



The Opening Ceremony of the XVIII World Water Congress

The opening ceremony of the 18th World Water Congress was held in Beijing on September 11th at the Beijing Guoce International Conference and Exhibition Center. This is the first time that the Congress has convened in China, and it is also the first comprehensive face-to-face gathering of the World Water Congress since the outbreak of the COVID-19 pandemic, that has attracted widespread attention worldwide. Policy leaders, representatives from international organizations, and experts on water resources from over 60 countries and regions gathered in Beijing for the five-day event to seek water resources protection and development under the theme of "Water for All: Harmony Between Humans and Nature". This is of great significance for strengthening multilateral exchanges and cooperation in water management, providing solutions to respond to rising water security risks and challenges, and promoting the global achievement of Sustainable Development Goals (SDG).



Minister Li Guoyin sheds light on China's Water Management Wisdom

Mr. Li Guoying, China's Minister of Water Resources delivered a keynote address, offering insights into China's approach to both domestic and global water governance. In his speech, he elaborated on President Xi Jinping's water governance philosophy, which emphasizes "prioritizing water conservation, balancing spatial distribution, taking systematic approaches, and leveraging the roles of both government and the market." This philosophy is poised to illuminate the path for global water governance cooperation.

Additionally, he elaborated on China's historical water challenges, characterized by summertime floods and wintertime droughts. He drew attention to the stark disparity in water resources, with the north facing water scarcity while the south enjoys abundance. Frequent and recurrent occurrences of flood and drought disasters further compound these challenges. Addressing water conservancy and mitigating water-related damages has, consequently, always held profound significance for the nation's long-term stability.

On China's concept of water management, Minister Li Guoying pointed out that China adheres to the new development philosophy of "innovation, coordination, green, open and sharing", and practices the water management concept of "prioritizing water conservation, balancing spatial distribution, taking systematic approaches, and giving full play to the roles of both government and market" proposed by President Xi Jinping. By formulating and implementing good water management policies, significant progress has been made in ensuring food and energy security, enhancing people's sense of gain, happiness, and security.

Minister Li Guoying also emphasized the importance of strengthening global cooperation in water governance. Focusing on the harmonious coexistence of humanity and water, he proposed the adoption of President Xi's principles to tackle shared challenges in global water governance. The objective is to realize a vision of harmonious coexistence between humankind and nature.





Multi-party Speeches, Global Thoughts

Ministers and high-level officials of water authorities from China, Denmark, Indonesia, Uzbekistan, and other countries, as well as representatives from international organizations such as the World Water Council, inaugurated the opening ceremony.



According to Mr. Liu Weiping, Vice Minister of Water Resources of the People's Republic of China, we need to pay close attention to the serious challenges facing water security and promote the sustainable use of water resources, governments and the international community need to take active actions. "Today, we are convening at the 18th World Water Congress to deepen international exchanges, share experience and achievements in water control, promote the formation of a modern global concept of water control, and systematically address prominent issues of global water security."

Mr. Li Yuanyuan, President of the International Water Resources Association, stated that: Exploring the harmonious coexistence between humans and nature is not only in line with the pursuit of sustainable development, but also closely related to everyone on Earth.

"We must focus on building more cohesive and consolidated relationships among scientists, policymakers, and water managers, in the same way that water links the economy, society and ecology together."



Mr. Liu Yuhui, the Member of Party Leadership Group of the Beijing Municipal People's Government, Deputy Mayor, extended warm congratulations on the 18th World Water Resources Conference in Beijing and sincere welcomed to all guests from home and abroad attending. He also mentioned that he hopes to use the platform of the conference to share the story and course of Beijing's urban water management, learn from the advanced water management concepts and experiences of other cities, strengthen international exchanges and cooperation, and add more green, smart and innovative colors to Beijing's water management."

Mr. Li Junhua, Under-Secretary-General of the United Nations, "With the focus of this congress on harmony between humans and nature, it can help to sustain the momentum generated at the UN 2023 water conference, and drive forward the water related action needed in the second half of the journey towards the SDGs. Nature based solutions can played a vital role in improving the supply and the quality of the water and reducing the impact of natural disasters, helping us better face persistent and emerging challenges to water security. 2023 must be the turning point. It must be the moment we write a new chapter in the story of the human progress."



