



THE 5TH TAIHU INTERNATIONAL FORUM 2019

YANGTZE RIVER CONSERVATION AND GLOBAL GREEN DEVELOPMENT

Summary Report



About Taihu International Forum

The Taihu International Forum (Taihu Forum) is an annual forum on basin governance innovation and water resources conservation. Initiated by World Wide Fund for Nature (WWF) China in 2015, the forum has been successfully held for three years in row, thanks to strong support from partners across government departments, research institutions, business sectors, and from academic experts. The forum has served as a platform for the exchange of international river basin governance experience and for the promotion of the reform and innovation on basin governance in China.

About WWF

WWF (World Wide Fund for Nature) is one of the world's largest and most respected independent organizations dedicated to the conservation of nature. Since the first office was founded in Switzerland in 1961, WWF has grown into a global network active in more than 100 countries with almost five million supporters. (Reference: https://en.wwfchina.org/en/who_we_are/)



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Written and edited by: HE Wei, XIONG Yiyi, CHEN Chaochao, Angela ORTIGARA, ZHU Donglin

Design by: Vivian Shi

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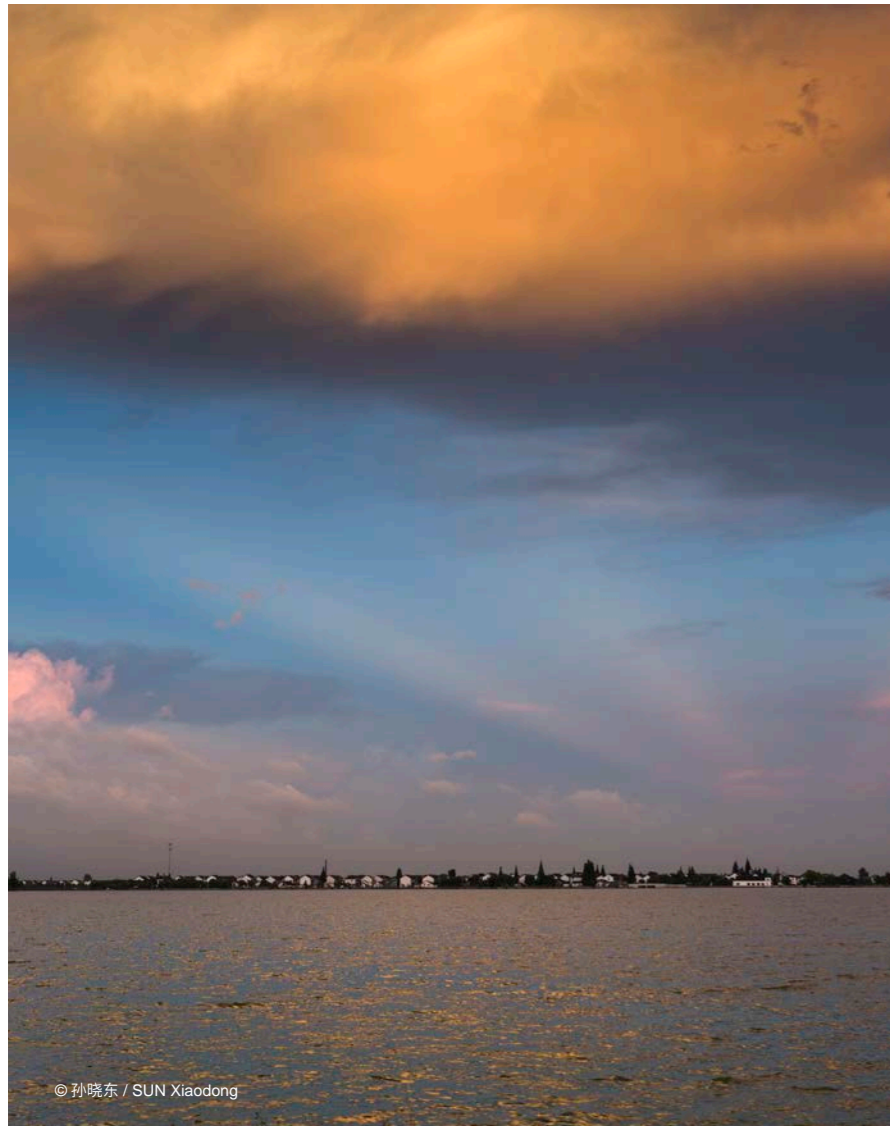
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REMARKS:

ANCHORING TAIHU LAKE, FOCUSING ON YANGTZE RIVER, MATCHING INTERNATIONAL STANDARDS AND PURSUING INNOVATION

The year 2019 marked the tenth year since the World Wide Fund for Nature (WWF) carried out protection work in the Taihu Lake basin.



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The year 2019 marked the tenth year since the World Wide Fund for Nature (WWF) carried out protection work in the Taihu Lake basin, as well as the fifth year of promoting the innovative river basin governance model. At the end of the year, as scheduled, we and our Partners held the “5th Taihu International Forum 2019: Yangtze River Conservation and Global Green Development” in Nanjing.

A retrospect of the past five years would lead us to these milestones: a shift in forum topics, from water and environmental protection to the natural extension of environmental protection and basin governance to green development and coordinated governance; a shift in governance model, from a government-dominant, project-driven model to an innovative alternative that promotes ecological protection through multi-stakeholder-participation with decisions made by those in charge of river basin governance.

