

SUMMARY OF THE BUDAPEST WATER SUMMIT 2016: 28-30 NOVEMBER 2016

The Budapest Water Summit took place from 28-30 November 2016, involving around 2,600 participants from 117 countries in three days of discussions and events at the Millenáris Park conference center in Budapest, Hungary.

In his opening address to delegates, János Áder, President of Hungary, positioned water as the most significant issue of the 21st century. Several heads of state and many ministerial-level delegates took part in plenary discussions, including the country leaders of Bangladesh, Mauritius, and Tajikistan. Heads of international organizations and many participants from the private sector, municipalities and civil society also attended the Summit, which highlighted the growing scale of water-related challenges in the context of climate change, and the need for global action and coordination across sectors and scales.

The Summit featured six high-level plenary discussions on: drinking water; sanitation and hygiene; water-use efficiency; integrated water resource management (IWRM); water quality; and ecosystems. Speakers made keynote presentations on climate and disasters, urban systems, transboundary water management, and progress toward a global indicator framework for monitoring of the Sustainable Development Goals (SDGs), including SDG 6 on water. A High-Level Special Session on Climate Change and Water took place on the final day.

Several events took place in parallel with the plenary discussions, including Women, Civil, Science-Technology and Youth forums, and a Sustainable Water Solutions Expo.

The High-Level Panel on Water (HLPW) met on the sidelines of the Summit, and 17 side events also took place.

The Budapest Water Summit produced a “Messages” document containing a menu of options for possible uptake by governments in their efforts to implement water-related aspects of the 2030 Agenda for Sustainable Development, including SDG 6 on water.

This report covers the three days of plenary discussions at the Budapest Water Summit.

A BRIEF HISTORY OF THE BUDAPEST WATER SUMMIT

The first Budapest Water Summit took place in October 2013, and discussed the role of water in the global sustainable development agenda, with the participation of UN leaders and heads of international water organizations, including UN Secretary-General Ban Ki-moon. More than 1,400 participants from 105 countries, including over 30 ministerial-level delegates, attended the conference, which was hosted by the Government of Hungary. The meeting convened within

the context of international negotiations around the 2030 Agenda for Sustainable Development, and sessions addressed: universal access to water and sanitation; water, sanitation and hygiene (WASH) issues; implementing IWRM for the 21st century; serving a growing population with water in a changing climate; implementing good water governance; governing water wisely with specific, measurable, attainable, relevant and time-bound (SMART) SDGs; enabling a green economy for blue water; investing and financing to address the global water and sanitation crisis and related SDG; and leveraging finance.

The Summit produced the “Budapest Statement,” which called for water to be covered as a stand-alone goal in what became the 2030 Agenda, and presented proposals covering the whole spectrum of water management.

The adoption of the 2030 Agenda at the UN Sustainable Development Summit in September 2015 in New York, US, affirmed the strong international support for a holistic approach to water management. SDG 6 in the 2030 Agenda focuses not only on safe drinking water and sanitation, but also on water

IN THIS ISSUE

A Brief History of the Budapest Water Summit	1
Budapest Water Summit 2016 Report	2
Inauguration Session	2
Opening Panel: Water Connects the SDGs?	3
Session 1: How to Provide Safe and Affordable Drinking Water	3
Session 2: How to Improve Sanitation and Hygiene	5
Session 3: How to Achieve Increased Water-Use Efficiency	6
Session 4: How to do IWRM	7
Session 5: How to Improve Water Quality	7
Session 6: How to Manage Water-Related Ecosystems Better	8
Keynotes on Cross-Cutting Issues	9
High-Level Special Session on Climate Change and Water	10
Discussion Session	11
Report-Backs	11
Budapest Water Summit Messages	12
Closing Remarks	13
Upcoming Meetings	14
Glossary	14

quality and wastewater management, water use and scarcity, water resources management, water-related ecosystems, international cooperation, and stakeholder participation.

The UN Secretary-General's June 2016 report on progress toward the SDGs (E/2016/75) highlighted the challenges for global freshwater management. The report states that, despite some progress, 2.4 billion people lack access to improved sanitation facilities in 2015, and many are exposed to drinking water that is contaminated with fecal matter. Worldwide, more than two billion people live in water-stressed regions, with 10 countries on the Arabian Peninsula, Central Asia and Northern Africa withdrawing more than 100% of their renewable freshwater resources. The report states that aid for water and sanitation represents around 7% of total aid flows and needs to be better targeted at countries with severe water issues.

With the adoption of SDG 6 as well as other water-related goals and targets in the 2030 Agenda, the international focus has shifted to implementation, through processes including the High-Level Political Forum on sustainable development and the work of the UN High-Level Panel on Water. UN Secretary-General Ban Ki-moon and World Bank President Jim Yong Kim appointed the 12-member panel in April 2016, and the panel released its action plan in September 2016, calling for a new approach to water management that will help the world achieve the 2030 Agenda, including the 17 SDGs.

BUDAPEST WATER SUMMIT 2016 REPORT

INAUGURATION SESSION

The Budapest Water Summit opened on Monday morning at the Millenáris Park conference center, to the rhapsodic strains of music and a live sand animation performance by Hungarian filmmaker Ferenc Cakó, illustrating the vital importance of clean water for communities around the world.

Zsófia Tomaj, Master of Ceremonies, welcomed delegates and recalled the outcomes of the 2013 Budapest Water Summit, which had called for a stand-alone sustainable development goal (SDG) on water.

János Áder, President of Hungary, identified water as the most significant issue of the 21st century. Noting that responsible water management is a prerequisite for development, he cited examples of water issues worldwide, including the link between water scarcity and conflict, and impacts of climate change on irrigation and hydropower production.

UN General Assembly President Peter Thomson cited an Organisation for Economic Co-operation and Development (OECD) forecast that global water demand will increase by at least 55% from 2000-2050, with urbanization and



UN General Assembly President **Peter Thomson**

climate impacts likely to drive this figure much higher. He highlighted the plight of small island states experiencing increased drought and groundwater contamination, and called for water needs to inform national planning processes relating to water-intensive sectors such as agriculture and energy production. Recognizing the interlinked challenges of freshwater management and the role of oceans in the water cycle, he encouraged all concerned to be involved in the UN Oceans Conference taking place from 5-9 June 2017 in New York, US.

UN Secretary-General Ban Ki-moon, by video, noted that the 2030 Agenda for Sustainable Development and the Paris Agreement on climate change provide a blueprint for peace, prosperity and a healthy planet, and that delivering on that promise of sustainable development will require engaging all stakeholders.

Ameenah Gurib-Fakim, President of Mauritius, and Co-Chair of the High-Level Panel on Water (HLPW), emphasized small island states' extreme exposure to the impacts of climate change, and the critical importance of water in their survival, urging everyone to support the recently launched HLPW Action Plan. She noted that the HLPW is currently taking stock of financing mechanisms for the water sector.

Emomali Rahmon, President of Tajikistan, highlighted that Tajikistan generates 60% of Central Asia's water resources, but that 1,000 of its 14,000 glaciers and snowfields have vanished in the last 20 years. He stressed the importance of water for agriculture and hydropower generation for development, and noted the inclusion of integrated water resource management (IWRM) in Tajikistan's national development strategy.

Sheikh Hasina Wazed, Prime Minister of Bangladesh and HLPW member, outlined the HLPW's priorities, including: building resilience to water-related disasters; ensuring equitable water distribution; and developing resilient crop varieties and agricultural technologies. She also highlighted Bangladesh's long-term water-sharing agreements with neighboring countries.

