigation, structural mitigation, and organizational mitigation are the three steps to building resilient infrastructure.

As part of informed decision-making, and in light of changing physical and natural environment, it is important to recognize that it is impossible to entirely eliminate the risk of flooding. Cities are complex systems – which means that residual risk, the possibility of failure, inability to cope with a shock, the uncertainty related to the shock, all these factors need to be part of our decisions over investments in the cities. Rather than trying to focus on optimal solutions for flood protection, we have to take a risk-based approach and prepare for the unexpected.

Ms. Kryspin-Watson introduced the Bank’s DRM initiatives in the East Asia and Pacific region
including building regulation, urban infrastructure such as schools, cultural heritage, and flood controls, transport, and dam safety. Ms. Kryspin-Watson closed her presentation by concluding that: (i) resilience must be incorporated at every stage of the infrastructure project cycle, (ii) risk reduction must be allied in all key types of assets, and (iii) investments in DRM require prioritization.

Cledan Mandri-Perrot – Head, Infrastructure Finance and PPPs, World Bank Group

Mr. Mandri-Perrot presented a framework to aid policymakers in prioritizing infrastructure investments. The Infrastructure Prioritization Framework (IPF) is a multi-criteria decision support tool that synthesizes project-level Financial and Economic Indicators (FEI) and Social and Environmental Indicators (SEI) for a particular sector. The tools display this information, including the public budget constraint, in a simple visual interface to inform infrastructure decision makers and support systematic project selection. There is a gap when it comes to dealing with resilience; thus, we are developing indicators at the project and system levels to give us information about the relative risks and vulnerabilities associated with projects (and/or their impacts on regional resilience) under the support of the Japan – World Bank Program for Mainstreaming DRM in Developing Countries.

Resilience indicators can be included in either the SEI or FEI, including functionality (e.g., improved access to vulnerable populations, improved emergency access), redundancy for major trade routes, sensitivity to hazards, and robustness in terms of design, contingency planning, and disaster response. For future refinements, Mr. Mandri-Perrot mentioned that the following needs to be taken into account: project risk and vulnerability, system resilience, physical versus organizational measures, tradeoffs, urgency, sequence; and private participation.
Yumiko Noda – Partner, Head of Infrastructure and PPP, PwC Advisory LLC | President, Cities Solution Centre, PwC Advisory LLC

Ms. Noda introduced a study on Resilient Infrastructure PPPs jointly implemented by the Global Infrastructure Facility (GIF), Public-Private Infrastructure Advisory Facility (PPIAF), and Japan – World Bank Program for Mainstreaming DRM in Developing Countries. She described a recent trend of PPP schemes in Japan where 87% of PPP projects are based on public-sector payment with a Build-Transfer-Operate (BTO) structure, with concession projects slowly emerging. Ms. Noda then pointed out that natural disaster risks are mainly allocated to the public sector in BTO projects where dialogues between the public and private sectors are used to explore risk sharing with the private to promote effective risk management. On the other hand, concessions promote risk sharing between the public and private, and dialogues are held to explore risk sharing with public to scale up projects and attract more investment.

She then introduced a series of PPP projects in Sendai, Japan which led to an evolution of natural disaster risk allocation in PPP contracts including a sports center affected by Miyagi Earthquake in 2005 as well as an astronomical observatory and a school facility affected by the Great East Japan Earthquake in 2011. An important takeaway from these cases is that the projects quickly recovered from the earthquakes due to the private sector’s quick emergency response underpinned by flexible use of human resources and supply chains, which led to Value-for-Money (VFM) for the public sector.

Lastly, Ms. Noda summarized the following lessons learned from the Japanese cases:

- Private sector participation in disaster risk management promotes disaster preparedness and contributes to early recovery and VFM.
- Appropriate risk allocation between public and private is required to encourage private participation. In particular: (i) Continuous dialogue with private sector leads to better understandings of both parties to design appropriate collaboration; (ii) A backstop from the public sector is necessary considering the required large amount of investment and public nature of infrastructure.

Q&A Session

Q.1: (Moderator) What are the challenges and opportunities for scaling up investment in resilient infrastructure through partnerships with public and private sectors?
A.1: (Mr. Mandri-Perrot) From a policy perspective, there are three important factors that policy makers need to consider: (i) incorporating resilience at the forefront of an infrastructure project cycle (what I want), (ii) how resilient investment aligns with the policy direction (what I need), and (iii) the cost implications of incorporating resilience (what I can). He highlighted the importance of finding a right balance among the three factors as well as the need to take into account the network effects when planning and prioritizing infrastructure.

(Ms. Kryspin-Watson) It is important to consider the impact of natural disasters and resilience investment on the welfare of the poor. For example, Typhoon Haiyan in 2013 posed a limited impact on the Philippines’ national target for economic growth while it left a devastating impact on poverty reduction where two million people in the affected areas fell under the poverty line. She also recommended a different approach to prioritization depending on sectors, natural hazards, and benefits for vulnerable people. For example, retrofitting 3% of most vulnerable schools in Metro Manila are estimated to reduce 18% of children’s disaster mortality. She also highlighted that the governments have been increasingly investing in risk reduction of recurrent natural disasters such as floods while the opportunities for reducing the risk of natural disasters with a longer return period such as earthquake often arise during a post-disaster period.

(Ms. Noda) The private sector prefers the public sector to take as much risk as possible, but allocating some degrees of risk to the private sector in PPPs could bring an opportunity for the private sector to come up with solutions and innovation to address and manage the risk.

Q.2: In practice, it is often a challenge for the public sector without sufficient experience in PPPs to define an appropriate risk allocation mechanism. Do you have any advice to the public sector?

A.2: (Ms. Noda) Continuous dialogues between the public and private sectors are key to identifying and defining the extent of risk allocation to the private sector.

(Mr. Mandri-Perrot) A risk basket created as a result of such dialogues is what makes the infrastructure project bankable or non-bankable. Japan’s practice implies that the government would protect the private sector beyond a certain threshold while expecting the private sector to design and build the infrastructure well and to mobilize more effectively and quicker than the public sector in responding to a natural disaster within the threshold. Therefore, finding a right mechanism and defining a minimum threshold
is a good contractual way in which a risk transfer can occur.

(Ms. Kryspin-Watson) A right balance of risk transfer is key to enabling the government to use limited public funds to support the vulnerable people who cannot afford insurance and other means for livelihood recovery in the aftermath of a disaster.
Session 10: Working Across Political and Inter-Jurisdictional Boundaries to Realize QII

Sumila Gulyani – Global Lead, Urban Strategy and Analytics, World Bank Group

Ms. Sumila Gulyani from the World Bank Group led discussions on inter-jurisdictional policy, governance, management, and other challenges that need to be overcome to implement, operate, and maintain Quality Infrastructure.

Mats Andersson – Consultant, World Bank Group

Mr. Andersson opened his presentation with a very impactful diagram showing the four types of urban structures: monocentric, polycentric, sprawl, and multipolar. He then moved on to the topic of QII implementation at the metropolitan scale and claimed that collaborative approaches are central to a successful implementation. Specifically, he pointed out the need to prepare opportunities for stakeholders to share knowledge, to coordinate parallel projects, to combine funding and human resources to form a joint team, and to create a joint metropolitan authority that can work together. Having laid out the requirements, he next explained that there is no “one size fits all” solution to a metropolitan governance structure for QII implementation. He proposed five governance models: inter-municipal forum, metropolitan authority, separate metropolitan-level local governments, consolidated local government, and provincial/regional/state government managing some services. His argument was that each city and each metropolitan area must choose the governance model that best suits their circumstances. In the following slides, Mr. Andersson introduced examples of Metro Vancouver and Seoul Metropolitan Government to illustrate the government arrangements necessary for effective operations and management. Here, Mr. Andersson claimed that the key points are role division between the metropolitan level and the local level, the existence of a metropolitan authority capable of assigning responsibilities to different agencies, private sector engagement with flexibility regarding contract types, and a transparent, equitable, and predictable financing system.
After categorizing governance-related challenges into horizontal coordination, vertical coordination, and public-private coordination, Ms. Ishigaki provided an overview of MLIT’s governance structure for infrastructure and spatial development and how it addresses the three challenges above, particularly the first two challenges.