Despite the challenges, the Taihu International Forum has been a successful platform for sharing international experience in river basin governance and promoting reform and innovation in China's basin governance model. By anchoring Taihu Lake, focusing on the Yangtze River, aligning ourselves with international standards and pursuing innovation, the mechanism highlighted in the forum has created a new model for a multi-stakeholder-participatory basin governance, water stewardship and water environmental protection.



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“The beauty of heaven lies in the beauty of Taihu Lake” - this is Secretary General Xi Jinping's wishes for the protection of Taihu Lake. Although the water quality of Taihu Lake has seen steady improvement after more than a decade of governance, the nature of algae bloom has yet to be substantially altered. The possible occurrence of a water crisis still exists, and a number of problems remain: heavy industries still constitute a sizable share of the basin's industrial output, while the region's layout has caused an overload of pollutants being discharged into the lake, greatly exceeding the basin's pollutant load capacity. The threat of a cyanobacteria outbreak still lurks, and the restoration of the wetland ecosystem and lakeside waters has a long way to go. Noticeably, the integration of governance technique systems (including early warning systems) requires further improvement. Policies on river basin governance and technology and fund guarantees still need to be optimized. At the same time, it is still difficult to achieve cross-regional and cross-sectoral coordinated governance in the basin.

Despite the many challenges we face today, the green development of Taihu Lake Basin has ushered in a historical moment: 2019 was the first year the central government proposed upgrading the integrated development of the Yangtze River Delta to a national strategy. This high-quality integrated development was even highlighted in the Outline of the Integrated Regional Development Plan of the Yangtze River

Delta issued by The State Council.

By promoting coordinated, cross-regional development, all parties should strive to achieve green development and environmental protection so as to live up to the conviction that “lucid waters and lush mountains are invaluable assets”. Sitting at the core of the Yangtze River Delta Region, Taihu Lake Basin is perfectly positioned to meet the requirements for the Yangtze River Delta plan that was put forward in the “Outline”.

We hope that the Taihu Lake basin will serve as a high-quality development model for the Yangtze River basin, becoming a new benchmark for the transformation of ecological advantages, a new highland for green innovation and development, an experimental field for integrated institutional innovation, and a new model for harmonious co-existence between nature and mankind.



DR. REN WENWEI
HEAD OF FRESH WATER PRACTICE,
WWF CHINA



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BACKGROUND

At the end of 2013, WWF and the Development and Reform Commission of Jiangsu Province reached a consensus on the first cooperative demonstration of Water Stewardship in the Taihu Lake basin.



BACKGROUND

At the end of 2013, WWF and the Development and Reform Commission of Jiangsu Province reached a consensus on the first cooperative demonstration of Water Stewardship in the Taihu basin. This has set up a multilateral participatory governance model which involved multi-stakeholder participation and created an innovative approach based on Water Stewardship, which aimed at supporting the reduction of pollution and increasing the use efficiency of water through the full participation of the government, enterprises, social organizations and the public.

Further work in 2015 led to the promotion of this governance model, and the first Taihu International Forum was held in Wuxi, the outbreak site of the cyanobacteria bloom crisis in Taihu Lake in 2007. The organizers expected that

a multilateral participatory basin governance model could be further enhanced and strengthened through the Forum. WWF and partners believe that bringing together the government, enterprises and the public under a sustainable market framework can pay significant dividends for China's lakes. WWF's leadership in this area will also be instrumental in preserving the Yangtze River as a whole, as China continues to embark on economic development.

Since 2015, in what the WWF calls "a multi-stakeholder-participatory basin governance model", various stakeholders are encouraged to participate in the discussion about basin governance and bring to the table their own expertise and resources. Underpinning this, the ideas and opinions are taken up the line to decision-makers in order to change their perception of basin management as a pure engineering problem. The model is developing over time, and relies

on investigation, dialogue and collaboration between stakeholders, facilitated by the Taihu International Forum as well as regular working groups. At the annual forum, stakeholders have the opportunity to discuss their issues through workshops and conferences.



A RETROSPECT OF PREVIOUS FORUMS

- The 1st Taihu International Forum held in Wuxi, Jiangsu Province, was attended by over 100 people. In this event, the proposal of the multi-stakeholder participatory basin governance model, drafted jointly by the WWF and the Jiangsu (Provincial) Engineering Consulting Center, was circulated and publicly announced, along with the Beautiful Taihu Lake Manifesto. Potential changes to the basin governance model were discussed in the main forum, and sub-forums were convened for finance and business round tables. These led to the creation of organic networks and side meetings, on issues such as simplified governance, cross-sector cooperation, and other forward-looking approaches for preserving the basin. The key output of the 1st forum was a new basin governance model, and the fact that participating stakeholders became conscious of the transformative potential of the new governance model.
- The theme of the 2nd Forum in 2016 was collectively building green basins. In this forum, the basin governance models from Dongting Lake, Poyang Lake, Chishui River, and Jiaying City were discussed. Furthermore, international experts were invited to share experiences abroad, including the Australian Agriculture Water Stewardship and the Baltic River Basin Collaborative governance model. The Forum was held in Changzhou, Jiangsu Province, and had around 200 delegates participating. In this forum, cross-basin dialogue was established between Chinese and international delegates
- The theme of the 3rd Taihu International Forum in 2017 was "continuous promotion of basin governance

and innovation". This was a response to the National Government's call on improving basin governance, adopting innovative reforms and implementing nationwide water-saving actions. This forum received the support from the Yixing City (of Jiangsu Province) government and the China National Textile and Apparel Council (CNTAC). More than 200 water experts and basin stewardship practitioners attended the forum. Some of the most critical issues discussed were institutional reform of basin stewardship, multi-stakeholder engagement, green finance and technological innovation. These subjects were explored as a way for future developments in basin governance.

