

## **The 4th CWINS International Symposium—Governing Natural Resources, Global Strategies and Governance Innovations— has been held successfully in Hangzhou, China**

From Nov. 10 to Nov. 11, 2018, the 4th CWINS International Symposium on Governing Natural Resources, Global Strategies and Governance Innovations, sponsored by the CWINS (China Workshop in Institutional Analysis of Social Ecological Systems) and the WINS (Berlin Workshop in Institutional Analysis of Social-Ecological Systems), has been held successfully in Hangzhou, Zhejiang Province, China.



Fig 1 Participants at the 4<sup>th</sup> CWINS workshop

Nearly 100 experts and scholars from UN-Habitat, Germany, the United Kingdom, Norway, the Netherlands, Nepal, China and China-Hong Kong, who are engaged in natural resource governance research, jointly presented and discussed the modernization of natural resource governance system and governance capacity from different fields such as economics, management, politics, law, sociology and environmental science.

The conference delivered 16 keynote speeches on the topics of "Natural Resource Governance and Sustainable Development", "Theory and Practice of Natural Resource Governance", "Tools and Performance of Natural Resource Governance", "Rights and Conflicts of Natural Resource Asset Governance", "Resource Element Governance and Regional Coordination", and "Public and Private Rights of Land Resources Governance". In addition, 30 session reports were organized on the topics such as "Cultivated Land Protection and Food Security", "International Strategy for Resource Governance" and "The fundamental institutions of land governance", and so on.



Fig 2 Conference site

The experts at the meeting conducted in-depth exchanges in a question-answer manner. By answering three questions—why such a governance mode exists, how to replicate existing governance modes, and what impact the established governance modes have, experts and scholars have reached a preliminary consensus on the main issues of natural resources governance.



Fig 3 Prof. Zhu



Fig 4 Prof. Vatn

In the keynote speech of "Natural Resource Governance and Sustainable Development", Prof. Zhu Daolin from China Agricultural University believed that in the short term, we should first calculate the real quantity of land resources according to the type, area, quality and application status; for the other parts that can be assessed and realize market value, we can attempt to calculate the value quantity. When talked about Institutions for sustainability, Prof. Arild Vatn from Norwegian University of Life

Sciences pointed out that environmental protection and the creation of sustainable futures form the integrated core of our political and economic institutions. While emphasizing economic development, we can also formulate policies that are friendly to natural resources.



Fig 5 Prof. Lin



Fig 6 Prof. Paavola

In the keynote speech of "Theory and Practice of Natural Resource Governance", Prof. Lin Jian from Peking University clarified the relationship between natural resources supervision, ecological protection and environmental governance, he deemed that these three contents have their emphasis and intersection. Prof. Jouni Paavola from University of Leeds believed that bottom-up polycentric initiatives can muster substantial action to curb GHG emissions, but the characteristics of polycentric governance were also evolving.



Fig 7 Prof. Ho



Fig 8 Prof. Geng



Fig 9 Prof. Gatzweiler

In the keynote speech of "Tools and Performance of Natural Resource Governance", Prof. Peter Ho from Tsinghua University shared two cases of natural resource management in the Netherlands, and proposed that clashes diverging views on nature. Prof. Geng Zhuo from Guangdong University of Foreign Studies took cultivated land as an example, proposed that the process of legalization of China's natural

resources management system should be accelerated. Prof. Franz W. Gatzweiler from Xiamen Institute of Urban Environment (the CASS) towards a socio-ecological-technological theory of living systems and livable cities, talked about the complexity governance for future urban health and wellbeing, and thought that we should analyze the complexity between environment and economy in a systematic way of thinking.



Fig 10 Dr. Otto



Fig 11 Prof. Zhang



Fig 12 Prof. Jin

In the keynote speech of "Rights and Conflicts of Natural Resource Asset Governance", Dr. Ilona M. Otto from Potsdam Institute of Climate Research suggested that we can induce a global sustainability transformation from norms and values system, human settlements, information feedbacks. Prof. Zhang Xiaoling from City University of Hong Kong pointed out that although it was necessary to define property rights clearly, it was equally important to establish a sound social system space for the implementation of various property rights (including compound property rights), which required the training of the behavior ability of the relevant stakeholders. Prof. Jin Xiaobin from Nanjing University based on the theme of "Storing Grain on the ground", found that extensive management, changes in cropping system and crop adjustment were the main reasons for the reduction of yield.



Fig 13 Director Zhou



Fig 14 Prof. Zhang



Fig 15 Prof. Li

In the keynote speech of "Resource Element Governance and Regional Coordination", Director Zhou Zhanguang from International Institute for Water Security believed that transboundary water cooperation should consider six elements: legal framework, governing body, integrated approach, data share, joint participation, and

cost and benefits share. Prof. Zhang Weiwen from Zhejiang University found that policy environment, market environment, technology promotion and individual characteristics were the main factors affecting fertilizer use around Taihu Lake Basin. Prof. Li Hongbo from Huazhong Agricultural University suggested that the density of POI points in population activities was negatively correlated with the NPP value of land use change in Yuanyang County.



Fig16 Dr. Klaus



Fig 17 Mr. Weidlich



Fig 18 Prof. Feng

In the keynote speech of "Public and Private Rights of Land Resources Governance", Dr. Michael Klaus, who are the chief representative of Hanns Seidel Foundation, combined the current situation of China's rural areas and the experience of rural spatial governance in Germany, and provided a useful direction for China learning the German experience. Mr. Oliver Weidlich, the director of the spatial planning department, the District Government of Franconia, Bavaria, indicated that to solve spatial and interest conflicts and consider environmental aspects at an early planning stage, the public participation was efficient option for the design and implementing the Spatial Planning. Prof. Feng Shuyi from Nanjing Agricultural University found that promoting the development of land market can improve the efficiency of land use, and eliminating labor market restrictions can further promote the sustainable development of agriculture.



Fig18 Prof. Rong Tan

Prof. Rong Tan chaired the opening session and also gave the final speech at the closure session of the workshop. He summarized the two-day workshop and propose a slogan for the CWINS workshop, i.e., *If we are Collaborative, Collective, and Co-beneficial, and then everyone of us wins!* The “C” in the CWINS representing the “C” in *Collaborative, Collective, and Co-beneficial*. He thanked all the guests and participants, as well as the organization team members, and invited all the participants to be reunion next year for the “C” and wins again.

During the week of 4<sup>th</sup> CWINS workshop, the foreign guests also visited the Chinese Land Surveying and Planning Institute, at Beijing, the Shuangpu Town Rural Comprehensive Land Consolidation Project in Xihu District, at Hangzhou, Zhejiang Province, as well as the Shanghai Institute of Land Surveying and Planning, at Shanghai



Fig19 The delegation visited the Shuangpu Land Consolidation Project at Hangzhou



Fig 20 The delegation visited the Forbidden City at Beijing