REVISED VERSION SUBMITTED 8 JANUARY 2004

A VOLUNTARY REPORT ON IMPLEMENTATION OF EXPANDED PROGRAMME OF WORK ON FOREST BIOLOGICAL DIVERSITY

Please provide the following details on the origin of this report.

Contracting Party:	People's Republic of China					
National Focal Point						
Full name of the institution:	International Cooperation Department of the State Environmental Protection Administration of the People's Republic of China					
Name and title of contact officer:	Tu Ruihe, Director of International Organisations Division					
Mailing address:	115 Nanjiaojie, Xizhimennei, Beijing, 100035 PRC					
Telephone:	+86-10-66151933					
Fax:	+86-10-66151762					
E-mail:	Ruihe-tu@zhb.gov.cn					
Contact officer for n	ational report (if different)					
Full name of the institution:	Nature and Ecology Conservation Department of the State Environmental Protection Administration of the People's Republic of China					
Name and title of contact officer:	WANG Dehui, Deputy Director General,					
	Chief of the office of China Steering Committee on Implementing CBD					
Mailing address:	115 Nanjiaojie, Xizhimennei, Beijing, 100035 PRC					
Telephone:	+86-10-66111453					
Fax:	+86-10-66151762					
E-mail:	wang.dehui@zhb.gov.cn					
s	ubmission					
Signature of officer responsible for submitting national report:						
Date of submission:						

Please provide summary information on the process by which this report has been prepared, including information on the types of stakeholders who have been actively involved in its preparation and on material which was used as a basis for the report.

The preparation process of this case report was as follows:

- 1. Under the guide of the Office of China Steering Committee on Implementing CBD of the State Environmental Protection Administration, China National Forestry Economics and Development Research Center under the State Forestry Administration undertook the task of preparing the report. The Ministry of Agriculture, the State Forestry Administration, Chinese Academy of Forestry, Chinese Academy of Sciences, etc. have been actively involved in the preparation process.
- 2. The preparation process mainly includes collecting and compiling related policies and regulations, technology status of China's forest biodiversity conservation and sustainable use, information on management situation, development trends and technology communication and cooperation with other countries and international organizations. According to the preparation format of the report, all participation parties drafted out the first draft and discussed the first draft, to present revision suggestions and comments so that the Trial Edition of the report could be completed.

References

- 1. The State Environmental Protection Administration. 1998. China's National Report on Implementation of the Convention on Biological Diversity. China Environmental Sciences Press, Beijing.
- 2. The State Environmental Protection Administration. 2001. China's Second National Report on Implementation of the Convention on Biological Diversity. China Environmental Sciences Press, Beijing.
- 3. State Environmental Protection Administration, State Planning Commission, China Biodiversity Action Plan (1991—2000), 1994, China Environmental Science Press, Beijing. Beijing.
- 4. The State Environmental Protection Administration. 1998. China's Biodiversity: A Country Study. China Environmental Sciences Press. Beijing.
- 5. The Department of Nature Conservation, Handbook of Nature Reserve, 2002, China Environmental Science Press, Beijing.
- 6. The State Development and Planning Commission, National Report on Environment and Development of People's Republic of China, 1992, China Environmental Science Press, Beijing.
- 7. National Report on Sustainable Development of the Peoples' Republic of China, 2002, China Environmental Science Press, Beijing.
- 8. Department of Nature Conservation, State Bureau of Environmental Protection, *Llist of*

Nature Reserves in China, 2002, China Environmental Science Press, Beijing.

- 9 Xue Dayuan and Jian Mingkang. 1994. Construction and Management of Nature Reserves in China. China Environmental Sciences Press. Beijing.
- 10. State Environmental Protection Adminstration, The State Development and Planning Commission, China's Development Outline of Nature Reserve (1996—2010), 1997, Beijing.
- 11. Research Group of Forestry Strategy of China Sustainable Development, The Study on Forestry Strategy of China Sustainable Development—Strategy Volume, 2003, China Forestry Publishing House, Beijing.