Joaquim Levy, Managing Director and Chief Financial Officer, World Bank Group, said sound investments in the water sector can have an enormous pay-off in terms of health, environment and economic development. Calling for innovative blended financing mechanisms, he stressed the need to strengthen the technical and financial capacity of water service providers and to focus on collaboration and inclusivity.

The meeting also heard messages from Bartholomew I, Archbishop of Constantinople, and Pope Francis, recognizing the value of water in sustainable development.



János Áder, President of Hungary



(L-R) **Johan Kuylenstierna**, Executive Director of the Stockholm Environment Institute, Sweden; **Pavel Kabat**, Director General and Chief Executive Officer, International Institute of Applied Systems Analysis; **Heiner Markhoff**, President and Chief Executive Officer, GE Power & Water's Water & Process Technologies; **Joachim von Amsberg**, Vice-President, Policy and Strategy, Asian Infrastructure Investment Bank; **Tegegnetwork Gettu**, UN Under-Secretary-General and UNDP Associate Administrator; **Han Seung-soo**, Former Prime Minister, Republic of Korea; and **Danilo Türk**, Former President of the Republic of Slovenia and Chair of the Global High-Level Panel on Water and Peace

OPENING PANEL: WATER CONNECTS THE SDGS?

Johan Kuylenstierna, Executive Director, Stockholm Environment Institute, moderated the session.

Danilo Türk, former President of Slovenia and Chair of the UN Global High-Level Panel on Water and Peace, highlighted the panel's 22 November 2016 discussion of connections between water, peace, and security. He noted the potential to galvanize UN action, particularly where action is lacking in the area of transboundary water agreements.

Han Seung-soo, former Prime Minister, Republic of Korea, and UN Secretary-General's Special Envoy on Disaster Risk Reduction and Water, emphasized that his country's achievement in increasing water access from 16% in the 1960s to 98% in 2016 has been central to Korea's economic success. Han highlighted that 90% of human loss of life from natural disasters comes from water-related events, and that political will to improve resilience is vital to reducing disaster mortality rates.

Tegegnetwork Gettu, UN Under-Secretary-General and UN Development Programme (UNDP) Associate Administrator, outlined the challenges for the UN system as: "delivering as one"; filling the knowledge gap; accessing investment and other necessary instruments; creating enabling environments; supporting water security; and meeting capacity needs.

Joachim von Amsberg, Vice-President, Policy and Strategy, Asian Infrastructure Investment Bank (AIIB) explained the AIIB was established soon after the adoption of the 2030 Agenda and the Paris Agreement to meet the financing needs of its 57 founding member countries, with China being its largest shareholder. He estimated investment needs of US\$1 trillion a year for water infrastructure and declared the AIIB's intention to become known for its financing of sustainable infrastructure, including low-carbon energy, environmentally sustainable water infrastructure, and resilient systems for water and sanitation.

Heiner Markhoff, President and CEO, GE Power & Water's Water & Process Technologies, highlighted GE's work as a technology provider in 100 countries, in areas such as energy-efficient water technology, water reuse, and nutrient recovery from wastewater. He noted that activities such as

power generation and oil and gas extraction are highly water-intensive, and stressed the importance of addressing the water-energy-food nexus in a broad context.

Pavel Kabat, Director-General and CEO, International Institute of Applied Systems Analysis, called for greater attention to groundwater and salinity issues, and to transboundary cooperation, citing needs in the Mekong and Nile Deltas and areas around the Bay of Bengal. He challenged the multilateral development banks to support a sustainable investment agenda for blue, green and greywater, and for science-policy partnerships.

On transboundary issues, Han noted the importance of China's role and its recent meeting on Hainan Island with Mekong country leaders. Türk said the capacity for additional institutional architecture on water varies across regions.

Gettu called for resilience building and providing practical guidance for activities on the ground. Amsberg highlighted the need for "cross-stakeholder" action that will bring together policy frameworks with science and technology, and public and private capital. Markhoff noted that stability is an important prerequisite for private capital flows.

Panelists discussed ways to trigger investments in sectors and places where the needs are greatest. Von Amsberg stressed the huge availability of private capital and the need for a framework to connect investable assets with water development needs, and Kabat proposed establishing a panel of hundreds of scientists to draw up robust scenarios for wise investments.

SESSION 1: HOW TO PROVIDE SAFE AND AFFORDABLE DRINKING WATER

Torgny Holmgren, Executive Director, Stockholm International Water Institute, moderated this session on Monday. He noted that 80% of African countries' Nationally Determined Contributions under the UN Framework Convention on Climate Change (UNFCCC) were about water issues.

Gérard Payen, former Advisor, UN Secretary-General's Advisory Board on Water and Sanitation, said the SDG water targets raise the bar significantly from the Millennium



(L-R) **Bai Mass Taal**, Former Executive Secretary, the African Ministers' Council on Water; **Henk Ovink**, Special Envoy for International Water Affairs, the Netherlands; **G rard Payen**, Former Adviser, United Nations Secretary-General's Advisory Board on Water & Sanitation; **Themba Gumbo**, Director, Cap-Net, United Nations Development Programme; **Torgny Holmgren**, Executive Director, Stockholm International Water Institute; and **Jos  Carrera**, Vice-President of Social Development, Development Bank of Latin America

Development Goal on water access. He outlined political challenges, including that of water being cheaper in wealthier areas, and the persistence of water access issues in countries that have significant rainfall.

Henk Ovink, Special Envoy for International Water Affairs, the Netherlands, elaborated on a World Economic Forum (WEF) model on the interdependency of risks, highlighting the need for comprehensive risk mitigation and adaptation strategies. He stressed the need for local financing solutions, including the use of bonds.

Jos  Carrera, Vice-President of Social Development, Development Bank of Latin America, emphasized that urban and rural situations call for different solutions. He said an annual investment of 0.3% of a countries' GDP is sufficient to close the gap in water supply and basic sanitation services by

2030. He noted this is not just a financial, but also a regulatory challenge, and that government need to consult civil society, the private sector and international development agencies to develop effective regulation.

HIGH-LEVEL PANEL DISCUSSION 1: DO WE HAVE ENOUGH GOOD WATER TO DRINK? Bai Mass Taal, former Executive Secretary, African Ministers' Council on Water (AMCOW), moderated the discussion.

Mohamed El Azizi, Director, Water and Sanitation Department, African Development Bank (AfDB), said the AfDB is scaling up its efforts on lending and co-financing, noting that lending for water infrastructure reached US\$1 billion this year, from an initial level of US\$200 million. He highlighted the AfDB's support for rainwater harvesting, and its assistance to countries to develop bankable projects for climate financing.



(L-R) **Bai Mass Taal**, Former Executive Secretary, the African Ministers' Council on Water; **Mohamed El Azizi**, Director, Water and Sanitation Department and the African Water Facility, African Development Bank; **Manuel Sager**, Director General, Swiss Agency for Development and Cooperation; **Kentth Hvid Nielsen**, Group Vice-President for Global Market Segment Water Utility, Grundfos; **Jaana Husu-Kallio**, Permanent Secretary, Ministry of Agriculture and Forestry, Finland; **Zsuzsanna Jakab**, Regional Director for Europe, World Health Organization; **Themba Gumbo**, Director, Cap-Net, United Nations Development Programme; and **Torgny Holmgren**, Executive Director, Stockholm International Water Institute

Zsuzsanna Jakab, Regional Director for Europe, World Health Organization, highlighted the public health and economic case for ensuring a safe water supply, and the urgency of working across silos and with the private sector and civil society, calling for “action, action, action.”

Manuel Sager, Director-General, Swiss Agency for Development and Cooperation, emphasized the importance of water for health and peace. He urged all concerned to work on engaging and mobilizing large numbers of people. He observed that more than 30 agencies work on water issues in the UN system alone, and stressed the need to speak with one voice.