The National Spatial Planning Act (2005) is core to infrastructure and spatial development in Japan. It is a cross-ministerial, comprehensive plan covering a wide range of areas such as land resources, sea areas, disasters, location of industries, and environment. Under the national spatial plan, regional spatial plans are made for each of the eight regions in Japan in order to better include local stakeholders and their opinions. These regional plans are created and submitted to MLIT by Regional Plan Councils which consist not only of the mayors of member prefectures but also mayors of adjacent prefectures, chiefs of economic and industrial groups, and heads of local offices of the government. Since spatial plans are inevitably broad and lack specifics, many detailed plans focusing on individual issues are made under the National Spatial Plan. Here, Ms. Ishigaki emphasized that consistency is of utmost importance, and in Japan, Article 6 of Priority Plan for Infrastructure Development Act legally requires individual plans to be aligned with the National Spatial Plan. She also mentioned that this Priority Plan for Infrastructure Development contributed to unifying the conventionally segregated plans in each of the different infrastructure categories such as roads, airports, ports, sewage, and flood management, thus allowing for enhanced horizontal coordination.

In the second part of her presentation, Ms. Ishigaki showed TOD initiatives as an example of cross-sectoral coordination in Japan. She explained how intensive urbanization in the past backed by the post-war rapid economic and population growth has resulted in a monocentric metropolitan Tokyo and how the government has been working with many agencies such as Tokyo Metropolitan Government (TMG) to change the over-congested monocentric structure into a transit-oriented multipolar structure. After showing examples of TOD projects, Ms. Ishigaki summarized the lessons and key points for consideration: infrastructure planning and investment should be embedded in economic and spatial planning, coordination requires political and administrative resources such as time and staff, and continuous capacity building is necessary for legal, institutional, and analytical capacity.
Henry Maina Kamau – Director, Metropolitan Development, Ministry of Transport, Infrastructure, Housing and Urban Development, Kenya

Mr. Kamau briefed participants on the history of the Kenyan governance. The current governance structure with two levels of government came into being in 2013. In this structure, the national government and the 47 county governments are distinct but interdependent with each other, and the national revenue is shared at a minimum ratio of 85:15 (national:county). In order to enhance inter-jurisdictional coordination, the law provides for a mechanism for resolution of intergovernmental matters. The structure includes the Council of Governors, the Summit comprising the President and the 47 governors, and the Intergovernmental Relations Technical Committee. Mr. Kamau then explained that Kenya is currently working on the Kenya Vision 2030, which advocates for the creation of six metropolitan regions and lays out the spatial planning concept for Nairobi Metropolitan Area. He ended his presentation by introducing current projects in partnership with the World Bank, JICA, and AfDB and commenting that the improvement of commuter railway stations and the improvement and maintenance of county roads are the high-priority issues in Kenya.

Q&A Session

Q.1: (Mr. Muwonge, WB) How has Japan been able to put together horizontal coordination? Is it thanks to the engineers? The politicians? This issue of bringing together different infrastructure sectors to work together is a big challenge for many of our clients.

A.1: (Ms. Ishigaki) In the past, government agencies working on each infrastructure sector had very strong political power. However, the challenge of coordination came up, and the Japanese government changed the organizational structure. This change made people understand that coordination was a priority issue.

Q.2: (Moderator) Ms. Ishigaki, how should we work on the inter-municipal coordination?

A.2: (Ms. Ishigaki) Our method is to start with the mutually beneficial agendas such as disaster risk management or tourism.

Q.3: (Moderator) Mr. Kamau, one big problem for citizen engagement is the “what’s in it for me?” problem. What kind of deals allow for stakeholders from different groups to collaborate?

A.3: (Mr. Kamau) We prepare a place where people, even individuals, can bring their
complaints. We put effort into listening to what people have to say.

Q.4: (Moderator) Mr. Andersson, do you have any project experience with a “not-in-my-backyard syndrome?”
A.4: (Mr. Andersson) My advice is to start small and convince others by showing success. You do not necessarily need everyone. Get the essential actors, and once you show success, others will follow. Also, governments should not be afraid of compensating municipalities in cases where there is an obvious loser.

Q.5: Implementation is the key problem in Turkey. What is the achievement rate for the National Spatial Plan in Japan?
A.5: (Ms. Ishigaki) The National Spatial Plan is a principle and no definitive monitoring criteria exist. However, we do monitor social impacts such as decreases in traffic accidents. We measure the actual social impacts instead of monitoring and evaluating the projects or plans.
Session 11: Winning Constituent Buy-in, Ensuring Inclusion through QII

Carmen Nonay — Practice Manager, World Bank Group

Ms. Carmen Nonay from the World Bank Group guided this session on how to ensure QII benefits to all of the society and to address inclusion and last mile challenges with practical strategies that incorporate private sector engagement.

Catherine C. O’Farrell — Lead Infrastructure Specialist, World Bank Group

Ms. O’Farrell represented the Global Partnership on Output-Based AID (GPOBA) and introduced their activities in the world. She started with a strong statement that market led growth is not equivalent to sustainable development. She voiced GPOBA’s concern that large infrastructure development projects often fail to provide services to the poorest who are most in need. GPOBA addresses the issue of how to ensure that QII remains efficient yet benefits more people. “Medellín provides a great example of a socially inclusive infrastructure and sends out the message that we must understand the actual infrastructure gaps in order to create true value for the money invested,” Ms. O’Farrell went on to showcase actual achievements to illustrate what GPOBA is working for. In Kenya, small subsidies unlocked new markets and commercial finance for generating and distributing electricity to dwellers of informal settlements that used to not have access to electricity. Given the success of the project, the Kenyan government initiated a national OBA program to reach the lowest income communities in the country. Ms. O’Farrell showed another example of power provision in Bangladesh and an example of clean water provision in Manila. She concluded her presentation by claiming that OBA pays for outputs instead of inputs and it contributes to QII initiatives by addressing the affordability barrier, stimulating market response, and adding equity and debt into projects, among other benefits.
Ms. Kang shared key findings from a field survey in Can Tho City, Vietnam and provided a fresh perspective of looking at universally accessible design at the initial stages of an infrastructure project. The introduced field survey was for the Vietnam Scaling Up Urban Upgrading Project (SUUP) which is a World Bank lending operation, aiming to improve infrastructure accessibility in priority city areas and to improve urban planning in the participating cities. The requests from the seven participating cities to the World Bank’s Task Team were to set up an accessible environment, achieve citizen participation, and revitalize their cities following Hanoi and Ho Chi Minh. However, Ms. Kang explained the current situation where people with disabilities cannot utilize welfare equipment due to the lack of required infrastructure and local consultants are not familiar with the institutional frameworks and technical requirements of universally accessible design and need support for capacity building. The key problems identified in the field survey were:

- Ramps are attached to sidewalks afterwards and the gradient is too steep for wheel-chair users to climb by themselves.
- Root-rising of road-side trees has broken the pavement on the sidewalks, thus making it difficult to walk or move on the sidewalk. Similarly, on-street shops blocked the sidewalk entirely, blocking the pathway and making the sidewalk dysfunctional as a pedestrian passage.
- Gateways in public facilities often have steep gradients and metallic obstacles such as parking ban signs, and they occasionally have no connection with the pedestrian crossing or sidewalk.
- Braille was misused in a park; it was not implemented as a guide-line for blind people but more as a decoration. The braille path led right into the car traffic.

Ms. Kang showed Mirairo’s proposals for the issues raised above such as embedding ramps into the design of the sidewalk in order to make them less steep, ensuring that there is at least 1-1.5m of effective soil under the sidewalk to prevent root-rising, and educating both the developers and citizens on the correct usage of braille and their benefits. Given the results of the field survey, she derived implications that cities should prioritize development targets, improve construction skills, and gain correct understanding of effective laws and regulations. She also commented that Mirairo will try to better understand the life culture in Vietnam and
incorporate natural disaster aspects in their future work. The presentation was well received by the audience as an introduction to the concept of universally accessible design and how it can also be incorporated to projects in developing countries.