VOLUNTARY REPORT ON IMPLEMENTATION OF EXPANDED PROGRAMME OF WORK ON FOREST BIODIVERSITY

Expanded Programme of Work on Forest Biological Diversity Annex to Decision VI/22

1.	Has yo	our	country	ident	ified	pri	ority	goals,	objec	tives	and	act	ivities	included	in
the	expan	ided	program	me of	work	for	imple	ementati	on at	the r	natio	nal	level?		

a) no (please specify the reasons)

b) yes (please provide a list of priorities identified)

X

Further comments on identification of priority goals, objectives and activities

In accordance with the development plans for wild fauna and flora and their habitats, a series of key wild fauna and flora have been rescued, many first-class state nature reserves, prohibited hunting areas and species bases and breeding bases of rare plants have been established, improved and expanded, rare species resources have been restored and expanded. Until 2050, nature reserves of forest type in China will reach to 2000; the total area accounts for 16 percent of China's area, 85 percent of key national protected wild fauna and flora will be conserved. These activities are followings:

- (1) The development of nature reserves has been achieved. From 1991 to the end of 2002, nature reserves have increased from 708 to 1757 and the areas also increased from 56.06 million hectares to 132.90 million hectares; 21 nature reserves have been included the Man and Biosphere Protection Network, and 21 nature reserves have been included in the List of International Important Wetlands.
- (2) The rescuing programs of endangered species have been implemented. The Government of China has implemented a series of rescuing programs for endangered species, which has gained outstanding effects. Many endangered species have been or being resumed. For example, the protection programs of Giant Pandas and their habitats have been comprehensively implemented. There are 28 Giant Panda conservation areas established or under construction, there are 1000 Giant Pandas in China, and the population becomes gradually stable.
- (3) The Biodiversity Conservation Action Plan and state research report have been developed. In order to implement the United Nations Convention on Biological Diversity, the Government of China has stipulated China Biodiversity Conservation Action Plan and China's National Report on Implementation of the Convention on Biological Diversity. The Report has comprehensively assessed Chinese biodiversity resources and their values, listed the names of national endangered angiosperms and vertebrates, and put forward the policy recommendations for national capacity building of biodiversity conservations and sustainable uses of bio-resources.

- 2. From the list of priorities, did some or all of them produce the expected impacts after their implementation (i.e. a success)?
 - a) no (please specify the reasons)

 b) yes (please specify success stories)

 X

Further comments on impacts of implementation of priority activities

The expected goals have been basically reached. The successful examples are followings:

- (1) The number of existing Giant Pandas is about 1000 in China, and the population becomes gradually stable;
- (2) Crested ibis is the worldwide-endangered bird. When it is discovered in 1981, there are only seven, at present, there are more than three hundreds;
- (3) About four hundreds breeding stations of rare plants for ex-situ conservation and germplasm resource bases and more than one hundred and twenty vivaria have been established step by step. More than 1800 species of plants have been protected and about 90 percent of national protected wild flora has been off-site conserved. Now man-made breeding of rare plants, which only distribute in China, such as Cathay Silver Fir (*Cathaya argyrohylla*), Dawn Redwood (*Metasequia glyptostroboides*), Dovetree (*Davidia involucrata*) and etc. has been succeeded.
- 3. Were there any challenges/impediments to the implementation of priority activities that could have negatively affected their chance of success?
- a) yes (please specify the activities and the main challenges/impediments)

 b) no

Further comments on challenges/impediments to implementation of priority activities

- (1) China is the most population country in the world. The population has brought about high pressure on forest resource management, which has caused some unsustainable human activities and loss and severe threat of forest biodiversity.
- (2) The activities of uncontrolled hunting and exploiting medicinal herbs and other economic plants are the key reasons to lead threat of biodiversity. For example, South China tiger and wild camel and other species are to be extinct, Liquorice and Nostoc (*flagelliforme*) and etc. have been excessively collected, which not only makes resources lost, but also destroys ecology and environment.
- (3) The impacts of forest over-cutting on biodiversity are mostly as following: the reduction of forest community type and destruction of forest habitats lead fauna and flora species lost or migrated.
- (4) In recent, the area of forest diseases and insect pests is about eight million hectares each year.
- (5) The impacts of plantation development on bio-diversity are mostly as following: forest plantation development of great scale at the cost of destroying natural forest with abundant biodiversity, mono-variety and simple structure of forest plantation, loss of natural forests and irrational establishment and management of forest plantation, all of these have caused the severe loss of forest biodiversity.