Jaana Husu-Kallio, Permanent Secretary, Ministry of Agriculture and Forestry, Finland, described her country’s water access and water quality programmes, and Finland’s promotion of international policies on climate and food security.

Kent Hvid Nielsen, Group Vice-President for Global Market Segment Water Utility, Grundfos, described the Danish company’s water pumping technologies, noting its local partnership approach to driving intelligent solutions.

Panelists stressed the significance of the private sector in delivering results, and discussed whether creating a water-specific international finance mechanism or institutional body is needed. While expressing some caution, they recognized the value in strengthening the international architecture. Sager suggested that a Summit outcome could be a roadmap for how to move towards a new coordinating body on water. Jakab did not support the establishment of new institutions, and instead favored introducing new governance and accountability mechanisms through existing international institutions. El Azizi advocated integrating water into the climate change agenda. He indicated that the AfDB is working with other regional financial institutions to define an approach to “bankability” of projects, which would take account of social aspects.

SESSION 2: HOW TO IMPROVE SANITATION AND HYGIENE

Sanjay Wijesekera, Chief of the Water, Sanitation, and Hygiene (WASH) Programme Division, UN Children’s Fund (UNICEF), moderated this session, which convened on Monday. He underlined that SDG 6 applies to all countries, the whole water cycle and the whole management chain of sanitation.



Sanjay Wijesekera, Chief of the WASH Programme Division, UNICEF

Pierre Victoria, President of Sustainable Development, Veolia, said there is an urgent need for technology that is adapted to local realities. He stated that: global water use has tripled since 1950; 80% of wastewater is discharged back into the environment

without any treatment; and 2.5 billion people lack access to basic wastewater treatment. He highlighted sanitation as both an environmental and social challenge.

Ibrahim Kabole, Country Director, WaterAid Tanzania, identified WASH as a complex of multi-stakeholder, cross-cutting issues that must be addressed in the context of poverty and urbanization. He stressed the importance of technological innovation, private-sector and local-government involvement, and education to promote behavior change on hygiene.

Ali Chavoshian, UN Educational, Scientific and Cultural Organization (UNESCO) Regional Centre on Urban Water Management, International Drought Initiative, spoke on behalf of Rahim Meidani, Deputy Minister of Energy for Water and Wastewater, Iran. Chavoshian reported 99% coverage of urban water supply in Iran, but less than 50% safe sewage disposal. He described keys to success, including decentralization and “coordinated privatization,” and public awareness and demand management campaigns. He also noted challenges, including the affordability of technological solutions, political stability and reliability of essential services in the long term.

HIGH-LEVEL PANEL DISCUSSION 2: DO WE HAVE WATER SOLUTIONS FOR IMPROVED PUBLIC HEALTH AND HYGIENE? Jack Moss, Executive Director, Aquafed, moderated this panel discussion on Monday.

Miklós Szócska, Director, Health Services Management Training Centre, Semmelweis University, and former Minister of State for Health, Hungary, said coordination between the health and sanitation sectors is challenging and more strategic investment is needed to make effective the links between SDG 3 on health and SDG 6 on water.

Joakim Harlin, Vice-Chair, UN-Water, called for a systems approach that recognizes water availability is linked to how we manage wastewater as well as drinking water. He stressed that managing drinking water supply “does not start at the tap,” and that the all six SDG 6 targets must be addressed.

Lesha Witmer, Women for Water Partnership, also supported a systems approach. She commented that good technical initiatives are not progressing because of the lack of a coordinating institution that could make the horizontal connections between water system elements. She stressed that the HLPF cannot perform such a role.

Sue Goeransson, Director, Municipal and Environmental Infrastructure Team, European Bank for Reconstruction and Development, recommended appropriate tariffs on both drinking water and wastewater as a way to drive efficiency and water recycling.

Chavoshian, UNESCO, noted that international discussions on water and sanitation lack effective regional cooperation, compared with other UN processes.

Alix Lerebours, Water Youth Network, noted that working in the water and sanitation sector is not appealing to young people as a career, but could be made more so, if people understood its significance.

Anders Bertell, Executive Director, 2030 Water Resources Group/International Finance Corporation, said wastewater and sewage represent commercial opportunities as the sludge contains energy and nutrients, noting that, in Sweden, the combined wastewater and sewage system has become a net energy producer.

Witmer said that women fill only 17% of paid jobs in the water sector. Participants discussed women’s participation in WASH, including ways the sanitation industry can make itself more attractive to women, for instance, by introducing flexible hours. They noted that involving women in the location, design and maintenance of sanitation facilities and in payment collection will have all-round benefits.

Harlin, UN-Water, mentioned monitoring efforts on SDG 6 implementation, including creation of a baseline for SDG 6 indicators in 2017.

Concluding the session, moderator Moss summarized by stating that tackling the global issue of water and sanitation will require institutional and administrative measures, rather than responses of a technical nature.

SESSION 3: HOW TO ACHIEVE INCREASED WATER-USE EFFICIENCY

Mohammed Bushehri, Undersecretary, Ministry of Electricity and Water, Kuwait, chaired this session on Tuesday.

Chen Lei, Minister of Water Resources, China, highlighted successful examples of China's IWRM policies. He reported on nation-wide water saving and pollution reduction actions involving, *inter alia*, technology implementation, recycling, wastewater management, and efficient irrigation. He advocated, among other measures: intersectoral cooperation on water, food and energy security; leverage of investments in water technology; government-led multi-stakeholder participation; strengthened monitoring systems; and inclusiveness, mutual learning and win-win approaches.

Hazim El Naser, Minister of Water Resources, Jordan, emphasized the urgent need for a long-term perspective in the face of regional instability and global strategic changes. He said that Jordan is: the third water-poorest country in the world; hosting 1.4 million Syrian refugees; surrounded by regional conflict; sharing 40% of its water resources with other countries; and is already affected by climate change. He identified useful strategies, including: technology and knowledge transfer; energy efficiency and renewable energy policies; public-private partnerships; and public awareness and education campaigns.

Vladimir Rakhmanin, Assistant Director-General, Regional Representative for Europe and Central Asia, Food and Agriculture Organization of the UN (FAO), outlined FAO efforts toward achieving water efficiency by improving water productivity in the "thirsty" agriculture sector, which is responsible for 70% of global water withdrawals. He noted

the food sector doubled its overall productivity in the last half century through modernization and innovation but needs to do more to meet demand from the expected 9-10 billion global population by 2050, including working to reduce food waste.

HIGH-LEVEL PANEL DISCUSSION 3: HOW TO MANAGE EVERY DROP: Jerome Delli Priscolli, Chair, Technical Committee, Global Water Partnership, moderated this panel discussion on Tuesday. The panel included: Olcay Ünver, Deputy Director, Land & Water Division, FAO; Regina Kuzmina, Managing Director Hungary & Adria, Unilever; Jonathan Taylor, Vice-President, European Investment Bank; Bruno Tisserand, Research Programme Director at Veolia and President of EurEau; and Batbayar Zeneemyadar, Ambassador of Mongolia to Hungary.

Panelists noted that water-use efficiency has multiple meanings, presents human capacity challenges, and will require long-term investments and behavioral change. They emphasized that long-term investments make sense from a business perspective, but the challenge is attracting investors. Taylor suggested innovative means of investing in the necessary water infrastructure, such as through blended finance and through governments offering to "take the first loss," so as to reduce risk to private investors. Kuzmina highlighted that Unilever seeks to source its products from water-efficient, sustainable agriculture, noting that this has potential to prompt a positive chain reaction in related industries.

