As of July 2, 2019

The Fourth UN Special Thematic Session on Water and Disasters
Draft Chair's Summary

June 24th, 2019
United Nations Headquarters

The Fourth UN Special Thematic Session on Water and Disasters (STSWD4) was held on July 24th, 2019 at the United Nations Headquarters in New York. The meeting was organized by the High-level Experts and Leaders Panel on Water and Disasters (HELP) and a number of UN member states (Indonesia, Japan, Republic of Korea Mexico, the Netherlands, Tajikistan). H.E. Dr. Han Seung-soo, Chair of HELP and Former Prime Minister of the Republic of Korea, hosted the Session.

Dr. Han Seung-soo, H.E. Ms. María Fernanda Espinosa Garcés, President of the 73rd Session of the United Nations, and Ms. Maria Francesca Spatolisano, Assistant Secretary-General for Policy Co-ordination and Inter-Agency Affairs at the United Nations delivered opening remarks. H.E. Mr. Carlos Agostinho do Rosário, Prime Minister of the Republic of Mozambique, H.E. Mr. János Áder, President, the Republic of Hungary (Video Message), and H.E. Dr. Danilo Türk, former President of the Republic of Slovenia / Chair of the Global High-Level Panel on Water and Peace delivered keynote remarks during the Opening Plenary. Following this, H.E. Ms. Cora van Nieuwenhuizen, Minister of Infrastructure and Water Management, Kingdom of the Netherlands, and Vice Chair of HELP chaired the High-level Panel Discussion.

The Special Thematic Session also included: Special Session: "Build Back Better from Cyclones Idai and Kenneth – Lessons Learnt and Actions to Reduce Climate Change Impact in the Future"; Science and Technology Summit for Addressing Water and Disasters; and High-level Session on Financing an Investment in Water and Disasters,

The sessions were attended by heads of state and government, ministers and high-level representatives of member states, executives of intergovernmental organizations, experts and staff members of the member missions and observers, and invited experts from academia, civil society, youth and other stakeholders to discuss and identify priority actions needed to address the issue of water and disasters and provide a concrete step towards implementation of globally agreed agendas. Some critical points were especially highlighted throughout the session: good governance, increase in financing, promotion of science and technology, and interlinkage between water/disasters and climate actions.

Common understanding and messages and recommendations made in the session were:

- Water-related disaster risks are growing due to several factors including demographic, societal, and climate changes;
- Addressing the issue of "water and disasters" not only prevents or reduces losses and suffering, but also provides an opportunity for creating the foundation for sustainable socioeconomic development, national security and prosperity;
- Increased investment in preventative measures is critical. Such investment is still small in proportion to post-disaster expenditures. Increasing water resilience pays off, and is an investment for our common future;
- The usage of data, science and technology, and innovation is the key to effectively address the issue of water-related disasters.

- A strong connection between science and the disaster risk reduction practices is needed. The creation of interdisciplinary groups that communicate, catalyze, analyze and support disaster risk management systems is one of the solutions.
- The recent devastating disasters that happened in Africa: cyclones Idai and Kenneth provided a sense of urgency for taking actions in response to climate change;
- The Secretary-General's Climate Action Summit is an ideal opportunity to share best practices and lessons learned.

Several documents by the High-level Experts and Leaders Panel on Water and Disasters (HELP) were launched during the Opening Plenary of STSWD4. They are: "Global Report on Water and Disasters 2019", "Principles for Financing and Investment on Water-related Disaster Risk Reduction" and a newly published book based on a special issue of the "Water Policy Journal" on Water and Disasters. The documents are developed in order to support all member states to improve finance, govern and implement actions on water-related disaster risk reduction.

Opening Plenary (10:00-11:30)

The speakers repeatedly pointed out the devasting consequences of the failure to engage in disaster risk reduction on a continuous basis. The importance of learning lessons from the natural disasters that have occurred recently in the developing world, including Asia and Africa, was emphasized; the panelists reiterated the need for increased investments in preventative measures as it reduces not only human and economic losses from disasters, but also post-disaster expenditures. Gender issues and disparities caused by water-related disasters and related issues as well as vulnerable communities and children, were mentioned. The need to address them prior to the disaster was stressed. Lastly, the panelists acknowledged the added complexities that water-related disasters bring with regards to conflict and political unrest.

At the end of the session, several documents of HELP were launched to support countries in improving their DRR.