In addition, environment pollution and forest fire also threaten to the biodiversity management and sustainable uses.

- 4. Is your country collaborating with other Governments and regional and international organizations and processes to implement regional or international activities in the expanded programme of work?
- a) no
 b) yes, limited collaboration (please provide details)
 c) yes, significant collaboration (please provide details)
 X

Further comments on collaboration with other Governments and regional and international organizations and processes to implement regional or international activities in the expanded programme of work

In recent years, China has strengthened cooperation with all other countries and international organizations to push forest biodiversity conservation and sustainable use.

China has developed national and local criteria and indicators consistent with ITTO, the Montreal Process, and the new Regional Initiative for Dry Forests in Asia. UNDP and FAO have provided support for this effort through the "Capacity Building, Research and Extension for Sustainable Forest Management Project." Currently, testing of criteria and indicators is being carried out in three eco-zones of the country.

China has joined Convention on International Trade of Endangered Species of Wild Fauna and Flora, United National Convention on Biological Diversity and the Convention on Wetland.

The Government of China has signed the agreements with Japan, Austria, America, India and Russia. China side has cooperated with the World Bank, United National Development Program, WWF and other international organizations and non-governmental organizations. In accordance with incomplete statistics data, China has gotten about \$100 million, more than 100 cooperative programs, and program areas have covered 20 provinces. By international cooperation and exchanges, China side has learned advanced technology and management experiences, and professionals have been trained, and forest biodiversity conservation and sustainable uses has been pushed.

In addition, China cooperates and communicates with concerned departments in USA, Canada, Japan, Australia, Russia, etc. in the field of nature reserves, which has improved the management level and management technology of Chinese nature reserves.

Programme Element 1: Conservation, Sustainable Use and Benefit-sharing

5. Has your country developed practical methods, guidelines and/or ind: the ecosystem approach in relation to sustainable forest management?	icators to apply
a) no (please specify the reasons)	
b) relevant methods, guidelines and indicators under development	X
c) some methods, guidelines and indicators developed (please provide details)	
 d) a comprehensive set of methods, guidelines and indicators developed (please provide details) 	

Further comments on the practical methods, guidelines and indicators to apply the ecosystem approach in relation to sustainable forest management

With references from experiences of other countries, China side have been studying and designing the practical methods, guidelines and indicators to apply the ecosystem approach in relation to sustainable forest management. China National Forestry Economics and Development Research Centre and Chinese Academy of Forestry have taken the task.

6. Has your country taken any measures to prevent the introduction of invasive alien species that threaten ecosystems, and mitigate their negative impacts on forest biodiversity in accordance with international law?

a) no	
b) relevant measures under development	
c) yes, some measures taken (please outline the measures)	
d) yes, comprehensive measures taken (please outline the measures)	X

Further comments on the measures taken

China pays attention to the prevention and control of alien species. The main measures are as follows.

China established and perfected plant quarantine laws. The Law on Quarantine of Imported and Exported Animals and Plants was passed in 1991. There are over 200 quarantine departments established at the ports, which formulate a comparatively complete supervision and monitoring network. China also set up the examination and approval system on introduction of aquatic and terrestrial wild animals.

China conducted the regional investigation and the research on biological control and comprehensive harnessing for a number of critical harmful alien plants, basically understood the occurrence, spreading and distribution of these alien plants across the country, and took some prevention and control measures.

China set up the prevention and control system for forest pests and diseases, implemented the control projects on longicorn, pine moth, Bursaphelenchus xylophilus and Hyphanteia cunea.

China has been founding over 500 national monitoring and forecasting centers since 1999, monitoring and forecasting 11 kinds of forest pests and diseases in China. Through the foundation of the national centers, the construction of local monitoring and forecasting stations of forest pests and diseases was promoted. The monitoring and forecasting network for critical forest pests and diseases was shaped across the country.