Maria Helena M.Q. Semedo, "Water is the Center. Water is life, water is food. Sustainable water management will lead us to sustainable development."

Magnus Johannes Heinicke, Minister of the Environment of Denmark, " Water system is connected, one will impact the other. Water is the basis for life. We come from the water and many ways water is our home. So we must take good care. Find solutions for the challenge of water resource. I hope this compass would bring us closer in finding solutions to the global challenges. "



Basuki Hadimuljono, Minister of Public Works and Public Housing, Indonesia: "People faced challenges of the equitable and unsustainable distribution of natural resources, especially continental waters. Let's be bold in view and improve action oriented commitment to achieve our objective in the future."

Khamraev Shavkat, Minister of Water Resources of the Republic of Uzbekistan: Our main task is to find practical solutions to global and regional problems such as transboundary water cooperation, adaptation to climate change - combating droughts and floods, stable biodiversity and ecosystem resilience, increasing the productivity of water used in economic sectors, increasing the productivity of irrigated lands and providing food security of a growing population and others.



Loïc Fauchon, President of the World Water Council, " Water is not our slave, water is our partner, water is our friend. We need to give priority to the new balance between water for humans and the wonderful nature."

Renee Martin-Nagel and Shi Qiuchi, co-chairs of the Scientific Committee of the congress, discussed the summary of the work of the International Scientific Committee, thank all members of the ISC, and provided an overview of the number of abstracts and proposals were received.



Renee Martin-Nagel and Shi Qiuchi ►

The Prestigious IWRA Awards: A Continuous Inheritance from Generation to Generation

The **Water Drop Award** for 2023 was awarded to Lindsey Blodgett. She currently serves as the Chief Advisor at NextWave Consulting LLC and a member of the IWRA Task Force and Chapters Committee. Additionally, she is one of the 15 "Water and Climate Alliance Leaders" appointed by the World Meteorological Organization (WMO) to advance Sustainable Development Goal 6 on a global agenda.

The IWRA Crystal Drop Award aims to recognize individuals or organizations that have made significant contributions to improving the state of global water resources.



IWRA's Water Drop Award recognizes students, young scientists or practitioners who have made innovative contributions to the water industry. By honoring the accomplishments of emerging scientists, the Water Droplet Award serves not only as an accolade but also an inspiration for more young professionals in the water sector to strive for a more sustainable future through scientific inquiry. The Water Droplet Award for this year has been presented to Lindsey Blodgett. She currently serves as the Chief Advisor at NextWave Consulting LLC and the Co-Chair of the Chapters Committee for the International Water Resources Association. Additionally, she is one of the 15 "Water and Climate Alliance Leaders" appointed by the World Meteorological Organization (WMO) to advance Sustainable Development Goal 6 on a global agenda.

This year's Ven Te Chow Memorial Lecture Award was awarded to Professor Xia Jun, who has made pioneering contributions to water management, sustainable development, and practical applications, not only within China, but also on a global scale. His innovative work has left a significant impact on a global scale.

The Ven Te Chow Award is a significant accolade established by the International Water Resources Association in honor of its first president, Professor Ven Te Chow. Its primary objective is to recognize individuals who have made exceptional contributions to global research in water resources and environmental studies. The award also represents a celebration of the continuous advancement and breakthroughs in the fields of water science, technology, and innovation.



The **Crystal Drop Award** was awarded to Olcay Ünver and the Korea Water Resources Corporation (K-Water). Olcay Ünver currently serves as a Senior Specialist at the Wrigley Global Futures Laboratory and holds the position of Professor at the Melikian Center at Arizona State University. He is a member and industry researcher at the Australia Rivers Institute's Water Policy Group, and a Senior Advisor for the Food and Agriculture Organization (FAO), and the United Nations Educational, Scientific and Cultural Organization (UNESCO). K-Water is a leading South Korean company specializing in water resources management and infrastructure services. Established in 1967, K-Water has been playing a crucial role in promoting the sustainable development and conservation of water resources in South Korea.

A Meeting Focused on Three Key Underlying subjects.

