responsible for convening IRP Steering Committee meetings and disseminating information on IRP activities and knowledge products.

\* IRP members: Asian Development Bank (ADB), ADRC, Cabinet Office of Japan, Centro de Coordinación para la Prevención de los Desastres Naturales en América Central (CEPREDENAC), Hyogo Prefectural Government, International Labour Organization (ILO), Ministry of Foreign Affairs of Italy, Swiss Agency for Development and Coordination (SDC), the World Bank, United Nations Centre for Regional Development (UNCRD), United Nations Development Programme (UNDP), United Nations Environment Programme (UNEP), United Nations Educational, Scientific and Cultural Organization (UNESCO) ,United Nations Human Settlements Programme (UN-HABITAT), United Nations Office for Disaster Risk Reduction (UNDRR), United Nations Office for Project Services (UNOPS), World Health Organization (WHO).

# 6-3. IRP Activities in FY 2019 6-3-1. International Recovery Forum 2020

### Introduction

International Recovery Forum 2020 ~Building Back Better through Resilient Infrastructure~ was held on 28th January, at Hotel Okura Kobe. 172 participants from 24 countries and 23 organizations attended the forum.

The International Recovery Forum 2020 drew upon the insights and experiences of governments, private sector, and international organizations to discuss common and emerging challenges and solutions for infrastructure recovery. The Forum featured distinguished keynote speakers and two panel discussions. The first panel focused on preparedness for infrastructure recovery, and harnessing the opportunity to invest in resilient infrastructure before disaster strikes. The second panel explored past and ongoing recovery initiatives to build resilient infrastructure to withstand future disasters.

#### **Opening Remarks**

Mr. Jared MERCADANTE, Chair, IRP Steering Committee and Disaster Risk Management Specialist, Global Facility for Disaster Reduction and Recovery (GRDRR) at the World Bank opened the forum, followed by Welcome Remarks from Mr. KANAZAWA Kazuo, Vice Governor, Hyogo Prefectural Government and Mr. MURATE Satoshi, Assistant Vice-Minister for Disaster Management, Cabinet Office, Government of Japan.

#### **Keynote Session**

The main substantive sessions opened with a keynote session featuring two presentations.

Mr. MUROSAKI Yoshiteru, Dean, Graduate School of Disaster Resilience and Governance, University of Hyogo gave a presentation entitled "Recovery of Livelihood and Infrastructure ~Lessons of the Great Hanshin-Awaji Earthquake". He noted that the Great Hanshin-Awaji Earthquake has completely changed the way people think about recovery in Japan, and there has been a significant shift from the conventional idea of restoring the original state and reconstructing buildings to the idea of creating a new society called "creative reconstruction", which is common to the idea of Build Back Better advocated in the Sendai Framework for Disaster Risk Reduction. He also mentioned that if we fail to consider the soft infrastructure and human infrastructure as well as hard infrastructure more comprehensively, we cannot achieve recovery in the true sense of the word and I think that is what "resilient infrastructure" is all about.

Mr. Kamal KISHORE, Member, National Disaster Management Authority, Government of India gave a presentation entitled "Making Infrastructure Disaster Resilient Opportunities and Challenges." He noted that to actually work towards making our infrastructure more resilient, we have to take a territorial and regional planning approach, and look at interconnections between infrastructures and look at infrastructure as ecological infrastructure. He also mentioned that since at least five of the Sustainable Development Goals (SDGs) speak directly to infrastructure development, if we do not do a good job of resilient infrastructure, we will not be able to achieve these SDGs.

### **Panel Discussion 1**

The theme of panel discussion 1 was Enabling Recovery Readiness with Resilient Infrastructure.

Mr. Jared MERCADANTE, Disaster Risk Management Specialist, GRDRR, at the World Bank Group moderated the discussion.

Panelists included Ms. Camille CRAIN, Section Chief, Building Resilient Infrastructure and Communities (BRIC), Federal Emergency Management Agency, Government of the USA; Mr. TAKAISHI Masaya, Counsellor, National Resilience Promotion Office, Cabinet Secretariat, Government of Japan; Mr. Brendan MOON, Chief Executive Officer, Queensland Reconstruction Authority, Government of Queensland, Australia and Mr. TADA Shinya, Director, Technology Planning Division, Policy Planning & Coordination Bureau, Public

Works & Development Department, Hyogo Prefectural Government.Ms. Camille CRAIN noted that one thing that makes Building Resilient Infrastructure and Communities (BRIC) program different is FEMA has two different programs that fund

mitigation or resiliency projects in a post-disaster setting.