Q&A Session

Q.1: (Moderator) Mr. Fujita, what do you think is the biggest challenge for universally accessible design in developing countries?
A.1: (Mr. Fujita) I would like to raise the lack of knowledge on the part of local planners and construction companies. For example, they do not know what gradient the ramps should be for a wheel-chair user to be able to climb. Education is necessary to foster understanding for universal design and accessibility.

Q.2: (Moderator) Ms. O’Farrell, what can GPOBA do to bring Quality Infrastructure to a higher level?
A.2: (Ms. O’Farrell) The two examples of Kenya and Bangladesh both succeeded in entering the national government’s list of priorities and also succeeded in building local capacity. In Kenya, the utility was able to expand into a very new market, which was very profitable. The government was surprised, and the World Bank team was also very happy because they were originally successful in reaching middle-income group, but now they have succeeded in reaching low-income group. Another important element is that these cases developed a new way of financing through serving the unexpected low-income market.

Q.3: Since it is a corporation, I think one of the biggest strengths of Mirairo is the ability to speedily adjust to social trends. How do you think you can utilize your strength in mainstreaming the concept of universally accessible design? Also, why did you choose Vietnam as your first overseas site?
A.3: (Ms. Kang) Aging is a huge social trend in Japan today. Consequently, elderly people will become a bigger target for private firms such as retailers, hotels, and restaurants, and they are sure to become more eager to incorporate universal design. We hope to address this need and convey information to these firms on how to achieve universal design. (Mr. Fujita) To answer your second question, city officials from Vietnam told us that there are disabled people in the city but they cannot live comfortably. They wanted to do something, but they did not know how to help such people. We wanted to cooperate in
making an environment where disabled people can go outside and work just like any other person. Also, we are hoping that our activities will make the issue of disabled people even more visible so that the whole society can work together to improve the situation.
Session 12: Closing Session

Kazuko Ishigaki – Director in charge of International Planning for construction Industry, Ministry of Land, Infrastructure, Transport and Tourism

After congratulating the success of the Second International Conference on QII and thanking the audience for their active participation, Ms. Ishigaki mentioned that more active participation from private firms may be one possible improvement for the following events. She also commented that the Japanese government is very eager to provide support and contribute to the infrastructure development in developing countries who are suffering from aging and deterioration of infrastructure. With these final remarks, Ms. Ishigaki officially closed the Second International Conference on QII.
Appendix 1: Conference Agenda

Jointly organized by the Government of Japan (Ministry of Finance/Ministry of Land, Infrastructure, Transport and Tourism) and the World Bank Group

QII CONFERENCE DAY 1
February 2, Thursday

<table>
<thead>
<tr>
<th>Day 1 Session 1</th>
<th>Opening</th>
<th>Welcome Remarks</th>
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<td>Yasusuke Tsukagoshi, Special Representative, Japan, World Bank Group</td>
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<td>Key Objective Setting and Building from First Conference</td>
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<td></td>
<td>Lessons learned following the First QII Conference and key objective setting for the Second Conference.</td>
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<td>Moderator: Daniel Levine, Senior Operations Officer, World Bank Group</td>
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<td>Yoshiki Takeuchi, Director-General, International Bureau, Ministry of Finance</td>
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<td>Ede Jorge Ijjasz-Vasquez, Senior Director, World Bank Group</td>
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<tr>
<th>Day 1 Session 2</th>
<th>Panel Discussion</th>
<th>Special Session 1: Territorial Development as a New Dimension for Infrastructure Development</th>
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<td>Moderator: Sumila Gulyani, Global Lead, Urban Strategy and Analytics, World Bank Group</td>
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<td></td>
<td></td>
<td>Identifying opportunities and challenges for strategic infrastructure investment at the national level.</td>
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<td>Ede Jorge Ijjasz-Vasquez, Senior Director, World Bank Group</td>
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<td>Takeshi Mugishima, Assistant Vice-Minister, Ministry of Land, Infrastructure, Transport and Tourism</td>
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<td>Hiroshi Kato, Senior Vice President, Japan International Cooperation Agency</td>
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<tr>
<th>Day 1 Session 3</th>
<th>Panel Discussion</th>
<th>Special Session 2: Operation and Maintenance as Key Aspects for QII</th>
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<td></td>
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<td>Moderator: Yuko Okazawa, Operations Officer, World Bank Group</td>
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<td>Evidence-based discussion on the importance of operation and maintenance in QII projects. Introduction of cross-ministerial efforts in Japan on infrastructure maintenance, renovation and management.</td>
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<td>Professor Koichi Maekawa, Lead Researcher, Infrastructure Asset Management under the Cross-ministerial Strategic Innovation Promotion Program (SIP) on Infrastructure Maintenance, Renovation and Management, Cabinet Office cum Professor of Graduate School of Engineering, University of Tokyo</td>
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<td>Takehiko Mori, Counsellor for Global Strategies, Minister’s Secretariat, Ministry of Land, Infrastructure, Transport and Tourism</td>
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Coffee Break
15:45-16:00
(15 minutes)

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<tr>
<th>Day 1 Session 4</th>
<th>Quality Infrastructure Initiatives for Poverty Reduction and Inclusive Development</th>
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<td>Quality Infrastructure Initiatives for Poverty Reduction and Inclusive Development</td>
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<tr>
<td>Panel Discussion</td>
<td>Moderator: Phil Karp, Lead Knowledge Management Specialist, World Bank Group</td>
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<tr>
<td>16:00-17:30 (90 minutes)</td>
<td>Highlighting the challenges/barriers and opportunities for the implementations of Quality Infrastructure projects for sustainable development. Addressing issues related to political economy and capacity constraints of implementing, operating, and maintaining quality infrastructure.</td>
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<tr>
<td></td>
<td>• Sumila Gulyani, Global Lead, Urban Strategy and Analytics, World Bank Group</td>
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<td>• Carlos Alberto Álvarez Barrera, Deputy Director, Medellin International Cooperation Agency</td>
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<td>• Paul Kriss, Global Lead, City Infrastructure and Services, World Bank Group</td>
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<td>• Barjor Mehta, Global Lead, City Management, World Bank Group</td>
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<tr>
<th>Closing Session</th>
<th>Daniel Levine, Senior Operations Officer, World Bank Group</th>
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<tr>
<td>17:30-17:40 (5 minutes)</td>
<td>Closing Session</td>
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<tr>
<th>Reception</th>
<th>Cocktail Hour</th>
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<td>17:40-19:00 (80 minutes)</td>
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### QII CONFERENCE DAY 2
February 3, Friday

