

# Resource-oriented Water Management: Towards Harmonious Coexistence between Man and Nature

Wang Shucheng

资源水利——人与自然和谐相处

汪恕诚 著



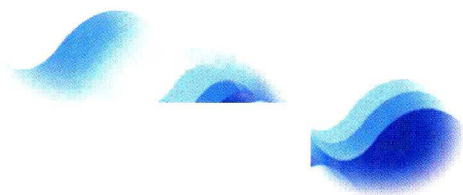
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## About the author

Mr. Wang Shucheng, born in Jiangsu Province, China in 1941, graduated from the Department of Hydraulic Engineering of Tsinghua University in 1968 with a degree of MSc., senior engineer. He has been long engaged in technological improvement, development and management of water resources and hydropower. After the devastating floods occurred in the Yangtze River in 1998, he was appointed Minister of Water Resources and has been at this post ever since.



With a view that China is in a stage of transiting from planned economy to market-oriented economy, and bearing in mind water issues in China, by drawing experiences from both home and abroad, he has put forward a series of innovative thinking on water management based on his broad knowledge, rich experiences and his extraordinary competence in leadership. He stressed that in water management, it is imperative to uphold the principle of harmonious coexistence between man and nature, strengthen the allocation, conservancy and protection of water resources, follow the economic laws and give full play to the basic role of market in water allocation. In the past few years, thanks to effective successful flood control works, China's capacity of flood control and disaster relief has reached to an ever-higher level. Despite of severe drought in several consecutive years in North China, water for domestic, production and ecological uses has been effectively coordinated. The Yellow River, observing no flow at some reaches from time to time in the past, has not reoccurred for three consecutive years. The seriously deteriorated ecological environment in the downstream of the inland Tarim River and Hei River has begun to revive.

In accordance with the new thinking, a series of water resources planning will surely lay a solid foundation for sustainable utilization of water resources in China.

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## Abstract

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This book compiles nine selected addresses and papers on resource-oriented water management by Mr. Wang Shucheng from March 1999 to November 2001. With a view to the current situation of economic and social development in China and in accordance with the actual condition of water resources in China, the author based himself on the philosophy of harmonious coexistence between man and nature, will not confine himself with traditional practice has put forward new thinking that China should transit from project-based water management to resources-oriented water management, from traditional water management to modern and sustainable water management so as to satisfy the water demand of economic and social development and safeguard sustainable economic and social development with sustainable utilization of water resources. These addresses and papers systematically expound the theoretical implication and practical basis for resource-oriented water management and answer a series of questions related to water resources development and management.

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Mr. Wang Shucheng met with HRH the Prince of Orange during the Second World Water Forum in March 2000.



Mr. Wang Shucheng met with board members of the International Association of Hydraulic Research (IAHR) during the 29<sup>th</sup> IAHR Congress in September 2001.

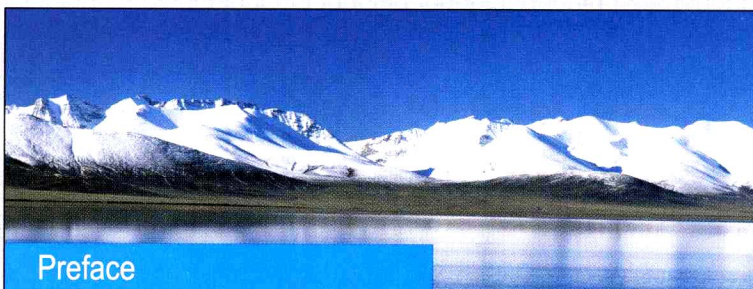




Mr. Wang Shucheng met with Mme. Margaret Catley-Carlson, Chair of Global Water Partnership (GWP), during the GWP Workshop on Water Rights and Water Market in March 2002.



Mr. Wang Shucheng met with board members of the International Soil Conservation Organization (ISCO) during the 12<sup>th</sup> ISCO Conference in May 2002.



Water is the most fundamental but finite natural resource that is of vital importance to human existence. Water resources are critical to water supply, flood prevention and grain safety, to social and economic development and improvement of ecological environment, to the likelihood of creating a path of civilized development that will integrate advanced production with a prosperous life and a sound ecological system. At present, serious water-related problems all over the world are exerting growing impact on the existence of thousands of millions of people in developing countries. As the traditional approaches of developing and utilizing water resources could hardly support sustainable social and economic development, it is imperative for us to transform the existing ways of managing water resources. For the recent years, China has been increasingly perplexed by such water-related problems as flood, draught, water shortage, water pollution and soil erosion. Together with grain and oil, water resources have assumed strategic importance vital to China's national and economic safety. It is against such background that water management practice strongly calls for innovation of theories on water management.