High-Level Panel Discussion (11:30-13:00)

Panelists acknowledged that disaster risks are growing due to expanding populations in high disaster risk areas, climate change and other factors. Therefore, cooperation among governments, municipalities, communities, stakeholders as well as sectoral coordination among, e.g., water, agriculture, energy, transportation, and DRR will be vital to developing disaster-prevention cultures. Panelists stressed the importance of transboundary water cooperation initiatives that help effectively mitigate climate change impacts and water–related disaster risks. This cooperation, however, should expand beyond water management. Involvement of aid and technical experts during preventative and post-disaster actions within the transboundary cooperation framework will be crucial. Participants emphasized the use of data, science, technology, and innovation as a means to improve the effectiveness of DRR programmes and cooperation. Having proper information sharing and cooperation mechanisms was recommended to decrease the chances of conflict, improve resilience and decrease the impact of water-related disasters on society in the long-run.

Special Session "Build Back Better from Idai and Kenneth – Lessons Learned and Actions to Reduce Climate Change Impact in the Future" (13:30-14:45)

Hearing from the countries most affected by Idai and Kenneth provided a wealth of first-hand information on the impacts of climate change as well as sharing the lessons learned. The prime takeaway is that nothing hampers sustainable development more quickly than disasters. Key words from lessons learned are: understanding climate change-related disasters; improving risk governance;

investing in resilient infrastructure and developing plans of action so that communities are prepared when disaster strikes; an inclusive and cross-sectoral approach for disaster risk reduction management programs. The climate action summit by the Secretary-General is a perfect opportunity to turn the best practices and lessons learned into actions.

Science and Technology Session to Address Water and Disasters (15:00-16:20)
The scientific community presented a clear picture. Climate scientists recognize the complexity and the explicit need for integrated disaster management solutions. The barrier they recognize is that there is no connection between the scientific realm and the disaster risk reduction applications. They recommend the creation of interdisciplinary groups that communicate, catalyze, analyze and support disaster risk management systems to achieve the overarching goal of maintaining sustainable development and preventing loss of human life.

Special Session on Financing and Investment in Water and Disasters (16:20-17:40)
The panelists all highlighted the significance of launching the document, "Principles on Investment and Financing for Water-related Disaster Risk Reduction" as it will help member states and partners to effectively finance and implement their projects. Furthermore, the panel congratulated the High-level Experts and Leaders Panel on Water and Disasters (HELP) for launching the principles as it will align all stakeholders involved and help them use their enhanced financial capacities to deliver what populations need to save their lives and properties. The Principles also demonstrate that water-related DRR requires more than just finance. Capacity building and multi-stakeholder participation, for example, should be promoted in tandem with better financing.

Closing Plenary
Dr. Han Seung-soo, chair of the session, wrapped up the session by thanking all speakers and participants for their inspiring and thoughtful inputs. He expressed his conviction that the output of this meeting will contribute to various ongoing initiatives on water, disaster risk reduction, and climate change, including the International Decade for Action, "Water for Sustainable Development" 2018-2028. He concluded his remarks by declaring that the Session was a success.

Opening Plenary (10:00-11:30)

The chair, Dr. Han Seung-soo, opened the session by highlighting that water disaster is hampering sustainable development irrespective of the development stage of a country. He pointed out that severe disasters are happening globally at an alarming frequency. He mentioned the most recent cases of large-scale disasters including Cyclone Idai and Kenneth that hit countries of the South African Region, and called for international solidarity to assist the affected people and governments onto a fast reconstruction track towards development and prosperity in a sustainable manner, by "building back better". Dr. Han emphasized that reconstruction requires much more expertise, integrated plans, and far larger human and financial resources than relief. He further underscored that the DRR community should be more proactively engaged in climate change discussions and through investments for climate change adaptation, which are designed to avoid, minimize and improve the impact of damages and suffering from hydrometeorological extreme events. He concluded by wishing all participants to join hands together to help create disaster resilient societies worldwide.

H.E. Ms. María Fernanda Espinosa Garcés, President of the 73rd Session of the United Nations General Assembly said drought and floods are increasingly affecting human beings and cause heavy loss in human lives and to economies. She stressed that water is life, but water is also a threat to life and sustainable development. Ms. María emphasized that water disasters are linked to conflicts, poverty, and displacement which impede recovery. She emphasized the need to act concretely and invited the international community to contribute to the comprehensive policy programme. She drew attention to the current agenda that reflects the urgencies and need for collaboration between countries by mobilizing political resources and establishing goals.