<table>
<thead>
<tr>
<th>Day 2</th>
<th>Recapping Day 1 Discussions</th>
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<tbody>
<tr>
<td>Session 5</td>
<td>Ede Jorge Ijjasz-Vasquez, Senior Director, World Bank Group</td>
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<tr>
<th>Session 6</th>
<th>QII Initiatives of Development Partners</th>
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<tbody>
<tr>
<td>Panel Discussion</td>
<td>Moderator: Carmen Nonay, Practice Manager, World Bank Group</td>
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<tr>
<td>9:15-10:15 (60 minutes)</td>
<td>Leveraging the power of partnerships to scale QII globally (WB, JICA, ADB, AfDB).</td>
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<td></td>
<td>• Naoki Yamashita, Deputy Director, Multilateral Development Banks Division, International Bureau, Ministry of Finance</td>
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<td>• Hideya Kobayashi, Senior Director, Operations Strategy Department, Japan International Cooperation Agency</td>
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<td>• Tomoyuki Kimura, Deputy Director General, Strategy, Policy and Review Department, Asian Development Bank</td>
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<td></td>
<td>• Abayomi Babalola, Division Manager (PICU1), Transport and ICT Department; VP Complex of Private Sector, Infrastructure and Industrialization, African Development Bank (VC connection)</td>
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<tr>
<th>Session 7</th>
<th>Innovative Financing Mechanisms for QII</th>
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<tr>
<td>Moderator: Sanae Sasamori, Senior Infrastructure Finance Specialist, Global</td>
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<tr>
<td>Panel Discussion</td>
<td>Infrastructure Facility</td>
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<tr>
<td>10:15-11:15 (60 minutes)</td>
<td><em>Addressing the challenges of financing to urban infrastructure development through QII. The panel will introduce case studies of financing urban infrastructure projects through public financing, PPP, co-financing and other mechanisms, then discuss the key issues.</em></td>
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<td></td>
<td>- Ryutaro Nishizaki, Director, Infrastructure and Environment Finance Group, Social Infrastructure Finance Department, Japan Bank for International Cooperation</td>
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<td>- Jason Lu, Acting Head, Global Infrastructure Facility</td>
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<td>- Hitoshi Miyake, Joint General Manager, Structured Finance Department, Sumitomo Mitsui Banking Corporation</td>
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<tr>
<td>Coffee Break</td>
<td>11:15-11:30 (15 minutes)</td>
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<th>Session 8</th>
<th>Procurement Frameworks enabling QII Approaches</th>
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<tr>
<td>Panel</td>
<td>Moderator: Koichi Omori, Senior Communications Officer, World Bank Group</td>
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<td>Discussion 11:30-12:30 (60 minutes)</td>
<td><em>Ensuring that the value of QII is properly accounted for and consider for large civil works projects through innovations in life cycle costing and procurement frameworks.</em></td>
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<td>- Christopher Mark Browne, Chief Procurement Officer, World Bank Group</td>
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<td>- Manmohan Parkash, Advisor, Operations Services and Financial Management Department and Head, Operations Management Unit, Asian Development Bank (VC connection)</td>
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<td>- Takao Ikegami, Consultant, World Bank Group</td>
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<td>Lunch Break</td>
<td>12:30-13:30 (60 minutes)</td>
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<th>Session 9</th>
<th>QII for Disaster Resilience</th>
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<tr>
<td>Panel</td>
<td>Moderator: Naho Shibuya, Disaster Risk Management Specialist, Tokyo Disaster Risk Management Hub, World Bank Group</td>
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<td>Discussion 13:30-14:30 (60 minutes)</td>
<td><em>Addressing challenges and identifying opportunities for scaling up resilient infrastructure investment as a core element of QII.</em></td>
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<td>- Jolanta Kryspin-Watson, Lead Disaster Risk Management Specialist, World Bank Group</td>
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<td>- Cledan Mandri-Perrot, Head, Infrastructure Finance and PPP, World Bank Group</td>
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<td>- Yumiko Noda, Partner, Head of Infrastructure and PPP, President - Cities Solution Centre, PwC Advisory LLC</td>
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<td>Coffee Break</td>
<td>14:30-14:45 (15 minutes)</td>
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<th>Session 10</th>
<th>Working Across Political and Interjurisdictional Boundaries to Realize QII</th>
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<tr>
<td>Moderator</td>
<td>Sumila Gulyani, Global Lead, Urban Strategy and Analytics, World Bank Group</td>
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<td>Panel</td>
<td>Bank Group</td>
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<tr>
<td>Discussion</td>
<td><em>Overcoming inter-jurisdiction policy, governance, management and other challenges necessary to implement, operate, and maintain QII.</em></td>
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| 14:45-16:15 (90 minutes) | - Mats Andersson, Consultant, World Bank Group  
- Kazuko Ishigaki, Director in charge of International Planning for Construction Industry, Ministry of Land, Infrastructure, Transport and Tourism  
- Henry Maina Kamau, Director, Metropolitan Development, Ministry of Transport, Infrastructure, Housing and Urban Development, Kenya |

| Session 11 | Winning Constituent Buy-in, Ensuring Inclusion through QII |
| Panel | Moderator: Carmen Nonay, Practice Manager, World Bank Group |
| Discussion | *Ensuring QII benefits of all society, addressing inclusion and last mile challenges with practical private sector engaged strategies.* |
| 16:15-17:15 (60 minutes) | - Catherine C. O’Farrell, Lead Infrastructure Specialist, World Bank Group (VC connection)  
- Takahisa Fujita and Hyonsun Kang, Design Consultant, Mirairo Inc. |

| Session 12 | Closing Session |
| Closing Session | Kazuko Ishigaki, Director in charge of International Planning for Construction Industry, Ministry of Land, Infrastructure, Transport and Tourism |
| 17:15-17:30 (15 minutes) |  |
Appendix 2: Bios of Panelists and Moderators

Ede Jorge Ijjasz-Vasquez, Senior Director, World Bank Group

Ede Ijjasz-Vasquez is the Senior Director for the World Bank Group’s Social, Urban, Rural and Resilience Global Practice.

In this position, Mr. Ijjasz-Vasquez leads a team of over 600 technical experts deployed across the world, leveraging global knowledge and collaborating with partners to help tackle the world’s most complex development challenges in: social inclusion and sustainability; mainstreaming resilience in all dimensions of development; territorial and rural development; and urban planning, services and institutions.

Before this, he was Director for Sustainable Development of the Latin America and Caribbean Region since November 2011, covering infrastructure, environment and climate change, social development, agriculture and rural development, disaster risk management, and urban development with an active portfolio of about $17 billion.

From 2007 to 2011, he was based in Beijing, where he managed the Sustainable Development Unit for China and Mongolia. Earlier in his career, he managed the global trust-funded programs ESMAP and WSP in energy and water and sanitation, respectively.

Mr. Ijjasz has a Ph.D. and a M.Sc. from the Massachusetts Institute of Technology (MIT) in civil and environmental engineering, with specialization in hydrology and water resources. He has been a lecturer at the Environmental Science and Policy Program at Johns Hopkins University, and at Tsinghua University. He is a Colombian and Hungarian national.

Yasusuke Tsukagoshi, Special Representative, Japan, World Bank Group

Yasusuke Tsukagoshi became Special Representative, Japan on August 1, 2013. Special Representative leads the institutional relationship with the Japanese Government, partners, and stakeholders and oversees the World Bank Tokyo office and has responsibility for coordinating and managing outreach and communications programs in Japan.

Mr. Tsukagoshi, a Japanese national, has had a long career in MoF. Most recently, he served as Director General of Tokyo Customs following senior positions in the Ministry’s Customs and Tariff Bureau.

Prior to the Customs’ positions, Mr. Tsukagoshi had had over 17 years of experience in international finance and development. From 2008 to 2011 Mr. Tsukagoshi was Executive Director at the Inter-
American Development Bank, representing Croatia, Japan, Korea, Portugal, Slovenia, and the United Kingdom; and from 1988 to 1991 he served as Executive Director at the African Development Bank, representing Argentina, Austria, Brazil, Japan, and Saudi Arabia. He also worked on Japan-US finance and trade relations as Chief Representative of the Japan Center for International Finance in Washington, DC from 1994 to 1998. In addition, he represented the Government of Japan at a number of meetings of IMF (FSAP), OECD (Committee on Financial Markets), Financial Stability Forum, WTO (trade negotiations on financial services), and APEC (co-chairperson of WG on Electronic Financial Transactions System).

