



## **Estimating Biodiversity Expenditure in China**

### **Contents**

2001 reporting .....	2
2005 reporting .....	4
2008 reporting .....	6
2012 Submission .....	8
Further information .....	9

## **2001 reporting**

In order to implement the strategy of sustainable development, fulfill the obligations under the CBD, and effectively protect biodiversity, the Chinese government has devoted large amount of financial resources to the conservation and sustainable use of biodiversity, scientific research and public education. During this process, China has received technical and financial support from the international communities.

### **1. China's investment in the conservation and sustainable use of biodiversity**

#### **(1) Investment of in situ conservation**

It is estimated that, in 1995 and neighboring years, the average annual input by the central and local governments in the construction of nature reserves was approximately 200 million RMB yuan. The input has been increasing since then to well over 200 million RMB yuan each year, with the development of the construction and management of nature reserves. In addition, the central government has earmarked approximately 30 million RMB yuan each year for capital construction of nature reserves.

#### **(2) Investment in the construction of ecosystems**

Between 1998 and 2000, the national investment (state debt) in the conservation of natural forests and the development of public welfare forests and commercial forests was 8.04 billion RMB yuan, and the central fiscal expenditure on forest conservation and management, retirement fees for forestry workers, economic and social costs, relocation as well as life insurance and compensation costs was 11.3 billion RMB yuan. On December 6, 2000, China launched the Natural Forest Resources Conservation Project. The planned duration of this project is from 2000 to 2010, with a total investment of 96.2 billion RMB yuan, among which 78.4 billion will be from central budget and 17.8 billion will be from local budget. By the end of 2000, 193 counties in 17 provinces had launched the efforts to convert steep arable land back to forests or grasslands. The central government has invested over 1.9 billion RMB yuan into it, and the converted area totaled 1.363 million hectares.

During the 9th Five-Year Period, China invested 8.702 billion RMB yuan into the 10 major forestry ecological projects, i.e. Three-North Preventive Forest Project, Yangtze River Upper and Middle Reaches Preventive Forest Project, Coastal Preventive Forest Project, Preventive Forest Project for Huai River and Tai Lake Basin, Preventive Forest Project for Pearl River Basin, Yellow River Middle Reaches Preventive Forest Project, Preventive Forest Project for the Liao River Basin, Desertification Combating Project, Forestation Project for Taihang Mountain, and Forestation Project for Plain Areas, among which the national investment was 3.276 billion RMB yuan. Between 1997 and 1999, the total investment in these projects was 7.213 billion RMB yuan, among which the national investment was 2.727 billion RMB yuan. From 1998 to 1999, China's investment in key ecological environmental restoration projects was 858 million RMB yuan, among which the national investment was 630 million RMB yuan.

#### **(3) Investment in the access to and use of genetic resources**

From 1996, China started to implement the Seed Project. By 1999, 189 non-commercial projects had been launched within the Seed Project, with a total investment of 1.18 billion RMB yuan.

(4) Investment in scientific research on biodiversity

During the 9th Five-Year period, China supported researches on such areas as biodiversity inventories, conservation technologies, monitoring and information systems, biotechnologies, and policy and management. For example, the National Key Scientific and Technological Research Plan of the 9th Five-Year Period set up the project named the Demonstration on Information Sharing of Natural Resources, with a total budget of 7.5 million RMB yuan. In 2000, the budget for the Division of Life Sciences of the National Natural Sciences Foundation was 212.61 million RMB yuan, a considerable part of which was devoted to biodiversity. Currently, the National Key Basic Research Development Plan has established a project named the Change and Sustainable Use of Biodiversity in the Yangtze River Basin and Regional Ecological Safety, with a total budget of 25 million RMB yuan.

(5) Training and public Education for the conservation and sustainable use of biodiversity

China invested large amount of money in workshops, seminars and training courses for the conservation and sustainable use of biodiversity. Public education activities have also been carried out through newspaper, radio, TV, film, exhibitions, the Internet, summer camp, knowledge contest, and anniversary, etc.

## **2005 reporting**

During 1992- 2004, China invested over 137 billion RMB for biodiversity conservation, equivalent to US\$ 16.6 billion, including:

- 1) China's annual investment in nature reserve by central government and various levels of governments increased considerably from around US\$ 24.2 million in 1995. A special fund of US\$ 3.63 million was established for the infrastructure of nature reserve, and the fund increased to USD 6.05 million by 2004.
- 2) Since 2001, China's state budget allocated US\$ 0.12 billion as the compensation fund for ecological benefit of forest, and this fund increased to US\$ 0.24 billion by 2004, with the four-year total reaching US\$ 0.605 billion.
- 3) China's accumulated national investment reached nearly US\$ 6.05 billion in natural forest resources protection projects.
- 4) China invested a total of US\$ 9.087 billion for returning land from farming to forest since the end of 2004.
- 5) China's accumulated national investment in returning land from grazing to grassland reached US\$ 0.847 billion for five years.
- 6) China's accumulated national infrastructure investment reached nearly 0.8 billion RMB for protection of wild animals and plants and construction of nature reserve.
- 7) Through National 973 Program, 863 Program, the National Key Technologies Research and Development Program and the National Natural Science Foundation, China invested a large sum of fund into the study of biodiversity conservation.