Since assuming office in 1998, Professor Wang Shucheng, Minister of Water Resources of the People's Republic of China, has devoted himself to the study of China's water-related problems. He analyzed the current situa-



tion, summarized experiences and lessons in water management, exerted efforts to grasp the new circumstances and issues that China's current water management is facing with, undertook extensive on-site study tours to various countries and drew upon their relevant experience and lessons in water management. On such solid basis, Professor Wang puts forward the new philosophy of water management. This philosophy advocates the transformation from project-based water management to resource-oriented water management, the transformation of traditional water management to modern and sustainable water management and the assurance of social and economic sustainable development through sustainable utilization of water resources.

This book compiles some selected addresses and papers Professor Wang delivered and published between March 1999 to November 2001, from which the reader can infer the process in which Professor Wang formed and developed his philosophy of water management. The book will also help the reader to understand the water-related problems prevalent in China, their counter-measures and the vision for developing and managing China's water resources.

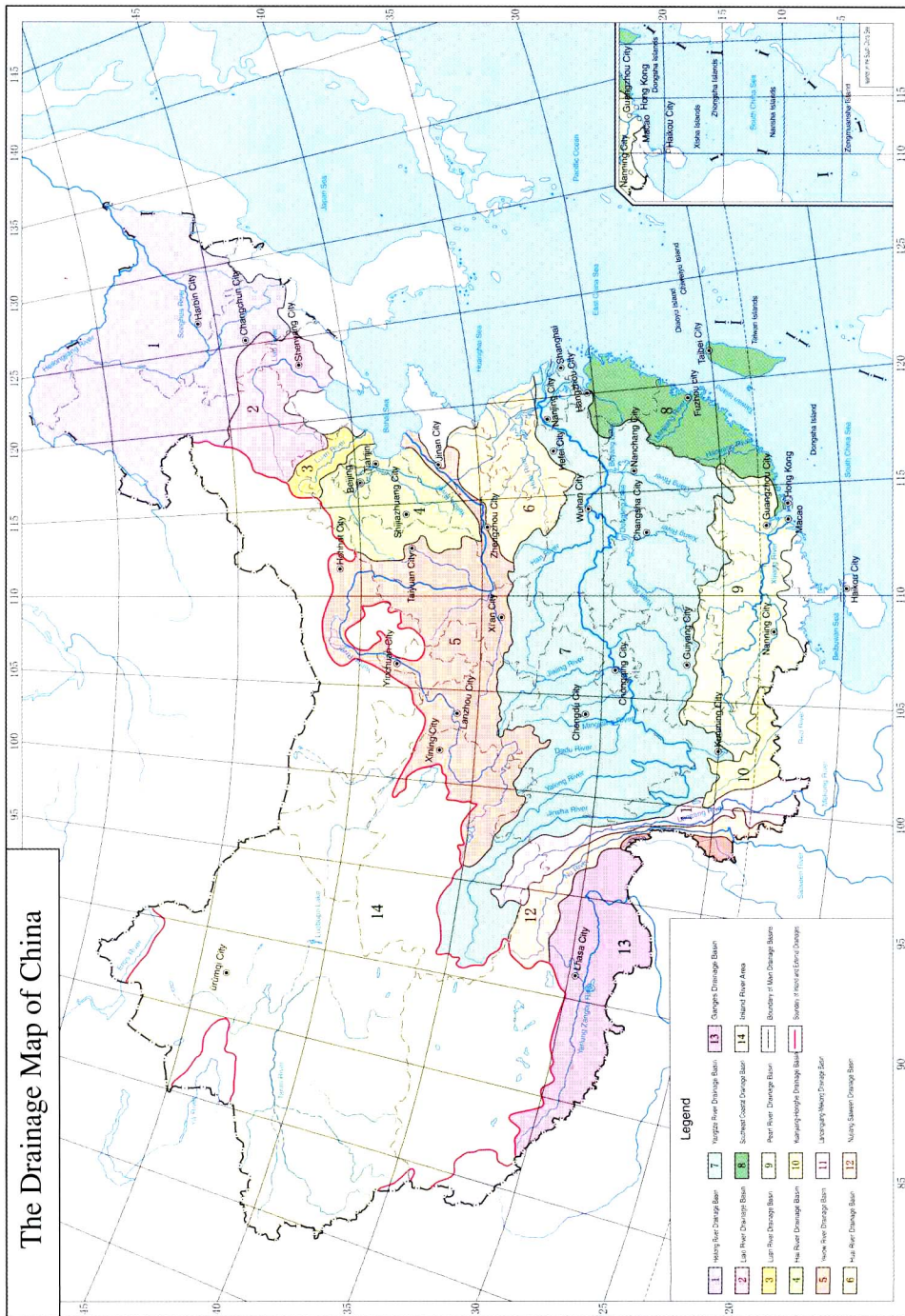
We publish this book with the hope that it will facilitate international exchange and cooperation in the field of water resources management.