Yoshiki Takeuchi, Director-General, International Bureau, Ministry of Finance

Yoshiki Takeuchi is the Director-General of the International Bureau at the Ministry of Finance. After graduating from the University of Tokyo he joined the Ministry of Finance (MOF) in 1983. Throughout his career, Mr. Takeuchi served various positions including Deputy Director of the Coordination Unit, Securities Bureau (1990-1992), Secretary at the Embassy of Japan in the United States of America (1992-1996), Deputy Budget Examiner of the Budget Bureau (1996-2001), Secretary to the Minister of Finance (2001-2003), Director of the Policy Coordination Office, Policy Planning and Research Division, Minister’s Secretariat (2003-2004), Director of the International Tax Policy Division, Tax Bureau (2004-2006), Budget Examiner of the Budget Bureau (2006-2007), Director of the Foreign Exchange Markets Division, International Bureau (2007-2009), Visiting Fellow of the Royal Institute of International Affairs (Chatham House) in the United Kingdom (2009-2012), Deputy Director General of the International Bureau (2012-2014), Senior Deputy Director General of the International Bureau (2014-2015), and the Director of the Kinki Local Finance Bureau (2015-2016).
Takeshi Mugishima, Assistant Vice-Minister, Ministry of Land, Infrastructure, Transport and Tourism

Takeshi Mugishima is the Assistant Vice-Minister at the Ministry of Land, Infrastructure, Transport and Tourism (MLIT). After graduating from Tokyo University he joined the Ministry of Construction (MOC) in 1984. Throughout his career, Mr. Mugishima has served various positions including Director-General of the Planning Department at Ibaraki Prefecture (2003-2007), General Manager of the Business Planning Department at the Japan Housing Finance Agency (2009-2012), and Director of the City Bureau at MLIT (2012-2013), and he has been engaged in a wide array of urban development at national and regional levels. He has also been involved with inter-ministerial projects as Deputy Director-General, of the Office for Promotion of Overcoming Population Decline and Vitalizing Local Economy in Japan at the, Cabinet Secretariat (2014-2016).

Hiroshi Kato, Senior Vice President, Japan International Cooperation Agency

Hiroshi Kato is Senior Vice President of the Japan International Cooperation Agency. Since joining JICA in 1978, he has served at various positions, including the General Affairs Department, the Planning Department, and the Southeast Asia Department. He also has an experience working at the Ministry of Foreign Affairs of Japan (in Tokyo and in the Ivory Coast). He graduated from the University of Tokyo in 1978 majoring in Asian History. He later earned his master's degree in Public Administration from the John F. Kennedy School of Government, Harvard University in 1988. He is Visiting Lecturer and Professor at Kobe University (Graduate School of International Studies) since 2003. He has been on the board of directors of the Japan Society for International Development since 2002.
Abayomi Babalola, Division Manager (PICU1), Transport and ICT Department; VP Complex of Private Sector, Infrastructure and Industrialization, African Development Bank (VC connection)

Abayomi Babalola is currently the Manager, Transport Division 2, in the African Development Bank from 1998 to date. He is responsible for the North, East and South African Regions (31 countries- 79 active projects worth more than USD3.3billion); he was Chief Transport Engineer/PPP Expert in the Transport Division 1 covering the West and Central African Regions. He was also a Principal Investment Officer and Principal Portfolio Management Officer in the Private Sector Department of the Bank from 2008 to 2011. He was also a PPP Expert and the Transport Focal Point of the Private Sector Department of the Bank on Port, Highway, Airport, Railway and Mass Transit sub-sectors. He had previously worked as Senior and Principal Transport Engineer in the Public Sector of the Bank. He has over 33 years of academic, professional and managerial experience to his credit in Civil/Transport Engineering and Infrastructure Finance. Before joining the Bank, he had worked as a Senior Lecturer in University of Ilorin, Nigeria; Principal Consulting Engineer in Enplan Group of Engineers and Planners, Lagos; and an Assistant Director (Principal Manager) in Nigerian Ports Authority. He was an author of several publications in some international and local technical journals. He holds a Bachelor degree in Civil Engineering with First Class Honors from Ahmadu Bello University, Zaria, Nigeria in 1979, and a Doctorate degree in Civil/Transport Engineering from the University of Calgary, Alberta, Canada in 1984 and several executive training certificates in Port Management, Project Finance and PPP, Road Sector Reforms and Financing. He received additional Certificate in Infrastructure in a Market Economy-PPP from HARVARD Kennedy School, Cambridge in July 2015. He has a continent-wide exposure in Transport infrastructure development from both public and private sector perspective.
Barjor Mehta, Global Lead, City Management, World Bank Group

Barjor Mehta is the Lead Urban Specialist in the East Asia Urban and Disaster Risk Management team and a Co-Global Lead of the City Management, Governance and Finance Global Solutions Group. Since July 2016, he has been based in the Bank's China Country Office in Beijing. Between 2012 and 2016, Barjor was based in the Bank's India Country Office in New Delhi and between 2009 and 2012 in the Tanzania Country Office in Dar es Salaam working on urban development projects in Tanzania, Uganda and Kenya. Before moving to East Africa, Barjor has worked on several countries in the Middle East and North Africa, Sub-Saharan Africa, East Asia and South Asia. Prior to joining the Bank in 2000, Barjor was Director of the School of Planning, CEPT University in Ahmedabad, India; Senior Planner in Bhutan; Program Manager of a consulting firm working on World Bank supported urban projects in Mumbai; Research Associate at the Human Settlements Department of the Asian Institute of Technology, Bangkok and in 1981 started his career working on UN-HABITAT's urban planning initiative in Sri Lanka. Barjor is an architect and urban planner.

Carlos Alberto Álvarez Barrera, Deputy Director, Medellin International Cooperation Agency

Carlos Alvarez is the Deputy Director of Local and International Relations of the Agency for Cooperation and Investment of Medellin and the Metropolitan Area. He is a Mechanical Engineer from Universidad Pontificia Bolivariana and Management Specialist. In the private sector he has more than 10 years of experience in international negotiation of raw materials and finished goods for different productive sectors.
Carmen Nonay, Practice Manager, Global Partnerships & Resource Mobilization, World Bank Group

Carmen Nonay is the first Practice Manager for the Partnerships and Resource Mobilization unit, created within GPSURR in 2015. Carmen leads a global team whose task is to develop for GPSURR new external financial and knowledge partnerships – such as the TDLC -- while aligning these relationships with the corporate, regional and country strategies of the World Bank Group (WBG). Carmen joined the WBG in 1997, has worked at the World Bank, IFC and MIGA, and is familiar with a whole range of WBG instruments for public and private sector in infrastructure, financial and social sectors, in Africa, East Asia, Eastern Europe, Central Asia, and Latin America. At the World Bank, Carmen was the Manager for the Global Partnership on Output-Based Aid (GPOBA) where she designed the strategy for this program’s transformation from a grant-providing, trust-funded partnership, into a Center of Expertise. At IFC, she led complex financial sector projects in Latin America. While at MIGA, she held several positions at headquarters as Senior Underwriter for a total of US$1 billion of guarantees in energy, finance, oil, gas and mining and in the field as the first MIGA representative in Europe. Prior to joining the WBG, Carmen worked in project finance in Nittetsu Shoji, the trading company of Nippon Steel, in both Japan and the US.

Catherine C. O’Farrell, Lead Infrastructure Specialist, World Bank Group

Catherine Commander O’Farrell has over 25 years’ experience in international finance, development and public private partnerships, including over 18 years’ experience in the World Bank Group, with 16 years at the International Finance Corporation and over 2 years at the World Bank’s Global Partnership on Output-Based Aid (GPOBA). Catherine joined GPOBA in June 2014 driven by the opportunity to bring further innovation to development work using Output Based Aid and Results Based Finance and approaches, and was named Head of GPOBA in May 2015. Prior to joining GPOBA, Catherine specialized in Public Private Partnership (PPP) advisory at the IFC, where she worked on and led pioneering PPP projects across sectors for improved infrastructure and basic services in Africa, South Asia and Eastern Europe. This project work has been recognized through internal and external awards, citations and case studies including the first World Bank Award for Excellence, PWC’s annual Top 100 Global Solutions, and at Harvard’s Kennedy School and Business School. Her professional experience outside the World Bank Group includes work in international business strategy consultancy and as commercial director for a startup biotech
Christopher Mark Browne, Chief Procurement Officer, World Bank Group

