

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: Wei He, Tom Guan, Yifeng Liu, Chaochao Chen, Aihui Yang, Angela Ortigala, Panqiu Lin Design by: Vivian Shi

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is necessary to reflect on the past events and how WWF became involved in a multilateral governance framework for preserving the Taihu Lake.

In the aftermath of the devastating Yangtze floods in 1998, WWF launched the Yangtze River Program. The first demonstration site was in the Dongting Lake area in the middle reaches of the Yangtze River to

In the aftermath of the devastating Yangtze floods in 1998, WWF launched the Yangtze River Program. The first demonstration site was in the Dongting Lake area in the middle reaches of the Yangtze River to promote the return of farmland to the lake and to help communities build alternative livelihoods. For many years WWF carried out biodiversity conservation work in such regions as Honghu Lake, Swan Oxbow of the Yangtze River, Poyang Lake, Chishui River, Huangpu River water source wetland areas, the Three Rivers Source region, the Yangtze River estuary and other important ecological sensitive areas of biodiversity.

During this period, WWF realized the importance of Taihu water resources conservation for improving biodiversity, which gained supports from governance partners. Taihu is the third largest freshwater lake in China and it is one of the most developed regions, with high levels of industrialization and urbanization and significant government investment. However, with this development came high environmental degradation and plummeting biodiversity. It was a daunting challenge for WWF to be involved in such a complex project and without significant experience working on China's freshwater lakes. Nevertheless in 2011, Nalco (afterwards integrated with Ecolab) consolidated its support for WWF to launch China's first Water Stewardship Program in the Taihu Lake basin.



WWF took on this opportunity to improve the health of one of China's most important and biodiverse regions. The decision to work on this was based on:

1

The basin's rich biodiverse history. WWF, together with the government, enterprises and other NGOs, was motivated to restore the lake to picturesque scenes of 'the eagle flying under the clear sky and fish swimming in the lucid shallow water'; and create a 'Homeland of fish and rice with clean streams and elegant bridges', harking back to an era of poetic tranquility.

2

The Taihu basin's strong economic base and the potential to model future basin preservation plans. Any of Taihu's innovative mode of governance, its transformation of economic development mode and the breakthrough of ecological restoration mode could provide a key model that other basins in China could follow in their governance and development.

3

The opportunity to create a multilateral framework. A large number of the global 500 companies and their suppliers operate in the region. Under the concept of ecological civilization (also well known as sustainable development), the program could promote enterprises to integrate environmental and social responsibility into their development strategies, profit strategies, brand building and management of the entire industrial chain.



The unique aspect of this Water Stewardship
Program was to change the often confrontational and
compliance-focused relationship between government
and enterprises, as well as the lack of effective
participation of non-profit organizations.

It became apparent that all the stakeholders in the basin, including the government, enterprises and society must realize that they share the risks and rewards from the prudent use of water in the basin. Refocusing the adversarial relationships between stakeholders meant that all parties had to see the mutual benefit in a healthy and biodiverse basin. Only with correct incentives and the engagement of enterprises and government, water governance could improve.

The results of WWF's work have been transformational. By 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 set up a multilateral participatory governance model which involved multiple stakeholder participation and created an innovative approach based on water stewardship, which aims to support the reduction of pollution and increase the efficiency of water use 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. We hope that through the ongoing Forum, which extended into the fourth of its kind last year in Suzhou, Jiangsu province, the multilateral participatory basin governance model can be further enhanced. We believe involving 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 promoting well-coordinated environmental conservation of the Yangtze River basin as a whole as China continues its economic development.

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2018: ANOTHER FRUITFUL YEAR IN PROMOTING BETTER BASIN GOVERNANCE IN CHINA

The Taihu basin has long been part of Chinese culture and heritage. The idyllic lake and surrounding area has been impacted by industrialization and environmental degradation in recent decades. There is now an opportunity to put in place a basin governance framework which aims to protect the area and tie in business and government support for preserving the environment and cultural heritage of this valuable national treasure.



As a response to the blue algae bloom in 2007, the Taihu Regulation was enacted, which prohibits further technological industrialization (even for the purpose of improving environmental performance) and production expansion for certain high-pollution causing industries. In particular, this included the printing and dyeing industries, which through their activities, have significantly impacted the environment in the basin.

Recent government action

Recent government action has led to an estimated 40 percent of all of China's factories being shut down at some point in time in order for inspections to be conducted by environmental bureau officials. As a result of these inspections, over 80,000¹ factories have been hit with fines and criminal offences as a result of their emissions.