Ms. Maria Francesca Spatolisano, Assistant Secretary-General for Policy Co-ordination and Inter-Agency Affairs at the United Nations said disasters are becoming more frequent and widespread, and 90% of them are water-related. Water disasters are closely linked with climate change and substantially impact sustainable development. She called for mobilizing resources for disaster mitigation and technology innovation and highlighted the need for action on water and sustainable development issues, and learning from each other to take actions. She also mentioned that the United Nation is committed to encourage political dialogue among partners to integrate approaches. She said, "We all need to work together to address the accountability during the process of development."

Keynote Speeches by Heads of States and Dignitaries

H.E. Mr. Carlos Agostinho do Rosário, Prime Minister of the Republic of Mozambique, introduced the severe damage and recovery status of the recent disasters in Mozambique caused by Cyclones Idai and Kenneth. He is grateful for the opportunity to learn from each other and hopes that international partners take responsibility in mobilizing resources and technology to solve the climate change issue. He called for more support from the international community to expedite reconstruction in Mozambique. He emphasized that the reconstruction is a long-term process and continued support to the country is needed. He affirmed that the resources will be exclusively used for recovery and reconstruction from the cyclones.

H.E. Mr. János Áder, President, the Republic of Hungary, (Video Message) said water related natural disasters have endangered many people's living conditions. More investments should be put into water disaster prevention and mitigation, which will increase the chances for reducing damage and associated cost caused. She emphasized the importance of conservation and sustainable use of water resources, developing water-related infrastructure, promoting use of new technology and experience-sharing among countries.

H.E. Dr. Danilo Türk, former President of the Republic of Slovenia/Chair of the Global High-Level Panel on Water and Peace addressed the relationship between water and peace and water cooperation. He said that the topic needs to be given full understanding. He stressed that peace requires sustained disaster resilience and development. Disaster consequences are largely our responsibility as they are caused by human activities. We all need to be continuously engaged in disaster risk reduction actions if we hope to maintain peace. A full understanding and recognition of those issues are needed when discussing peace. He emphasized that the international community should respond to those complex questions and focus on analyzing them. He stressed the importance of water cooperation for sustainable peace. He called for integrating the issue of water cooperation into the peace building process as a path to sustainable development. He underlined three key tasks which includes data collection and sharing, transboundary cooperation, and financing.

Launch of Documents

Dr. Kenzo Hiroki, Coordinator of HELP and Professor a thet National Graduate Institute for Policy Studies (GRIPS) of Japan introduced the newly released "HELP Global Report on Water and Disasters 2019" which is open to the public on the HELP website, as well as in printed copies. The report is a compilation of lessons from the latest large-scale disasters that have happened in the world. The rationale of the report is that countries can swiftly learn, through the report, from lessons and experiences of recent large-scale disasters in other countries that rarely happens in a country. The report includes the cases and the lessons of Cyclone Idai and Kenneth, which hit the South African region, heavy rain in Western Japan, earthquake and tsunami in Sulawesi, Indonesia, flood in Kerala, India and more. Dr. Hiroki also briefed participants on the "Principles on Financing and Investment for Water-related Disaster Risk Reduction (DRR)" which was launched to help strategically increase and make effective use of financing and investment in water-related DRR.

Dr. Jerome Delli Priscoli, Chair of Global Water Partnership Technical Committee introduced HELP's recent publications. The first one is based on a special issue on water and disasters of the Water Policy Journal. It contains a global perspective, reviews and experiences of water-related disasters in Japan, the Netherlands, the United States, Bangkok, Kuala Lumpur and Manila. The second one is another special edition coming in 6 months. It is on integration of disaster risk reduction with other forms of planning (e.g. urban planning). The third one will be about efficiency of flood protection measures. There are quantitative reviews and several cases worldwide. In the introduction, Dr. Priscoli explained that these publications are HELP's substantial contribution to the international community.

High-Level Panel Discussion (11:30-13:00)

The chair, Ms. Cora van Nieuwenhuizen, Minister of Infrastructure and Water Management, Kingdom of the Netherlands, opened the session by emphasizing the importance of finance and investment in disaster prevention, introducing the historical challenge of the Netherlands on the delta's water issues to reduce its disaster risk. Ms. Cora asked the participants to discuss ways to reduce the disaster risk in the session.