Christopher M. Browne is the Chief Procurement Officer at the World Bank, where he leads procurement covering more than $42 billion in 172 countries, and an ambitious program to reform the Bank's procurement policy and procedures. Before joining the World Bank in 2012, he was Director of the Commercial Solutions Branch in the Ministry of Economic Development of New Zealand, delivering a reform that produced $360 million in true cost out savings to date and has transformed the reputation of the function, built capability and is readying for expansion. As Emergency Procurement Manager, he led New Zealand's procurement response to the Christchurch Earthquake, developing and implementing a $3 billion emergency construction and repair project that was tendered and negotiated in less than 8 days. He was Chief Advisor to the Ministry's procurement reform from 2009 to 2011 and Procurement Strategy Manager in the United Kingdom's Environment Agency from 2000 to 2008. Chris Browne is acknowledged as an international expert in sustainable procurement and was Advisor to the United Nations Marrakesh Task Force on Sustainable Public Procurement from 2006 to 2011. Recognized as Leader in Procurement, Chris Browne was named Procurement Professional of the Year 2011/12 by the Chartered Institute of Purchasing and Supply Australasia (CIPSA). The New Zealand Government Procurement Reform Programme, led by him, won three CIPSA awards in 2010.
Cledan Mandri-Perrot, Head, Infrastructure Finance and PPP, World Bank

Cledan Mandri-Perrott is the Head of Infrastructure Finance and PPP, Singapore. He has been involved over the past 20 years in numerous infrastructure projects and has particularly experience in developing and implementing project finance transactions. Cledan combines an engineering, financial and legal background with sound commercial and legal expertise. Prior to joining the World Bank, he acted as transaction adviser to a number of infrastructure projects advising both Governments and Private clients. He has strong regulatory background and has designed and implemented regulatory policy frameworks. He has practical operational experience having managed a utility in Trinidad and Tobago. Furthermore, he has assisted a number of utilities in evaluating the potential benefits of privatization. He has gained a reputation as a pragmatic problem solver helping determine regulatory disputes and PPP contracts in distress through the development of innovative dispute resolution and mediation techniques between regulators and operators. He has authored operating and service agreements for the provision of basic infrastructure services. He has written extensively on issues of PPP and infrastructure and is a regular presenter and trainer on PPP related topics. A graduate in Civil Engineering, he also holds an MSc in Finance, an LLM in commercial and transaction law from the University of Dundee, and a PhD in Project Finance from the University of Groningen.

Daniel Levine, Senior Officer, Tokyo Development Learning Center (TDLC), World Bank Group

Daniel Levine is the Senior Operations Officer / Team Lead of the Tokyo Development Learning Center program within the Social, Urban, Rural and Resilience Global Practice of the World Bank Group. In his position he manages the Tokyo based operations and staff of the program. He has over 12 years of experience with the World Bank and International Finance Corporation covering finance and private sector development, knowledge and portfolio management, jobs and growth, and most recently infrastructure and urban development. As a Wolcott Fellow, Dan obtained a MBA from the George Washington University and additionally holds BS in Political Science from Arizona State University.
Henry Maina Kamau, Director, Metropolitan Development, Ministry of Transport, Infrastructure, Housing and Urban Development, Kenya

Henry Maina Kamau is a Civil Engineer with a post graduate diploma in engineering management. He has worked with the Government of Kenya related parastatals and development partners. He also has worked in transport, water housing urban and environment sectors in various capacities.

Hitoshi Miyake, Joint General Manager, Structured Finance Department, Sumitomo Mitsui Banking Corporation

Hitoshi Miyake has been recently promoted to Joint General Manager of Project & Export Finance Department ("PEFD") at Head Office Tokyo. SFD is responsible for supporting mainly Japanese companies globally in relation to PF and ECA finance. Prior to May 2014, he was Joint General Manager and Head of Energy / Power PF in SMBC Europe, Structured Finance Department covering Europe, Middle East and Africa. November 2005, he moved from Tokyo to London to newly establish a team of Advisory & ECA finance. He successfully expanded the business of the group in both financial advisory and ECA business. Initially started from Japanese ECAs, then entered into Korean ECAs and European ECA financing, which was remarkable expansion. Prior to London, he has closed many LBO deals in Japan in relation to global private equity firm such as Ripplewood and Carlyle. He was covering sectors such as Telecommunications and Mining. Before entering into structured finance business, he started his international finance career in Tokyo as a member of Planning Department of International Division at the Head Office. He was in charge of strategic planning of expanding overseas office network of the bank. He obtained his MBA degree at London Business School in 1995 as a sponsored student of the bank.
Hyonsun Kang, Design Consultant, Mirairo Inc.

Hyonsun Kang has been working for Mirairo Inc. as a Director at Fukuoka Branch. She acquired her degree at Ritsumeikan Asia Pacific University. She mainly takes charge of marketing, sales and directing in the range of Kyushu, Japan. She is currently involved in research regarding overseas Universal Design toward 2020.

Jason Lu, Acting Head, Global Infrastructure Facility, World Bank Group

Jason Z. Lu joins the GIF as Lead Infrastructure Finance Specialist after ten years of working at the Multilateral Investment Guarantee Agency (MIGA) of The World Bank Group. While at MIGA, Jason worked on a broad range of complex energy and infrastructure projects worldwide, such as Bujagali hydropower in Uganda, KivuWatt methane gas extraction and power generation in Rwanda, Rajamandala hydropower in Indonesia, Adenium solar power in Jordan, Autopistas Del Nordeste toll road in Dominican Republic, and Guayaquil water concession restructuring in Ecuador. He has built expertise in managing and closing complex projects and advising clients on infrastructure financing, risk mitigation and credit enhancement to support their investment and financing needs in emerging markets and developing economies. Jason started his banking career with Bank of America in its Global Project Finance Group in 1996 where he was responsible for transaction structuring and execution. He also worked at ABB Energy Capital with responsibilities for renewable energy financing in the United States and State Street Bank and Trust Company in credit and portfolio management. Jason holds graduate degrees from Yale University (MBA), Central European University (Prague), and China’s Peking University.
Jolanta Kryspin-Watson, Lead Disaster Risk Management Specialist, World Bank

Jolanta Kryspin-Watson is Lead Disaster Risk Management Specialist and Regional DRM Coordinator for East Asia and the Pacific at the World Bank, based in Singapore. She has over 18 years of experience working on advancing disaster risk reduction around the world, including in Turkey, Albania, Croatia, Romania, the Philippines, China, Vietnam, Indonesia, Myanmar, and Algeria. She has led large scale reconstruction and disaster mitigation investment projects, and analytical work and knowledge exchange initiatives in areas of: seismic retrofitting, emergency preparedness, climate adaptation, disaster risk financing and insurance, community-driven DRM, catastrophe risk assessment, flood protection, weather forecasting and early warning, and post-disaster recovery and reconstruction. Jolanta holds Master degrees in Public Administration (MPA) from the University of New York in Albany, and Business Administration (MBA) from University of Warsaw, Poland.

Kazuko Ishigaki, Director in charge of International Planning for Construction Industry, Ministry of Land, Infrastructure, Transport and Tourism

Kazuko Ishigaki is the Director in charge of International Planning for Construction Industry, the Ministry of Land, Infrastructure, Transport and Tourism (MLIT), Government of Japan. She has been engaged with promoting Quality Infrastructure Investment across countries. She served thirteen years at the Japanese Government and engaged in national spatial planning, disaster risk management planning and a wide array of regional development policies. She also has six years of experience as economist in international organizations including the United Nations Office for Disaster Risk Reduction (UNISDR) and the OECD, and drafted several publications including “Regional Development Policies in OECD Countries” (OECD, 2010). She has Master’s degree in Public Policy and Urban Planning at Kennedy School of Government, Harvard University and Master’s degree in Economics at Waseda University, Tokyo, Japan.
Professor Koichi Maekawa, University of Tokyo

Dr. Koichi Maekawa is a Professor of Department of Civil Engineering at The University of Tokyo, Japan. He received his Doctorate degree of Engineering from The University of Tokyo in 1985. His major are structural mechanics and thermo-dynamics of cementitious composites. His recent research interests include multi-scale, multi-chemo-mechanistic modeling of concrete structures, interaction of structures with soil foundation and underground water, and poro-mechanics of coupled cracks and liquefied continuum. In the past few years, he has served as a Chair of Standard Specification for Concrete Structural Design of Japan Society of Civil Engineers (JSCE) and a Chairman of Scientific Committee of Japan Concrete Institute (JCI). He worked as a Director of Center for International Affairs of School of Engineering, Director of Hongo Main Campus Office in International Center of the University of Tokyo. In 2014-16, Prof. Maekawa served as a Vice President of Japan Society of Civil Engineers (JSCE), and since 2015, working as a Chairman of JSCE Concrete Committee.