7. Has	-	-	taken	any	measures	to	mitigate	the	impact	of	pollut	cion or	ı fore	st
a)	no													
b)	under	conside	ration	<u> </u>										

c) relevant measures under development

 \mathbf{X}

d) yes, some measures taken (please provide details)

e) yes, comprehensive measures taken (please provide details)

Further comments on the measures taken to mitigate the impact of pollution on forest biodiversity

Environmental pollution especially acid rain damage, heavy metal and pesticide concentration in ecological systems has led many species and ecological system to endanger. Forest damage areas caused by acid rains in China has covered 22 provinces. Acid rains have taken in the East China, Central China, and Southern China of the south of Changjiang River and Southwest China of the south of Qinling Mountains. In accordance with preliminary investigations, more than 15 thousand heactare forests have been dead, and 400 hectares have been damaged in Guangxi, Sichuan, Guizhou and Guangdong. Acid rains have caused soil acid and land degradation. The effect of acid rains on biodiversity has not been clearly, how to mitigate the impact of pollution on forest biodiversity is still under consideration.

8. Has your country taken any measures to mitigate the negative impacts of climate change on forest biodiversity?

a) no	
b) relevant research and monitoring programmes under development	X
c) some research and monitoring activities being undertaken but no measures taken	
d) yes, some measures taken (please outline the measures)	
e) yes, comprehensive measures taken (please outline the measures)	

Further comments on the measures taken to mitigate the negative impacts of climate change on forest biodiversity

In the past 50 years, the global has become warmer, the natural disasters have been taken place, which caused the degradations of forest systems, the conditions of species habitats have been worsen, which caused the loss of biodiversity, the issue should be solved. The higher CO2 concentration, temperature and rainfall changes has affected energy fluid of forest system, in the meantime, these effects may cause forest distribution, component and structures of forest ecological systems, and the distributions of fragile ecological belts and special ecological systems.

- 9. Has your country taken any measures to prevent and mitigate the adverse effects of forest fires and fire suppression (where fire is a natural disturbance agent)?
- a) no
 b) relevant measures being considered
 c) relevant measures under development
 d) yes, some measures undertaken (please specify)
 e) yes, many measures being undertaken (please specify)

Further comments on the measures to prevent and mitigate the adverse effects of forest fires and fire suppression $\frac{1}{2}$

Without control of forest fires, forest fires resulted in deterioration of environments and descent of animal and plant resources. The forest soils were damaged to some degree. The withered shrub and leaf layer and semi-decomposed organic compound burnt up. In the meantime, forest fires also caused the habitats for wild fauna and flora loss, which threaten existence of wild fauna and flora; therefore, forest fires may reduce wild fauna and flora, even loss, which cause loss of biodiversity. In order to prevent and mitigate the adverse effects of forest fires and fire suppression, the measures have been taken the following measures.

Firstly, the central and local governments have increased financial inputs for controlling and preventing forest fires, fundamental constructions of forest fire controls have been improved and strengthened, for instance, the department of civil aviation and the air forces have properly arranged airplanes for forest fire watch, and the department of weather has been timely taken weather forecasts for forest fire risk and higher risk days.

Secondly, with the approval of the State Council and the Central Committee of Military of Communist Party of China. Forest fire squadrons of Sichuan, Tibet and Xinjiang have been founded; forest fire professions have been strengthened.

Thirdly, forest fire belts have been planted, the length of forest fire belts has been reached more than 400 thousand kilometers, the belt system for forest fire control has been formed in the south of China.

Fourthly, forest fire control organizations have been expanded, at present, there are 3085 forest fire control offices, 3257 forest fire management offices and the number of the staff is 16945 in China.

Fifthly, forest fire control law system has been updated, in 1988, the State Council stipulated "the Regulation on Forest Fire Control", in accordance with the regulations, and local governments have been launched rules for forest fire control.

Finally, the responsibility system for forest fire control has been established in China, propagandas for forest fire control has been strengthened.

