## RAMSAR CONVENTION AND WETLAND CONSERVATION IN CHINA

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### Contents

- 1. Introduction
- 2. Legislation and Policies Concerning Wetland Conservation in China
- 2.1. Legislation
- 2.2 National Strategy Concerning Wetland Conservation
- 2.2.1 China's Agenda 21—A White Paper on China's Population, Environment and Development in the 21st Century
- 2.2.2 Forestry Action Plan for China's Agenda 21
- 2.2.3 China Biodiversity Conservation Action Plan
- 3. Conservation and Management of Wetlands in China
- 3.1 Conservation of Wetland Biodiversity
- 3.2. Establishment and Development of Wetland Nature Reserves
- 3.3. Wetlands of International Importance in China
- 3.3.1 Zhalong Nature Reserve in Heilongjiang Province
- 3.3.2 Xianghai Nature Reserve in Jilin Province
- 3.3.3 Qinghai Birds Island Nature Reserve
- 3.3.4 Dongzhaigang Nature Reserve in Hainan Province
- 3.3.5 Poyang Lake Nature Reserve in Jiangxi Province
- 3.3.6 Dongting Lake Nature Reserve in Hunan Province
- 3.3.7 Maipo Nature Reserve of Hong Kong
- 3.4. Control and Prevention of Wetland Pollution
- 3.5 Publicity and Education
- 3.6 Wetland Survey and Scientific Research
- 4. International Cooperation and Agreement
- 5. Devastating Flooding in 1998 and Enhanced Measures for Wetland conservation in China
- 5.1. Policy Review and Counter-measures for Ecosystem Management after the Flooding.
- 5.2. Major Short Term Measures (1999 to 2010)
- 5.2.1 National Natural Forest Protection Program
- 5.2.2 Regulation of Main Rivers and Lakes
- 5.2.3 Regional Comprehensive Development Plan
- 6. China National Wetland Conservation Action Plan
- 6.1. General Introduction
- 6.2 Guiding Ideology
- 6.3 Principles in Promulgating the Action Plan
- 6.4. Objectives for National Wetland Conservation Action
- 6.4.1 General Objective
- 6.4.2 Short Term Objectives (by 2005)

6.4.3 Middle-Long Term Objectives ( by 2020 ) Glossary Bibliography Biographical Sketch

## **Summary**

China is a contracting party to the Ramsar Convention. To implement the Convention and conserve wetlands in China, the Chinese government has made great efforts and undertaken a series of actions including public education, continuous enhancement of biodiversity conservation and control of wetland pollution, establishment and construction of wetlands nature reserves, and designation of seven reserves as Ramsar Sites. A national inventory has been prepared, and "China National Wetland Conservation Action Plan" has been published, with a series of priority projects, scientific research on wetland resources, and active international cooperation. At present, legislation enactment for wetland conservation is underway.

#### 1. Introduction

Wetlands, referred to as "the kidney of the planet", constitute a unique, multifunctional ecosystem supporting rich natural resources with the highest biodiversity. They also benefit human beings ecologically, economically and socially, and play an important role in national, regional as well as global economic development and human subsistence. To coordinate international actions on the conservation and wise use of wetlands, on 2 February 1971, a global intergovernmental treaty—the Convention on Wetlands of International Importance especially as Waterfowl Habitat (Wetland Convention) was created in Ramsar, Iran (hence the name Ramsar Convention). The Convention is the only global convention for conservation of a specific ecosystem and claims to provide the framework for intergovernmental cooperation on wetlands and to play the leading role in conservation of wetland biodiversity.

For a long period of time in history, wetlands had been regarded as filthy, useless and unexplored mud lands and sites where mosquitoes live and reproduce. People all over the world acquired a large number of assets from wetlands through enclosure, exploitation and drainage for agricultural and other purposes. But in recent years, more and more disastrous consequences have resulted from the loss of wetlands, including: less storage of underground water, serious flooding, drying regional climate, coastline erosion, accumulation of pollutants, salinization, and continuous losses of biodiversity and other resources in wetlands. These problems far outweighed the profits people obtained from unwise exploitation of wetlands. Thus, the Wetlands Convention came into reality in a bid to realize sustainable development of wetland resources, environment, society and economy globally, through strengthening international cooperation and national action on the conservation and wise use of wetlands.