Under an initiative dubbed the "263 Action Plan" aiming to tackle pollution, by the end of 2018 more than one thousand chemical companies in the Jiangsu province have been shut down, raising alarms and concerns in the industry over future regulatory posture and economic viability in the textile sector. In addition to this, engineering projects to improve water quality have been ineffective. In the past 10 years, at least \$14.9 million² has been invested for improving the water quality of Taihu Lake. These projects have not yielded the desired results for environmental improvement.

The government's heavy engineering focus has not been fully effective and the top-down approach of managing diverse small and medium enterprises (SMEs) constrains the environment performance of these companies and creates a vicious cycle for business operations, where they do not have the opportunity to innovate and adapt. In addition to this top-down approach, we see a model of multi-stakeholder participation in basin governance as an alternative solution.

In what the World Wide Fund for Nature (WWF) calls the multi-stakeholder participatory basin governance model, various stakeholders are encouraged to participate in the discussion of 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 seeing the basin management as a pure engineering problem. The model will develop 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 sit together and discuss their issues through workshops and conferences.



Reference: A methodological framework for integrated assessment of land use policies and sustainable development in developing countries - Scientific Figure on ResearchGate.

Available from: https://www.researchgate.net/figure/Map-of-Taihu-Basin-China_fig2_40096463
[accessed 20 May, 2019]

^{1.} Reference: http://www.sohu.com/a/289831305_310421

^{2.} Reference: http://js.xhby.net/system/2017/06/17/030695123.shtml





-The 1st Taihu International Forum was held in Wuxi, Jiangsu Province, and recorded an attendance of over 100 people. In this session, proposal of the multi-stakeholder participatory basin governance model, drafted jointly by the WWF and the Jiangsu (Provincial) Engineering Consulting Center, was circulated and its publication was 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 forwardlooking approaches for preserving the basin. The key output of the first forum put forth a new basin governance model, and participating stakeholders became conscious of the transformative potential of the new governance model.





-The 2nd forum in 2016 was set with a theme of collectively building green basins. In this forum, other basin governance models were introduced and discussed, and the participating basin included representatives from Dongting Lake, Poyang Lake, Chishui River, and Jiaxing City. 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 in attendance. In this session, cross-basin dialogue was established between Chinese and international delegates and stakeholder ties were further strengthened between governments and industry participants.

-The 3rd Taihu International Forum in 2017 was held under the theme of "continuous promotion of basin governance and innovation" in response to the National Government's call on improving basin governance, adopting innovative reforms and implementing nationwide water-saving actions. This was promoted in parallel with the support of the Yixing City (Jiangsu Provice) government and China National Textile and Apparel Council (CNTAC). More than 200 water experts and basin stewardship practitioners and promoters from the globe attended the forum. Some of the most critical issues on basin stewardship, including institutional reform, multistakeholder engagement, green finance and technological innovation were explored and this paved the way for future developments in basin governance.





2018 HIGHLIGHTS

1

The 2018 theme has incorporated a market-based mechanism in basin governance, which sets it apart from previous iterations where the focus had been on the public sector. Bringing in market participation echoes the governance trend in China to explore for more energetic and innovative ways in conducting better basin governance. Industry involvement is key to successfully incorporating economically viable concepts and proposals that can lead to sustainable governance solutions.

Working group meetings were introduced as a new meeting format at the sub-forums.

2

This enabled more on-the-ground discussions between participants and allowed to develop dedicated conclusions from sub-forums' discussions to be fed into more strategic policy suggestion reports, which were submitted to the higher echelons of government.



3

It was the 1st time that the forum was co-hosted by WWF, Environmental and Resource Department of China International Engineering Consulting Corporation, China National Textile and Apparel Council and China National Institute of Standardization, as well as the College of Hydrology and Water Resources at Hohai University. Partners are increasingly involved in the content design of the Forum, increasing the ownership of the program. After the 4th Forum, organizers received excellent feedback from partners, and this has led to a rise in interest for discussions in the next forum. The event was also reported by mainstream media in China, including Tencent, Sohu, and iFeng. In total, more than 10 pieces of news of the

event were published online. Such coverage has helped raise the profile of the initiative and increased public attention to the event and related topics in basin preservation.

4

The forum provided an opportunity for one local NGO called QBY Environmental center,

from Jiangsu province, to demonstrate
their work and effort in utilizing social
media to promote environmental education
and public awareness. In the subforum, this was discussed in detail for the audience and
demonstrated the practical aspects of this new outreach
approach.



