New Thinking on Water Governance Conference 1-4 July 2009, National University of Singapore

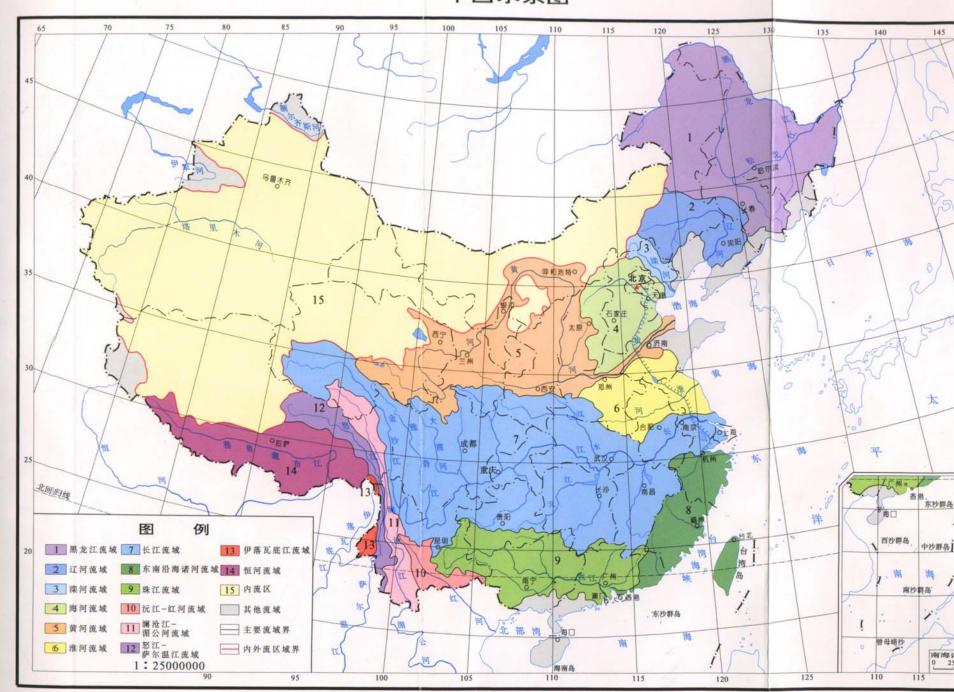
## The Transition of Water Governance in China: An Overview 1999~2008

Yahua Wang
Associate Professor
School of Public policy and Management
Deputy Director
Center for China Studies,
Tsinghua University, China

#### **Outline**

- > I. Water Crisis Confronted by China
- ► II. China's New Thinking on Water Governance
- **▶ III. The Transition of China Water Policy**
- ► IV. China's Water Management System Reform
- V. Taking the Reform of Water rights Institution for Example
- > VI. Conclusions

