Water Resources Governance in China

Dr. SHI Haifeng
Shihf@263.net
Water Resources & Hydropower Planning and Design
General Institute, MWR, PRC

Recently in many countries, water problems inevitably arise in addressing issues such as eradication of poverty, economic development, environmental sustainability and political stability. To solve problems including water shortage, deterioration of water, floods and droughts, securing of food and water supply and sanitation, special consideration and prompt action are considered necessary. Integrated Water Resources Management (IWRM) is a process which can assist countries in their endeavor to deal with water issues in a cost-effective and sustainable way. It is a participatory planning and implementation process, based on sound science, which brings together stakeholders to determine how to meet society's long-term needs for water and coastal resources while maintaining essential ecological services and economic benefits. Integrated water resources management strategy aimed at securing sustainable development is a critical element in achieving good water governance.

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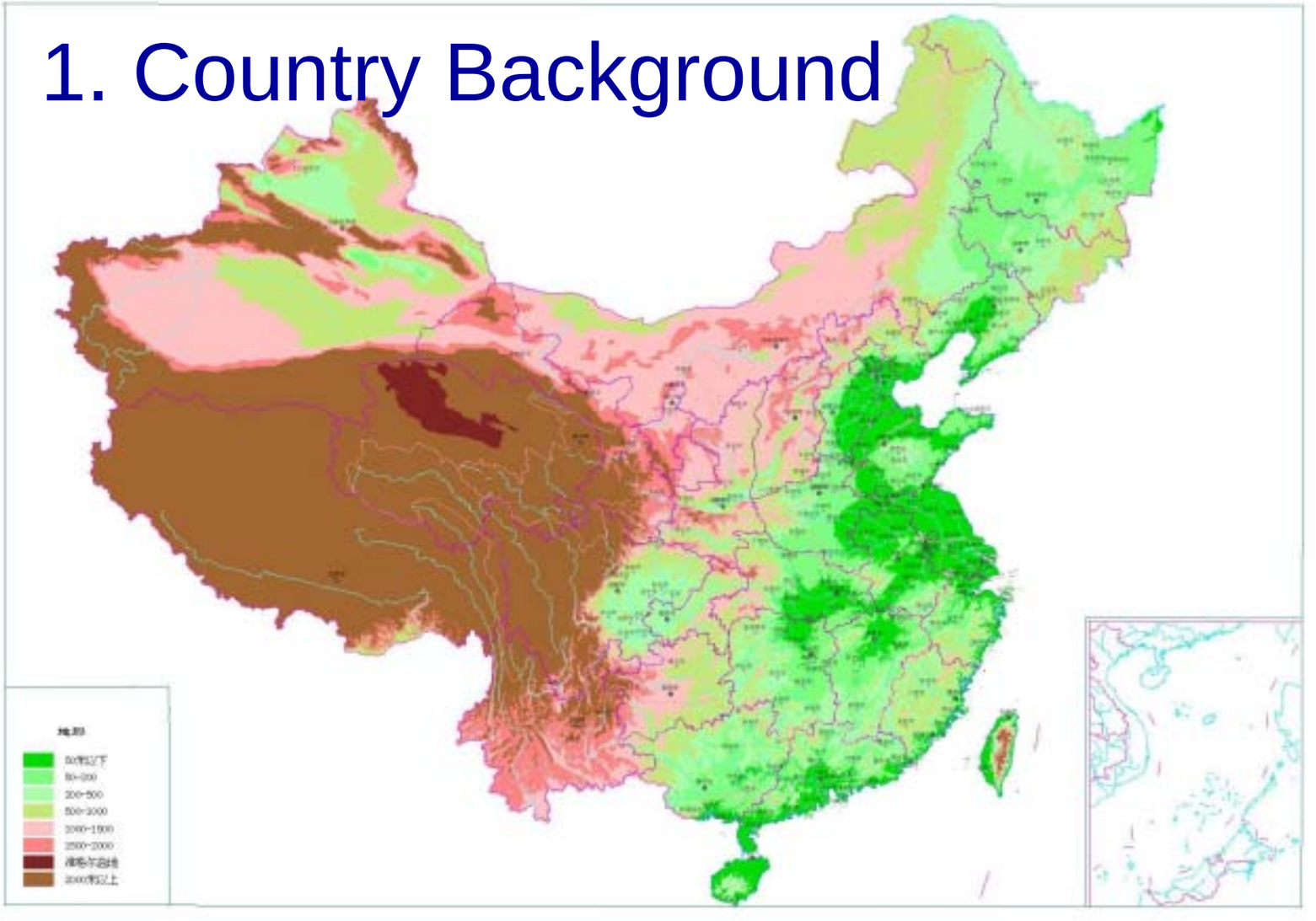
1. Country Background