- The 4th Taihu International Forum in 2018 was held in the city of Suzhou under the theme of "Collective Action for Water Governance under the Market-based Mechanism". The conference covered a wide range of topics including water conservation and protection, basin management and basin treatment. With a special focus on "market-based" and "multi-stakeholder participation", the gathering aims to promote proactive participation of all parties in water resources protection and basin management, and contribute to ecological civilization construction. Bringing in market forces echoes the prevailing governance model in China to seek more energetic and innovative ways in conducting better basin governance.



2019 INTRODUCTION

2019: GLOBAL BASIN GOVERNANCE AND BEST PRACTICES IN CHINA

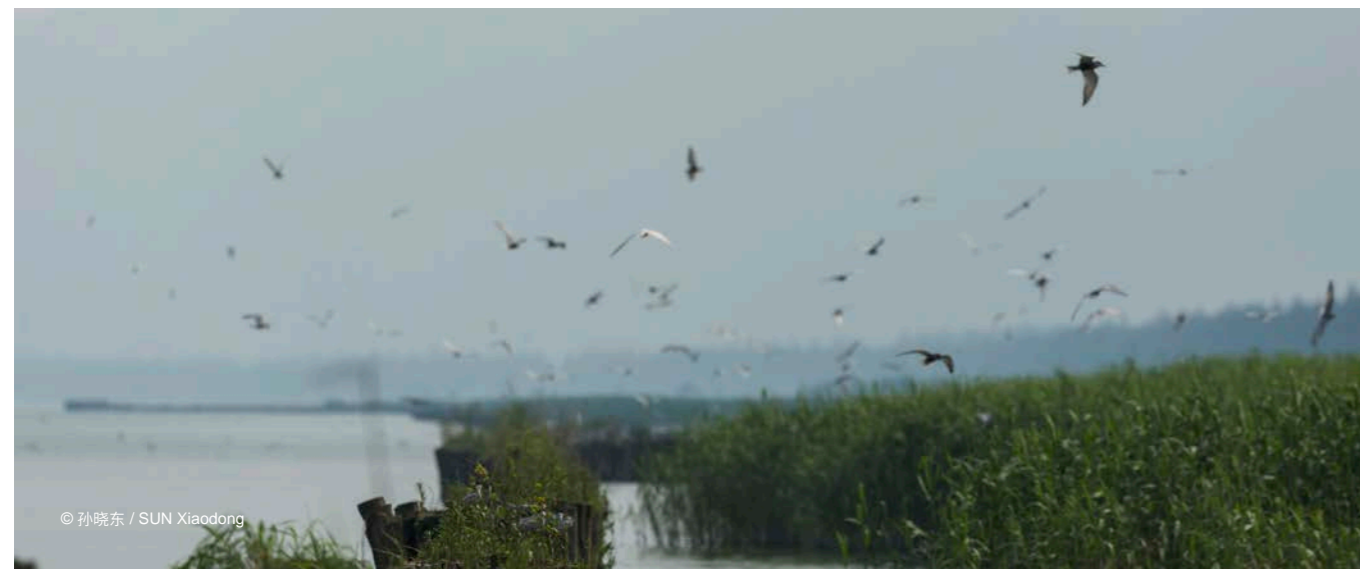
The 5th Taihu Forum was held on December 4-6, 2019 in the city of Nanjing, Jiangsu Province, under the theme of “Yangtze River Protection and Global Green Development”. The Forum aimed at exploring and promoting the green development of other relevant river basins and regions in the world, while showcasing the best practices and success cases in China’s Yangtze River protection. The main sessions and their hosts of the Forum were the following:

Training Course of 2019 Green Manufacturing and Water Stewardship of Textile Industry

Committee for the Promotion of Environmental Protection and Resource-Saving of China National Textile and Apparel Council; World Wide Fund for Nature-Beijing Office

Dialogue on China-Vietnam Green Transformation of Textile Industry (Closed Door Session)

Committee for the Promotion of Environmental Protection and Resource-Saving of China National Textile and Apparel Council; Vietnam Textile & Apparel Association (VITAS); WWF- China; WWF- Great Mekong, WWF- Vietnam



Sustainable Development of Textile Industry and Basin Management Seminar

Committee for the Promotion of Environmental Protection and Resource-Saving of China National Textile and Apparel Council; World Wide Fund for Nature-Beijing Office

Targeted Consultation on Living Yangtze Report

Academy of Environmental Planning of Ministry of Ecology and Environment; Changjiang River Scientific Research Institute; Hohai University; Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences; Institute of Hydrobiology, Chinese Academy of Sciences; Nanjing Institute of Geography and Limnology, Chinese Academy of Sciences; Research Institute for Environmental Innovation (Suzhou) Tsinghua; Tongji University; World Wide Fund for Nature-Beijing Office

River Basin Ecological Management and Citizen Scientific Actions Workshop

HOME-EARTH; Jiangsu Yuzhi Basin Management Technology Research Institute; International Centre of Excellence in Water Resources Management (ICE WaRM); Alliance for Water Stewardship

Yangtze River Conservation and International Experiences in River Basin Management

Yangtze Ecology and Environment Company Limited, China Three Gorges Corporation; U.S.-China Green Fund; Jiangsu Yuzhi Basin Management Technology Research Institute