According to the Convention, the contracting parties are required to include at least one of their wetlands into the List of Wetlands of International Importance and to strictly protect the Ramsar Sites from any damage, in addition to their general responsibilities such as wise use of wetlands, conducting environmental impact assessments for

wetlands, undertaking surveys on wetland resources, establishing wetland nature reserves, training wetland technical and management personnel, consulting with other contracting parties on wetland conservation issues and assisting the operation of the Convention etc. The Bureau of the Convention and other contracting parties are bound to conduct necessary monitoring and inspection to ensure the Ramsar Sites are in good condition.

There are many different definitions of "wetland" in the world. In the Convention it is defined: "...wetlands are areas of marsh, fen, peatland of water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six meters."

To date six Conferences of the Contracting Parties have been convened and the number of Contracting Parties has increased to 128, compared to 28 parties when the Convention was created in 1971.

Representatives from the Chinese government attended the third and forth Conferences of the Contracting Parties in 1987 and 1990 as observers. In 1992, the Chinese government finished the legal procedure to accede to the Convention and officially became a party of the Convention on 31 July. After that, the Chinese delegation attended the fifth Conference of the Contracting Parties held in Kushiro, Japan in June 1993 and the sixth COP held in Brisbane, Australia in March 1996.

As the only global convention for a specific ecosystem, the Convention is an important tool in promoting conservation and wise use of wetlands. Since conservation of wetlands and implementation of the Convention involve different governmental agencies concerning various fields of society, economy, environment and development, the State Council of China stipulated that the State Forestry Administration should take the responsibility of organizing and coordinating wetland conservation in the country and implementing related international conventions, during the reform of governmental institutions in August 1998, in order to coordinate action on wetland conservation in the country.

To conserve wetlands and implement the Convention, China has made following major endeavors:

### 2. Legislation and Policies Concerning Wetland Conservation in China

## 2.1. Legislation

Since the early 1980s, China has promulgated a series of laws concerning conservation of natural resources and ecological environment. Of these, 15 are related to wetland conservation. They include:

- The Marine Environment Protection Law Of The People's Republic Of China (1982);
- The Forest Law Of The People's Republic Of China (1984):

- The Law Of Fishery Of The People's Republic Of China (1986);
- The Law Of Wildlife Conservation Of The People's Republic Of China(1988);
- The Law Of Water Resources Of The People's Republic Of China (1988);
- The Law Of Environmental Protection Of The People's Republic Of China (1989);
- The Law Of Soil And Water Conservation Of The People's Republic Of China (1991), And
- The Law Of Water Pollution Prevention Of The People's Republic Of China (1996)

Also, the State Council have successively issued 18 related administrative regulations including: Regulations for the Conservation and Breeding of Aquatic Resources (1979), Implementing Regulations on Terrestrial Wildlife Conservation in the People's Republic of China (1992), Implementing Regulations on Aquatic Wildlife Conservation of the People's Republic of China (1993), Regulations of the People's Republic of China on Nature Reserves (1994), Regulations of the People's Republic of China on Wild Flora Conservation (1996) etc.

In accordance with the national laws and regulations, a number of local implementing regulations have been formulated by local governments at various levels with regard to local conditions. By implementing these laws and regulations, wetland resources throughout China have been protected effectively, marking an important step toward legal management and conservation of wetlands in China. Although the wetland ecosystem is distinctive, people still lack knowledge of it, and its management involves different departments. This means more coordination work is required, there is a need to formulate a national regulation specifically for wetland management and conservation to regulate actions on wetlands. At present, the formulation of the Regulation of the People's Republic of China for Wetland Conservation has been listed into legislation agenda of the state and the concerned governmental departments are actively drafting the document. There are reasons to believe that it will be issued very soon.

### 2.2 National Strategy Concerning Wetland Conservation

# 2.2.1 China's Agenda 21—A White Paper on China's Population, Environment and Development in the 21st Century

China's Agenda 21—A White Paper on China's Population, Environment and Development in the 21st Century, approved by the Chinese government on 25 March, 1994, was formulated in accordance with the Agenda 21 adopted at the UN Conference on Environment and Development held in Rio, Brazil in June 1992. Its content covers sustainable development strategy, a policy and action framework for China's population, economy, society, resources and environment, and serves as a guiding document for formulating mid-term and long-term plans for national economic and social development. In the document, conservation and wise use of wetlands in China is referred to in many chapters and the Conservation and Wise Use of Wetlands in China has been listed as priority program.