After the opening ceremony, a high-level plenary discussion was held under the theme of "'Water Resources-Economy (Agriculture, Industry, Cities, etc.)- Ecology Linkage' in a Changing Environment". Climate change and the resulting increase of risks in ecology, economy, society, and water security pose a threat globally, and their impacts are all-encompassing and multi-faceted. The high-level plenary session explored the intricate ties between water, economy, and ecology emphasizing the importance of collaboration, sustainable resource management, and policy formulation.

The session was moderated by Peng Jing, President of the Chinese Academy of Water Resources and Hydropower Research, and Rabi Mohtar, Vice President of the International Water Resources Association. The Keynote Speeches were delivered by Li Yuanyuan, President of the International Water Resources Association, Asit Biswas, former President of the International Water Resources Association, and Zhang Fan, Chief Economist of the World Bank. The panel included representatives from Texas A&M University, Mekong River Commission, Binzhou City, Hunan Province, and Beijing Institute of Water Science and Technology. Jana Husu Kallio, Permanent Secretary of the Ministry of Agriculture and Forestry of Finland, and Koh Lien Keng, Senior Minister for Sustainable Development and Environment of the Ministry of Transport of Singapore, delivered guest speeches.

The panelists delved into critical discussions and emphasized the importance of scientific guidance for the sustainable development of agriculture, ecology, society, and the environment by studying the trends and driving factors of the past and future climate change and the systematic improvement of the human-water system. Dive into the critical discussions that unfolded during this enlightening High-level panel moderated by Peng Jing, President of the China Institute of Water Resources and Hydropower, and Rabi Mohtar, Vice-President of IWRA.



In the keynote speech, Li Yuanyuan pointed out that water resources are one of the core elements in the natural-social composite system, and are crucial for human survival, economic growth, food security, and ecological integrity, whereas Asit K. Biswas emphasized the mutual promotion of water and the economy as a current challenge and urged experts from various fields to collaborate in studying the ties between water, economy, and ecology.



Anoulak Kittikhoun, stressed the importance of transitioning from competition to cooperation in governing transboundary water resources. Building dialogue, sharing data, and fostering mutual understanding among riparian countries are key steps. Similarly, Wu Peijun illustrated how we can ensure sustainable water resources during economic development, emphasizing efficient water use and integrating urban and rural water supply for water security.

Meng Qingyi discussed water security issues and how government initiatives are addressing challenges arising from rapid economic development, highlighting President Xi Jinping's guidance. Bassel Daher emphasized the need to change development patterns and adopt interdisciplinary approaches to tackle water crises caused by urbanization, economic growth, and population increase.

Bassel Daher opined that we must change development patterns to address crises and adopt new approaches to face water crises. Currently, urbanization, economic growth, and population increases still lead many people to face water security crises. Addressing the crisis requires coordination from various social levels, policy formulation. He also emphasized that water issues present multi-industry challenges, requiring interdisciplinary research to address different water security challenges. Fourth, capacity building to ensure that future scholars, leaders, scientists, etc., receive relevant training.

All the panelists highlighted that climate change has evolved into a realistic, urgent, and severe crisis. The retreat of glaciers, rise of sea level, and the increasingly frequent extreme climatic events around the world such as droughts, rainstorm, and floods make climate change and its impact more visible to people. Global climate change is bound to exacerbate global and regional water cycle processes, alter the spatiotemporal distribution pattern of water resources, and thereby affect water resource utilization and water security. Therefore, the panel concluded on the notion that since water resources, economic and social factors, and ecological factors are closely related and mutually influencing, they require systematic governance and comprehensive planning.





An Exhibition Spreading China's Water Management Stories Far and Wide

The themed achievement exhibition titled "High-Quality Development of Water Conservancy in China" has been launched. This exhibition consists of seven sections: "Introduction", "Securing Flood Control Safety", "Safeguarding Water Supply Security", "Revitalizing the Ecological Environment in Rivers and Lakes", "Promoting Science and Technology Innovation", "Strengthening International Cooperation", and "Conclusion". Covering an expansive area of over 700 square meters, the exhibition comprehensively highlights the distinct features of China's water management, the achievements of water control since its inception, and the current situations and challenges it faces.