10. Is your country mitigating effects of the loss of natural disturbances necessary to maintain biodiversity in regions where these no longer occur?				
a) no				
b) monitoring and assessment of effects ongoing	х			
c) potential measures identified				
d) yes, some adopted and being implemented (please provide details)				
e) yes, comprehensive measures adopted and being implemented (please provide further details)				
Further comments on measures adopted to mitigate effects of the loss of n disturbances necessary to maintain biodiversity in regions where these no				
By means of establishing national network of ecology, effects of the loss of natural disturbances necessary to maintain biodiversity in regions where these no longer occur have been not clearly identified, the potential measures have been under considerations.				
11. Is your country preventing and mitigating losses of forest biodiversit fragmentation and conversion to other land uses?	y due to			
a) no				
b) potential measures identified				
c) yes, some measures undertaken				
d) yes, comprehensive measures undertaken	х			
12. Is your country restoring forest biological diversity in degraded secondary forests and in forests established on former forestlands and other landscapes?				
a) no				
b) potential measures identified				
c) yes, some measures implemented in some areas (please provide details)	х			
d) yes, comprehensive measures implemented in major areas (please provide details)				
Further comments on the measures to restore forest biological diversity in degraded secondary forests and in forests established on former forestlands and other				

China has implemented the Natural Forest Protection Project and suspended logging natural forests. The logging of natural forests has been suspended in the upper and middle of Yellow River and Yangtze River, and the mountains are forbidden for logging for protection and management. The Chinese Government provided funds for logging-ban regions. The central finance will compensate the loss of local financial incomes due to the suspension of logging natural forests through transfer payment. Since the initiation of the pilot project of Natural Forest Protection in 1998, 51.33 million ha of forests in the upper of Yangtze River, the upper and middle of Yellow River, Northeast China, and Inner Mongolia have been effectively conserved, and 5.988 million hectares of forest vegetation were restored. By the end of 2002, logging ban has been implemented in 13 provinces of middle Yangtze River and upper and middle of Yellow River, 93330 thousand hectare-forest resource been updated, silviculture area was 1470 thousand hectares.

China has implemented the Converting Arable Lands to Forestland or Grassland Project. The basic policy of the project is to restore forests and grasslands from cultivated lands, close hillsides to facilitate afforestation, provide grain instead of subsidies, and to allow individuals to sign contracts of afforestation. The central government provides gratuitous grain to farmers for re-afforestation. The standard for annual grain subsidy per hectare is 2250 kg in the upper of the Yangtze River, and 1500 kg in the middle and upper reaches of the Yellow River. In the meantime, certain cash subsidies will be provided to farmers and the standard is 300 Yuan RMB per hectare. The duration of subsidy depends on actual situation. The necessary seedling for the re-afforestation, re-vegetation and the artificial afforestation in the barren mountains suitable for afforestation shall be supplied by the forestry departments and the seedling institutions should provide gratuitous seedling to farmers. The subsidy of the seedling is 750 Yuan RMB per hectare according to the standards of establishing ecological forests, which shall be provided to the seedling production institutions by government. By the end of 2000, the total area of reafforestation and re-vegetation was 1.363 million hectares in 193 counties of 17 provinces or autonomous regions.

13. Is your country promoting forest management practices that further the conservation of endemic and threatened species?

a) no	
b) relevant forest management practices under development	
c) yes, some practices adopted and promoted (please provide details)	х
d) yes, some practices being implemented (please provide details)	

Further comments on the forest management practices that further the conservation of endemic and threatened species $\frac{1}{2}$

- (1) Endemic species for silviculture have higher priority.
- (2) China has established 14 Wild Animals Refuge Stations and more than 400 wild plant germplasm bases to improve endangered wild fauna and flora.
- (3) The State Council stipulated the List for Wildlife of State Priority Conservation in December 1988, and the List for Wild flora of State Priority Conservation in September 1999. The former list includes 398 species of wildlife of national grade one and two; the latter includes 246 species and 8 categories of wild flora.

