THE 4TH TAIHU INTERNATIONAL FORUM 2018

Collective action for water governance under market-based mechanism

Summary Report, June 2019
The 4th Taihu International Forum was held in 2018, eleven years after the blue algae outbreak in Taihu Lake. This also coincided with the 20th anniversary of the WWF work on the Yangtze River. In reviewing the work of the WWF, it is necessary to reflect on the past events and how WWF became involved in a multilateral governance framework for preserving the Taihu Lake.

BUILDING ON A MULTI-STAKEHOLDER MECHANISM FOR PRESERVING TAIHU LAKE — A REVIEW AFTER THE 4TH TAIHU INTERNATIONAL FORUM

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.
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.

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.

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.

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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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.

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

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 80,000 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 million 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_40096415 [accessed 20 May, 2019]

1. Reference: http://www.sohu.com/a/289831305_310421
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Retrospectives on the previous three summits

-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 forward-looking 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 Province) 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, multi-stakeholder 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.

2. Working group meetings were introduced as a new meeting format at the sub-forums. 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 sub-forum, 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
Four main areas were identified as relevant for better governance: management at the basin level, ecosystem services, water security (linked to floods and droughts) and healthy environment.

Basin governance requires systematic and long-term planning, but the current ‘responsive’ and ‘project-based’ approach, which favors speed and scale, is at odds with effective basin governance and poses a challenge to the goal of building a ‘Beautiful China’.

International experiences in river and lake governance is difficult to duplicate without adapting to Chinese realities. It is an important task to maintain the continuity, preciseness and high effectiveness of basin governance policies and chart a unique course with Chinese characteristics.

Basin governance is a long-term and complicated matter that requires multi-stakeholder engagement and cooperation. Knowledge exchange is essential to enhance management and increase collaboration.

Knowledge sharing and promote cooperation on basin management should be increased.

Multi-stakeholder dialogues, taking into account legislative, policy, inspection, market and technological factors should be promoted.

Current policy opportunities and technological innovations, such as the river chief system and the ‘smart basin’ concept should be leveraged on.

Panelists on this sub forum took a comprehensive comparative study between China and Australia in basin governance and had thorough exchanges of views on governance measures and experiences. On the same occasion, a joint research center between China’s Hohai University, a forum co-host, and the WWF, was unveiled to focus on international basin protection and administration. Several public-private partnership projects featuring multi-player water governance were also launched, which were designed to offer more practical cases on water governance.
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 well as scholars and officials. Panelists had heated discussions 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.

Key Findings

China has an early edge in exploring this market-based model, which serves multi-fold 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.

Introduction

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

Call for various organizations such as NGOs, enterprises and cross-functional government agencies should be part of this initiative so as to lower overall costs for innovative practices. A better market environment on the policy and standard-setting front should be created to enhance the robustness and resilience of market mechanism.

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

Recommendations

The possibility of including the water efficiency contract model to the River Chief system should be studied.
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Introduction

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.

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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.
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 above-mentioned 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 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.

The WWF should continue to act as a bridge between textile manufacturers, apparel brands and relevant policy-making 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.
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.

Key Findings

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

Apart from contributing to environmental protection-related 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

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

The possibility of including the water efficiency contract model to the River Chief system should be studied.
Main Forum & Closing Ceremony

A total of 200 guests 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.

Key Findings of Main Forum

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).

Introduction

Recommendations for next years

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
WWF was founded in 1961

+100

WWF is in over 100 countries, on 6 continents.

+5M

WWF has over 5 million supporters

+5K

WWF has over 5,000 staff worldwide