Strategic Dialogue on Lancang-Mekong Cooperation Green Economic Development Belt

Foreign Environmental Cooperation Center, Ministry of Ecology and Environment/ Lancang-Mekong Environmental Cooperation Center

Seminar on Green Development Assessment of the Yangtze River Economic Belt

Policy Research Center for Environment and Economy, Ministry of Ecology and Environment

Corporate Water Stewardship: Innovation & Good Practice

Water Stewardship China Network (WSCN)

Taihu Lake Green Development Co-assistant Program (Taihu Program)

U.S.-China Green Fund; World Wide Fund for Nature-Beijing Office; Jiangsu Yuzhi Basin Management Technology Research Institute; Center for Environmental Management and Policy Analysis, Nanjing University; Global Green Technology Center (GGTC)

FORUM HIGHLIGHTS FOR 2019

1. For the first time, the “Yangtze River Protection” concept was included in the theme of the Forum. As a strategically important region in China with solid economic strength, the Yangtze River Economic Belt is facing severe ecological and environmental challenges with the arduous task of industrial transformation and upgrading, and the imperfect regional cooperation mechanism. To align with China’s development strategy of “promoting well-coordinated environmental conservation and avoiding excessive development”, much attention was paid to

addressing environmental, economic, development and social issues in the Yangtze River Basin, and prioritizing ecological and green development through a multi-stakeholder approach. Participants of the forum have reached the following consensus: In order to address the challenges of the protection and development of the Yangtze River basin, all parties should strengthen cooperation in policy mechanisms, science and technology, enterprise operations and social management to help each other and achieve win-win results.



2. The Forum brought in invaluable international experience by inviting leading figures and representatives of the governments, such as RAN Hua, vice-mayor of the city of Nanjing, universities, research institutes and the private sector from countries along the Lancang-Mekong River and the officials from Australia’s Murray-Darling Basin. Through candid exchange of views and experience sharing, participants offered insights on the challenges, measures and experiences in the protection, governance and development of major international water basins.
3. The Forum abided by its tradition of pulling in concerted efforts from both public and private sectors in driving sustainable development and water basin co-governance. Large enterprises such as the Three Gorges, Ecolab, Teda, as well as a number of small and medium-sized enterprises have provided suggestions on environmental protection, resource conservation and green development. NGOs including Alliance for Water Stewardship (AWS), Water Stewardship China Network, private non-profit organization HOME-EARTH and other institutions shared unique insights and representative cases on environmental education, popularization of natural science, environmental research and water resources management.
4. For the first time, the Forum included a special training session titled “Training Course of 2019 Green Manufacturing and Water Stewardship of Textile Industry”. With the participation of over 70 people, the training session provided tangible, hands-on advice on promoting the concept of green designs, understanding green manufacturing system, industrial water-saving policies, as well as advancing environmental-friendly evaluation system in the textile industry. The forum also gave opportunity to WWF partners (such as China National Textile and Apparel Council, textile and apparel brands) to participate in the events and host a closed session for the annual planning of the next phase: the development of FAIS (Factory Assessment and Improvement System), a tool devoted to helping textile factory evaluate their environmental performance and acquire solutions for sustainable improvement.