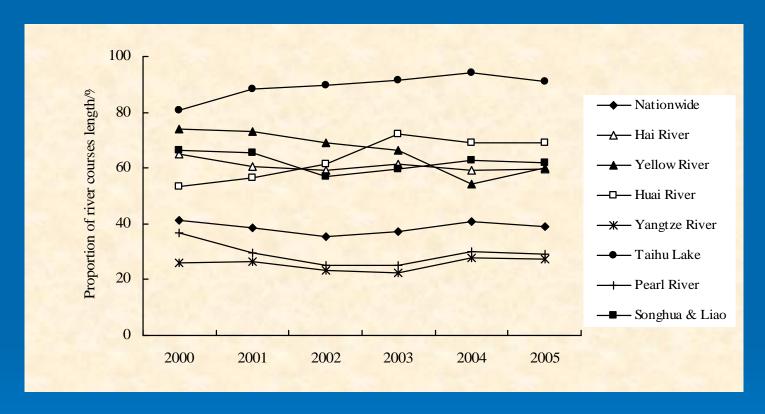
#### 中国水系图



### I. China Water Crisis in the New Era

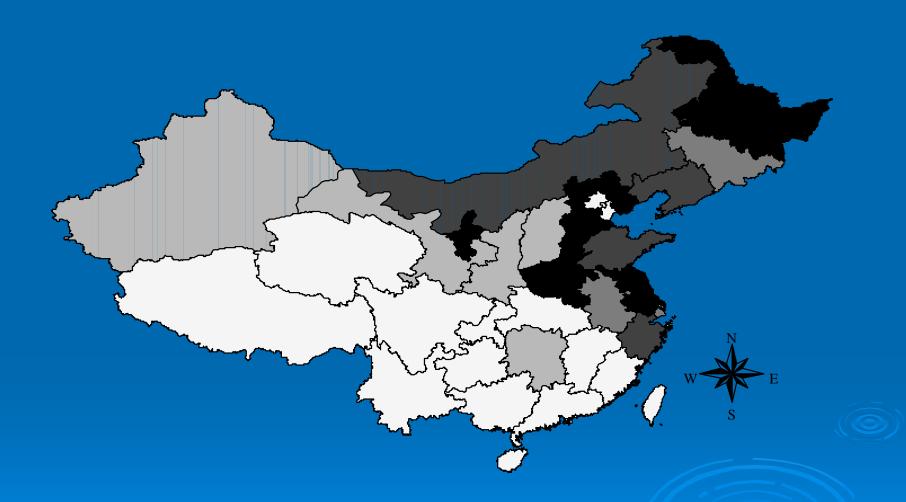
- Water pollution
- Water scarcity
- Aquatic ecosystem degradation
- Water-related hazards
- Water challenges in the context of climate change

## Proportion of river courses length worse than class III in China's Seven Major River Basin



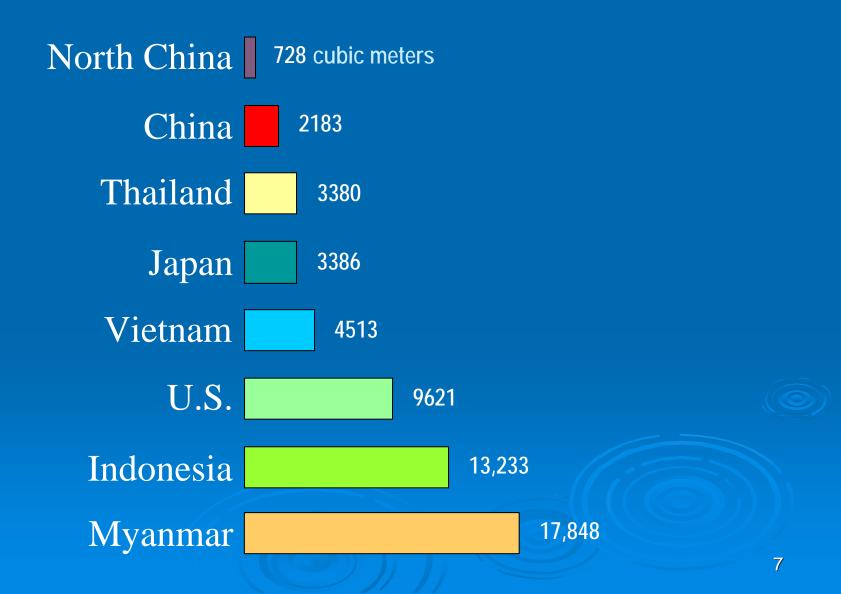
Sources: China Water Resources Quality Bulletin 2000–2005, <a href="http://www.hydroinfo.gov.cn/">http://www.hydroinfo.gov.cn/</a> gb/szyzlnb.asp