Participants and panelists discussed the need to price water accurately so as to influence consumer behavior, while incorporating support for the most vulnerable consumers, and Ünver suggested engaging the expertise of behavioral scientists. They agreed that water "doesn't stay within SDG 6," but has many linkages to other SDG targets, including those on agriculture, land use, land degradation, sustainable consumption and production. They observed that water-use efficiency can be advanced not only through macro approaches but also through micro-solutions such as smart metering that has the potential to change water-use behaviors, and through joint efforts on a wide range of interventions, including education and advocacy.



(L-R) **Jerome Delli Priscolli**, Chair, Technical Committee, Global Water Partnership; **Vladimir Rakhmanin**, Assistant Director-General, Regional Representative for Europe and Central Asia, FAO; **Hazim El Naser**, Minister of Water Resources, Jordan; **Chen Lei**, Minister of Water Resources, China; **Rozemarijn ter Horst**, Water Youth Network; and **Mohammed Bushehri**, Ministry of Electricity and Water, Kuwait



(L-R) **Tom Soo**, Executive Director, World Water Council; **Christian Friis Bach**, Executive Secretary, UNECE; **Sirodjidin Mukhridinovich Aslov**, Minister of Foreign Affairs, Republic of Tajikistan; **Mansour Faye**, Minister for Water Resources and Sanitation, Senegal; **Stefan Uhlenbrook**, Coordinator, World Water Assessment Programme, UN Educational, Scientific and Cultural Organization; and **Shammy Puri**, International Association of Hydrogeologists

SESSION 4: HOW TO DO IWRM

Shammy Puri, former Secretary General, International Association of Hydrogeologists, moderated this session on Tuesday.

Mansour Faye, Minister for Water Resources and Sanitation, Senegal, presented national experiences with IWRM in the areas of: knowledge management; creating an institutional framework for IWRM; and communication, education and information, highlighting successful action in managing water supply to the capital Dakar.

Sirodjidin Mukhridinovich Aslov, Minister of Foreign Affairs, Tajikistan, said transboundary cooperation among central Asian countries is transitioning from primarily national-level IWRM actions to a river basin approach. He presented Tajikistan's efforts in promoting IWRM at the regional scale, based on: strengthening the legal basis for IWRM; capacity building; and improving the financial incentives for infrastructure cooperation.

Christian Friis Bach, Executive Secretary, UN Economic Commission for Europe (UNECE), observed that six out of 10 transboundary river basins have not yet put in place transboundary cooperation arrangements. He welcomed progress in the international space, including the adoption of SDG target 6.5 on transboundary cooperation. Noting that the HLPF will be reviewing progress on SDG 6 in 2018, he urged countries to submit their national reports by March 2017. Friis Bach highlighted the success of the UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes (UNECE Water Convention) in promoting good practice and securing financial resources for projects, and noted interest in the concept of an intergovernmental platform for long-term political cooperation on water issues.

In the ensuing discussion, participants addressed water as a source of engagement and cooperation. Some expressed concern about the potential for water conflict, and others stressed the need to create structures to promote engagement and political will. Aslov concluded that water cooperation and partnerships contribute to avoiding conflict.

HIGH-LEVEL PANEL DISCUSSION 4: IWRM – DOES IT REALLY EXIST?

Tom Soo, Executive Director, World Water Council, moderated this session on Tuesday. The panel included: Peter Joo Hee Ng, Chief Executive, Public Utilities Board, Singapore; Betsy Otto, Global Director, Water Program, World Resources Institute; Daene C. McKinney, University of Texas, US; Alexandros Yannis, European External Action Service; Sami Faruqi, Water and Environment Division, Islamic Development Bank; Ivan Zavadsky, Executive Secretary, International Commission for the Protection of the Danube River; and Torkil Jønych Clausen, Board of Governors, World Water Council.

Panelists agreed that IWRM is “not an if, it’s a how.” Jønych Clausen remarked that IWRM should not be seen as a cathedral, high up and unattainable, but as a bazaar, a place where people work and live every day. Panelists also agreed that IWRM is a multi-sectoral issue that cuts across various SDGs. Otto felt that many countries formulate their development goals without taking into account IWRM, noting a role for the private sector in this regard. Faruqi drew attention to varying IWRM needs even within countries, and Zavadsky added that actions should be tailored to the basic hydrological unit, the basin.

In response to participants’ comments, panelists suggested that the W should be taken out of IWRM because truly integrated resource management will include interconnected water management, and that failure to price water appropriately prevents private sector involvement and harms the poor through underinvestment. They proposed that IWRM transboundary treaties should be flexible in responding to increasingly severe climate impacts, and noted that applications for project funding must take into account water footprints, as well as carbon footprints.

SESSION 5: HOW TO IMPROVE WATER QUALITY

Le Duc Trung, Director General, Viet Nam National Mekong Committee Secretariat, Ministry of Natural Resources, Viet Nam, moderated this session on Tuesday.



(L-R) **Mark Smith**, Director, Global Water Programme, International Union for Conservation of Nature; **Helge Wendenburg**, Director-General, Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety, Germany; **Sommad Pholsena**, Minister of Natural Resources and Environment, Lao PDR; **Anik Bhaduri**, Executive Director, Sustainable Water Future Programme, Australia; **Le Duc Trung**, Director-General, Ministry of Natural Resources, Viet Nam; and **Philip Gichuki**, Managing Director, Nairobi City Water and Sewerage Company, Kenya

Sommad Pholsena, Minister of Natural Resources and Environment, Lao PDR, highlighted his country's Action Plan for 2016-2020, including the aim to: formulate, update and implement legislation; develop river basin management plans in 10 priority basins; and enhance regional cooperation.

Helge Wendenburg, Director-General, Water Management and Resource Conservation, Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety, Germany, on behalf of his Minister Barbara Hendricks, said that despite significant improvements, water quality in the developed world faces challenges from industrialization and climate change. He stressed the need for: comprehensive national and international assessments of water quality challenges, such as the World Water Quality Assessment initiated by the UN Environment Programme (UNEP); and favored having a UN-based governance framework for water.

Philip Gichuki, Managing Director, Nairobi City Water and Sewerage Company, Kenya, described how his organization is increasing citizens' access to safe water through legal provisions including the 2016 Water Act, which established a regulator to oversee water services, and the introduction of a programme for testing water quality at the source, treatment and point of consumption. He also highlighted a microfinance programme, which is supporting poorer rural communities in gaining access to water.

HIGH-LEVEL PANEL DISCUSSION 5: HOW TO IMPROVE WATER QUALITY FOR PEOPLE AND THE PLANET: Mark Smith, Director, Global Water Programme, International Union for Conservation of Nature, moderated the panel discussion on Tuesday. Panelists included: Jennifer Haverkamp, Special Representative for Environment and Water Resources, US State Department; Jeremy Bird, Director General, International Water Management Institute; Alvaro Umaña-Quesada, former Minister of Energy and Environment, Costa Rica and Vice-Chair of the UN Global High-Level Panel on Water and Peace; Frank Rijsberman, Director-General, Global Green Growth Institute; Debra Kertzman, European Representative Office, Asian Development Bank; and Alex Mung, Head of Water Initiative, WEF.

Rijsberman said regulatory and "polluter pays" approaches of the 1980s struggled to achieve environmentally friendly, pro-poor outcomes on their own. He expressed satisfaction that finance ministers currently see the potential of price signals for achieving inclusive green growth outcomes, and fund managers now increasingly see green bonds as part of mainstream finance.

Mung recognized increased sustainability awareness in the business community, but identified the need for a catalyst, such as a global framework on water, to "connect the dots." Haverkamp favored flexible approaches and finding platforms to share best practices. Umaña-Quesada said change requires a solid legal basis, and different stakeholder groups have to realize that water management is their responsibility.