Dr. Basuki Hadimuljono, Minister of Public Works and Housing, Republic of Indonesia, reported on the serious disasters caused by earthquake, tsunami and the liquefaction phenomenon in Central Sulawesi Province in Indonesia in September 2018, which caused more than three thousand casualties. Dr. Basuki explained the mechanism and condition of the occurrence of tsunami and liquefaction, which were triggered by the earthquake. He also introduced the establishment of a "Nalodo Center" that aims to deepen researches on liquefaction. At the end of the presentation, Dr. Basuki committed

to making future progress in disaster prevention in Indonesia and also to making his personal contribution to international strategic activities in the field of water and disasters.

Hon. Norbert Emmanuel Tony Ondo MBA, President of AMCOW/Minister of Water, Energy and Mines, Gabon, started his presentation by introducing the difficult situation of African countries on water issues and stressed the necessity of emergency support by the international community. He emphasized the vulnerability of the least developed countries, in which decades of development efforts can be ruined from disasters, and also stressed that the impact of disastesr is becoming larger than before due to global changes such as climate change, population growth, migration, rural exodus and urbanization.

As a specific initiative, he introduced the action program from the African Regional Strategy for Disaster Risk Reduction and their four priorities, namely "Understanding Disaster Risk", "Strengthening disaster risk governance to better manage them", "Investing in Disaster Risk Reduction for Resilience", "Strengthening disaster preparedness for effective response and "rebuilding" during the recovery, rehabilitation and reconstruction phase". At the end of his remarks, he stated that AMCOW would support a Special Thematic Session on Water and Disasters to pursue the global dialogue and maintain a high level of awareness on water and disaster issues among UN Member States.

Mr. Shozo Kudo, Parliamentary Vice-Minister of Land, Infrastructure, Transport and Tourism, Japan introduced the historical disaster of Typhoon Vera in September 1959, called "Isewan Typhoon" in Japan. The disaster, he explained, triggered the introduction of comprehensive disaster risk reduction policies and programmes in Japan. Since then, continuous investment in DRR infrastructure significantly reduced disaster damages. However, he pointed out that increased safety lead to a lowering of the awareness to natural disaster risks by the Japanese people.

After a serious tsunami disaster in 2011, Japan reformed its DRR investment strategy to make Japan more resilient

LTG Mr. Todd Semonite, Chief of Engineers and Commanding General of The U.S. Army Corps of Engineers, started his presentation by introducing the value of water resources investments. He also explained that 2018 had been a year where water-related disasters caused significant damages, 14 separate billion-dollar disaster events, to the US. As a way to respond to severe disasters, he introduced some of the Corps' technical tools and successful collaboration programs, which help the district commanders conduct intelligence preparations of the disaster impact area. Further, he introduced the Corps' latest strategic program of 54 billion dollars to minimize disaster risk. Through the presentation, he emphasized the importance of actual challenges on disaster risk reduction.

Ms. Olga Algayerova, Executive Secretary, United Nations Economic, Commission for Europe, emphasized that transboundary water cooperation was essential for climate change adaptation and disaster risk reduction because more than 60 per cent of the global freshwater flow exists in transboundary basins, and more than 40 per cent of the world population lives in basins that cross national boundaries, and these basins are often particularly vulnerable to disasters and climate change. She showed some examples of transboundary cooperation and highlighted the activities of the Water Convention led by UNECE, which aims to reduce transboundary disaster risk through sharing experiences among the participants.

Special Session "Build Back Better from Idai and Kenneth – Lessons Learned and Actions to Reduce Climate Change Impact in the Future" (13:30-14:45)

Ms. Kirsi Madi, Director of the United Nations Office for Disaster Risk Reduction (UNDRR), chair of the session introduced the fact that cyclone Idai and Kenneth affected more than 2 million people in three countries (Mozambique, Zimbabwe and Malawi) and brought these three countries further difficulties to accomplish the SDG goals. She pointed out the importance of preventive actions for climate change following the priority actions outlined in the Sendai Framework.
She emphasized the importance of collaboration with international networks, such as the International Recovery Platform (IRP) and International Bank for Reconstruction and Development, (IBRD) for early and effective reconstruction.