Mr. TAKAISHI Masaya noted that the Great East Japan Earthquake served as a major turning-point to institutionalize the concept of building national resilience, including soft infrastructure, so in order to prevent the recurrence of such a catastrophic disaster, it is important to prepare for the worst case during normal times, before disaster strikes.

Mr. Brendan MOON noted that since we already have the tools to make our infrastructure fit-for-need in light of current and future climate risk, the current challenge is about getting greater alignment in terms of our policy, funding, and decision-making to ensure that we have an integrated and systematic approach to "Building Back Better."

Mr. TADA Shinya noted that preparing for Nankai Trough earthquake, Hyogo prefectural government has formulated a 10-year infrastructure development plan for tsunami risk reduction (2013–2023), and systematically promoting measures against tsunamis by strengthening and preventing subsidence of tide embankments.

#### **Panel Discussion 2**

The theme of panel discussion 2 was Resilient Infrastructure Recovery and Building Back Better.

Mr. Krishna VATSA, Recovery Advisor, Crisis Bureau, United Nations Development Programme (UNDP), Kenya moderated the discussion.

Panelists included Ms. Nadia ADRIÃO, Senior Coordinator, Post-Cyclone Reconstruction Cabinet (GREPOC), Government of Mozambique, Mr. OCHI Kengo, Counsellor, Construction of Infrastructure Section, Reconstruction Agency, Government of Japan, Mr. Abdul Malik SADAT IDRIS, Director, Institutional for Water Resource Infrastructure, National Development Planning Ministry (BAPPENAS), Government of Indonesia, Mr. Davut ŞAHIN, Group Leader, Department of Recovery, Disaster and Emergency Management Presidency (AFAD), Government of Turkey and Mr. KAWASE Nobuyuki, Managing Executive Officer and General Manager, Osaka Main Office, Toyo Construction Co, Ltd.

Mr. Kamal KISHORE, Member, National Disaster Management Authority, Government of India acted as Commentator:

Ms. Nadia ADRIÃO noted that in terms of recovery and reconstruction needs for Cyclone Idai and Cyclone Kenneth, the total is 3.2 billion dollars, we got about 1.4 billion dollars. But the persisting gap is about 1.8 billion dollars.

Mr. OCHI Kengo noted that about nine years have passed since promoting recovery projects following the Great East Japan Earthquake, it has become structurally safe, but we are facing the serious issue of building a resilient community including non-structural aspects.

Mr. Abdul Malik SADAT IDRIS noted that following the 7.7M earthquake and tsunami that struck Central Sulawesi, Government of Indonesia chose to work with existing mechanisms in delivering the recovery program, and in doing that, Government of Indonesia coordinated different players and assigned responsibilities.

Mr. Davut ŞAHIN noted that in accordance to lessons learned Duzce Flood, stream beds was expanded to be able to avoid new flood, we changed route of some roads, and some of road crossing constructions with better quality and made new ones for some routes, reconstruct some of them by using new techniques and considering new regulation.

Mr. KAWASE Nobuyuki noted that the basic policy of restoration of Kobe port from the Great Hanshin-Awaji Earthquake was to strengthen the seismic resistance through diverse

types of structures, and as the priorities of full-scale restoration were clarified, we could complete the project by the deadline under the given construction conditions.

### Wrap up and Closing Remarks

Ms. ISHIGAKI Kazuko, Co-Chair, IRP Steering Committee and Director for Public and International Relations, Disaster Management Bureau, Cabinet Office, Government of Japan closed the Forum.