Panelists anticipated that developing countries can leapfrog problems of pollution and waste, with sufficient foresight and political will. They believed that achieving the needed scale of financing is possible if multilateral development banks can use funds to help "crowd in" the private sector, and through innovative approaches such as Costa Rica's introduction of payments for ecosystem services.

Concluding the session, panelists called for: increasing capacity to develop bankable projects; targeting finance to the needs of the poorest; tailoring solutions to different countries; using the power of networks; working across silos and sectors; and redefining water quality to include whole ecosystems.

SESSION 6: HOW TO MANAGE WATER-RELATED ECOSYSTEMS BETTER

Ger Bergkamp, Executive Director, International Water Association, chaired the session on Tuesday.

Ney Maranhão, Director, National Water Agency, Brazil, described the multiple functions of freshwater ecosystems in Brazil. He noted serious pollution problems from sewage discharge into rivers that cross São Paulo, and the collapse of a tailings dam on the Doce River Basin in Minas Gerais that had affected water supply to nearly two million people. He called for integrated data and an interdisciplinary approach to protecting water as a collective asset.

Charles Vörösmarty, City University of New York, presented economic arguments for environmental stewardship, and the value of ecosystems for human water security. He suggested that mixing green approaches to water management alongside more traditional large-scale engineering, or “grey” approaches, would yield significant economic benefits.

Stuart Bunn, Director, Australian Rivers Institute, Griffith University, and Sustainable Water Future Programme, Australia, stressed the critical connections among rivers, wetlands, floodplains and coastal zones. He said addressing point source pollution is not a technical issue, but one of political will, whereas diffuse or non-point source pollution, including from degraded riparian land and vegetation, is technically more challenging to address.

HIGH-LEVEL PANEL DISCUSSION 6: HOW TO GET MORE GREEN: Gábor Baranyai, Ministerial Commissioner, Ministry of Justice, Hungary, moderated this session on Tuesday.

Nikolay Kosov, Chairman of the Board, International Investment Bank, noted that banks currently have a low appetite for risk and for start-up enterprises. He suggested: establishing a global water fund for projects; compiling a global portfolio of water-related projects in need of funding; and issuing water bonds that are guaranteed by countries.

Jean-François Donzier, International Network of Basin Organizations (INBO), highlighted INBO’s work on an inventory of natural water retention measures in Europe.

Karin Krchnak, Director, Freshwater Program, World Wildlife Fund (WWF), said many policymakers and funders now agree it is important to invest in both grey and green infrastructure, but the next challenge is to determine what is the right mix and to operationalize this approach at the river basin level. She mentioned WWF’s basin report cards, which can be used to inform private sector investment in basin-level water management, and said WWF is forming partnerships with large companies to help them put a value on their natural capital.

Ania Grobicki, Deputy Secretary General, Ramsar Convention, said around two-thirds of the world’s wetlands have been destroyed over the last century, but the Convention protects around 25% of total remaining wetland areas. She called for “re-greening” catchments and basins, including for carbon restoration and flood prevention. She noted the importance of lower runoff factors for flood prevention.

Patrick Lavarde, Director, International Water Resources Association, described successful basin-level ecosystem management actions in France. He underlined the importance of reviewing national policies, involving key stakeholders such as farmers, and conducting reviews and actions at the basin scale and across sectors.

Concluding the session, panelists expressed the need to: prioritize financing for water management; recognize and quantify the role of environmental services; take into account the effects of climate change; seek concrete and ambitious commitments from all stakeholders; and make people understand that “this green and blue planet is a tremendous asset,” and that “the smartest solutions are green solutions.”

KEYNOTES ON CROSS-CUTTING ISSUES

Stefan Uhlenbrook, Coordinator and Director, World Water Assessment Programme, UNESCO, chaired this session, which convened on Wednesday morning.

Toshio Koike, Director, International Centre for Water Hazard and Risk Management, and Tokyo University, Japan, discussed the links between climate change and water-related hazards, and the associated economic losses. He underscored the important role of science in policy-making, and described prediction, early-warning and response systems, noting the importance of monitoring and data integration. He concluded that managing uncertainties is vital to reducing water-related disaster risk and increasing social resilience, and affirmed the value of green infrastructure and both “hard” and “soft” approaches to mitigating disaster risk.

Graham Alabaster, Chief, Waste Management and Sanitation, UN-Habitat, noted that half of all urban dwellers live in smaller cities, while some larger cities have experienced population decline. On slums, he called for “a sanitary revolution,” to be led by prominent local political figures, on water supply, sanitation, drainage, solid waste and air quality management. He asserted that lack of finance is not the main challenge, noting that GDP in Rwanda is now the same as that of Great Britain in the Victorian era, when its cleanup of the “Great Stink” took place.

Francesca Bernardini, Secretary, UNECE Water Convention, UNECE, said the Convention now has a global focus and many countries are currently acceding, bolstering its 41-strong membership. She highlighted lessons learned



(L-R) **Nikolay Kosov**, Chairman of the Board, International Investment Bank; **Jean-François Donzier**, Permanent Technical Secretary, International Network of Basin Organizations; **Karin Krchnak**, Senior Director for Water, World Wildlife Fund; **Ania Grobicki**, Deputy Secretary General, Ramsar Convention on Wetlands; **Patrick Lavarde**, President, IWRA; **Ger Bergkamp**, Executive Director, International Water Association; and **Gábor Baranyai**, Ministerial Commissioner, Ministry of Justice, Hungary

about strengthening transboundary cooperation, for example, that cooperation on a non-contentious agenda of common concern, such as Belarus and Lithuania's work on regional climate change adaptation, can overcome reluctance to discuss sensitive issues. She noted that developing a methodology for identifying basin-wide benefits can assist in attracting financial support, but that intersectoral conversations across silos can be difficult to achieve. She stressed that international law plays an important role in leveling the playing field, providing predictability, and serving as a reference point for peer review to drive action.

Gabriella Vukovich, President, Hungarian Central Statistical Office, outlined efforts to measure and manage SDG implementation through a global indicator framework. Vukovich noted that 11 indicators currently address SDG 6 water targets and that methodologies are still being developed for some of these. She said the High-Level Group for Partnership, Coordination and Capacity-Building, which she co-chairs, is supporting strengthening of countries' statistical systems for SDG monitoring, and that a global action plan on data for SDG monitoring will be released in January 2017 at the UN World Data Forum in Cape Town, South Africa.

HIGH-LEVEL SPECIAL SESSION ON CLIMATE CHANGE AND WATER

Johannes Cullmann, Director, Water and Climate Department, World Meteorological Organization (WMO), moderated the session on climate change and water on Wednesday.

Mohammed Al-Saud, Deputy Minister for Water Affairs, Saudi Arabia, noted that the changing social and economic consumption patterns over the last 40 years have had a significant impact on the country's limited water supply. Al-Saud noted these impacts far outweigh climate change impacts to date and mean the country now relies heavily on desalination of seawater for drinking, with some recently constructed desalination plants being powered by solar energy.

Mariusz Gajda, Undersecretary of State, Ministry of the Environment, Poland, said Poland has been a leader in climate protection over many years and highlighted that actions to repair the local hydrological cycle also benefit the global cycle. He noted Poland's investment in forest retention, improved agricultural practices, and creating rural and urban reservoirs.