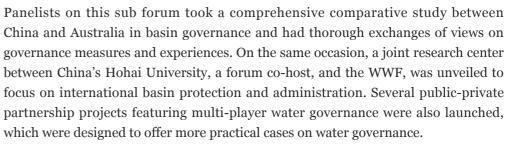
5

Sub forums have witnessed more than 200 representatives from governmental agencies, corporates, research institutes, universities, and NGOs.

Themes of the five Sub-forums are (and led by):

- Intelligent basin management and the river/lake chief system (Hohai University, Taihu Basin Authority of Ministry of Water Resources)
- Water-saving contract helping water-saving marketization in China (NDRC, CNIS)
- Dialogue with stakeholders on industrial park environmental policy in China & Seminar on industrial park green transformation in Taihu Basin (PRCEE-MEE, JECC)
- Regional structural layout of Chinese textile industry and the outlook of Water Stewardship in China (CNTAC)
- Social media power promoting environmental education and public awareness improvement

INTELLIGENT BASIN MANAGEMENT AND THE RIVER/LAKE CHIEF SYSTEM







WATER EFFICIENCY CONTRACT HELPING WATER-**SAVING MARKETIZATION IN CHINA**

This sub forum focused on water efficiency contract and its related policy standards, application areas and assessment criteria.

It is defined as a service mechanism based on technological progress and a combination of administrative management and market behavior established by the government and social forces to strengthen water conservation, protection and utilization. The session drew in representatives from enterprises of various industries (such as dyeing and hospitality) as

over the water efficiency contract's leading characteristics, policy needs, constraints and future development, and proposed a number of suggestions on better promoting and implementing the water efficiency contract.

well as scholars and officials. Panelists had heated discussions

Introduction

Pilot programs and favorable policies should be introduced to encourage certain industries to adopt the 'water efficiency contract' mechanism

Key Findings

Call for various such as NGOs, initiative so as to lower overall costs for innovative better market environment on front should be created to enhance the robustness and resilience of market

R&D in water efficiency contract with lower costs and better technologies should be optimized in a bid to reap long-term gains

China has an early edge in exploring this market-based model, which serves multifold purposes including promoting technological progress in water resources, ensuring innovation in government administration, and guaranteeing the reasonable use of State capital.

Soaring water prices and more specialization of work have given rise to a wider variety of application scenarios in water contract management.

The mechanism is still at its infancy stage, lacking comprehensive policy, standard and operational models. It requires concerted efforts across different entities and organizations to come up with detailed policy guidelines, water-saving technologies and a flexible and actionable mechanism to ensure the possible financial incentive.

Trial runs and pilot programs will be favored to select industries, including linen washing, car washing and other industrial sectors that consume large sum of water.

More policies and standards are anticipated to promote the market-based mechanisms in water management and operation.

Kecommendations

The possibility of including the water model to the River Chief system should

SUB FORUM III

DIALOGUE WITH STAKEHOLDERS ON INDUSTRIAL PARK ENVIRONMENTAL POLICY IN CHINA & SEMINAR ON INDUSTRIAL PARK GREEN TRANSFORMATION IN TAIHU BASIN

Green development of industrial parks, its related policies, challenges and ways ahead were the focus of this sub forum.

Introduction

Experts made references to the construction of eco-friendly industrial parks, green supply chain management, and did comparative studies on three basin governance cases worldwide.

Industrial parks are an important element in tackling pollution in basin governance. Waste-water treatment infrastructures in many Chinese industrial parks are insufficient to handle current industrial wastes. The design of treatment mechanism has become even more intricate following ownership changes.

The Yangtze River Delta Region has a role to play in not only pioneering some of the leading 'green' initiatives, but combining information technologies to propel a holistic regional green development agenda.

The green development of industrial parks can leverage the supply chain management of companies. These lie at the core of green supply chain because it is the procurement of industrial players who drive upper-stream vendors to embrace the green agenda. Supply chain finance, if properly utilized, has a role to play in such transitions. The going-green transition of industrial parks should take into consideration both innovative management models and market-based mechanisms.

Panelists have agreed on four key words to the green development of industrial parks: value, which means that the value of environment protection should be incorporated into the development of mainstream industrial park; coordination, which means the cross-departmental, cross-regional, cross-player and cross-technological coordination; innovation, which means the improvement in institutions, policies and management; and momentum, which means that all relevant parties should address the problem of lack of momentum in taking a green development path.

Key Findings

Recommendations

Based on discussions of the sub-forum, the political research center of the Ministry of Ecology and Environment would compile a special report on the environmental governance of industrial parks and submit to higher-level decision makers.