H.E. Mr. Carlos Agostinho do Rosário, Prime Minister of the Republic of Mozambique, introduced the damage by cyclones Idai and Kenneth, which affected more than 2 million people. In terms of lessons learned from the experience of cyclones Idai and Kenneth, he emphasized the following points: 1. Prepare for the effect of climate change, e.g. importance of disaster resilient infrastructure; 2. Selection of priority actions for recovery; 3. Collaboration among central and local government, and private sector; 4. Coordination for the smooth reception of international and domestic relief. 5. Basic social infrastructure for the population living in rural high-risk areas of disasters, and; 6. Food security and agricultural protection for rural areas.

Honourable July.G Moyo, Minister of Local Government, Public Works and National Housing, Republic of Zimbabwe, introduced that 342 people are still missing, more than 400 thousand people lost their houses, and more than 5 million people need assistance.
Cyclone Idai and Kenneth affected especially sanitation, water supply and agriculture. He reported that approximately 70% of water supply pumps were damaged, infection disease increased and huge damage were inflicted on agricultural production such as nuts, banana and mango. He expressed his expectation to have discussions about financial support for reconstruction of affected countries by cyclone Idai and Kenneth.

Ambassador of Malawi, introduced that 60 people were dead, 672 people were injured and 975 thousand people were affected by cyclone Idai and Kenneth. He also reported that rural population was affected heavily, and 4.5 million USD was planned for reconstruction.
He introduced following lesson learned from the experience: 1. Rapid needs analysis after disaster is necessary for effective recovery planning; and, 2. Coordination between central government and local government for efficient emergency relief. He emphasized 370 million USD was necessary for reconstruction and for accomplishment of SDGs.

Ms. Wafaa Saeed, Deputy Director, Africa 1, Operations and Advocacy Division, United Nations Office for the Coordination of Humanitarian Affairs (OCHA), reported that more than 13 million people are living in evacuation settings in 2017 and that 5 million people were forced to be evacuated by cyclones Idai and Kenneth. She mentioned long-term support is necessary for evacuated people. She introduced UN-OCHA's two tools: first, is a disaster relief fund that provides financial support on recovery phase and, second is UN-OCHA's coordination system for stakeholders at recovery stage, a UN-OCHA and UNDA (the United Nations Development Account) collaboration in Mozambique, which is deemed to be successful.

Ms. Megumi Muto, Director General, Global Environment Department, JICA, explained that recovery should aim to build "disaster resilient societies", not recovering to pre-disaster conditions, and to breaking the "negative spiral of disaster & poverty", by reconstructing the disaster hit community to be "more resilient" not return it to its pre-disaster condition.
She pointed out that Japan had dispatched a survey mission to Mozambique on May 2019 to identify the needs for reconstruction.

She explained JICA's experience on Build Back Better, presenting the case of Typhoon Yolanda in the Philippines in November 2013, in which the Japanese government strongly insisted on the concept of Build Back Better at the time of reconstruction, and contributed to launching the basic policy of the Philippines.
In concluding, she emphasized the importance of the priority actions of the Sendai Framework and the necessity of a multi sectorial approach to address climate change effects on water in the African region.

Mr. Francisco, Representative of the Portuguese government, announced the commitment of four million euros to Mozambique for the purpose of supporting reconstruction.

Science and Technology Session to Address Water and Disasters (15:00-16:20)

Science and Technology Session to Address Water and Disasters was facilitated by Dr. Johannes Cullmann, Director, Climate & Water Department, World Meteorological Organization (WMO). Dr. Cullmann mentioned that science and technology (S&T) can provide tools for the society to be resilient against natural disasters and asked the panelist what S&T can provide as resilient solutions for societies.

Prof. Gretchen Kalonji, Dean, Institute for Disaster Management and Reconstruction, Sichuan University, provided a presentation titled "Building Collaborations for Research and Education on Water and Disasters: Vision for the Alliance of Alliances". She pointed out that there are huge numbers of networks and alliances working on "water" and "disasters", and the goal of the Alliance of Alliances (AoA) is to create a meta-alliance to support existing efforts, focusing on research and education. AoA has several roles including a "Communications Role" which enables more effective communications between researchers, students, and policy makers; "Catalytic Role", for integrating joint research projects into higher education curricula; "Analytical Role", to provide critical policy advice; and a "Supportive Role", which supports the work of existing alliances and of individual institutions. The strategic approach of AoA includes to fill the gaps between natural science and engineering communities, to connect with disaster health sciences and emergency medicine communities, and to build stronger connections and to support youth leadership movements. The first meeting of its steering committee would take place in Chengdu, July 3-4th, 2019. Further details can be found at AoA_IDMR@163.com.