Diversified exchange and interaction, regular sessions, special sessions, and side events

Today Focusing on the six sub-themes of the conference: "Water resource - population - Economy (agriculture, industry, cities, etc.) - Ecology in a changing environment", "Improving water efficiency and efficiency and improving water public services", "Building a resilient disaster prevention and reduction system", "Improving the quality and stability of water ecosystems", "Promoting sustainable water infrastructure construction" and "Water governance and management Innovation", Six conferences were held, including the law and mechanism of water cycle evolution under the influence of climate change, water resource supply and demand management, extreme weather and flood and drought disaster prevention, river and lake health, water rights and water market, information disclosure and public participation. 14 special sessions on sustainable protection and institutional innovation of freshwater ecosystems, efficient use and protection of water (landscape) resources in Yalong River Basin, Intelligent water management in large river basins, and 3 side sessions on water technology application in Denmark, How to Adapt Integrated Water Resources Management to Climate Change and Economic Development, and the 3rd Global Water Security Symposium, Domestic and foreign politicians, experts, scholars, and industry representatives will share the results of water control experience, discuss solutions to water security challenges, and seek a harmonious coexistence between people and water.

Durable Protection and Finance Innovation for Water and Freshwater Ecosystem

How to durably conserve the freshwater ecosystem? This special session held by The Nature Conservancy China focused on the challenges/threats but also opportunities that people are now facing for a long-term protection on water and freshwater ecosystem. Threats mainly include droughts that seriously influence the access of water, biodiversity population decline, unique biodiversity that is threatened by alien plant invasion, as well as increasing anthropogenic demands and rising population. Opportunities and on-going measurements for durable protection of freshwater ecosystem include legally and non-legal mechanisms, governmental and non-governmental investment, mechanism innovation, E-flows, etc.

Green Hydropower and Sustainable Development

This special session held by International Center on Small Hydro Power (ICSHP). Green Hydropower and Sustainable Development by no means is an important topic in today's developing world. The climate change and SHP in China, Green transition of SHP in China, and New Opportunities of SHP, these three topics integrated with each other and in need to put more attention. The Challenges of Integrating Increasing Amounts of new energy to Power System also in need of great effort to make this issue better. Smart Hydroelectric Power Plant, and many countries are constructing Smart Grid. Green Small Hydropower Promotes Rural Revitalization very applied to China's small town. Sustainable Development of Hydropower in Ethiopia also give us new insight. And technology from Zhejiang Yuansuan Technology is very innovative and deserve to be broadcast.



Ms Yan Huang, opening speaking of this session



Photo of session

Groundwater Governance: Challenges, Opportunities, and Best Practices

Groundwater is an important water resource. Held by International Association for Water Law (AIDA), this session focus on groundwater Governance. Due to the concealment characteristics of groundwater, people lacked knowledge of groundwater in the early years. The number of groundwater laws and regulations is lower than that of surface water's. This session aims to find a solution to regulate and manage groundwater at the international level. Hybrid format with presentations and interactive workshop: - 15 minutes reserved for each presentation and 30 minutes reserved for discussion. The first presentation was from Joseph W. Dellapenna. He introduced

the origins of groundwater law, the technical and other developments, and the alternative approaches to groundwater law. Then, Prof. Gabriel Eckstein (moderator), Mr Eric Garner, Ms. Lili Yu, and Mr. M. Dinesh Kumar discussed the ownership of groundwater and groundwater regulation and management policy in different countries. In the last part of this session, Mr Abou Amani gave a presentation on groundwater governance: challenges, opportunities, and best practices. The process of groundwater regulation is difficult, especially for the sophisticated conditions (i.e. groundwater-surface water interaction). We could continue to adjust the groundwater regulation rules. Rules will finally find the process.



Interview Series – Meet Kirsten Schuijt



In a candid interview, Kirsten Schuijt, Director General of the Worldwide Fund for Nature (WWF), shared her insights and perspectives on the pressing issues surrounding water management and conservation. With a wealth of experience in environmental conservation and partnerships, she provided valuable perspectives on the challenges and opportunities ahead.

Topic 1: The Growing Water Crisis

Q: Kirsten, can you elaborate on the current state of the global water crisis and its implications?

Kirsten Schuijt (KS): Certainly. Today, the world is facing a significant water crisis. We're aware of the staggering numbers – millions without access to safe water, billions lacking proper sanitation, and the devastating impact of floods and droughts. But there's a crucial aspect often overlooked, which is the dramatic loss of freshwater biodiversity and the ongoing degradation of our freshwater ecosystems. Over the past five decades, we've witnessed the disappearance of one-third of our wetlands and a shocking 83% decline in freshwater species populations. This illustrates the harm we're causing to our rivers, lakes, and wetlands, and why it's vital to reverse these losses. Healthy freshwater ecosystems are pivotal for ensuring equitable access to water and addressing the broader climate and nature crises.