Petteri Taalas, Secretary-General, WMO, outlined WMO contributions to the 22nd Conference of Parties (COP-22) to the UNFCCC, summarizing statistics on greenhouse gas emission increases and temperature trends. He noted that climate impacts are most severe in the Arctic, with high winter temperatures and low sea ice levels now setting records. He said the cost of climate-related disasters is now 50 times higher than in the 1950s, and he called for improved, integrated country-level early-warning systems. Acknowledging that renewable energy is not carbon neutral, he said it is always better than fossil energy, and remarked that, "the only energy solution that is carbon-neutral is energy saving."

Gordon McBean, President, International Council for Science, said policy-making should include the social and political sciences, in addition to the physical sciences. He encouraged scientists to communicate better with policy makers and all other stakeholders, and to co-design research projects with them to ensure their work is relevant.

János Pásztor, Senior Advisor to the UN Secretary-General on Climate Change, and Senior Fellow of the Carnegie Council for Ethics in International Affairs, stressed the linkages between the various SDGs and targets. He stressed that climate, water and energy each offer entry points for action but that this calls for cross-sectoral integration and systems thinking.

Javier Manzanares, Executive Director, Green Climate Fund (GCF), said the GCF is the largest dedicated climate change fund and has so far approved 27 funding proposals, 13 of which are water-related. He said the goal of the GCF is to catalyze efforts by emerging economies to implement low-emission and climate-resilient strategies.



(L-R) **Javier Manzanares**, Executive Director a.i., Green Climate Fund; **János Pásztor**, Senior Advisor to the UN Secretary-General on Climate Change and Senior Fellow of Carnegie Council for Ethics in International Affairs; **Gordon McBean**, President, International Council for Science; **Petteri Taalas**, Secretary-General, WMO; **Mariusz Gajda**, Undersecretary of State, Ministry of the Environment, Poland; **Mohammed Al-Saud**, Deputy Minister for Water, Saudi Arabia; and **Johannes Cullmann**, Director, WMO



(L-R) **Joshua Newton**, World Bank Group, Global Water Partnership, African Development Bank; **Balázs Heincz**, Water Coordinator at Ministry of Foreign Affairs and Trade, Hungary; and **András Szöllösi-Nagy**, Co-Chair, Budapest Water Summit

Participants discussed how to achieve integrated approaches and underlined the need to maintain the “water momentum” displayed at UNFCCC COP-22.

DISCUSSION SESSION

András Szöllösi-Nagy, Co-Chair, Budapest Water Summit, invited participants to discuss the Summit “Messages” document on Wednesday, explaining that a 12-member group of eminent persons had drafted the document. He stated that the Summit is a technical forum, rather than an intergovernmental one, and that the document does not therefore have the status of a negotiated outcome, but instead presents a range of ideas for water management within the 15-year framework of the SDGs.

Szöllösi-Nagy also noted that the science community favors having an intergovernmental panel on water, a kind of “IPCC-lite.” He observed that under the SDGs water targets are not only about WASH and must take into account the whole water cycle, with overall coordination being needed.

He cautioned against calibrating models against datasets from developed countries alone, as this could lead to bias in predictions, commenting that there are more hydrology data available on Germany than on the whole of Africa.

Participants stressed the need for data to support monitoring against the SDG indicators and highlighted the need for: gender-disaggregated data; combined water and land-use data; data on transboundary aquifers; use of “citizen data” drawn from sources such as mobile telecommunications; and funds and long-term instruments for implementation of water-related targets.

They canvassed other issues that they felt could receive more emphasis, including: the emerging crisis of urban health; the science-policy interface; the need for increases in official development assistance to build basic capacities in least developed countries; and the role of local decision makers, such as mayors.

They also recommended simplifying the language of the Messages document and grouping potential activities under key themes. Concluding the discussion, Szöllösi-Nagy said the Messages would remain a living, open document.

REPORT-BACKS

Szöllösi-Nagy moderated the report-back session on Wednesday.

SESSION 1 (DRINKING WATER): Marianne Kjellén, UNDP Senior Water Advisor, on behalf of Themba Gumbo, Director, Cap-Net, UNDP, said speakers had recommended, among various measures: exercising “water diplomacy;” addressing legal barriers to realizing the human right to water; mobilizing finance, including through local and private funding and new kinds of partnerships; developing solutions tailored to different-sized cities; seeking integration among targets under SDG 6 and the other SDGs; and sharpening the monitoring and measurement of progress.

SESSION 2 (SANITATION AND HYGIENE): Sarah Dousse, Executive Director, International Secretariat for Water/Solidarity Water Europe, said speakers had emphasized that sanitation is also an issue in developed countries, and that the strong links between SDG 6 on water and SDG 3 on health call for strategic and coordinated investments and the active involvement of all stakeholders. She said speakers had stressed that in order to achieve the ambition of SDG 6, the water sector needs to be organized, which calls for a coordinating mechanism that makes existing connections in the water sector more efficient. She said the session had concluded that: innovation is key, but technology alone will not be enough, as there remain institutional and administrative measures; sanitation has to be made more appealing as a career choice for young people; and existing solutions need to be scaled up, including social components.

SESSION 3 (WATER-USE EFFICIENCY): Rozemarijn ter Horst, Board Member, Water Youth Network, reported that China had noted: the need to reform agricultural prices to drive reductions in water use; the way the SDGs link all countries; its plan to cap water use by 2020; and its need for capacity development. She noted Jordan’s actions to improve water-use efficiency, and its perspective on how conflict limits potential water actions. She further highlighted other speakers’ perspectives, including that: farmers need support for innovation; water pricing drives consumption efficiency and attracts the necessary investments; the less well-off can receive direct support when pricing is introduced; multipurpose funds can “break the silos”; and behavioral scientists are needed in the policy discussion on reducing consumption.

SESSION 4 (IWRM): Stefan Uhlenbrook, Coordinator and Director, World Water Assessment Programme, UNESCO, noted that Senegal had outlined its actions since 2002, including: investing in knowledge management and data systems; and balancing social, economic and environmental drivers to achieve IWRM. He further noted Tajikistan’s presentation on balancing its social, economic and environmental needs under an IWRM approach and its plan to launch, in 2018, a decade on water issues. He recalled the UNECE’s presentation that around 50% of river basins are at high risk of increased flooding and drought, which requires extensive transboundary cooperation. The panel discussion noted the vital role of IWRM in addressing water challenges, and the comprehensive treatment and reuse approach practiced by Singapore.

SESSION 5 (WATER QUALITY): Anik Bhaduri, Executive Director, Sustainable Water Future Programme, Australia, highlighted speakers’ calls for: novel approaches, including catchment conservation initiatives, water funds, and targeted programmes for low-income groups; improved data, monitoring and analysis; and cooperation with the private sector, notably agriculture. Bhaduri reported that: in many parts of the world, appropriate legislation is in place but enforcement is still lacking; catalysts and global



(L-R) **Béla Kuslits**, REC; **Alice Bouman-Dentener**, Chair a.i., Global Water Partnership; **Chishala Kapupu**, Go Green R³; **János Zlinszky**, Director, REC; **Anik Bhaduri**, Executive Director, Sustainable Water Future Programme, Australia; **Rozemarijn ter Horst**, Board Member, Water Youth Network; **Sarah Dousse**, Executive Director a.i., International Secretariat for Water/Solidarity Water Europe; **Marianne Kjellén**, UNDP Senior Water Advisor; **András Szöllösi-Nagy**, Co-Chair of the International Programme Committee of the Budapest Water Summit 2016; and **Stefan Uhlenbrook**, World Water Assessment Programme, UNESCO

partnerships are needed to ensure an integrated and multi-sectoral approach; and local action and implementation require capacity development and flexible financing. He noted other recommendations from the session included: targeting young professionals and leaders; building capacity to develop bankable projects; cooperating with the finance sector; and developing system-wide solutions.