Koichi Omori, Senior Communications Officer, World Bank Group

Koichi Omori is World Bank Group’s Senior Communications Officer based in Tokyo. Currently he leads the World Bank’s business outreach and advisory programs for Japanese private sector looking into business opportunities in the Bank-financed projects. From 2010 to 2014, he was Special Assistant to the Vice President for South Asia Region, based in Washington, after 10 years based in Tokyo leading the Bank’s civil society outreach programs. Before joining the Bank, he was a chair research associate engaged in research projects on conservation and development of historic cities in Asia at the Ritsumeikan University. He holds MA in International Relations at the Ritsumeikan University, and MA in International Relations at the American University.
Manmohan Parkash, Advisor, Operations Services and Financial Management Department and Head, Operations Management Unit, Asian Development Bank

Manmohan Parkash, in his current role as Advisor, Operations Services and Financial Management Department (OSFMD) and Head, Operations Management Unit (OSOM) leads OSFMD's operations support in procurement reforms, project implementation and portfolio management, including policy advice; project management practices; portfolio management systems, analysis and reporting; capacity building for effective project delivery; updating, clarifying, and maintaining consistency on project administration instructions; and interagency coordination. Prior to his appointment in OSFMD, Mr. Parkash was East Asia Department’s Advisor (June 2010 to October 2012) and led knowledge management and capacity development activities undertaken to support ADB’s knowledge management strategy and delivery in the region. From 2002 to 2010, he worked in Infrastructure and Transport Divisions and helped develop a number of new and innovative initiatives for lending and non-lending opportunities in several developing member countries of Asia Pacific relating to climate change, environmentally sustainable transport, disaster risk management, and regional cooperation. He has over 25 years’ experience of working with infrastructure development in Asia. Mr. Parkash is from India and has a Bachelor’s degree in Engineering and a Postgraduate degree in Management from India. He has also completed executive education courses from Harvard (Kennedy School), Cambridge and Michigan (Ross School of Business).

Mats Andersson, Consultant, World Bank Group

Mats Andersson (Consultant) specializes in urban, metropolitan, and regional development. He was urban management and municipal finance specialist at the World Bank 1994-2007, and their Country Coordinator in China 2000-2003. He has since 2008 worked on the subject of metropolitan governance and finance as consultant in many countries, and has various publications on the subject. Mats is Swedish national; resides in San Francisco; has MBA degrees from Sweden and USA; and is Certified Management Consultant (CMC) by the Canadian Association of Management Consultants (CAMC).

Kinyua Wamugunda, Deputy Director, Operations and Project Management and Implementation Unit, Nairobi County
Kinyua Wamugunda is a Professional Civil Engineer with over 25 year post graduate experience working in mainly urban environment. For the past 4 years I have been involved in project designs and implementation of Nairobi Metropolitan Services Improvement Project (NaMSIP) for The Nairobi City County Government. The project support urban planning, municipal finance, urban and metropolitan infrastructure planning, design and implementation. It is implemented through highly participatory processes to ensure achievement of project objectives.

**Naho Shibuya, Disaster Risk Management Specialist, Tokyo Disaster Risk Management Hub, World Bank Group**

Naho Shibuya, Disaster Risk Management Specialist, World Bank DRM Tokyo Hub, supports bridging global and Japanese knowledge and expertise with the World Bank’s operations to help mainstream DRM in developing countries. Currently implements a knowledge program on Resilient Infrastructure by leveraging her experience in infrastructure development including PPPs in water supply and sanitation, transport, energy, and urban planning. As a Chartered Water and Environmental Manager and a Chartered Environmentalist, Ms. Shibuya provided advisory service to multilateral and bilateral development banks, commercial lenders, investors, civil contractors, and manufacturers in the Asia-Pacific region prior to joining the Bank. Ms. Shibuya holds a graduate degree from the Arizona State University (USA) and a Master’s degree in Sustainability Science from the University of Tokyo.

**Naoki Yamashita, Deputy Director, Multilateral Development Banks Division, International Bureau, MOF**

Mr. Yamashita’s work experience includes two years as a Staff Official in the Financial Bureau, MOF (2009–10), followed by an appointment at the Regional Taxation Bureau, National Tax Agency (2009-10), acting as Section Chief, Agricultural Production Bureau, Ministry of Agriculture, Forestry, and Fisheries (2010–12), and Second Secretary, Embassy of Japan in Thailand (2013-16). Mr. Yamashita is now the Deputy Director, Multilateral Development Banks Division, International Bureau, at MOF. His academic experience includes a Bachelor in Education, Hokkaido University (2005), MPP, Hokkaido University (2007) and MPP, Univer’sity of Southern California (2013).
Paul Kriss, Global Lead, City Infrastructure and Services, World Bank Group

Paul Kriss is the Global Leader for Sustainable Infrastructure and Services at the World Bank Group. Paul provides technical in-depth value that helps cities deal with their infrastructure challenges by successfully integrating the planning, social, technical and financial aspects of urban development. Recent changes such as large migration and extreme weather events require new and innovative solutions in the urban space. Paul has more than 20 years of experience in urban development and infrastructure projects in large, medium and small cities. He has identified, prepared and executed large-scale investment programs for the World Bank targeting urban and rural infrastructure all across the world. Over this time, he has demonstrated that providing attention to details can significantly improve results and deliver services to poor populations.

Phil Karp, Lead Knowledge Management Officer, World Bank Group

Philip Karp is Lead Knowledge Management Officer in the World Bank’s Social, Urban, Rural Resiliency Global Practice where he is responsible for developing and supporting implementation of various components of the Practice’s knowledge, learning and innovation work, including South-South knowledge exchange, Communities of Practice, and knowledge networks and partnerships, along with associated training and capacity building for World Bank staff and clients. He has more than 20 years of experience in the fields of knowledge, learning, and advisory services, with particular emphasis on practitioner-to-practitioner and South South knowledge exchange. He was stationed for 4.5 years in the World Bank’s Office in Beijing where he led the World Bank’s engagement with China on South-South cooperation, most notably with African countries. Mr. Karp holds graduate degrees in economics and public policy from the University of California, Berkeley.
Ryutaro Nishizaki, Director, Infrastructure and Environment Finance Group, Social Infrastructure Finance Department, Japan Bank for International Cooperation

Ryutaro Nishizaki joined the Japan Bank for International Cooperation (formerly the Export-Import Bank of Japan) in April 1998. He currently serves as the Director, Division 1 (Railway) in the Social Infrastructure Finance Department, Infrastructure and Environment Finance Group. Prior to this position he held posts such as the Deputy Director of the Policy and Strategy Coordination Division, Policy and Strategy Office for Financial Operations Corporate Group, Representative for the Representative Office in Dubai, and Deputy Director for Press and External Affairs Division Corporate Planning Department. He holds an MA in International Relations from The University of Warwick, UK and BA in Law from Hitotsubashi University.