Prof. Akihiko Tanaka, President of the National Graduate Institute for Policy Studies (GRIPS), Japan pointed out that "Water and Disasters" is a complex problem and it is necessary to urgently address it in terms of social, financial, and political aspects. He also emphasized that climate change will exacerbate hydro-meteorological events and will be critical to achieving the SDGs. In this regard, he suggested to change the ineffective use of water resources at present and to take an integrated approach. He commented that international communities working on water and disasters should prioritize the 2030 Agenda (SDGs), Sendai Framework and Paris Agreement. He mentioned that his institute, GRIPS, tries to contribute to better governance and to fostering future leaders in the public sectors to address SDGs, where a holistic approach is critical. He announced that GRIPS started to host the secretariat of HELP and support it in dealing with not only political but also social science and bridging the gaps between social behavior and political decision making. He concluded by questioning "Would the social sciences help?" and "How politicians can help?"

Prof. Gordon McBean, past President, International Council for Science; Institute for Catastrophic Loss Reduction, Canada presented "Science and Technology Summit to Address Water and Disasters: Integrated Research Strategies within Agenda 2030". He pointed out that the water crisis is a social issue both in terms of quantity and quality. To solve these problems, he introduced several global

research programmes to address Water and Disasters: "World Climate Research Programme" in collaboration with WMO, "Urban Health and Well-Being", and "Integrated Research on Disaster Risk", whose objectives include characterizations of hazards, vulnerability and risks, effective decision-making, reducing risks and curbing losses through knowledge-based actions. He also introduced "Future Earth" and "Knowledge to Action Network (KAN)" as collaborative frameworks that facilitate highly integrative sustainability research.

Dr. Alex Halliday, Director of the Earth Institute, Columbia University, U.S.A, highlighted the recent flood and hurricane disasters such as Hurricane Sandy in 2012 and the recent heavy rainfall in Texas as new climate-related phenomena. While half of the population are now living in coastal zones, for example Miami and New Orleans, he raised a question on how to behave against such global warming and sea level rise circumstances. He stressed the importance of new global modelling and forecast tools through research and development. He also put importance on data information and improved water resources management to address future climate change together with the business community, media and government. In conclusion, he raised the question of how to communicate risk and what subjects are of concern for the future.

Prof. Choi Gyewoon, President, Society of Korean Smart Water Grid/Former CEO of K-Water, raised the subject of impacts related to water environments such as severe drought, heavy flood and natural environmental change, and pointed out that factors that affect water impacts include urbanization, imbalanced water allocation, transboundary issues, and improper water infrastructures. He then proposed applying the Smart Water Grid (SWG) in water supply systems to ensure the reliance between suppliers and customers. He also introduced the concept of applying the SWG application to water and disasters, which can be realized through linking conventional water management technology and ICT technology in the whole water flow processes such as forecasting, reservoir operation, and IWRM. Lastly, he suggested SWG initiatives in water information, standardization, capacity building, and social responsibility.

Prof. Toshio Koike, Director, International Centre for Water Hazard and Risk Management (ICHARM), touched upon three Key Global Agendas agreed to in 2015: Sendai Framework, SDGs and Paris Agreement. By mapping the stakeholders in water and disasters, he highlighted that science and technology (S&T) has sources of knowledge and can fill the gaps. In this regard, he underlined the role of facilitator from S&T community to clarify the problem structure and provide possible solution through trust-based relationships. He exemplified such cases: support for evidence-based contingency planning (for community); a drought program of the World Bank in Brazil (for local government); and the Platforms on Water Resilience and Disasters in the Philippines and Sri Lanka and the Water Disaster Platform to Enhance Climate Resilience in Africa (WADiRE-Africa) (for national governments).

Dr. Cullmann summarized the key points raised in the discussion: to provide knowledge; to support community; to communicate risk; and to link ICT to the existing systems.

Special Session on Financing and Investment in Water and Disasters (16:20-17:40)

The session was moderated by Mr. Greg Browder, Global Lead: Water Security & Water Resources Management, World Bank. Reiterating the need for a significant increase in funding for water-related disaster management, Mr. Browder stated that the goal of this session is to share the good practices and insights to increase finance for water-related disaster management.