SESSION 6 (WATER-RELATED ECOSYSTEMS):

János Zlinszky, Director, Regional Environmental Center for Central and Eastern Europe (REC), said the session had underlined the need to: consider freshwater ecosystem use, function, risk, vulnerability and management in an integrated way; and adopt a catchment approach, recognizing that national, legal and institutional boundaries usually differ from ecological boundaries. He said speakers had outlined examples of human-induced freshwater ecosystem loss and resulting disasters and economic damage. Among the conclusions, he highlighted that: wetlands and water systems are common assets; the rise of the economic middle class is welcome, but pressures are likely to increase; the environment's own need for water should be legally recognized; and the ideal mix of green and grey infrastructure needs to be determined on a case-by-case basis.

YOUTH FORUM: Chishala Kapupu, Swaziland Water Youth Forum, called on delegates to “give the future a chance” through actively supporting the engagement of young people in the water sector, and providing them with the tools and the necessary space to experiment. She stressed that, “The future is here!”

SCIENCE-TECHNOLOGY FORUM: Bhaduri, Sustainable Water Future Programme, Australia, said that root causes should be tackled, as opposed to undertaking quick fixes, and that solutions must be negotiated locally, with better data being provided to enable local authorities to make informed decisions. On groundwater, he reported that aquifer withdrawals have increased by 300% since the 1950s and have provided many benefits, but aquifers remain poorly protected and managed, and are often neglected in urban resilience planning. He called for policies and institutional structures to be developed that will support aquifer replenishment.

WOMEN'S FORUM: Alice Bouman-Dentener, Women for Water Partnership, said that, while many organizations have embedded women's participation in their policies, women remain predominantly the water carriers, and men the water managers. She stressed that women in civil society represent social capital that can and should be used to bring about needed changes in water governance, calling for better communication and capacity building. She reflected that actions at the interface of SDG 5 on gender and SDG 6 on water will be relevant to tackling the root causes of poverty, and supported an International Year on Water and Women. She called for empowering women through ensuring their economic independence and involving women in the design of solutions, quoting an African colleague that, “If you want to know about water, ask a fish!”

CIVIL FORUM: Béla Kuslits, REC, reminded delegates that local municipal authorities, NGOs and faith-based groups can make significant contributions to water management. He called for: adjusting legal systems to enable subsidiarity; providing access to appropriate technologies to help achieve water sovereignty; implementing rainwater harvesting; scaling up resilient infrastructure in areas of high population density; and monitoring resilience around the world to avoid the collapse of social-ecological systems.

In the ensuing discussion, participants discussed ways to attract young people to the water sector. Several approaches were mentioned, including improving developing country youth's access to formal education, as well as broader recruitment by the water sector. Among strategies to improve water management, they discussed ways to “make the people own the process,” noting the value of traditional technologies, and stressing that progress is not just about technology.

Concluding the discussions, Szöllösi-Nagy pointed to the parallels between outcomes of the Summit sessions and those of the parallel stakeholder forums.

BUDAPEST WATER SUMMIT MESSAGES

Co-Chair Szöllösi-Nagy noted that participants had recognized that the term “messages” best reflects the outcome of the three days of fruitful discussions. He said the meeting

had sought consensus on a set of ideas for potential uptake by Governments as they move forward to achieve SDG 6 by 2030, and does not represent a negotiated outcome.

He then outlined the five high-level messages of the document. In relation to the first message, that “in 2015 a new water era began,” he noted that water is fundamental for achieving the SDGs, the Paris Agreement and the Sendai Framework for Disaster Risk Reduction.

On the second message, that “water is the most critical natural asset,” he noted that all the SDGs have some connection with water.

On the third message, that “water is a critical global issue,” he noted that through the planetary water cycle and global economy, water is now a strategic resource worldwide.

In relation to the fourth message, that “water is an enabler and an inter-connector,” he noted that water offers opportunities for synergies and integration of the 2030 Agenda.

In relation to the fifth message, that “action on water is an absolute and ethical imperative,” he noted that scientists have learned that engineering achievements can spin out of control and need to be viewed through an ethical lens.

Summit participants welcomed these messages as a reflection of their collective efforts. Szöllösi-Nagy then thanked his co-chair, Benedito Brava, of Brazil, his colleagues on the drafting team and the support group at the Hungarian Ministry of Foreign Affairs and Trade, headed by Istvan Joo, Ministerial Commissioner with responsibility for the Budapest Water Summit.

Final Outcome: The Budapest Water Summit Messages summarize the outcomes of the thematic sessions and the deliberations of the civil society, science, youth and women fora that took place during the Summit. The Messages state, *inter alia*, that:

- in 2015, a new water era began with the adoption of the 2030 Agenda, including SDG 6 on water;
- water is the most critical natural asset, and must therefore be embedded within policies related to the entire 2030 Agenda;
- water is a critical global issue; therefore, a new global political water architecture is needed to ensure a consolidated and strong political governance for water within the SDGs and other international agendas;
- water is an enabler and an inter-connector, which calls for an integrative approach to water resources management based on the acknowledgement of the central nature of water; and
- action on water is an absolute and ethical imperative; acting now is a matter of human dignity, justice and survival, and waiting to act is no longer an option.

The Messages conclude that the transformation to a water-secure world requires a range of actions. Some of the suggested actions, among many that are listed, are to:

- establish or revitalize appropriate local, regional, national, basin-level and transboundary institutions that address the allocation and sustainable use of water in a fair, transparent and equitable manner, create mechanisms for meaningful participation of all stakeholder groups and increase public financial investments;
- ensure and enhance women’s real involvement in all phases of water management;
- develop a mechanism/partnership to support initiatives of young people;
- increase support for water and sanitation investments, particularly the mobilization of local capital;
- establish and/or strengthen regional-level, basin-level and/or transboundary institutions to foster peaceful and effective cooperation around water and enhance the application, effective implementation and accession to UN water conventions;

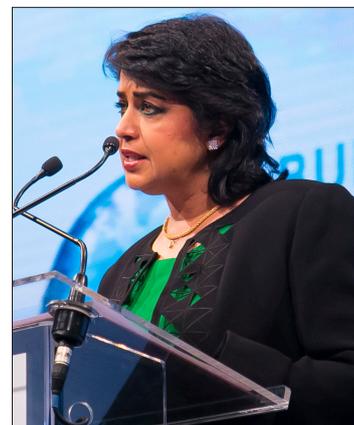
- strengthen the capacity to monitor water-related SDG targets, improve and enhance water-related data collection and analysis efforts at all levels, employ new methods and techniques such as big data and crowdsourcing, and invest politically and financially in open access to water data;
- increase national-level commitments to solving neglected water pollution by increasing wastewater treatment, restoring polluted water bodies and addressing pollution prevention at its source in all forms; recognize used, treated water as a valuable resource, and encourage the reuse of treated water;
- recognize the need for an appropriate intergovernmental platform on water and sanitation as a follow-up to the suggestions of the Budapest Water Summit 2013 outcomes and of the UN Secretary-Generals’ Advisory Board on Water and Sanitation; and
- follow up and review progress on achievement of water targets in the 2030 Agenda in support of the work of the HLPF.