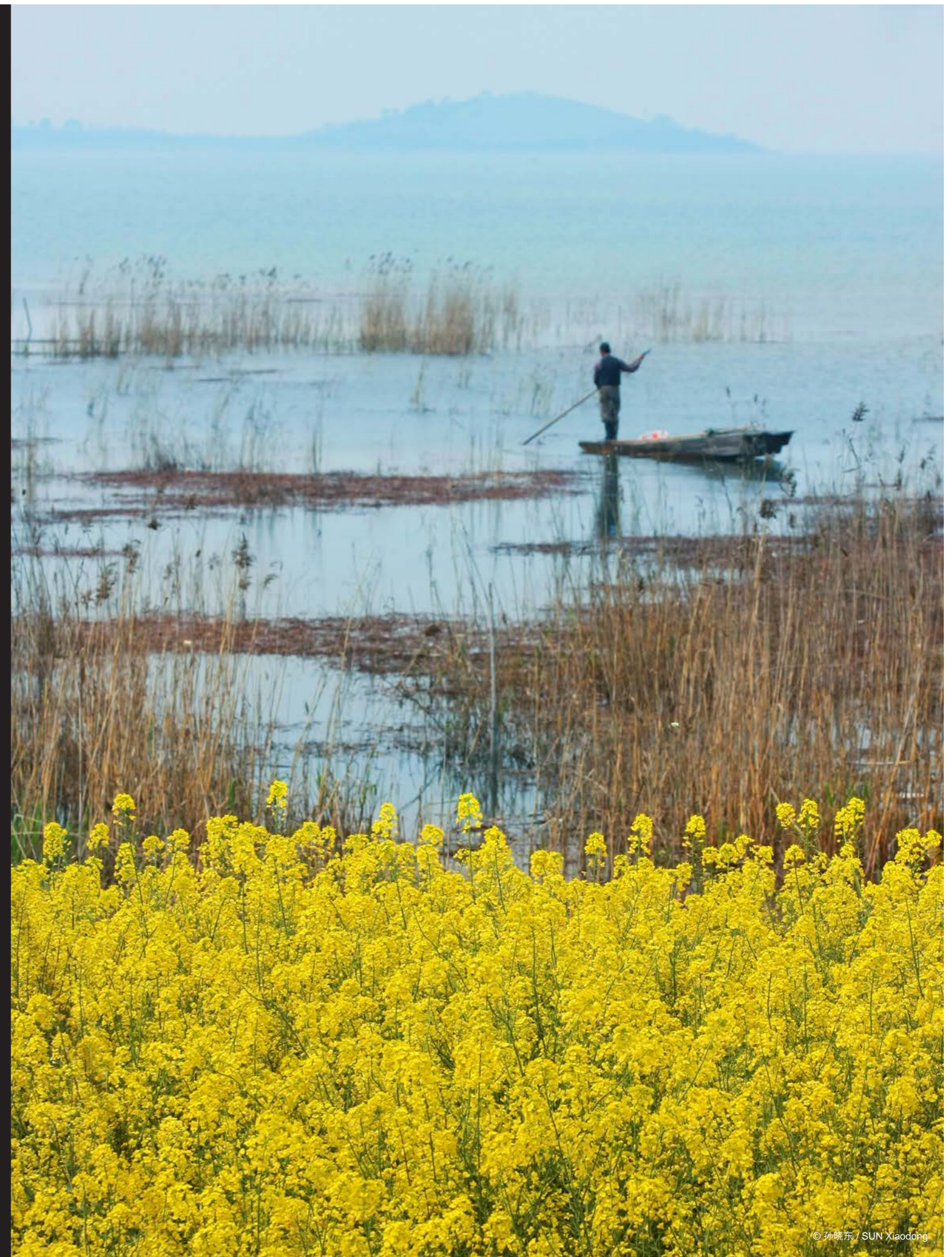
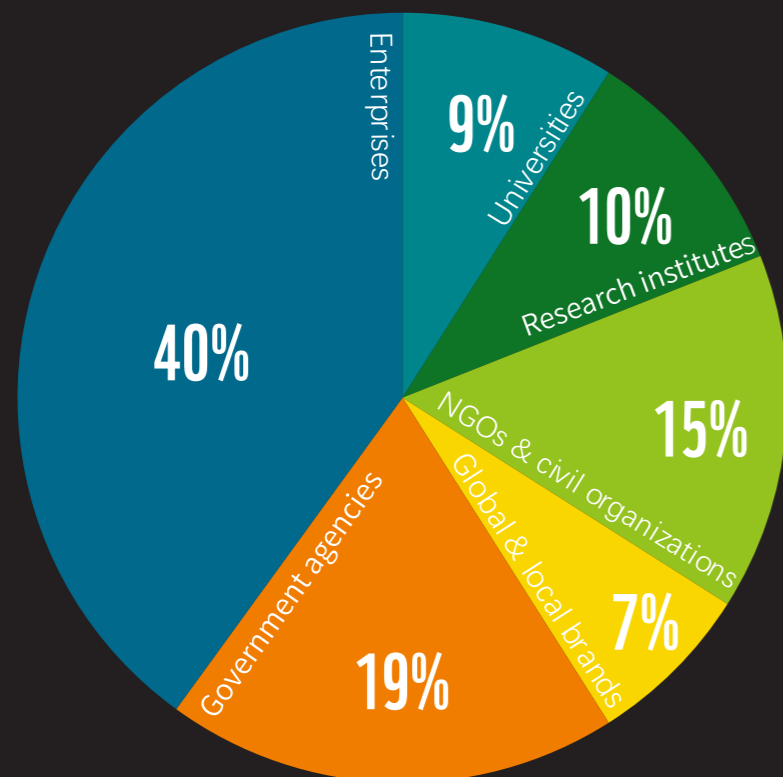


PARTICIPATION

The 5th Taihu International Forum was attended by around 300 participants representing over 150 organizations worldwide. They come from 14 countries and regions, including Australia, Cambodia, China, Germany, Myanmar, Sweden, the Laos, Thailand, the Netherlands, the United Kingdom, the United States, Vietnam, Hong Kong (China), Taiwan (China).

In terms of breakdown of participants: enterprises claim 40%, or the largest proportion of all participants, followed by 19% from government agencies and 15% from NGOs. Others represent research institutes (10%), universities (9%), global and local brands (7%) (Figure 1).

Figure 1 Who are the participants



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MAIN FORUM

INTRODUCTION

The 5th Taihu International Forum featured key themes such as ‘Yangtze River Protection’, ‘River Basin Governance’ and ‘Green Development’. It served as a platform for stakeholders in multiple fields to share thoughts and insights, while facilitating exchanges and collaboration between Chinese and overseas entities. The forum has involved the participation of 254 participants, including government officials, experts,

entrepreneurs, scholars and business executives from 14 countries and regions. WWF partners included the Nanjing Municipal Government, U.S.-China Green Fund, China Three Gorges Corporation, China National Textile and Apparel Council, China International Engineering Consulting Corporation and the Department for Environment and Water, Government of South Australia.



KEY FINDINGS OF THE MAIN FORUM

1. About one-third of Chinese population live alongside the Yangtze River region, an area that generates 45% of the nation's GDP. Protection of the river basin helps to support the industrial transformation and is aligned with the country's need to seek high-quality growth without compromise on the environment. During the process, green and sustainable development is particularly important.
2. Green development in China hinges on efforts by the country's manufacturers. It's wise to suggest companies to follow a 'five-layer' approach in Water Stewardship so that they can be aware of water risks, take actions internally, promote actions across supply chain, foster coordinated actions and realize joint governance. All these efforts will significantly improve basin governance. On this front, printing and dyeing mills in the textile industry in Taihu Lake basin have taken the initiative to adopt the improvement approach in the WWF Water Stewardship Programme.
3. Industrial Parks (IPs) play a key role in increasing investment and driving economic growth, and are also key drivers to help achieve sustainable development goals and green growth. It is essential to work out a China-specific system of green actions for industrial parks so that they can develop in a sustainable manner.
4. Sharing and leveraging experience and best practice in river basin governance in different countries is of great significance to contribute to watershed protection, governance, and sustainable and green development.