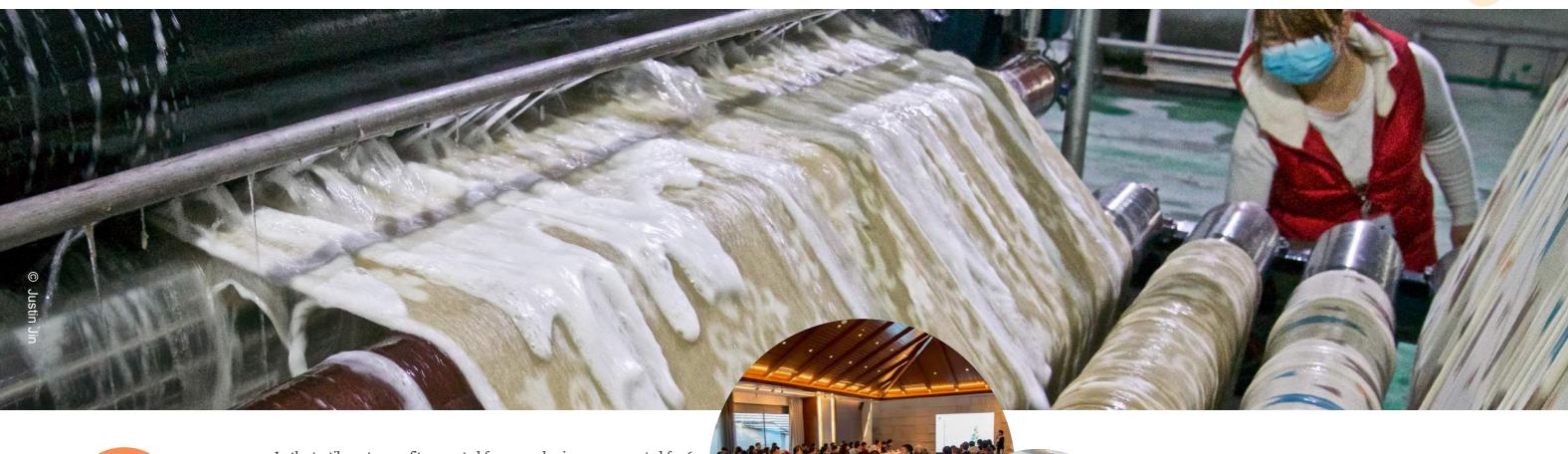
The WWF and its partners should further explore and develop innovative strategies for water management in industrial parks and devise environmental governance measures at the institutional level.

SUB FORUM IV

REGIONAL DEPLOYMENT AND WATER STEWARDSHIP INNOVATION IN THE TEXTILE SECTOR

The sub forum took a retrospect on the development the textile industry by geographies, compare their pros and cons, and their ongoing efforts to reduce pollution. Experts have shared their views on how technologies can be applied to minimize the use of water and trim sewage discharge, and proposed the use of big data to improve the efficiency of used clothing recycling.





Key Findings

In the textile sector, profit generated from core businesses accounted for 6 percent of the entire industrial sector and claimed 10 percent of industrial employment. Fiber processed in China accounts for 58% of global fiber processing. China's textile exports comprise 25% of the country's total exports and are valued at 200 billion yuan (US\$ 29 billion)

China's textile industry boasts 54 million tons of full-industrial chain manufacturing capability, and is the world's top textile manufacturer by the number of product categories. According to statistics, the country is home to tens of thousands of textile enterprises of various sizes, nearly 200 top-tier industrial clusters, and over 16 million skilled workers and managers. The industry can satisfy up to 30 million tons of fiber consumption domestically. It also claims more than one third of the global textile market.

Asia is the region where China has made the highest amount, or around 80 percent, of outbound investment. Two main areas of investment are cotton textile and apparel. Africa has emerged as a new hotspot of investment in the past one to two years. Statistics showed that investment in Africa reached \$190 million in 2017, ten times that of 2015. Unlike investments in Southeast Asia, investment is no longer confined to the abovementioned two areas (cotton textile and apparel) but the entire industrial chain.

Recycling initiatives are crucial to bolstering the sector's sustainable development goal. Technologies can play a part in enhancing its efficiency.

The WWF should continue to act as a bridge between textile manufacturers, apparel brands and relevant policymaking departments to strengthen mutual communication and understanding.

Textile enterprises should focus on long-term policy guidance (like five to ten years) and make an effective selection of technologies based on a thorough understanding of policy directions.