Mr. Bambang Susantono, Vice President of Asian Development Bank (ADB) (Vice President for Knowledge Management and Sustainable Development), stated that Asia and the Pacific has experienced a significant increase in the number, intensity, and impact of extreme weather events and associated water-related disasters, including tropical cyclones/hurricanes, floods, and droughts. On the recognition of the high-level technology in addressing water-related disasters, he announced that the government of Japan has established a High-Level Technology Fund in ADB. Per ADB's financial contribution, he highlighted: ADB's annual financing for flood projects has grown from $95 million in 2011 to a projected $810 million in 2020; ADB and its donor members established a grant up to $200 million for disaster risk reduction for ADB's poorest members during the current cycle of the Asian Development Fund, 2017 to 2020; ADB established the Asia-Pacific Climate Finance multi-donor trust Fund last year to support development of financial risk management products to unlock private capital for climate investments. He highlighted three key pillars to accomplish the goals of Strategy 2030: (i) expanding private sector operations, (ii) catalyzing and mobilizing financial resources, and (iii) strengthening knowledge services. He then called for strengthened partnerships to enable these activities. It was reminded that governments need to be aware of financial, economic, and social benefits of ex-ante investment, and that enhanced financial management of disaster risks needs to be included in national strategies. He also reminded participants of the regional public good aspect of disaster risk management, and pointed out that ADB and other multilateral institutions can play an important role by providing help in facilitating agreements on cooperation as neutral broker for its clients. Lastly, he emphasized ADB's role in supporting their member countries to (i) adopt sensible policies, (ii) improve the capacity of domestic institutions for planning and implementation, and (iii) mobilize domestic funding and engagement of the private sector.

Ms. Babita Bisht, Deputy Director, External Affairs Division, Green Climate Fund (GCF), opened her speech by describing the huge portfolio of GCF, the largest climate fund that grew quickly in 3.5 years to support 97 countries. She stated that $5B of financing comes from GCF resources alone, but also a large part of the financing ($12.6B) comes from co-financing, which highlights the importance of mobilizing networks and co-financing projects through a wide network. She made the point that the GCF is mandated to invest equally in climate mitigation and adaptation. She stated that the GCF is country-driven, meaning that the GCF finances in response to countries' priorities. In addition to the financial packages, she also made special emphasis on the fact that the GCF invests to enhance countries' "readiness" so that countries are ready to access climate funding when the need arises, including GCF funds. She highlighted a few unique advantages of the GCF—a most collaborative and open climate fund; country-driven; flexible and capital agnostic; and willing to take risks—which is very important for climate funding. Finally, she encouraged countries to submit a proposal to the GCF in order to make a transformative impact, emphasizing the predictability and funding scale that the GCF can provide as it is the largest climate fund.

Mr. Loic Fauchon, President of World Water Council (WWC), first reminded participants of two major contributions the WWC made to HELP's earlier achievements namely that of ensuring greater consideration of water scarcity and droughts as well as excess water, and of opening the debate on the resilience of human settlements against all types of water disasters. He also reminded the participants that the issues of resilience apply not only to urban cities but also to rural areas, and that disasters are influenced not only by climatic factors but also by demographic factors. In order to bring financing to poor communities, which are often struck more severely than richer ones, he highlighted three capacities that need improvement: financial capacity, governance capacity, and knowledge capacity. He stated that while we have contributed significantly, especially towards building knowledge capacity, that we must push further. He introduced three initiatives that WWC has taken with regards to water-related disasters: the Council has placed reducing water-related disasters as a principle priority and their 400 member organizations have been asked to support it; the WWC has created a group of

responses dedicated to disaster response; and, WWC has immediately integrated the investment required for disaster management. To conclude, he emphasized that contributing to water security requires collaborative actions.

Dr. Monika Weber-Fahr, Executive Secretary of Global Water Partnership, stated that financing and investments in water-related disaster risk reduction is crucial but is behind. She called for a shift in financial institutions based on the recognition that water-related disaster risks are systemic and that time of hazard-by-hazard risk reduction is over. She emphasized three important changes required to make the shift: (i) financing needs to understand the systemic nature of risk, (ii) financing needs to take collaborative approaches to jointly reducing the creation of new risk and to manage the existing stock of risk, and (iii) everyone involved in financing water-related disaster risk reduction must embrace a "triple-loop" learning process, which involves reacting, reforming, and transforming. In addition, she highlighted three key aspects in making the new chapter of financing most effective: (i) the poor is particularly vulnerable; rethink financial priority and expand financial inclusion, (ii) the financial system is mostly still water-risk blind; recommend to involve rating agencies that incorporate climate risk into credit scores, and (iii) governments have not yet put in place measures to bring financing and investments effectively to bear to address water-related risks; consider bringing in the private sector, bringing financing into the planning process for DRR, being inclusive and cross-sectoral, and being innovative. She also put an emphasis that governments must create transparency and integrity. She reminded the participants of the greater sense of urgency and urged not to succumb to the hands of bureaucratic and institutional inertia.