Sanae Sasamori, Senior Infrastructure Finance Specialist, Global Infrastructure Facility, World Bank Group

Sanae Sasamori has worked with the Global Infrastructure Facility, the World Bank as Senior Infrastructure Finance Specialist since June 2015 after 10 years working at Mizuho Bank in Tokyo, Singapore and, most recently, London. At Mizuho London, Sanae held the position of Associate Director, EMEA and set up an integrated cross-regional team to promote multi-source ECA/MDB financing for infrastructure. She had been engaged in sourcing, structuring and execution of export finance and project finance for 10 years and closed large and complex projects in the power, waste treatment, energy, water and agriculture sectors in Africa, Central Asia, the Gulf States, South East Asia and Japan. Prior to commercial banking, Sanae worked for the Japan Economic Research Institute for 5 years providing financial and transaction advisory services to the Japanese central government and municipalities in PFI & PPP projects. Sanae holds MBA in Finance from Hitotsubashi University, and MSc in Applied Environmental Economics from University of London, Imperial College.
Hideya Kobayashi, Senior Director, Operations Strategy Department Japan International Cooperation Agency

After his career in a private banking corporation in Japan for ten years, he started his career in JICA in 2000. He successively held the position of Representative of Sri Lanka Office, Director of Grant Aid Project Management Division in HQ and Senior Representative of Afghanistan Office. He has long field experience in conflict affected countries. In addition, he has experience engaged in project formulation of disaster reconstruction projects in Bangladesh and Peru. In Afghanistan, he was handling grant aid and technical cooperation projects in various sectors such as aviation, road, health and education. Currently, he is in charge of dissemination of the Quality Infrastructure Investment concept as a Senior Director of the Operations Strategy Department, JICA HQ.

Sumila Gulyani, Global Lead, Urban Strategy and Analytics, World Bank Group

Sumila Gulyani is currently the Global Lead for Urban Development Strategy and Analytics at the World Bank. From 2012-2014, she served as Manager for Urban Development, Water Supply and Sanitation, and Disaster Risk Management in the Europe and Central Asia Region of the World Bank. The unit’s active portfolio included 38 projects totaling US$4 billion. From 2008-2011, she was based in Kenya as Sector Leader for Sustainable Development for 6 African countries. From 2005-2007, Ms. Gulyani was at Columbia University in New York where she held the position of Assistant Professor and also served as the founding Director of the Infrastructure and Poverty Action Lab (I-PAL). Prior to that, she has held several other positions at the World Bank. Ms. Gulyani received her Ph.D. in Economic Development and Urban Planning from the Massachusetts Institute of Technology, and also holds a graduate degree in architecture. She is the author of the book innovating with Infrastructure and of several articles on urban development, water, electricity, transport, and slums.
Takahisa Fujita, Design Consultant, Mirairo Inc.

Takahisa Fujita has been working for Mirairo Inc. as an Art Director since April 2013. Born in June 1990 in Shizuoka, Japan, he acquired a degree from Shizuoka University of Art and Culture in Accessibility Design and Architecture. He has been in charge of consulting and proposing solutions for facility and mapping design over 4 years. He is currently involved in sign planning in Kobe University, supervising Paralympics Support Center facility, evaluating and supervising Rikuzentakata City, one of the heavily hit areas from the Great East Japan Earthquake.

Takehiko Mori, Counsellor for Global Strategies, Minister’s Secretariat, Ministry of Land, Infrastructure, Transport and Tourism

Takehiko Mori is the Counsellor for Global Strategy of the Minister’s Secretariat at the Ministry of Land, Infrastructure, Transport and Tourism (MLIT). After graduating from Tokyo University he joined the Ministry of Construction (MOC) in 1989. After working at MOC, Cabinet Office and Japanese Embassy in London, in 2004 he became Director for Coordination of International Construction Market at Policy Bureau of MLIT. From 2012 he worked at the Ministry of Internal Affairs and Communication and in July 2014 he returned to MLIT, taking the present post. In the past two years, his team has coordinated and held Public-Private Conferences on high Quality Infrastructure in several countries such as Cote d’Ivoire, Ethiopia, Kenya, Mozambique, Nigeria, Tanzania, Uganda, Zambia, Kazakhstan, Kyrgyz and Uzbekistan. These conference aim at promoting the understanding for Quality Infrastructure and sharing best practices and relative technologies for implementing Quality Infrastructure Investment in the world.
Tomoyuki Kimura, Deputy Director General, Strategy, Policy and Review Department, Asian Development Bank

Tomoyuki Kimura has more than 28 years of work experience, more than 13 years of which have been spent in ADB. Prior to joining the Strategy, Policy and Review Department (SPD), Mr. Kimura was Country Director in Viet Nam Resident Mission (VRM), where he successfully led VRM’s operations and maintained strong results with respect to loan and technical assistance approvals, project implementation, and portfolio management. He also supported the Midterm Review process, particularly in respect to the move to country-focus portfolio management and procurement in large resident missions, and fostered harmonious relationships with the Government and development partners. He joined ADB in March 2000 as Energy Sector Specialist in SAEN and was promoted to Senior Energy Sector Specialist, responsible for country strategy development, loan and technical assistance processing and conducting policy dialogue on a wide range of power sector issues with client governments and agencies. He left ADB in 2004 to re-join JBIC as Country Director for Sri Lanka and Bangladesh where he was responsible for official development assistance operations, country strategies, lending programs, and portfolio management. In 2006, Mr. Kimura returned to ADB as Principal Energy Specialist, SAEN. He subsequently transferred to BPMSD initially as Principal Management Services Specialist and later as Advisor, BPMSD and Head, Unit for Institutional Coordination (UIC), where he provided strong support in the development of the three-year workforce plan and reform of relevant HR policies. Before joining ADB, Mr. Kimura was an Associate and subsequently an Assistant Vice President in The Fuji Bank, Limited, Japan. He then worked with the Japan Bank for International Cooperation (JBIC) as Deputy Director of the Strategy Department, where he drafted and implemented various operational policies, including JBIC’s first medium-term operational strategy. He also worked extensively on power sector projects for the Overseas Economic Cooperation Fund.
Yuko Okazawa, Operations Officer, World Bank Group

Yuko Okazawa is the Operations Officer of the TDLC, and is responsible for the overall implementation of the City Partnership Program and various research activities on urban development. After receiving a Master’s degree in Civil Engineering at the University of Tokyo, she launched her career as an urban planning consultant at ALMEC Corporation before joining the Bank. Throughout her years with ALMEC she resided in Vietnam but also has experience working in Indonesia, Philippines, Thailand, Mongolia and Japan. Some major projects she undertook include the Vietnam Urbanization Review as delivery team of the Urban Planning, Land, and Housing background report, various urban development Master Plan projects, formulation of urban planning and management manuals for training courses targeted at planning authorities in client countries, and transport planning projects. She has recently earned her second Master’s degree in Planning, Growth and Regeneration Course at the Department of Land Economy, University of Cambridge.

Yumiko Noda, Partner, Head of Infrastructure and PPP, President - Cities Solution Centre, PwC Advisory LLC

Yumiko Noda is a Partner of PwC Advisory LLC, leading Infrastructure and Public-Private-Partnership (PPP) practice. She also leads Cities Solution Centre in Japan as well as Cities Infrastructure Solutions Centre for PwC Global, which is located in Singapore. She is recognized as a pioneer who introduced PFI/PPP concepts into Japan and contributed to the development of Japan’s PFI/PPP market, advising governments and private sector companies on policies, strategies, and financing. Between 2007 and 2009 she served as Deputy Mayor of Yokohama City, where she was responsible for business and economy, tourism, transport, water, international strategy, city branding, and PPP. During her career in Yokohama, she spearheaded the initiative of newly creating PPP unit and transferring Yokohama’s “urbanization” experience to Asian cities. Between 2010 and 2011, she was senior fellow at Tsinghua University Japan Research Centre, Beijing, China. Her other career includes a project finance banker working in Tokyo, London and New York. She is a member of Advisory Panel of Cities Development Initiative for Asia as well as Urban Solution Advisory Panel of Centre for Liveable Cities, Singapore. In Japan, she serves many public positions, including “Board of Directors at Keizaidoyukai”, Japanese executives’ business association, “Future City Initiative Committee” under Cabinet Secretariat Government of Japan, “Council for Transport Policy” of Ministry of Land,
Infrastructure, Transport and Tourism, “Trade Committee” under Ministry of Economy, Trade and Industry. She holds MBA from Harvard University and BA from Tokyo University.