14. Is your country ensuring adequate and effective protected forest area networks?					
a) no					
b) networks of protected areas being planned					
c) some protected areas established but networks not in place					
d) networks of protected areas taking shape					
e) major networks of protected areas established	х				
15. Is your country promoting sustainable use of forest resources to enhance the conservation of forest biological diversity?					
a) no					
b) relevant policy and programme under development					
c) yes, some policies and programmes in place (please provide details)	х				
d) yes, comprehensive policies and programmes in place (please provide details)					
Further comments on the policies and programmes for promoting sustainable	use of				

Further comments on the policies and programmes for promoting sustainable use of forest resources to enhance the conservation of forest biodiversity

In order to minimize the adverse impacts of human activities on forest biodiversity, restore and reconstruct destroyed or degraded forest ecosystems, China mainly took the following actions:

- 1. Allowable cutting amount system has been implemented in China, the system is benefit to control over-logging and maintain enough forest resources.
- 2. Since 1998, Natural Forest Protection Project, Converting Arable Land into Forestland Project, Three-North and Yangtze River Basin Shelterbelt Protection Project, Around Beijing Dissertation Controlling Project, National Wildlife and Nature Reserve Protection Project, and Key Area Forest Plantation Project have been launched to push forest biodiversity conservation and sustainable uses.
- 3. China has been transmitted from the plan economy system to market-oriented economy; therefore, China still has not enough experiences of forest biodiversity conservation and sustainable uses under market-oriented economy.

16. Is your country preventing losses caused by unsustainable harvesting of non-timber forest resources?	of timber and
a) no	
b) potential measures identified	
c) some measures undertaken (please provide details)	
d) comprehensive measures undertaken (please provide details)	х

Further comments on the measures to prevent losses caused by unsustainable harvesting of timber and non-timbering forest resources

Under the precondition of forest and non-timber forest resource conservation and sustainable uses, wild fauna and flora collecting should follow the principle of that "resource consuming should be lower than that of natural growth." Tenure should be clear, the relationship between conservation and uses should be coordinated, local people should gain benefits from resource use and conservation, the goal of resource increase and economic growth should be realized. The The collections of Manchurian ask (*Fraxinus mandshuria*), seeds of Korean Pine (*Pinus koraiensis*), Chinese yew (*Taxus Chinesis*) have been under control, which is benefit to reduce local poverty.

Allowable cutting amount system has been implemented in China, the system is benefit to control over-logging and maintain enough forest resources.

17. Is your country taking any measure to enable indigenous and local communities to develop and implement adaptive community-management systems to conserve and sustainably use forest biological diversity?

a) no	
b) not applicable	
c) relevant policy and programme under development	
d) yes, some policies and programmes in place (please specify)	х

Further comments on the policies and programmes to enable indigenous and local communities to develop and implement adaptive community-management systems to conserve and sustainably use forest biological diversity

China is a country with long history and multi-nationality. During thousands of years of production and living practices, China accumulated much traditional knowledge related to forests. These traditional life style and knowledge are especially important to the conservation and sustainable use of forest biodiversity. China pays high attention to the traditional knowledge that is beneficial to the conservation and sustainable uses of forest biodiversity, and actively takes measures to promote the incorporation of the knowledge into forest management at national and regional levels. The main measures are as follows:

China actively maintains and protects traditional knowledge. For example, Kunming Institute of Botany of Chinese Academy of Sciences, and Tropical Botanical Garden of Xishuangbanna of Yunnan Province investigated and researched the traditional life style and culture of minorities in Xishuangbanna area, especially, "Spirit Mountains" of Dan Nationality, "Spirit Forests" of Hani Nationality and botanical gardens in Buddhist temples. In 1997, Kunming Institute of Botany of Chinese Academy of Sciences and Forestry Department of Yunnan Province surveyed 8 minorities who live around Jinping watershed nature reserve, such as Miao, Yao, Tai Nationalities and so on. The experts have investigated and maintained diverse traditional botanical knowledge and experiences, which come from the activities such as traditional hunting, slash-and-burn cultivation, wild plants introduction and domestication and so on. The study is beneficial to the succession and development of the traditional knowledge on forest biodiversity conservation.

China has taken effective measures to encourage local community to maintain diverse traditional knowledge, which is left over by their ancestries and is beneficial to the conservation of forest biodiversity. Many Taoist and Buddhist resorts are fairly good sites to conserve forest biological resources. China regards religious belief, implements the policy of freedom to believe in religion, and guides positive factors of religion. This policy resulted in the fact that the Taoist and Buddhist resorts play positive roles in the conservation of forest biodiversity. Religions resorts such as Wudang Mountain in Hubei Province, Emei Mountain in Sichuang province, Taibai Mountain in Shaanxi province and Wutai Mountain in Shanxi province all become the sites where plants and animals are well protected.