Mr. David Boys, Deputy General Secretary, Public Service International (PSI), stated that the role of governments, including national governments and even within the UN, has been weakened, being replaced by market actors. He emphasized that governments now need to work hard to recapture the trust that is being lost. In order to achieve this goal, he introduced some of the good practices of the PSI: to defend public services, solidarity among people, and commitment of experts across all levels of government; and to link trade unions and public services with the community. To give a concrete example, he introduced that the PSI is joining a Global Tax Justice Campaign, aiming to increase tax transparency and to reduce taxation evasion and illegal financial flows. To strengthen this effort, he called for a global tax body under the UN. He shared his concern that the scarce public funding is being used to reduce risks for private investors and that private finance is facilitating the diversion of wealth from public services to the private sectors and from poor countries to rich countries. He encouraged the participants not to repeat the irrational exuberance of the Public Private Partnership of the 80's and 90's. He called for building an enabling environment for the public sector, increasing the tools available to them. He also emphasized the needs at the local level, stating that well-paid, motivated local staff are the key in creating sustainable impacts and that they need better tools and training, as well as predictable sources of income.

Ms. Claire Melamed, Chief Executive Officer, Global Partnership for Sustainable Data, opened her speech by stating the importance of good data in making good decisions and driving actions. While stating that data are useful in monitoring the progress of and in helping the achievement of the SDGs. She drew particular attention to two challenges, namely timely data and data coverage. Data are often outdated, and she claimed that this is entirely a fixable problem. She also emphasized that often absent from data are the marginalized and most susceptible people. She then highlighted the importance of making practical use of the data. She reminded the participants that making data available is not enough, but that the training of institutions and individuals needs to be dispensed so that they can use data to take action. Regarding the topic of financing, she raised two points where good data can be of importance. Firstly, data can help to understand and predict changes in the long term, so that investments can fow into the right place. Secondly, data can also help understand the scope of urgent

problems, so that aid can be provided in a timely manner. She concluded that data and information need to be an integral part of infrastructure when we talk about financing.

Prof. Naoyuki Yoshino, Director of the Asian Development Bank Institute joined the meeting through video presentation. He shared his analysis on the economic impact of disasters, which can help assess the importance of disaster prevention. Using the difference in difference method, he analyzed the impact of flood on the regional economy in several cities around Nagoya after a flood in 2000. His analysis revealed that the economic impact of the flood was significantly different from city to city, indicating that different kinds of shocks create various magnitudes of impact in cities depending on the industries that they rely on. He stated that such understanding can help assess how resources can best be allocated for the prevention of disasters. He also emphasized that the present discount value of the decline of GDP due to potential disasters is a good indicator to be used for disaster management. He also indicated that a similar approach can used to estimate the economic impact of a disaster at the macro level. He concluded that estimating the impact of disasters both at the micro and macro-level is important for preparing for disaster prevention and for encouraging disaster mitigation.

Mr. Greg Browder, chair of the session, wrapped up the session thanking the panelists for sharing various perspectives on the issue of how to increase financing for disaster risk reduction.

Closing Plenary

Dr. Han Seung-soo, former Prime Minister of the Republic of Korea and Chair of the High-level Experts and Leaders Panel on Water and Disasters (HELP), wrapped-up the discussion thanking all the speakers and participants for their fruitful and inspiring discussions. He emphasized that many speakers shared a common understanding and substantive messages throughout the day, i.e.: addressing the issue of water and disasters, reducing the losses and suffering caused by water-related disasters around the world that in turn provides opportunities for creating the foundation of a sustainable social-economic development and national security and prosperity. He mentioned that 3 points were emphasized from the lessons of the disasters that occurred in Africa: Increasing financing, promotion of science and technology, and interactivity of water and disasters and climate actions. He informed the participants that the outcome of the day's meeting would be compiled into a Chair's summary. He then expressed his hope that everyone's work would contribute to various ongoing initiatives on water, disaster risk reduction and climate change, including the International Decade for Action, Water for Sustainable Development 2018-2028. Finally, he declared the successful conclusion of the day's Special Session.