## Groundwater gets rapidly depleted and polluted

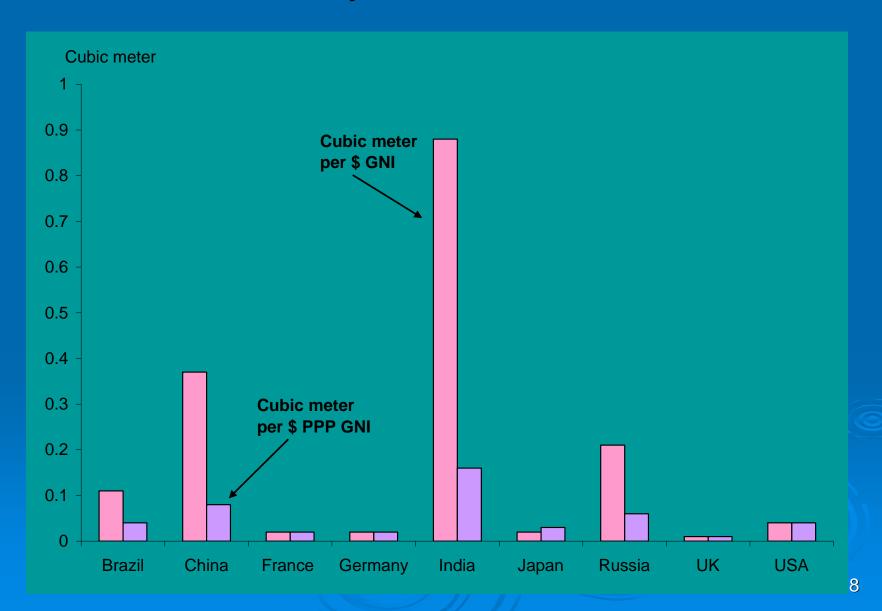




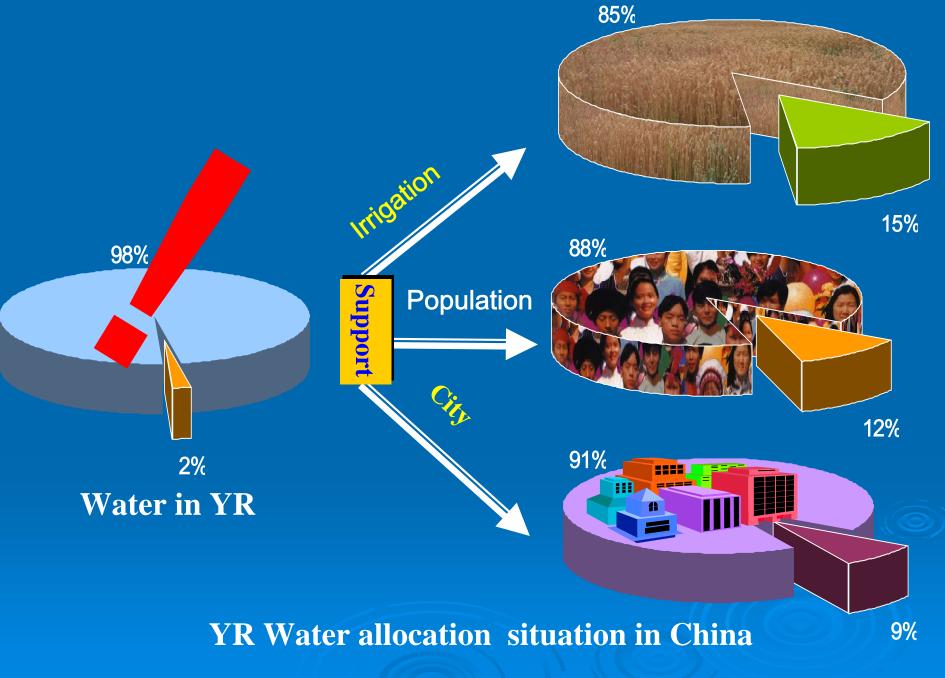
#### Renewable fresh water per capita



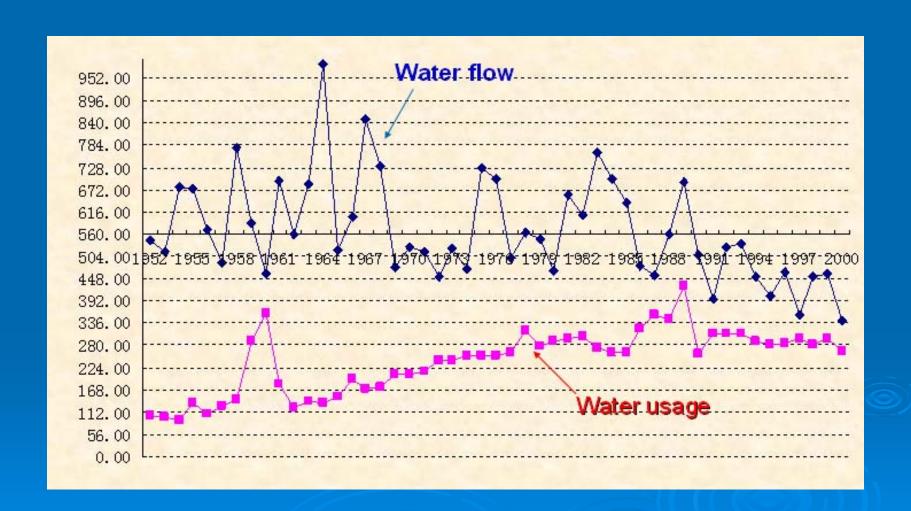
### Low efficiency of water use in China



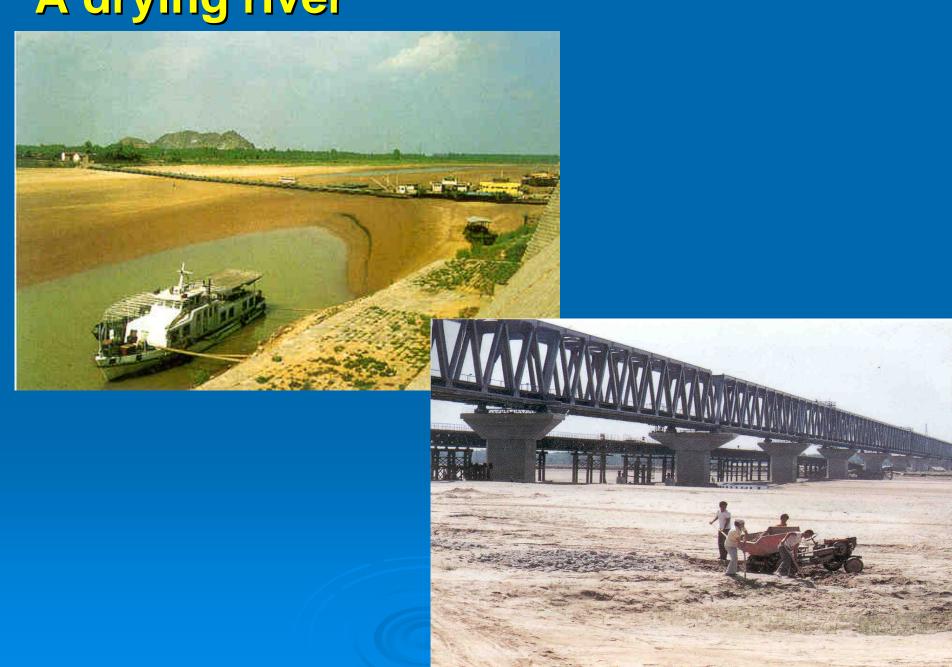




#### Water Shortage in the Yellow River Basin



## A drying river



# II. China's New Thinking on Water Governance

Wang Shucheng (1999): the proposal regarding the new thinking of China's water resources development in the coming 21st century.

- Updating water governance ideas
- Reforming management system
- Advocating policy innovation

### New Water Governance Ideas

- > Keeping a harmonious relationship between human and nature
- > Insisting on the sustainable utilization of water resources
- > Human-oriented water policies

# III. The Transition of China Water Policy

- > 1. Changes of flood control policy
- > 2. Unified allocation and management for water resource within watershed
- > 3. Comprehensive building of a watersaving society
- > 4. Caring about the health of rivers
- > 5. Ensuring drinking water safety in countryside
- > 6. Pricing reform