More textile and apparel-related brands should be encouraged to take part in the joint efforts to tame pollution. More technological support and capacity building initiatives to help more plants and textile enterprises to carry out substantial improvement.

A national initiative to recycle used apparel was reiterated during the discussion to draw wider public attention.

Recommendations

Justin Jin

SUB FORUM V

SOCIAL MEDIA POWER PROMOTING ENVIRONMENTAL EDUCATION AND PUBLIC AWARENESS IMPROVEMENT



This sub forum focused on the general public's growing awareness of environmental protection which has served as a major impetus to environmental governance.

Therefore ways to promote people's awareness and equip them with the proper knowledge were explored.





Local NGOs have huge potential and perceived major roles in enhancing the environmentalprotection awareness of the people.

Apart from contributing to environmental protectionrelated education, local NGOs have also stepped up exploring and promoting green finance and market-based mechanisms in the realm of environmental protection.

More space and support should be given to local NGOs for them to unleash full potential in driving meaningful initiatives.

The next Taihu International Forum should continue to set stage for local NGOs to help them promote their agendas.

International NGOs should be encouraged to share more experiences with local peers to help the latter play a bigger part in carrying out green initiatives.





Recommendations



A total of 200 quests from government agencies, think tanks, enterprises and NGOs participated in the 2018 meeting.

The forum also received strong backing from the National Development and Reform Commission and the Political Research Center of the Ministry of Ecology and Environment. Attendees came from six countries including Sweden, the Netherlands, Australia, the United States, Switzerland and China. With dual focuses on both "market-based" and "multi-stakeholder participation", the main forum focused on three aspects in water stewardship in China: First, a retrospect and analysis on national policies regarding water protection; Second, some experience-sharing on the protection of rivers and lakes; Third, best practices across different industries, regions and countries.



Findings of

Sub forums covered a raft of topics including basin ecosystem governance and smart administration, water efficiency contracts, the green transaction of industrial parks, the layout of Chinese textile industries, as well as wetland protection and environmental education (see below the summaries for each sub forum).

China has raised the importance of ecosystem and environmental protection to the national strategy level. While substantial progress has been made in the past decades, problems remain: inconsistent improvement of water quality, slow restoration of water quality, lack of planned layout in industrial structures, and the unbalanced development of water stewardship measures and the level of pollution.

China should come up with a holistic layout on water resources protection and improvement, set standards in promoting key technological upgrades and enhance cooperation (especially cross-function and cross-border collaboration).



Prepare for the next Taihu International Forum at the earliest convenience, with the recruiting of more participants representing various industries.

Make the forum a more effective platform where policymakers, market forces and other players stand to interact and have candid exchanges of views. Set different time slots for different sub-forums, allowing participants to attend more sub forums and access more insights.

Push forward the standardization of enhancing water environment and water resources protection by catering to market demands. Raise the importance of utilizing technology in water perseverance.

Make Taihu International Forum a truly renowned brand in the area of water stewardship. Enhance international cooperation and promote China's water resources management standards overseas, by leveraging the Belt and Road initiative and through a win-win approach.





LIST OF PARTNERS AND SUPPORTING ORGANIZATIONS

Taihu International Forum 2018 Partners

Hosts:

World Wide Fund for Nature (WWF)

Resource and Environment Department of China International Engineering Consulting Corporation (CIECC)

Committee for the Promotion of Environmental Protection and Resource-Saving of China National Textile and Apparel Council (CNTAC)

Branch of Resource and Environment of China National Institute of Standardization (CNIS) College of Hydrology and Water Resources of Hohai University

Guiding Units:

China National Institute of Standardization (CNIS)

Policy Research Center for Environment and Economy of Ministry of Ecology and Environment (PRCEE-MEE)

Support organizations

Suzhou Industrial Park

State Key Laboratory of Hydrology-Water Resources and Hydraulic Engineering

National Engineering Research Center of Water Resources Efficient Utilization and **Engineering Safety**

Hohai University - WWF Joint International Research Center for River & Lake Conservation Restoration and Management

HSBC

The Coca-Cola Company

H&M

Tommy Hilfiger

100%

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1961

WWF was founded in 1961





WWF has over 5 million supporters



WWF has over 5,000 staff worldwide



Why we are here

To stop the degradation of the planet's natural environment and to build a future in which humans live in hamany with nature.

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WWF China, 3rd Floor, Building 2#, 22 Baiwanzhuang Street, Xicheng District, Beijing, PRC. Tel. (86) (10) 6809 3666 Fax (86) (10) 6809 3666.

For context details and further information, please visit en.wwfchina.org