2. Water Resources Governance

- 2.1 The Water Management Policy
- 2.2 Institutional Mechanism (including governance issues)
- 2.3 Compliance Verification

2.1 The Water Management Policy

China faces rapidly increasing constraints to meeting the country's social, economic, environmental and security goals as water shortage becoming more and more severe. Floods and droughts have plagued China; its social and political history is replete with the problems and successes of the governments' efforts to mitigate the effects of the country's characteristic weather extremes. Today, with an increasing population, an expanding economy and an unrelenting trend towards urbanization, China is even more dependent upon the health and efficient utilization of its limited water. Its government recognizes the problems and changing conditions.

2.1 The Water Management Policy

Over the last few years, the government is transforming projected based water management to resource-oriented water management. Resource-oriented water management is the integrated development and scientific management of water resources in closer connection with the development of the national economy and social progress. It can be summarized into six areas, i.e. development, utilization, control, distribution, conservation and protection of water resources. The transformation from project-based to resource-oriented water management reflects the process of productivity development. Now that productivity is further developed, it is imperative for China to take a more macroscopic view in improving its water management.

2.2 Institutional Mechanism (including governance issues)

With the transformation of water management policy, China's government bodies at all levels have formulated new means meet their responsibilities and have taken action on many. China has enacted a comprehensive set of laws. Government agencies have been reorganized and new entities created. Provinces are launching new initiatives in several areas of water resources management. Now, the responsibility for water management is largely divided between national, river basin and local levels.

2.2 Institutional Mechanism (including governance issues)

As a principal department for water administration under the State Council, the central Ministry of Water Resources (MWR) is responsible for overall water resources management and given the following mandates.

2.2 Institutional Mechanism (including governance issues)

1. Formulation of water-related policies, development strategies and medium and long-term development plans, including water conservation and demand management policies.
2. Drafting and implementation of enabling legislation and design of water-related regulatory frameworks.
3. Implementation of integrated management of water resources, including atmospheric water, surface water and groundwater.
4. Formulation of water resource protection plans in accordance with related national laws, regulations and standards concerning resource and environment protection; demarcation of functional water areas and control of discharge of wastewater to potable water areas and other water areas; monitoring of the quantity and quality of water of rivers, lakes and reservoirs, review and approval of the pollution loading capacities of water bodies with proposal for the limit of total wastewater discharge.

2.2 Institutional Mechanism (including governance issues)

5. Formulation of economic regulatory measures for the water sector; exercise of macroeconomic regulation on the utilization of funds within the water industry; provision of guidance to economic activities related to water supply, hydropower and diversified development within the water sector; provision of recommendations on economic regulation of water pricing, taxation, credit and financial affairs.
6. Drafting and review of proposals and feasibility study reports on large and medium-sized capital construction projects in the water sector.
7. Drafting and supervision of the execution of technical standards for the water sector and specifications and codes for water works; implementation of key hydro science research projects and the popularization and dissemination of water-related technologies.