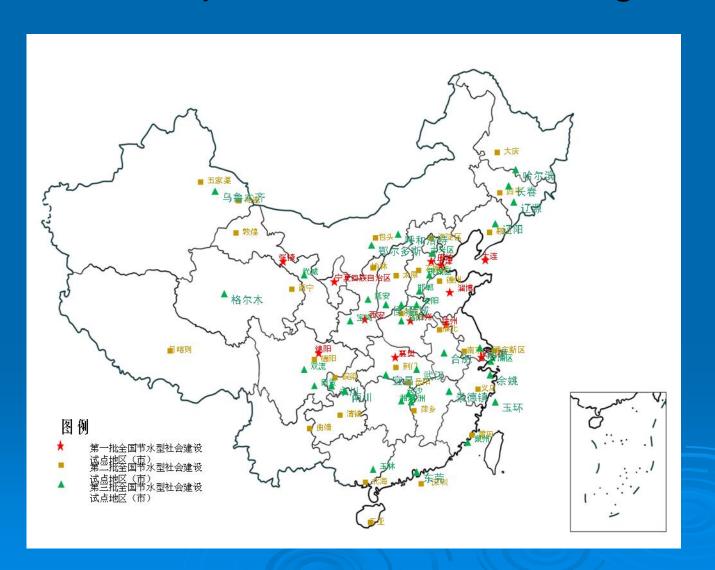
## Building a Water-Saving Society

From 2002, Zhangye city is the area which firstly initiates regional comprehensive water-saving pilot program in China.





#### The Development of Water Saving Pilots



# National Rural Drinking Water Safety Project

In 2006, the State Council proposed that the drinking water safety problems for the rural population shall be solved within ten years.

During the "Eleventh Five-year" period(2006-2010), drinking water safety problems for 160 millions of rural population shall be solved at first.

## IV. China's Water Management System Reform

- 1. Integrated management of water resources has been improved
- 2. Watershed management is strengthened and reinforced
- > 3. Watershed planning is being regarded in practice
- 4. Regional water unified management move forward rapidly
- > 5. Reform progress in water works management system
- Control > 6. Rapid development of water user association

## Integrated Watershed Planning

In 2002, the nation-wide water resources comprehensive planning was initiated, and the work has been done.

➤ Since 2007, a new compre 船流域综合规划修编 planning for watershed watershed watershed was started.

流域综合规划修编工作领导小组办公室 二〇〇七年十二月

## Development of water user association

In 2005, the Government issued a regulation document of "Opinions on strengthening building of farmer association of water".

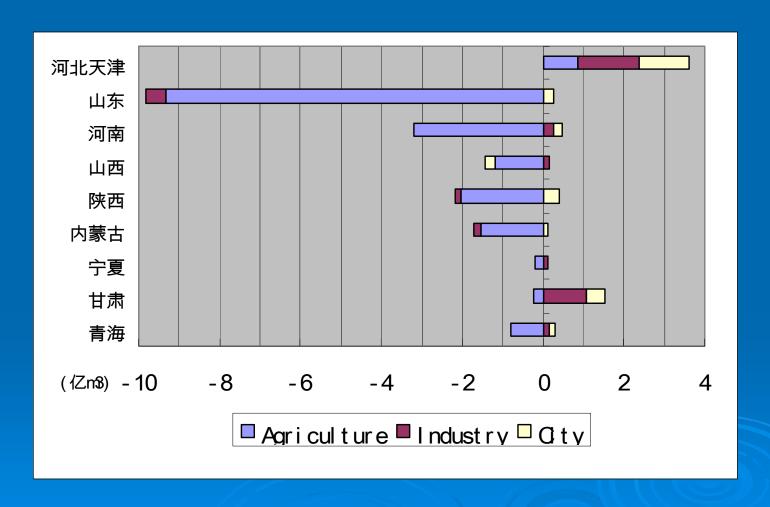
There are over 4,000 water user associations have been founded in 2004, and grew to over 7,000 in 2005, and increased to over 20,000 in 2006 nationwide.