During "Eighth Five-Year" period (1991-1995), China invested USD 24.2 billion in environmental protection; During "Ninth Five-Year" period (1996-2000), China invested USD 43.56 billion ; During "Eighth Five-Year" period (2001-2005), China invested USD 84.7 billion.

The major financing programs for biodiversity of China include: (1) budget appropriation of state and local governments; (2) bilateral assistance; (3) multilateral assistance; (4) regional assistance; (5) administrative charges such as charges for disposing pollutants, dumpage charge in sea area, charge for using sea area and etc; (6) subsidy for national key ecological forest.

During the construction of development of western area, the nation has started to engage in the construction of mechanism of multi-element of investing bodies and diversity of investment manners. In accordance with the requirements of central government, the various levels of government shall include the fund for environment construction into the budgets of various levels of government, the bank shall increase the loan for environment construction and postpone the term of loan repayment; for the long-term, low interest rate foreign loans or grants, project of environment construction shall be given

priority. Ecological compensation mechanism shall be gradually established and perfected in related areas and regions. The local government may consider granting certain financial subsidies to the fund in the field of environment construction.

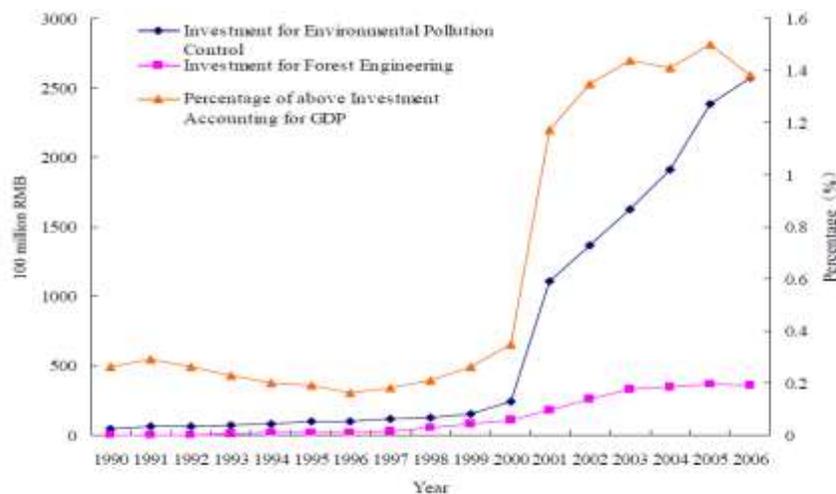
In programs of science and technology development of China, priority support is given to the conservation and sustainable use of biodiversity, the eco-social development in areas where ecology is weak. During “Tenth Five-Year” period, and in national 973 program, “Change, sustainable use of biodiversity and regional biological safety of Yangtze River drainage area” was established, and the national science and technology appropriation was USD 3.025 million; in terms of platform construction of natural scientific and technological resources, the nation arranged the scientific research involving protection and resource sharing of animal, plant and microbe species, and the national science and technology appropriation was USD 12.1 million; in the program of science and technology development, the appropriation for supporting the ecological conservation and construction, the research regarding agricultural biodiversity and prevention and control of crop diseases in western area reached around USD12.1 million. In addition, the research of technologies of biosafety and management of biodiversity conservation was also supported financially.

## 2008 reporting

### Domestic Funding:

While developing economy, China continued to increase investment in environmental protection. From 1990 to 2006, China invested a total of 1,427.83 billion yuan into environmental protection, with 1,210.87 billion yuan for pollution control and 216.96 billion yuan for key forestry projects. After 2001, investment in environmental protection and biodiversity conservation was substantially increased, with the total investment in pollution control and key forestry projects exceeding 1% of the GDP.