RECOMMENDATIONS

1. Take a long-term approach in exploring solutions that balance various interests regarding the protection and development of water resources. The protection of Yangtze River and green development call for concerted efforts to address a wide range of issues in the economy, science, politics, culture and society. Key considerations cover laws and regulations, management systems, unified water resources allocation, market-based adjustment systems, and public engagement.
2. Motivate all stakeholders to contribute to Water Stewardship. Different partners need to join hands in a bid to effectively improve water governance and bolster green development. Globally, all environmental, economic, social and development issues are closely related. Therefore, it is critical to raise people's awareness about Water Stewardship, engage experts in diverse fields in standard and policy drafting, and use economic mechanisms to regulate and incentivize enterprises in the proper use of water resources.
3. Leverage global strengths to create integrated worldwide solutions and tailor-made local solutions. When responding to the challenges commonly seen in global environment and development, China can borrow the experience from developed countries to set up effective public-private partnerships for Water Stewardship. However, measures also need to be tailored and fine-tuned based on the country's specific situations to ensure smooth implementation and effectiveness.

GREEN DEVELOPMENT ASSESSMENT OF THE YANGTZE RIVER ECONOMIC BELT



INTRODUCTION

The sub forum focused on the progress, opportunities and challenges in the development of the Yangtze River Economic Belt. Participants also discussed policy priorities, growth drivers and assessment indicators for the economic belt, while offering insights and advice from different perspectives.

KEY FINDINGS

1. The Yangtze River regions generate a big economic output and boast a large population base. With advanced economic and social status, these regions also play a key role in the ecological system and own strong research capabilities. So the assessment of the Yangtze River Economic Belt will be a model to evaluate other large river basins in the future.
2. For traditional polluting industries, the way to minimize the environmental impact is to curb emissions and optimize resource utilization. But it requires companies to book environmental costs in operating expenditure. Most polluting industries in China have yet to do so.
3. The green development of the Yangtze River Economic Belt is now mainly driven by external forces, such as national and local policies and standards. Internal driving forces, such as corporate and public awareness, technological advancement, and development of pollution control industries, are relatively weak and need to be enhanced.
4. The Policy Research Center for Environment and Economy under the Ministry of Ecology and Environment in China has a special research project on feasible paths and supporting policies for green development in China, which could be used as a reference for the green development assessment of the Yangtze River Economic Belt.

RECOMMENDATIONS

1. **Better define and interpret the concept and connotation of 'green development', while seeking synergies between 'green' and 'development'.**
2. **Take various social, economic and natural elements into consideration to make sure the assessment criteria are fair.** In the assessment process, consider multiple factors such as regional conditions, land use, natural resources, industrial production capacity, consumption, and population quality to strive to ensure the fairness.

STRATEGIC DIALOGUE ON LANCANG-MEKONG COOPERATION GREEN ECONOMIC DEVELOPMENT BELT

INTRODUCTION

The Lancang-Mekong River meanders 4,909 kilometers, drains 810,000 square kilometers and crosses 6 countries. It is the largest river in Southeast Asia. It is also one of the world's three largest rivers with the highest freshwater biodiversity, hosting the world's largest inland freshwater fishery, which yields 1.8 million tons in freshwater fish valued at US\$1.4 billion every year. The river feeds more than 60 million people, as it plays a key role in providing food, water resources and transportation. Due to the impact of damming, power generation and climate crisis, the biodiversity and population of freshwater species in the region are facing serious challenges. According to a study conducted by the Mekong River Commission (MRC) in 2012-2017, if no measures were taken, the total fishery biomass in the Mekong region would have been reduced by 35-40% by 2020.



In 2017, the Lancang-Mekong Environmental Cooperation Center was established. The center aims to facilitate Lancang-Mekong environmental cooperation, demonstrate China's philosophy in environmental governance, improve regional environmental governance capabilities, and achieve regional sustainable development.

Participants of this sub forum came from government agencies, universities, research institutes and industry leaders in Cambodia, China, Laos, Myanmar, Thailand and Vietnam. These officials, experts and executives shared

their insights and measures in addressing environmental challenges along the river. They highlighted that policies, technologies, fiscal resources, public engagement and collaboration all play a part in fostering sustainable development in the economy, society and environment in the Lancang-Mekong river basin.

KEY FINDINGS

1. The Lancang-Mekong river basin faces challenges such as pollution, lack of Water Stewardship capacity, and insufficient funding for green manufacturers.
2. Countries in the regions have launched a series of initiatives to address these challenges. China has set up the Lancang-Mekong Environmental Cooperation Center. Cambodia is implementing the National Policy on Green Growth. The Lao government has endorsed a national green growth strategy. Thailand is proceeding with the National Adaptation Plan. Other initiatives include the Five-Year Plan of Action on Lancang-Mekong Cooperation (2018-2022) and Lancang-Mekong Environmental Cooperation Strategy.
3. Cross-border collaboration will significantly contribute to Water Stewardship, information sharing, climate forecasts, greenhouse gas control, integrated management of watershed frameworks, and improved efficiency in water resources development and utilization.