# V. Taking the Reform of Water Rights Institution for Example

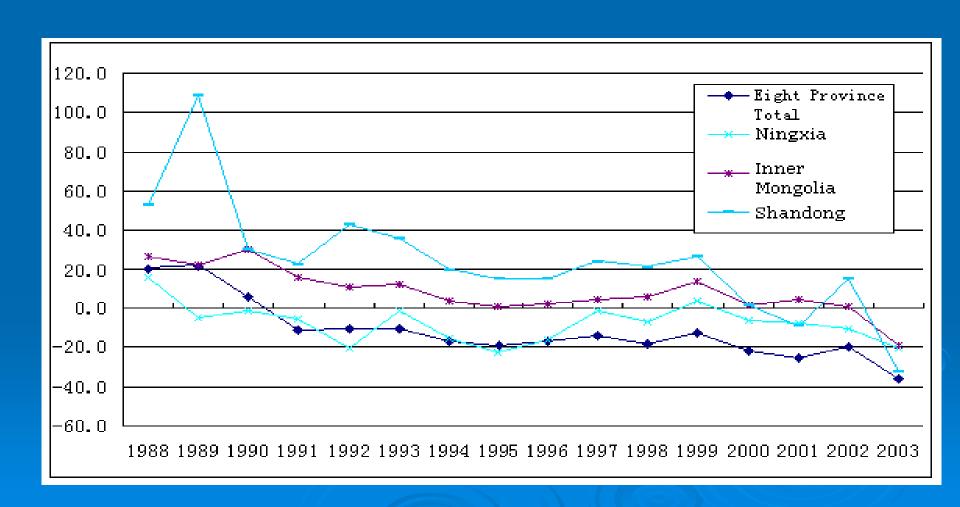
- > 1. Theoretical framework of water rights system
- 2. "Water Law" 2002 made progress in water rights system
- > 3. More cases of water rights market appears
- 4. Large-scale, cross-sector of water rights transfer has emerged in the upper Yellow River Basin
- 5. Legislation building of water rights and water market speeds up
- 6. The effects of water right institutional building are appearing gradually



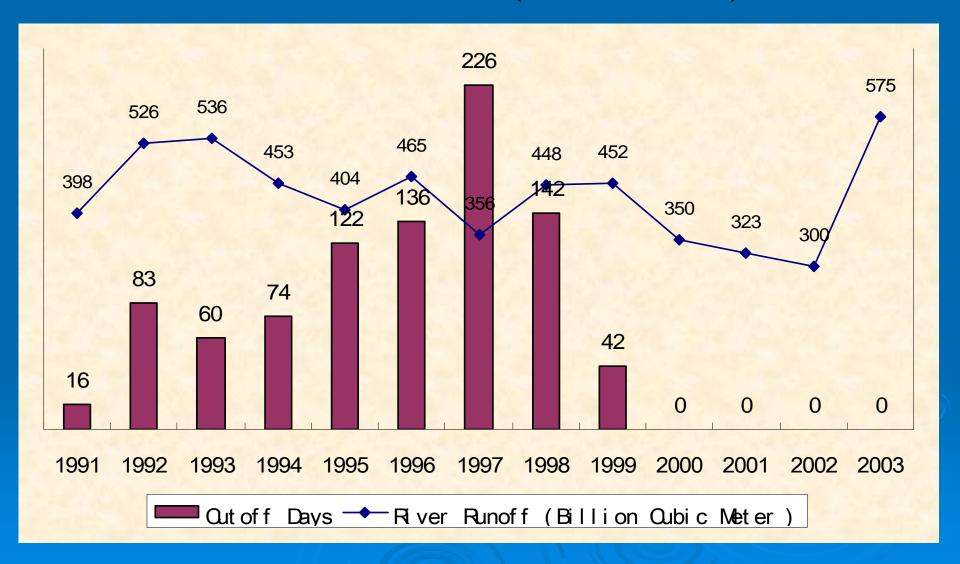
## Changes of water uses after institutional reform (1999-2003)



## Percentage of water overused by Yellow River riparian provinces (1988-2003)



## Contrast between Runoff and Cut-off of Yellow River (1991-2003)



### Water Market in the YRB

Water market as one instrument to promote water efficiency has transformed from theory to practice.

In Ningxia and Inner Mongolia, water right transfer from irrigation to inclusity happened in the past several years.

#### VI. Conclusions

- China is confronted with severe water crisis, which brings challenges and opportunities for water governance transition.
- China has made great achievements in the water governance transition, but it can only be regarded as a good start to responding to water crisis.
- The transition of China's water governance still has a long way to go, and there are lots of theoretical and practical issues to be resolved ahead.



Thanks!