Fig.6-3-1-1. International Recovery Forum 2020

## 6-3-2. IRP/ADRC Engagements at the at the World Reconstruction Conference 4 and the Global Platform for Disaster Risk Reduction 2019

The sixth session of the Global Platform for Disaster Risk Reduction (GP2019) and the fourth World Reconstruction Conference (WRC4) were held in conjunction with one another in Geneva, Switzerland, the week of 13-17 May 2019. The events were organized by UNDRR (GP2019), and World Bank/GFDRR, UNDP, UNDRR and the European Commission (WRC4), with conference themes focused on the "Resilience Dividend: Towards Sustainable and Inclusive Societies" and "Inclusion for Resilient Recovery", respectively. They offered a unique, full-week opportunity for the IRP/ADRC and participants to dive deeply into progress and challenges in inclusive recovery. The IRP Secretariat, IRP Steering Committee Members and Observers were well-represented at the conferences, contributing across the agendas and to the outcomes of these significant events, as both conveners and speakers. IRP held a successful Side Event at the Global Platform, thanks to the support of its SC Members and Observers. IRP also convened the 25th Meeting of the IRP Steering Committee.

### IRP/ADRC Side Event at GP2019: Securing an Inclusive Build Back Better Dividend

Disadvantaged, vulnerable people are frequently disproportionately impacted by disasters, and often with poor access to recovery resources and technical assistance. They are too often unable to benefit from efforts to build back better. The IRP/ADRC-organized side event at the

Global Platform, "Securing an Inclusive Build Back Better Dividend" convened an expert panel composed of representatives of national governments, civil society, and academia to address lessons learnt from diverse recovery experiences in working to secure more equitable recovery outcomes.

Mr. HAYASHI Haruo, President of the National Research Institute for Earth Science and Disaster Resilience, opened the session by introducing the vision for building back better developed for the 1995 Great Hanshin-Awaji Earthquake in Japan. He focused his remarks on evidence and lessons learnt on achieving 'life recovery' inclusively, which can be applied to contemporary recovery efforts. Mr. Kamal Kishore, Member, National Disaster Management Authority, India, spoke of the need for nimble institutional arrangements that can enable more holistic, integrated approaches to recovery, and can efficiently coordinate between agencies. Mr. Kishore proposed that recovery cannot be 'better' if it is not inclusive, and recommended that recovery planners should consider people and communities themselves as assets and contributors to recovery planning and implementation.

Mr. Mark Osler, Senior Advisor for Coastal Inundation and Resilience for the U.S. National Oceanic and Atmospheric Administration, presented inclusive approaches to drive the translation of science into decision-making support. He noted that including communities in knowledge translation gives agency to disadvantaged communities, leverages local wisdom and experiences, and yields better risk information. Mr. Sushil Gyawali, Chief Executive Officer, National Reconstruction Authority, Nepal, shared evidence of the benefits of inclusive recovery in Nepal and the key initiatives that catalyzed better, more equitable outcomes. Ms. Emily Wilkinson, Senior Research Fellow, Overseas Development Institute, introduced the Caribbean Knowledge Network on Resilience and Recovery, a new community of practice taking a collaborative approach. It brings representative stakeholders together to learn from recovery experiences and plan for future recovery scenarios. Mr. Juan Caballero, Director of Programmes and Partnerships for Latin America, Build Change, shared innovative practices in inclusive housing reconstruction through owner and inhabitant-driven approaches. Mr. INOMATA Tadanori, Advisor, Office for Global Relations, Nagasaki University, shared a 'village-academia collaboration model', in which academic faculty members, posted to affected villages, improve risk communication and promote inclusive recovery programmes.



Fig. 6-3-2-1 Side Event

### "Build Back Better and WRC4 Outcomes" Working Session at the Global Platform

UNDRR organized and coordinated this working session with contributions from IRP/ADRC, and sought to learn from good practices, new evidence, and experiences of success and failure in recovery, in order to support inclusive recovery planning and deliver better, more equitable recovery outcomes. The session opened by reflecting back on the outcomes of the fourth World Reconstruction Conference, the theme of which had focused on "Inclusion for Resilient Recovery", providing an opportunity to build on its success and delve more deeply into key issues. The panelists shared and discussed inclusive approaches, and the ways in which they improve recovery planning, implementation, and outcomes. The panel argued for people-centered, demand-driven approaches to recovery. They discussed addressing pre-disaster social disadvantages and vulnerabilities that can constrain recovery, and limit opportunities to build back better. The panel advocated for investing in capacities to build back better, such as strengthening institutional capacities for inclusion and intersectoral collaboration, as well as local capacities for planning, resourcing, implementation, and technical support. The panel discussed how countries and communities learn from recovery experiences at home and abroad, and how learning can be institutionalized. Ms. OKAI Asako, Assistant Secretary General and Director for Crisis Bureau of UNDP, moderated the session with panelists from the Government of Haiti, the Government of Indonesia, the World Bank, International Federation of Red Cross and Red Crescent Societies (IFRC), and the Japan International Cooperation Agency (JICA).