The full text of the Messages document and 28 associated actions can be found here: http://www.budapestwatersummit.hu/data/images/Statement%202016/BWS2016_Messages_v1129.pdf

The Policy Recommendations that accompany the Messages document address nine broad action areas covering: drinking water and sanitation; water use efficiency; IWRM; water quality and ecosystems; climate and disasters; water, food and energy nexus; urban systems; transboundary water systems; and indicators and monitoring to enable informed choices. The full set of Policy Recommendations can be found here: http://www.budapestwatersummit.hu/data/images/Statement%202016/BWS2016_PR_v1129.pdf

CLOSING REMARKS

Ameenah Gurib-Fakim, President of Mauritius, Co-Chair of the HLPW, said the Summit’s Messages have far-reaching consequences and provide valuable guidance to decision makers at all levels. She reported that, during this Summit, the HLPW had discussed innovative financing mechanisms with the major multilateral development banks, which had expressed their willingness to cooperate with the HLPW towards financing solutions. She said their discussions had resulted in a statement on resource mobilization for water-related actions in accordance with the Addis Ababa Action Agenda formulated during the Third International Conference on Financing for



Ameenah Gurib-Fakim, President of Mauritius, Co-Chair of the HLPW

Development in July 2015, and that the recommended priorities included: leveraging public funds with private funding; mobilizing domestic finance; and exploring government guarantees for investments. Calling on all stakeholders to embrace this approach, she shared “a dream about water in a future world,” inviting participants to join her in fulfilling this dream. The statement from the High-Level Panel on Water can be found here: <http://reliefweb.int/report/world/statement-high-level-panel-water-november-29th-2016>

Csaba Balogh, Minister of State for Public Administration, Ministry of Foreign Affairs and Trade, Hungary, quoted John F. Kennedy, who said that “anyone who can solve the problems of water will be worthy of two Nobel Prizes: one for peace

and one for science,” noting that this statement illustrates the complexity of the water issue. He emphasized that “the lion’s share of the work lies ahead of us,” namely the implementation of SDG 6, and that realizing a water-secure world by 2030 might require an annual investment of US\$500 billion. He concluded that the current Summit, which brought together 2,600 participants from 117 countries, “constituted a milestone in the global water agenda.”

Master of Ceremonies Tomaj thanked all participants and the Summit organizers, and closed the meeting at 4.55 pm.

UPCOMING MEETINGS

Fourth Meeting of the Task Force on the Water-Food-Energy Ecosystems Nexus: This meeting will discuss, plan and provide guidance to the implementation of activities on the water-food-energy-ecosystems nexus under the programme of work for 2016-2018 of the UNECE Water Convention. More specifically, it will: review the status of ongoing basin assessments; discuss possible follow-up actions to assessments already undertaken; and reflect on knowledge gaps and strategic directions for future nexus work under the Water Convention. The Task Force meeting will be held back to back with the Global Workshop on Assessments of the Water-Food-Energy-Ecosystems Nexus and Response Measures in Transboundary Basins taking place from 6-7 December 2016. **date:** 8 December 2016 **location:** Geneva, Switzerland **contact:** UNECE Secretariat **email:** water.convention@unece.org **www:** <http://www.unece.org/index.php?id=41738#/>

UN World Data Forum: The first UN World Data Forum will be hosted by Statistics South Africa, with support from the Statistics Division of the UN Department of Economic and Social Affairs (UNDESA), under the guidance of the UN Statistical Commission and the High-level Group for Partnership, Coordination and Capacity-Building for Statistics for the 2030 Agenda for Sustainable Development. **dates:** 15-18 January 2017 **location:** Cape Town, South Africa **contact:** UN Statistics Division, Statistical Services Branch **phone:** +1-212-963 9851 **email:** dataforum@un.org **www:** <http://undataforum.org/>

Global Forum for Food and Agriculture: This annual international forum offers representatives from politics, business, science and civil society an opportunity to share ideas and agree on a different key topic of agricultural policy each year. In 2017, the theme will be “Agriculture and Water - Key to Feeding the World.” **dates:** 19-21 January 2017 **location:** Berlin, Germany **contact:** German Federal Ministry of Food and Agriculture **phone:** +49-30-20 21 57628 **email:** info@gffa-berlin.de **www:** <http://www.gffa-berlin.de>

World Water Day 2017: This annual event is convened by UN-Water to highlight various aspects of freshwater management. In 2017, World Water Day will focus on wastewater issues, in partnership with UNEP, UN-Habitat, the World Health Organization and the UN University. **date:** 22 March 2017 **location:** Worldwide **contact:** UN-Water **email:** unwater@un.org **www:** <http://programme.worldwaterweek.org/event/5639>

Fourth Istanbul International Water Forum: This triennial preparatory event takes place a year in advance of each World Water Forum. The meeting theme is “Water and Peace,” focusing on the impacts of regional politics on water issues, in particular on the relationship between immigration and water services. Organized by the Turkish Water Institute, the meeting will provide input to the Eighth World Water Forum, to take place in Brazil in 2018. **dates:** 10-11 May 2017 **location:** Istanbul, Turkey **contact:** Turkish Water Institute **phone:** +90-216-325-4992 **fax:** +90-216-428-0992 **email:** info@suen.gov.tr **www:** <http://suen.gov.tr/en/>

Second Biennial Dresden Nexus Conference: This conference, hosted by the UN University for Integrated Management of Material Fluxes and of Resources (UNU-

FLORES), Technische Universität Dresden and the Leibniz Institute of Ecological Urban and Regional Development, follows up on the inaugural Dresden Nexus Conference of 2015. **dates:** 17-19 May 2017 **location:** Dresden, Germany **contact:** UNU-FLORES **phone:** +49-351-89219370 **email:** DNC@unu.edu **www:** <http://www.dresden-nexus-conference.org>

Sixteenth World Water Congress: This event is organized by the International Water Resources Association, National Water Commission of Mexico, and the National Association of Water and Sanitation Utilities under the theme of “Bridging Science and Policy.” **dates:** 29 May – 2 June 2017 **location:** Cancún, Mexico **contact:** Conference Secretariat **phone:** +33-1-4120-1628 **email:** office@iwra.org **www:** <http://worldwatercongress.com/index.htm>

World Water Week 2017: This annual event, organized by the Stockholm International Water Institute (SIWI) and partners, will focus on the theme of “Water and Waste: Reduce and Reuse.” **dates:** 29 May – 2 June 2017 **location:** Stockholm, Sweden **contact:** SIWI **phone:** +46 8 121 360 00 **fax:** +46 8 121 360 01 **email:** office@iwra.org **www:** <http://www.worldwaterweek.org/world-water-week-2017-call-for-engagement/>

World Water Forum 2018: The World Water Forum is the world’s largest water event that gathers international stakeholders every three years and aims to set water firmly on the international agenda. The World Water Forum is organized by the World Water Council, an international multi-stakeholder platform that aims to promote awareness, build political commitment and trigger action on critical water issues at all levels, including the highest decision-making level, to facilitate the efficient conservation, protection, development, planning, management and use of water in all its dimensions on an environmentally sustainable basis for the benefit of all life on earth. The World Water Forum 2018 will be held in Brazil. **dates:** 2018, with exact dates to be confirmed **location:** Brasília, Brazil **contact:** World Water Council **phone:** +33-4-91-99-41-00 **email:** wwc@worldwatercouncil.org **www:** <http://www.worldwatercouncil.org>

GLOSSARY

COP	Conference of the Parties
FAO	Food and Agriculture Organization of the UN
GCF	Green Climate Fund
HLPF	High-Level Political Forum on sustainable development
HLPW	High-Level Panel on Water
IWRM	Integrated water resources management
OECD	Organisation for Economic Co-operation and Development
SDG	Sustainable Development Goal
UNDP	UN Development Programme
UNECE	UN Economic Commission for Europe
UNEP	UN Environment Programme
UNESCO	UN Educational, Scientific and Cultural Organization
UNFCCC	UN Framework Convention on Climate Change
UNICEF	UN Children’s Fund
WASH	Water, sanitation and hygiene
WMO	World Meteorological Organization