China encourages minority communities to participate in the conservation of biodiversity. With the assistance of corresponding government departments and international organizations, participatory management approach has been implemented in some nature reserves where a number of minorities live together. This approach admits and encourages local communities and women to participate in the management of nature reserves. For example, Yi, Pumi and Mosuo nationalities live around Lugu Lake nature reserve, Yunnan province. In 1993, Yunnan province forestry department drew on the experiences of foreign countries, adopted participatory method of community forestry, organized training courses to increase the knowledge and skills of local communities, which promoted the participation of local communities in forest biodiversity conservation, expanded income sources of the local communities and raised their living standard. Through the sustainable uses of natural resources, the ecological environment and species resources that are critical to forest biodiversity have been conserved.

18. Has your country developed effective and equitable information systems and strategies and promoted implementation of those strategies for *in situ* and *ex situ* conservation and sustainable use of forest genetic diversity?

a) no

b) relevant information system and strategy under development

c) relevant information system in place

d) relevant strategies in place (please provide details)

e) relevant information system and strategies in place (please provide details)

Further comments on the strategies for $in \ situ$ and $ex \ situ$ conservation and sustainable use of forest genetic diversity

China pays high attention to the exchange and sharing of forest information. China has established the forest resources monitoring systems at national and local levels, the forest ecological project benefit and assessment system, and progressively built up the monitoring network for forest resources and project benefits. China conducts the first-class investigation on forests at national level every 5 years to provide first-hand information on status and trend of national forest resources. As required, the corresponding provinces, autonomous regions and municipalities can arrange the second-class investigation to provide scientific basis for the compilation of forest management plans and forest resource management. At present, China has finished its fifth national investigation on forest resources.

China conducted monitoring on natural resources and biodiversity in parts of forest ecosystem nature reserves, founded the biodiversity information management system for forest ecosystem nature reserves, and the wildlife resources monitoring center.

According to the Law on the Dissemination of Agricultural Techniques and the Law on Scientific and Technological Achievement Transformation, China founded and perfected forest scientific and technological disseminating units at provincial, prefecture and county levels. These units concentrated their attention on forest biodiversity conservation and management, conducted technological services, technological training, consulting services and cooperative development, and contributed to forestry production and management departments.

Since 1997, China has developed the national information network on forest pest and disease control and quarantine, initially realized computer networking of forest pest and disease control information and quarantine operation at provincial levels across the country, scientifically and quickly delivering information concerning forest pest and disease macroscopic management, and founding basis for sound decision making.

19. Is your country promoting the fair and equitable sharing of benefits resulting from the utilization of forest genetic resources and associated traditional knowledge?

a) no	
b) relevant policies and programmes under development	
c) some policies and programmes in place (please specify)	х
d) comprehensive policies and programmes in place (please specify)	

Further comments on the policies and programmes for promoting the fair and equitable sharing of benefits resulting from the utilization of forest genetic resources and associated traditional knowledge

Preserving China's biodiversity is extremely important to the maintenance of environmental systems that underpin human welfare. Not only is diversity thought to be critical for providing a natural resilience against shocks, but also it is argued that biodiversity provides a basis for evolutionary processes that allow species to change and adapt over time.

Under the precondition of forest and non-timber forest resource conservation and sustainable uses, wild fauna and flora collecting should follow the principle of that "resource consumption should be lower than that of natural growth." Tenure should be clear, the relationship between conservation and uses should be coordinated, local people should gain benefits from resource use and conservation, the goal of resource increase and economic growth should be realized. The collections of Manchurian ask (*Fraxinus mandshuria*), seeds of Korean Pine (*Pinus koraiensis*), Chinese yew (*Taxus Chinesis*) have been under control, which is benefit to reduce local poverty.