The Publisher

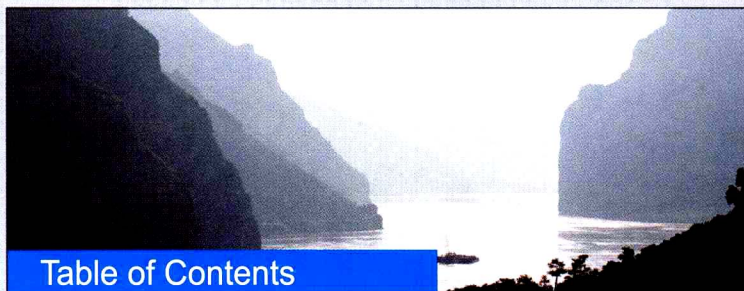
August 2002

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# The Drainage Map of China







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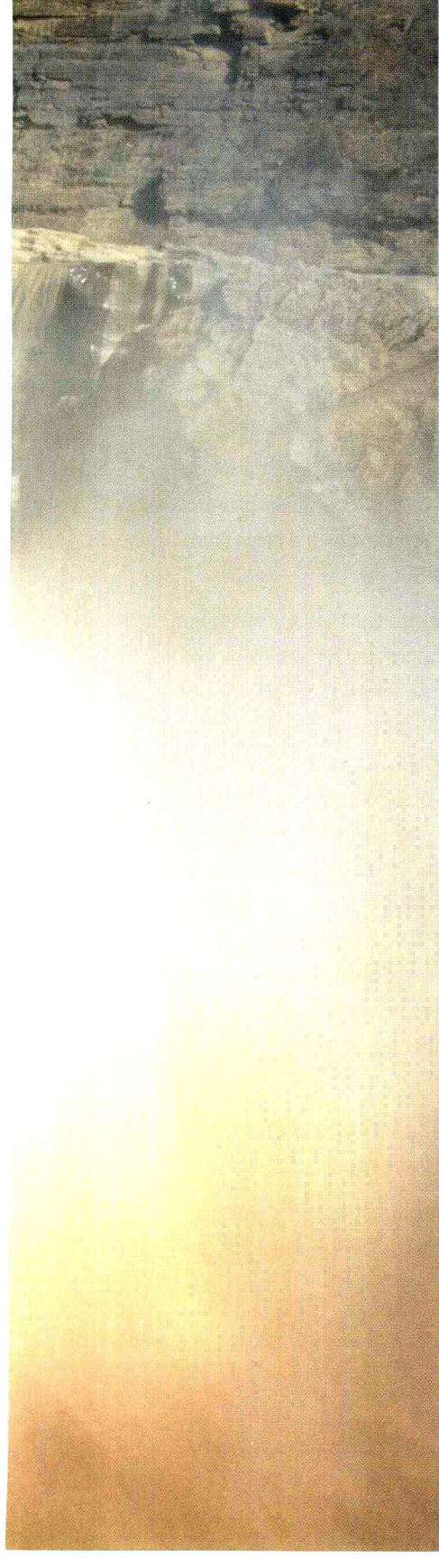


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To Develop a Path of Managing Water  
Resources with Chinese Characteristics

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# **From Project-based Water Management to Resource-ori- ented Water Management: Advance China's Water Management towards the 21<sup>st</sup> Century**

**(March 30<sup>th</sup>, 1999)**

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## **Background information**

*This is an address by Mr. Wang Shucheng at the National Assembly of the Chinese Hydraulic Engineering Society, a 70-year-old academic body in the water sector. In this address, Mr. Wang put forward the concept of “resource-oriented water management” for the first time, which initiated robust discussions on thoughts of water management.*

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## **Colleagues:**

First of all, on behalf of the Ministry of Water Resource, I would like to congratulate the Chinese Hydraulic Engineering Society on its convening of the 7th National Assembly.

The Chinese Hydraulic Engineering Society is a community of significance, playing an ever increasingly important role when the planned economy transits to a market-oriented economy. In recent years, thanks to the liberal atmosphere of the Association, some of my important articles were compiled on the basis of my remarks delivered at some academic meetings of the Society.

It is nearly 5 months since I started working in the Ministry of Water Resources. During this period, I visited numerous places and organizations and listened to various verbal reporting, pondering over the following issues. We are now in 1999, fifty years since the founding of the People's Republic of China. During this span of time, we attracted world attention with our great achievements in water management. The many water projects completed so far have been very conducive to the development of industry and agriculture, the prevention and fighting of floods and draughts and the protection of life and property. It is high time for us to summarize the past experience and lessons, bearing in mind the important question of "how to conduct our work in the next 50 years". Today, I would like to discuss my opinions with you on water management in China in the 21<sup>st</sup> century. Present here we have former ministers, senior experts, academicians and representatives from universities and research institutes. Please let me know where you disagree with me.

### **1. The first issue: transform project-based water management to resource-oriented water management**

Things develop as productivity develops. Take water resources for example. In ancient times, without the ability to fight floods, human beings could only try