2.2 Institutional Mechanism (including governance issues)

8. Organization and direction of the management protection of hydraulic facilities, water areas, dykes and coast lines, and the regulation, reclamation and development of major rivers, major lakes and beaches; handling of foreign affairs in relation to international rivers between China and its neighboring countries; organization of construction and management of key controlling and inter-province hydro projects; organization and direction of the monitoring and management of the safety of reservoirs and dams of hydropower stations.
9. Provision of guidance to activities related to rural water resources; organization and coordination of capital construction of farmland drainage and irrigation, rural electrification, and water supply for townships and villages.

2.2 Institutional Mechanism (including governance issues)

10. Organization of water and soil conservation nationwide, including formulation and development of engineering measures for water and soil conservation, and organization of the monitoring and overall prevention and control of soil and water losses.
11. Responsibility for the activities concerning science, technology and foreign affairs related to water resources, including provision of guidance to the development of a competent work force for the water sector.
12. Responsibility for the day-to-day work of the State Flood Control and Drought Relief Headquarters.

2.2 Institutional Mechanism (including governance issues)

The River Basin Commissions effectively cover all the People's Republic of China (PRC) and represent the MWR in the respective basins. The Changjiang (Yangtze) Water Resources Commission, the Yellow River Conservancy Commission, the Huaihe River Water Resources Commission, the Haihe River Water Resources Commission, the Pearl River Water Resources Commission, the Song1iao River Water Resources Commission, and the Taihu Lake Basin Authority are the agencies of the Ministry of Water Resources stationed in the respective river or lake basins. They take charge of water administration in each respective basin on behalf of the Ministry of Water Resources. The Commissions' primary responsibility is to comprehensively plan and manage water resources and flood control, coordinate the various provincial water resources activities and, approve proposed projects and design documents submitted by local agencies.

2.2 Institutional Mechanism (including governance issues)

There are five layers of government in the PRC: national, provincial, prefecture, county and community, and each province or region maintains a water affairs bureau (or water resources bureau) responsible for the planning, survey, design, construction, operation and management of irrigation, drainage, water supply, water environment, flood mitigation and hydropower. Designs for major projects are prepared by the river basin and provincial survey and design institutes. Provincial bureaus submit annual water allocation schedules for major rivers, which are aggregated from prefecture and county proposals. The bureaus also handle actual water diversions for all rivers except the Yellow River, which use is controlled directly by the Yellow River Basin Commission.

2.3 Compliance Verification

In term of environment, in China, Environmental Impact Assessment (EIA) is widely used to ensure that the effects of projects on environment, natural resources and on the community as a whole are properly evaluated.

The water-drawing permit system and the water resource fee system have been built for many years. Any water-drawing from water bodies requires a permit from authorities. Now, as a support to the water-drawing and water resource fee system, the Water Resources Reasoning System is establishing in China. The feasibility study of any water-consumption construction project should include a water resource reasoning report. The report should include water resource condition and potential impacts of the water consumption on neighborhood.

2.3 Compliance Verification

Any construction project not intended for flood control is to be carried out within a flooded area or a flood storage and detention area, the possible impact of floodwater on the construction project and the possible impact of the construction project on flood control should be assessed, a flood impact assessment report be provided and precautions be put forward. When submitted for approval according to the procedures set by the state for capital construction, the feasibility study report of the construction project should include the flood impact assessment report having been examined and approved by the relevant water conservancy administrative department. Flood impact assessment reports for oilfields, railways, highways, mines, power plants, telecommunications installations and pipelines to be built within flood storage and detent ion areas should include flood control and flood evasion plans arranged by construction units themselves.

- However, there are still some issues on governing water resources in china. Nationally, its specific functionaries for flood protection and water management are the seven River Basin Commissions, and the ministry's authority is limited in many critical areas given the high degree of autonomy of China's provinces and overlapping jurisdiction of other ministries and agencies, particularly in the areas of urban water supply, groundwater management, pollution control, and operation of reservoirs for hydropower. The result is that the current water management system is somewhat confused, incohesive, and fraught with opportunities for miss-allocation. But the situation is toward good side.

Vision without action is a daydream;

While action without vision is a nightmare;

The future is vision and action together.

Good water resources governance can make water vision and water action together.

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