## **Executive Summary**

### Promoting Sustainable River Basin Governance: Crafting Japan-U.S. Water Partnerships in China

# THREE KEY CHALLENGES TO CHINA'S RIVER BASIN GOVERNANCE: MANAGEMENT INSTITUTIONS, FINANCING, AND PUBLIC PARTICIPATION

Examination of the problems facing China's rivers opens up an opportunity understand the country's growing water crises and the social and political problems hindering effective river basin governance. Through this collection of papers we highlight what we believe are three key institutions necessary for promoting better river basin governance: (1) river basin management institutions, (2) financing mechanisms, and (3) public participation. Below is a short review of these three institutions in China.

#### **River Basin Management Institutions**

China's river basin commissions possess strong technical and hydrological expertise, but often lack the management and outreach capacity to monitor and enforce water protection and conservation measures. The effectiveness of river commissions is also limited due to: (1) poor (and sometimes even adversarial) relationships with provincial and local governments, and (2) a failure to incorporate broad stakeholder input in basin management efforts.

#### **Financing Mechanisms**

Chinese river basin commissions and cities lack financing mechanisms such as revolving funds and bonds, which could fund the construction of sorely needed wastewater treatment facilities. Market tools such as green taxes, water trading, and upstream-downstream compensation strategies, which could promote conservation of river water resources, have been slow to develop in China.

#### **Public Participation**

In China, public participation in the water policy sphere is generally limited to complaints and protests. Moreover, while Chinese citizens are allowed to make formal complaints to the government on damages from pollution and to sue polluters, these efforts do not always affect change. Greater citizen and NGO involvement in monitoring water policies and projects holds promise of improvements in protecting China's river basins. However, there remain questions whether the Chinese government would permit another nationwide protest like the one that took place in 2004 surrounding proposed dams on the Nu River.

## FINDINGS AND RECOMMENDATIONS TOWARDS SUSTAINABLE RIVER BASIN GOVERNANCE IN CHINA

#### **Balancing Water Use and Water Conservation**

Although water conservation is beginning to be emphasized in Chinese environmental law, in practice the water bureaucracy continues to prioritize water supply projects over conservation. China thus lacks a clear policy protecting the ecological water flow in rivers. For the sustainability of China's river basins both water use and water conservation should be equally prioritized, which would not just require new laws, but demand a shift away from the current centralization of river basin management towards a broader stakeholder—particularly citizen—involvement in water governance. One step in this direction was the bottom-up Nu River anti-dam campaign that raised awareness of the ecological value of a river among the general public in China. Although Chinese research centers and cooperative projects with international partners focus on the need for protecting the ecological water flow in rivers it is time to incorporate this as a priority into the basic policy of water and river basin governance in China.

#### Creating an Integrated Institution of River Basin Management

Integrated Water Resource Management (IWRM) has been a central focus of our project like many other research initiatives examining current water issues. Our working group members concluded that in order for China to build effective river basin governance institutions Chinese water managers, researchers and activists need to discuss the practice and implementation of IWRM rather than its concept and theory. In focusing on integrated water resource management/river basin governance, we should carefully examine the role of existing organizations with authority (functionally specialized organizations) over water. An incentive mechanism would be a key solution for hard and time-consuming process of collaboration and integration among government and nongovernmental stakeholders. How to share benefits among stakeholders—especially for those protecting upstream resources (e.g., through payment for environmental services schemes)—is an area that merits serious study and pilot projects in China.

#### **Information Sharing among Stakeholders**

Information and data sharing is essential for the basic planning and implementation of water protection policies. Yet China's bureaucratic competition over managing river basins has prevented the Ministry of Water Resource and State Environmental Protection Administration (a.k.a., fighting dragon heads) from sharing water quantity and quality information and data. Without collaboration, resources and time are wasted in the effort to improve river ecosystems in China. Besides conflicting data, China's government agencies have not been satisfactorily disclosing information to the public regarding water projects and river basin management activities—although the new Environmental Impact Assessment Law requires such information dissemination. Information disclosure is a key ingredient for building stakeholder consensus and enabling public participation in river basin protection.

#### **Cost Sharing and Stakeholder Consensus**

"Who gains the benefit, and who pays the cost" are major questions when discussing the economics of sustainable river basin governance. With the exception of some water user association pilot projects sponsored by the World Bank, currently there does not yet appear to be a good model of cost sharing for water conservation in China. However, in Japan and the United States there exist numerous examples of effective policies and institutions that promote cost sharing, such as green taxation for water use, payments for environmental services schemes, and conservation based on IWRM. Any policies or financial mechanisms to promote cost sharing for sustainable river basin governance in China will demand a much more participatory and consensus approach than currently exists in the political system. Notably, IWRM introduces greater complexity and potentially more costs into managing a river basin. Therefore, to cost effectively integrate the management of rivers demands that collaboration between functional agencies capture sufficient economies of scale or scope.

#### Fostering a Stewardship Approach to Water Governance

One key foundation of good river basin governance is a partnership between river administrators and broader stakeholders. This partnership can be one of citizen monitoring government enforcement of water pollution control and public comment on policy designs and projects. A more significant role for citizens would be to empower them to become stewards of the water and surrounding land. Citizens can be encouraged to participate in river basin protection activities by NGOs, which often join forces with environmental journalists to become watchdogs for ill-conceived water projects that threaten both river ecosystems and the livelihoods of local citizens. Such activism in China is raising the awareness of Chinese citizens on their role in caring—and fighting—for the protection of endangered rivers. A deepening of the partnership can be realized by local stakeholder initiatives in policymaking and implementation of river basin management. In China and other countries small grassroots NGOs—with support and training from larger indigenous or international NGOs—are playing an important role in coordinating local stakeholders in preserving water ecosystem while simultaneously helping ensure people's livelihoods. While such awareness and activism are admittedly still limited in China, they do represent key steps in forming a stewardship ethic for water governance.

#### Further Needs for Case Studies of Success and Failure

Over the past fifteen years despite the Chinese government's promulgation of ever stronger water protection policies and more ambitious targets and campaigns to clean up major rivers and lakes the water quality in China's waters—particularly rivers—has decreased markedly. International assistance has helped push forward the concept of integrated water resources management while internal activities of the NGO and news media communities have helped push the policy agenda for broader stakeholder participation in water pollution control and the siting of major dams. However, many policy initiatives and projects to improve the problems facing China's rivers often have not reached their anticipated outcome. One of the major obstacles to better river conservation is the current centralized river basin management institutions, which could be strengthened by greater public participation and innovative financing mechanisms. China can learn from a plethora of successful and unsuccessful models of river basin institutions, public participation models, and financing mechanisms used in Japan, the United States and other countries—some of which are discussed in the papers in this volume. China could use these cases to craft pilot projects in order to find how best to craft more sustainable water and river basin governance.