Fig. 6-3-2-2 Working Session

#### "Community-led Recovery" Thematic Session at the World Reconstruction Conference 4

The thematic session on Community-led Recovery at the WRC4 considered the leading role of communities as a key mechanism for achieving a more inclusive recovery and better overall recovery outcomes. The IRP Secretariat was invited to join a panel discussion, along with key representatives from JICA and Habitat for Humanity, and moderated by IRP SC Member GFDRR. The IRP Secretariat shared lessons gleaned from community-led recovery efforts, underscoring the complexity of the community-led recovery process, as well as important challenges and considerations in mobilizing communities and managing community-level recovery programs. The IRP Secretariat also shared good practices that have emerged from a range of global community-led recovery efforts, including examples from the 2001 Gujarat Earthquake and the 1995 Great Hanshin-Awaji Earthquake. The session outcomes were taken up by the WRC4 Joint Communique outcome document, including prioritizing community participation in recovery with access to information, decision-making opportunities, and engagement of community-led organizations.

### "Fostering Social Inclusion through Culture in City Reconstruction" Thematic Session at the World Reconstruction Conference 4

The IRP Steering Committee Chair, Mr. Josef Leitmann, GFDRR, and Co-Chair, Ms. SAYA Setsuko, the Cabinet Office Japan, led this session. Serving as moderator, Mr. Leitmann stressed that culture can be a powerful building block for social inclusion, risk mitigation, and recovery preparedness. He highlighted the importance of urban settings for disaster risk reduction, in the context of unprecedented urbanization and development, risk exposure and the continuing threat of climate change. He stressed that "cities are not just a collection of buildings, but they are about people and their interaction with each other, and their cultural identity. Therefore, city reconstruction needs to ensure social inclusion, promote economic development, and manage complex social, spatial, and economic transformations."

Ms. Saya shared the importance of culture in the recovery from the 2016 Kumamoto earthquakes. She described the reasons Kumamoto Castle became a top priority in the Kumamoto Reconstruction Plan. People have strong connections to their cultural heritage, and a sense of ownership. The city mobilized communities and global support using Kumamoto's mascot "Kumamon" as part of its communications strategy. By paying attention to culture, the reconstruction of Kumamoto Castle offers an important case of building back better and will serve as a reminder to prepare for future earthquake risks.

The Culture in City Reconstruction and Recovery (CURE) framework was introduced as a culture-based approach in fostering social inclusion and resilient recovery. CURE provides a roadmap for post-disaster economic development and management of complex social, spatial, and economic transformations, and for enhancing effectiveness and sustainability of current recovery practices.



Fig. 6-3-2-3 Working Session

## 6-3-3. The Workshop "Towards Coherent Disaster Risk Reduction Strategy Development, Implementation and Monitoring among the SAARC Member States"

As a first step in a process proposed to revise the SAARC Comprehensive Framework on Disaster Management, UNDRR and the SAARC Secretariat jointly organized the workshop "Towards Coherent Disaster Risk Reduction Strategy Development, Implementation and Monitoring among the SAARC Member States", 9-11 July 2019 in Gujarat, India. The IRP Secretariat and IRP SC Members UNDRR and ADB supported the implementation of the workshop as facilitators and session organizers, along with IRP SC Observers JICA, ASEAN, and SEEDS, and a range of participating partners from more than a dozen international agencies, national and local governments.

The workshop hosted 25 participants for the three-day training event, hailing from all eight SAARC member states, and representing disaster management authorities, the Ministry of Planning, and the Ministry of Finance. Participants worked collaboratively to identify gaps, needs, and opportunities to realign current DRR strategies and implementation action plans to inform a regional DRR framework. Participants considered the unique strengths that a regional platform could offer, where integration could be deepened, and where collaboration could be scaled to reduce the risks and impacts of disasters.

The IRP Secretariat convened and moderated a session on building back better, with a focus on post-disaster housing reconstruction. The session served as an initial consultation for a forthcoming ADPC publication on post-disaster housing reconstruction, and as a thematic session on recovery to engage and support participants as they considered Priority 4 elements for the potential revised framework.