RECOMMENDATIONS

1. **Promote cooperation by seeking common interests.** Countries in the Lancang-Mekong river basin should improve collaboration at the government, research and industry levels. They need to strike a balance between economic growth and environmental protection, while joining hands to address ongoing challenges.
2. **Share resources and information through ECO Centers.** ECO Centers could be established at the industrial park or watershed level to consolidate resources and facilitate information sharing with regard to clean technology, environmental protection, and sustainable business models.
3. **Better empower the private sector.** Companies that are engaged in 'green development' should be offered more investment incentives or financing support so that they are more willing and well-equipped to play a part.

SUSTAINABLE DEVELOPMENT OF TEXTILE INDUSTRY AND BASIN MANAGEMENT SEMINAR

INTRODUCTION

This seminar focused on growth paths, policy orientation, business layout and Water Stewardship abilities in the textile sector alongside the Yangtze River Economic Belt.

Participants discussed the industry's advantages, challenges and the role of technology innovation to explore potential growth strategies for the future. Experts from CNTAC (China National Textile and Apparel Council) proposed the establishment of a public service platform to conduct green development assessment for the textile industry.

The introduction of the FAIS (Factory Assessment and Improvement System) will also promote sustainable development in the industry.

KEY FINDINGS

1. The Yangtze River Economic Belt is a key base for the textile industry in China, accounting for over 50% of the nation's total output. The Yangtze River Basin is not sufficiently protected, with a fragmented ecosystem. The discharge of pollutants threatens the safety of drinking water, while the aquatic biodiversity worsens, and many



rare species are on the verge of extinction. The basin also faces threats from lake eutrophication and wetland degradation, while the water quality of some tributaries deteriorate. On the other side, as the governments take environmental protection actions, many textile companies within the belt face pressure to survive or grow.

2. The number of printing and dyeing enterprises in Jiangsu and Zhejiang provinces takes a considerable proportion of the country's total. They pose high water risks to Taihu Lake, Qiantang River and other river basins, as well as offshore marine ecosystems.

3. Despite these challenges, China's textile industry has potential for high-quality development due to: 1) its large scale; 2) significant overall advantages of the relatively complete textile industrial chain in China; 3) a group of textile conglomerates with global competitiveness and full coverage of the industrial chain.
4. But the awareness campaigns about green development are apparently not enough. More efforts are needed to raise public awareness about green and sustainable development in the textile industry via a multi-layer, multi-channel approach.

RECOMMENDATIONS

1. **Increase compliance on water regulation.** Water resource management and governance remain a top priority in China. Just as the CNTAC has proposed, when drafting industry plans and develops new industrial parks, regulators must ensure that industry players strictly comply with the requirements and standards in the use of water resources. As the world's second largest water user, China should seriously consider aligning the development of the textile industry with Water Stewardship.
2. **Use good water management in industrial sites as a competitive advantage.** Textile companies should make good use of policies, technology and refined management. They can leverage green development and environmental protection as new competitive edges and growth drivers to significantly bolster the sustainable development of the industry.
3. **Increase the use of more sustainable production technologies.** As ecological civilization becomes increasingly important in national development strategy in China, textile companies need to leverage 'technology', 'fashion' and 'green development' as the key messages to initiate transformation internally. The 'technology', 'fashion' and 'green development' could focus on: 1) new fiber materials; 2) integration of culture and fashion; 3) responsibility-oriented green industries; 4) efficient use of global resources; 5) development paths of world-class industrial clusters.
4. **Reduce the environmental impacts of operations in China and abroad.** Printing and dyeing enterprises in the Yangtze River Economic Belt should avoid the "not in my backyard" phenomenon, eliminate geographical restrictions, wisely separate industrial clusters, and contain water risks.



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SUB FORUM IV.

CORPORATE WATER STEWARDSHIP: INNOVATION & GOOD PRACTICE

INTRODUCTION

'Stewardship' implies managing something that one doesn't have full ownership. Therefore, Water Stewardship refers to multi-stakeholder, joint actions at the basin level in order to achieve social equality in developing and utilizing water resources. By summarizing project experiences, promoting project management tools and sharing learning results, this sub-forum helps to share high-quality "sustainable Water Stewardship" practice, and consequently advance the transformation of all industries towards more sustainable approaches in dealing with water resources.

KEY FINDINGS:

1. According to the Global Adaptation Council, investing \$1.8 trillion over the next decade - in measures to adapt to climate change - could produce net benefits worth \$7.1 trillion, indicating a high return of investment.
2. At present, most of the investment related to CWR in China concentrate on carbon emissions, while water risk, which poses the biggest threat to asset security, hasn't received due attention and investment.



3. According to the CDP Water Disclosure Project in 2018, suppliers in China need to improve their understanding of water resources.
4. Enterprises can formulate Water Stewardship strategies for enterprises and realize intelligent management through tools like water risk cost calculators and navigators.

5. As one method of sustainable water resources stewardship, the establishment of a water fund can achieve the goals of water source protection, rural resource protection and economic growth simultaneously by integrating ecological protection, humanistic promotion and artistic creation.
6. Capacity-building for sustainable water resources management can take the form of training, board games, symposiums, hiking and seminars in a bid to enrich content and form and blend well in nature.