Over the recent years, the Chinese government continued to increase investment in environment pollution control and ecological environment conservation. Now the annual investment has reached 1% of the GDP. This has contributed significantly to biodiversity conservation:



China's Investment in Biodiversity Conservation over the Years

The Regulation on Nature Reserves stipulates that the expenditure for the establishment and management of natural reserves shall be arranged by governments at all levels; the state shall integrate the development plan of natural reserves into the national economic and social development plan by implementing economic and technical policies and measures in consistent with the development of natural reserves; the development and management of natural reserves shall take into account local economic development and improving working and living conditions of local communities. Some examples include:

- The National Plan for Wildlife Conservation and Nature Reserve Establishment formulated in 2000 offered special support for establishment of nature reserves. By 2006, a total of 2.6 billion yuan was dedicated to these projects.
- Fujian Province adopted a series of preferential policies such as relocating residents in nature reserves, improving working and living conditions for residents in nature reserves and

strengthening construction of nature reserves to comprehensively address conservation and development issues.

- In 1998, the Special Fund for Capacity Building of National Nature Reserves was established by the Ministry of Finance. By 2007, investment in the capacity building of nature reserves in terms of management and conservation, scientific research and publicity and education amounted to 340 million yuan.
- In 2001, the National Wildlife Conservation and Nature Reserve Construction Project was launched. By 2006, investment in this project totaled 2.6 billion yuan. Fund allocated for the Natural Forest Resources Conservation Project launched in 1999 also supported the personnel resettlement, social security for working staff, ranger subsidy and forest protection (by closing off afforested mountains) of nature reserves covered by the Project. The Subsidy for Management and Protection of National Key Noncommercial Forests established in 2003 granted special fund to national nature reserves and local nature reserves with key ecological functions each year. The National Implementation Plan for Wetlands Conservation Project (2005-2010) adopted by the State Council in 2005 is under implementation now. The Plan sets the target to establish 222 wetland nature reserves.
- Local governments also dedicated a large amount of fund to nature reserves. For instance, Guangdong Province planned to allocate over 300 million yuan for nature reserve establishment from 2000 to 2009 to mainly invest in already established and newly planned national and provincial nature reserves; Fujian Province employed preferential policies such as increasing standards for ecological compensation and making more investment in infrastructure construction for forestry nature reserves above the provincial level to reinforce the construction and management of nature reserves.

China (2008) defined that investment in biodiversity conservation refers to the total investment in environment pollution control and ecological environment construction.

## 2012 Submission

### 2010

Bilateral ODA	219 million US\$	
Multilateral ODA	1 million US\$	
Central government budget	2,005 million US\$	
Positive incentives introduced	5,516 million US\$	It was noticed that the transfer payments directly related to biodiversity in 2010 include natural ecological conservation, natural forest conservation, returning farmland to forest etc., the amount involved was 34.753 billion Yuan (about 5.516 billion U.S. dollar)
Eco-compensation	unknown	China is going to establish eco-compensation pilot study in domain of protected areas, ecological important zone, mineral resources exploitation and water basin environmental protection. The survey shows that many of the provincial and municipal governments in China have started the studies on the concrete operation mechanisms for eco-compensation, but the work progress varies from place to place, and the methods and measures adopted are also not universal.

#### Capital needs for each Strategic Tasks (Currency: Million RMB)

Strategic Tasks	2011-2015	2016-2020
Further improve related policies, regulations and systems on biodiversity conservation	127	120
Promote mainstreaming of biodiversity conservation into the related planning processes	500	1,203
Strengthen capacities for biodiversity conservation	5,755	3,040
Strengthen in-situ conservation of biodiversity and rationally carry out ex-situ conservation	66,179	65,043

Promote sustainable development and use of biological resources	-	1,050
Improve benefit sharing of biological and genetic resources and associated traditional knowledge		
Improve capacities to cope with new threat and challenges to biodiversity	232	1,305
Raise public awareness and strengthen international cooperation and exchange	150	100
Subtotal	72,943	70,687
Total	143,630	

Capital needs in different Scenarios (correlation with global strategic goals) (Unit: Million USD)

CBD goals	Period -	Public financial input	Foreign aid needs (25%)
Strategic goal A	2011-2015	90	23
	2016-2020	79	20
Sub Total		168	42
Strategic goal B	2011-2015	10,211	2,553
	2016-2020	10,484	2,621
Sub Total		20,695	5,174
Strategic goal C	2011-2015	499	125
	2016-2020	315	79
Sub Total		815	204
Strategic goal D	2011-2015	-	-
	2016-2020	8	2
Sub Total		8	2
Strategic goal E	2011-2015	778	195
	2016-2020	333	83
Sub Total		1,111	278
Total		22,797	5,699

### Further information

China<sup>1</sup> referred to mainstreaming activities in agricultural sector, forestry, urban and rural development sector, marine sector, water resources sector, education sector, science and technology sector, poverty

<sup>1</sup> Resource Mobilization Information Digest No. 201: Sectoral and Cross-Sectoral Integration of Biodiversity in China, January 2013.

alleviation and development sector, land and resources management sector, commerce sector, customs sector, traditional Chinese medicine management sector, intellectual property management sector, national plans and programs.