Q: How do you view the role of this Congress in addressing these challenges?

KS: The Congress theme, "Water for All: Harmony between Humans and Nature," encapsulates a fundamental truth – water doesn't magically appear from a tap; it's a product of nature. This Congress comes at a pivotal time, as last year's global biodiversity framework highlighted the need to protect and restore inland waters for the first time. Similarly, recent conferences like COP 27 and the UN's global water conference have underlined the vital role of water in climate action and sustainability. The Congress serves as a platform to spotlight these issues and drive collective action towards solutions.

Topic 2: Collaboration and Hope for the Future

Q: WWF has a rich history of working with China on conservation efforts. Could you tell us more about your collaborations?

KS: Absolutely. WWF has been partnering with China for over 40 years, working alongside the government, companies, communities, and various stakeholders. Our joint efforts have covered a wide spectrum, from community projects to conserving the Yangtze River. We've supported initiatives like new river basin planning approaches and published the "Living Yangtze" report, assessing the health of the basin. The progress we've witnessed, such as the Yangtze River protection law and the recovery of the critically endangered Yangtze Finless Porpoise, is a testament to China's commitment to freshwater ecosystem conservation.

Q: What is WWF's vision for the future of freshwater conservation in China and globally?

KS: Our commitment to freshwater conservation in China remains steadfast. We continue pioneering water stewardship initiatives with businesses, and in fact, WWF is hosting a special session at the Congress focused on innovative tools and practices for water stewardship. We hope that China can share the valuable lessons learned from its ecological civilization efforts in its major river basins, serving as an inspiration for freshwater ecosystem conservation worldwide. Together, through investments in healthy rivers, lakes, and wetlands, we can ensure water access for all and contribute to a net-zero, nature-positive, and resilient future.

Q: Finally, any closing thoughts for our readers?

KS: I'd like to emphasize that partnerships are at the core of addressing water challenges. I extend my gratitude to our partners in China, including the Ministry of Water Resources and esteemed think tanks like CCICED and GIWP, for showcasing the remarkable results that collaboration can yield. I wish everyone a successful World Water Congress ahead, and let's remember that together, we can make a significant difference in securing a sustainable water future for all.



Exploring Sustainable Development Goals and Water Challenges: An Interview with Ben Braga



BENEDITO BRAGA
Honorary President - World Water Council

In a recent interview, we had the opportunity to speak with Ben Braga, an expert in water resource management. Mr. Braga shared his insights on sustainable development goals (SDGs), the persistent global challenges, and the role of professional associations in advancing SDG 6.

Sustainable development goals, often referred to as SDGs, were initially proposed during the Rio + 20 conference in 2012. Mr. Braga recalled the launch of the Millennium Development Goals (MDGs) during the UN Summit in 2000, which aimed to reduce poverty in less developed regions by 2015. However, as we find ourselves in the year 2023, substantial challenges remain in improving the well-being of the global population.

One significant shift from the MDGs to the SDGs is the expansion in scope. SDGs have grown from 8 goals in the MDGs to 17, with SDG 6 specifically dedicated to water and sanitation. This broader framework provides greater flexibility for countries to tailor the goals to their unique contexts.

Professional associations have a vital role to play in advancing SDG 6, which focuses on clean water and sanitation. Mr. Braga emphasized that these organizations could contribute by offering technical solutions. However, the ultimate impact depends on the practical implementation of these solutions, particularly in reaching decision-makers. Therefore, one of the critical challenges today is bridging the gap with the political class.

Mr. Braga expressed his optimism about the World Water Congress, noting that it is moving in the right direction with the support of the Ministry of Water Resources of China.

In conclusion, the interview with Ben Braga provided valuable insights into the transition from MDGs to SDGs, the significance of professional associations in advancing SDG 6, and the importance of engaging with policymakers. As the world continues to address sustainable development and water management challenges, Mr. Braga's perspectives serve as a valuable guide in our pursuit of a more sustainable and equitable world.