RECOMMENDATIONS:

1. **Launch a water conservation initiative.** A special water conservation mechanism dedicated to the electronics sector in the future could effectively raise suppliers' awareness of water risks and motivate them to engage in water conservation or water efficiency management.
2. **Establish a protection network of small water sources.** Such a setup will be highly powerful and effective in protecting these water sources through bringing together relevant institutions, sharing technologies and resources, conducting training and enhancing communication.
3. **Enhance cooperation among different stakeholders.** The leading role of water resources stewardship should extend from individual factories to all suppliers, schools, communities and the entire society to significantly elevate its effectiveness and expand influence.
4. **Formulate a string of industry-specific rules.** The government and relevant enterprises should work together to formulate industry standards, compile best practice cases, and revise a series of existing national standards in terms of Water Stewardship-related terminologies, indicators and methods.



RIVER BASIN ECOLOGICAL MANAGEMENT AND CITIZEN SCIENCE ACTIONS WORKSHOP

INTRODUCTION

Citizen science refers to scientific researches involving the active participation of non-professional scientists, science enthusiasts and volunteers in scientific research, and covers a wide range of topics like scientific exploration, new technology development, data collection and analysis. With the rapid development of science and technology, citizens' science acumen constitutes an important part of a country's comprehensive strength. Meanwhile, ecological issues have become even more acute with the environment, energy, resources, medicine and global climate undergoing

unprecedented changes. Thus, to drive sustainable development, it's of utmost importance to strengthen the public's understanding of environmental protection and basin management, as well as encourage their participation in the cause. This forum is jointly sponsored by Jiangsu Yuzhi Basin Management Technology Research Institute and HOME-EARTH. By discussing domestic and foreign cases of public participation in scientific researches, the sub-forum explores ideas and methods of popularizing citizen science in basin protection.



KEY FINDINGS:

1. Citizen science has the potential to become a cost-effective channel for policy contribution, as it emphasizes the importance of both fostering diversity and innovation in citizen science activities.
2. Faced with the current dilemma in domestic basin governance, it's imperative to establish a multilateral learning and communication network that involves multi-party participation and citizen science application.

Such an architecture will serve to play a positive complementary role in making scientific basin governance decisions.

3. Biomonitoring technology allows the public to understand aquatic animals, raise the awareness of lake protection and green lifestyle through observation, and strengthen the idea of ecological preservation in everyday life.
4. Public education on environmental protection is an important means to promote basin protection. Through public and educational events, people stand to improve their understanding of basin protection and green lifestyle, which in turn encourage them to take a bigger and more proactive role in basin management and protection.

RECOMMENDATIONS:

1. **Encourage partnerships in researches.** Governments, research institutions and universities should play positive roles in facilitating cooperation. The partnership with research institutes is highly critical in ensuring the effectiveness and reliability in data collection during citizen science projects.
2. **Popularize science knowledge to the general public.** The endeavor is instrumental to raising the awareness of ecological protection among the general public. We should strive to promote the country's environmental protection policies, promote environmental-protection related knowledge as well as relevant technology innovation, demonstration programs and showcase the country's vastly beautiful sceneries, in order to contribute to the noble cause of "Building a Beautiful China".
3. **Raise citizens' interests in environmental protection.** Dedicated courses to citizens on environmental protection can greatly enhance participants' interest in exploring the nature, raise their awareness in basin protection and encourage them to be part of basin-monitoring initiatives. Meanwhile, how popular science can play a sustainable role in basin protection remains to be further explored.



YANGTZE RIVER CONSERVATION AND INTERNATIONAL EXPERIENCES IN RIVER BASIN MANAGEMENT

INTRODUCTION

Due to improper production methods and lifestyles, the Yangtze River Economic Belt has since modern times been an area bearing the most acute water environment problems. General-Secretary Xi Jinping has proposed to put the restoration of Yangtze River ecological environment in an overriding position, promote well-coordinated environmental conservation and avoid excessive development. The sub-forum is co-sponsored by China-US Green Fund, Jiangsu Yuzhi River Basin Management Technology Research Institute and Yangtze River Eco-environmental Protection Group Co Ltd. With an aim of promoting sustainable development of the Yangtze River Basin, participants analyze the status quo of Yangtze River protection strategy, by drawing in international experience of basin governance and comparing governance models from home and abroad through panel discussions by leading experts.

KEY FINDINGS:

1. The TMDL basin governance model from the United States can be of reference to China, which oversees basin management through monitoring total maximum daily loads, introducing water quality modeling approaches and market-based mechanisms.
2. Regional basin governance requires a complex suite of professional support and systematic solutions. A well-established architecture will help set differentiated goals and help them effectively implemented, conduct detailed diagnosis and analysis of potential problems, evaluate program effectiveness in multiple dimensions, provide a set of management tools, a tangible set of measures containing loose and stringent requirements, and diversified policy guarantee and innovation.
3. The protection of the middle and lower reaches of the Yangtze River will focus on the prevention and control of floods and droughts, the safety of drinking water and the maintenance of water ecological services.
4. Basin management model needs innovation, and simulation modeling is the only proven way to predict the behavior of complex systems.

RECOMMENDATIONS:

1. **Use information technologies for long-term basin governance.** Build a model and data-based basin intelligent decision-making platform, and make comprehensive use of cloud computing, big data and other new information technologies to implement supervision and early-warning in order to achieve long-term governance.
2. **Strengthen the ecological compensation mechanism.** Channel social funds into environmental governance and ecological protection.
3. **Nurture talents across disciplines to be devoted to basin stewardship.** The future of river basin management in China requires the collaboration and coordination among scientists, engineers and other professional and technical personnel, as well as talents in the financial field, including green investors.



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ORGANIZERS

Jiangsu Yuzhi Basin Management Technology Research Institute

GUIDE AFFILIATIONS

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