## 2.2.2 Forestry Action Plan for China's Agenda 21

The Forestry Action Plan for China's Agenda 21, approved by the State Council's Committee for Environmental Protection in March 1995, is the first specific action plan for implementing China's Agenda 21. It stipulates that forestry has both the mission to improve the environment and the mission to promote development, and a relatively complete forest ecosystem and a relatively developed forest industry system should be established through sustainable development. There is a specific chapters in the Action Plan to elaborate the Conservation and Wise Use of Wetlands, setting targets to complete a national inventory on wetland resources, formulation of China National Wetland Conservation Action Plan and legislation on wetlands by 2000, and to begin to fully implement the Action Plan by 2010 to effectively hold back damage to wetlands and to completely conserve and sustainably use wetlands resources in China.

## 2.2.3 China Biodiversity Conservation Action Plan

In 1994, with support from the World Bank and UNDP, the National Environmental Protection Agency of China organized and completed the China Biodiversity Conservation Action Plan which serves as a guiding document for biodiversity conservation activities in this country. It systematically elaborates the present situation and the threats to various wildlife species and their ecosystems including wetlands resources, and the factors causing those threats. Also, it provides general objectives and specific goals and activities for biodiversity conservation, as well as specific measures for implementing the Action Plan, with conservation of wetlands and wild fauna and flora highlighted.

## 3. Conservation and Management of Wetlands in China

### 3.1 Conservation of Wetland Biodiversity

The Chinese government pays great attention to wetland biodiversity conservation. To protect endangered or rare waterfowl, 11 species of waterfowls receive the first-grade of national protection, and 22 species at the second-grade. Some waterfowl species are not only protected in their habitats but also bred in captivity. For example, Zhalong Nature Reserve has established captive breeding populations of Red-crowned cranes (Grus japonensis) and White-naped cranes (Grus vipio). There are about 3000 Siberian cranes (Grus leucogeranus) in the world. In 1981, 91 Siberian cranes were found in Poyang Lake of Jiangxi province. From then on, protection of their habitat in the lake was strengthened. A provincial nature reserve was established in 1983 and this was upgraded to a national nature reserves in May 1988. More and more Siberian cranes were found wintering there. By now, almost 95% of the world's Siberian cranes come here every year to winter, for about 4 months. The Crested Ibis (Nipponia nippon) was probably the most endangered bird species in the world and was thought to be extinct in the 1950s. In 1981, seven Crested Ibises were found in Yang county of Shanxi province and won great attentions from the Chinese government and international organizations. As a consequence, the Shanxi Crested Ibis Protection and Monitoring Station was set up, and a large amount of funding has been invested on ameliorating their habitat and environment; scientific researches on the conservation of the bird and captive breeding has met with remarkable achievement. The population of Crested Ibis has grown to 136.

As for ex-situ protection of aquatic wildlife, a number of nature reserves and breeding centers for endangered aquatic wildlife such as Chinese alligator (*Alligator sinensis*), Chinese sturgeon (*Acipenser sinensis*), Chinese paddlefish, Baiji dolphin (*Lipotes vexillifer*), and giant salamander (*Megalobatrachus davidianus*) have been established in recent years. In Anhui Alligator Breeding Center, the number of Chinese alligators has reached 5000. The scientific research on Baiji dolphin has taken a leading position in the field of studies on freshwater dolphins worldwide, captive breeding of many aquatic wildlife species such as Chinese sturgeon and *Myxocyprinus asiaticus* has succeeded, and researches on conservation of wild rice and wild barley has also made excellent progress.

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### **Biographical Sketch**

Chen Jianwei was born in Kunming of Yunnan Province in 1952. Since graduating from Beijing Forestry University in 1982, he has been working with the Academy of Forest Inventory & Planning of the Ministry of Forestry. For more than ten years he has been contributing to survey, planning, scientific research and management of forest, desert, wild fauna and flora, and wetland resources. During this period, he has been working as technical investigator, chief of investigation team, senior engineer, director and deputy director-general. He was also appointed as Deputy Director of the China National Desertification Monitoring Center, Deputy Director of the Wildlife Resources Monitoring Center of the Ministry of Forestry, Deputy Director of the Wetland Resource Monitoring Center, a member and vice chairman of the Evaluation Committee for National Nature Reserves, and Deputy Director-general of the Department of Wild Fauna & Flora Conservation of the State Forestry Administration of China. Over thirty of his scientific papers have been published in domestic or foreign periodicals. For his great contribution, he won the Science and Technology Advanced Prize of the Ministry of Forestry. He is now a member of the China Ecosystem Research Network (CERN), visiting professor and teacher for Ph.D. of

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