The IRP Secretariat opened the session with a presentation giving context on the state of post-disaster housing reconstruction and on progress in guidance to build back better in housing recovery. The presentation explored the arguments for more people-centered, demand-driven approaches. The presentation set the stage for the consultation to follow and the panel discussion, pointing to where there is continued need for knowledge generation and knowledge exchange.

Mr. Aslam Perwaiz, Deputy Executive Director at ADPC, delivered a presentation on a new knowledge product, currently in development, on housing reconstruction. Mr. Perwaiz shared the research methodology, and the consultative process toward developing the final product. The presentation highlighted a selection of the key areas addressed by the study, including the opportunities and challenges associated with an owner-driven reconstruction process.

The panel drew on a range of perspectives on housing recovery, including from international financial institutions, civil society, and official development assistance. Mr. Steven Goldfinch, Disaster Risk Management Specialist at ADB shared reflections on three cases from the ADB's work in housing recovery, in Pakistan, Kyrgyz Republic, and Fiji. The cases in Pakistan and Fiji looked at the successes and challenges of owner-driven housing reconstruction approaches at a large scale, including training and certification. The Kyrgyz Republic took a contractor

approach to an urban housing reconstruction programme. In rebuilding at scale, the programme was challenged in meeting the needs of residents, as well as with procurement, permitting, labor and protecting cultural assets.

Mr. Manu Gupta, Co-Founder of SEEDS, gave examples from the local Gujarat context, highlighting the importance of not just knowledge transfer, but knowledge exchange - coupling local wisdom and external technical support. He shared the origins of owner-driven housing principles, and the questions that persist about inclusion, technical and financial support. Finally, Mr. NAGAMI Kozo, Senior Representative, JICA Nepal Office, remarked on recent housing reconstruction efforts in Nepal. Mr. Nagami agreed with the preceding speakers on the merits of owner-driven approaches. However, with anecdotes and evidence from the 2015 Nepal earthquake, he noted where bottlenecks continued to hinder recovery and the lessons that can be learned from this experience. He underscored the importance of effective communications, giving an example of build back better messaging that local residents had memorized, yet did not have a clear understanding of the actions they needed to take. He also highlighted the importance local context, for example families might prioritize livelihoods over housing during the growing season.



Fig. 6-3-3-1 Group Photo in the conference

## 6-3-4. Disseminating IRP/ADRC Knowledge Products at the Fourth National Conference on Promoting Disaster Risk Reduction 2019

The Cabinet Office of Japan hosted the fourth National Conference on Promoting Disaster Risk Reduction 2019 ("Bosai Kokutai"), 19-20 October in Nagoya, Japan. The purpose of the annual conference is to raise public awareness, to learn and share experiences about disaster risk reduction, and to promote self-help and mutual assistance. This year, the conference focused on the theme of, "Preparing for large scale disasters: To think about disaster risk reduction more ordinarily."

Of the estimated 15,000 participants, more than 200 visited the IRP booth, which was jointly organized with UNDRR. Visitors to the IRP booth included national and local government officials, university professors, and private sector representatives. The IRP Secretariat shared



knowledge products and information about the Platform.

Fig. 6-3-4-1 Exhibition Booth

## 6-3-5. Practical Solutions for Building Back Better at the World Bosai Forum 2019

The Second World Bosai Forum was held from 9-12 November 2019 in Sendai City, Japan, focused on drawing out concrete solutions to make progress toward Target E of the Sendai Framework for Disaster Risk Reduction. Target E sets a goal of substantially increasing the number of national and local strategies for disaster risk reduction by 2020, and marks the first of the Sendai Framework targets to come due. Toward this goal, the conference drew from the experience and knowledge of its 900 participants from 40 countries, representing policy makers and practitioners from national and local governments, academics and civil society. With sessions on disaster recovery and building back better featured strongly throughout the agenda, IRP Secretariat and members and observers of its Steering Committee were engaged as participants and contributors to the sessions, while the IRP Secretariat also delivered a presentation as a flash talk.

The Second World Bosai Forum drew upon recent experiences in disaster recovery from around the world for discussion. At the opening, the representative of UNDRR delivered a message from Ms. MIZUTORI Mami, Special Representative of the UN Secretary-General for Disaster Risk Reduction and Head of UNDRR. Session speakers brought forth innovative ideas in disaster recovery that have been grounded in, and tested by experience. The discussions that followed offered some valuable insights and lessons that could be distilled from these contextual experiences.

Following the 7.5M earthquake and tsunami that struck Central Sulawesi, Indonesia in September 2018, recovery planners and their partners looked for ways to catalyze recovery and to build back better by identifying synergies between high priority areas in their recovery. Local planners, drawing from lessons learned from the Great East Japan Earthquake recovery, believed that social capital was an important contributor to recovery. They therefore focused their early efforts on restoring local marketplaces, which served a central role in the affected communities as a place where all members of the community would come together. The

markets were also an important precursor for restoring livelihoods, particularly for female entrepreneurs. With nearly 200,000 people displaced, they settled on recreating the marketplaces within the temporary settlements -to catalyze economic activity and rebuild social capital where people already were, and to avoid waiting for the reconstruction of the nearly 40,000 damaged and destroyed homes.

Local planners built on this early investment in marketplaces by developing small and medium enterprise (SME) centers alongside the marketplaces in the temporary settlements. The innovative SME Center became a one-stop shop for getting businesses back on their feet and supporting the development of new business, with support for training, financing, and all the processes and paperwork needed to set up and register a business. The SME Centers tried to prioritize businesses that could contribute to social capital, particularly those that operated in social spaces. The SME Centers also provided space for inventory and warehousing. These centers were so successful in the temporary settlements, local planners have proposed installing them in permanent settlements once they have been reconstructed.

Meanwhile, JICA had partnered with the Indonesian government to try to catalyze resilient housing reconstruction. JICA initiated a carpenter training programme, partnering with certified, qualified instructors to train people who had lost their livelihoods to the disaster. Targeting farmers who had lost their farms in particular, the programme was designed at modernizing livelihoods, developing the capacity for self-recovery in the affected communities, and building more resilient homes.

JICA speakers reflecting on recent recovery efforts spoke of widening the scope of efforts to build back better, particularly with respect to livelihoods recovery, and revitalizing local economies. Building on the experiences shared earlier, JICA speakers noted that affected communities are economically linked with other places that may or may not have been affected. Revitalizing local economies therefore requires that planners consider regional approaches to building back better. Taking a regional or area view allows planners to see critical infrastructure that links with the local economy, and supply chains upon which local businesses may depend.

Local government speakers, representing communities still recovering from the Great East Japan Earthquake spoke of taking a long-term view when building back better. Speakers noted that many affected areas are undergoing demographic transition, with aging and depopulation as significant challenges in their recovery. They urged planners in such situations to consider a forward-looking approach, and what building back better should mean for these communities in 10 years or more. The recovery process can reshape local economies for livelihoods suitable for future generations. To this end they spoke of engaging youth leaders to join in recovery planning, "smart" land use plans, and building resilient infrastructure that supports a vision for the future of these communities.

The IRP Secretariat also delivered a flash talk on recovery governance at the World Bosai Forum, reflecting on the recovery governance literature, recent recovery experiences and recovery institutions. The presentation addressed the need to institutionalize flexibility in

recovery governance, in order to build back better, faster, and more inclusively. The Secretariat presented cases from the Great East Japan Earthquake, Typhoon Haiyan, and the 2004 Indian Ocean Earthquake and Tsunami that illustrate institutionalizing flexibility into financing, pre-disaster recovery plans, arrangements, contracts, and bureaucratic processes in order to accelerate and promote efficiency in recovery.



Fig. 6-3-5-1 Conference

## 6-3-6. Disseminating IRP/ADRC Knowledge Products at the Sendai Symposium for Disaster Risk Reduction and the Future

The Sendai City hosted the Sendai Symposium for Disaster Risk Reduction and the Future, 10 November in Sendai, Japan. The purpose of the annual conference is to communicate the experience and the lessons from the earthquake, learning about disaster risk reduction, and delivering dairy activities. This year, the conference focused on the theme of, "Delivering our disaster risk reduction to the world and the future."

Of the estimated 3,700 participants, about 90 visited the IRP booth. Visitors to the IRP booth included national and local government officials, university professors, and private sector representatives. The IRP Secretariat shared knowledge products and information about the Platform and its work.



Fig. 6-3-6-1 Exhibition Booth