While all of society benefits from biodiversity protection, some groups benefit more directly through their commercial exploitation of genetic material. With China's vastly and rapidly expanding, medicinal herb industry is a critical commercial beneficiary. In total about 10,000 medicinal herbs are known, and 1,000 of them are commonly used. Many of them find their ways into mainstream drugs used alongside western medicines. About 80 percent of drugs used in China are based on indigenous plants. Not only is the domestic market for herbs huge, but exports are also growing rapidly. As a result overall production has expanded at an estimated 9 per cent per annum over the last 20 years. In 1987, total output reached 650 thousand tons. While medicinal herbs are frequently cultivated outside natural forests, they originate in natural forests. For many, cultivation is not an option since plants perform poorly outside their natural environment. As a result, 80 percent of medicinal plants are sourced from the wild. In volume terms the share is 60 percents. In addition, natural forests represent a reservoir of undiscovered medicinal uses. By 1990, 10 medicinal plants had shown promise for their anticancer and anti-HIV compounds. The significant potential for new drugs is indicated by the high rate of recent discovery. Between 1979 and 1990, forty-two new Chinese medicinal preparations appeared on the market. The destruction of natural forests poses a threat to the medicinal herb industry. This threat comes from within and outside the sector. Where medicinal plants are already discovered, extraction has meant that for most species, stocks will be exhausted within 10-20 years.

China side has collected and stocked forest germplasm resource since 1990s, 10 germplasm reservoirs of cool temperate zone, temperate zone, subtropical zone and north tropical zone have been built, which include more than 2000 kinds of germplasms of populations, seed sources, families, superior trees and clones of main tree species, more than 20 grade germplasms have been supplied to research and production units. In the meantime, 35 thousand genetic materials have been reserved in national forest grade species bases.

Forest eco-tourism has been developed, which reduces local poverty, increases farmers' incomes and better reserves forest resources.

If your country wishes to provide additional information on implementation of this programme element, please do this in the

Programme Element 2: Institutional and Socio-economic Enabling Environment

20. Is your country improving the understanding of the various causes of forest biodiversity losses?				
a) no				
b) a limited analysis being undertaken				
c) a thorough analysis being undertaken				
d) yes, some analyses completed and results available (please outline some findings from these analyses)	х			
e) yes, comprehensive analysis completed and results available (please provide some findings from these analyses)				
Further comments on the analysis of the various causes of forest biodiver	sity losses			

China pays high attention to disseminating the importance of forest ecosystem and biodiversity conservation for management personnel, the professional and the public, to increase their awareness. The main measures are as follows:

China pays high attention to forest publicity, and incorporates the conservation and development of forest resources into the main indicators to examine and assess officer's achievements in their official career at all levels, enhancing the willingness and activeness of officers at different levels to conserve and develop forest resources.

China launched a lot of colorful publicity and education activities on forest ecological environment through public media such as broadcast, film, television, newspaper and so on. According to incomplete statistics, China Central Television broadcasted over 660 items (sets) of news or programs on forestry, including 76 items of News Broadcasting, 7 series of Focus Talk, 173 items of News '30, 108 items of China News, and 18 sets of Economy '30.

In order to raise the understanding and management level on forest ecological environments, China holds forestry publicity meetings and training courses regularly.

China brought the supervisory function of public media into full play, resolutely publicized the major cases and crimes on destroying forestry resources through the media. For example, China conducted a series of publicity activities on "conserving the green, focusing on forests" in July 2003. These activities publicized a number of cases of destroying forest resources, converting forest lands to arable lands, illegally possessing forest lands, which gained the interests of the society and got good results.

China held different kinds of activities focusing on forest ecological environments, such as exhibitions, summer camps, festivals and commemoration days. These activities popularized the knowledge of forest ecological environments and increased public awareness of forest conservation.

21. Has your country integrated biodiversity conservation and sustainable	le use into
forest and other sector policies and programmes?	
a) no	
b) under consideration	
c) yes, integrated into policies and programmes in some sectors (please provide details)	
d) yes, integrated into policies and programmes in major sectors (please provide details)	Х
Further comments on the integration of biodiversity conservation and su into forest and other sector policies and programmes	ustainable use

The Government of China has integrated biodiversity conservation and sustainable uses into forest and other sector policies and programs, the key policies and programs are as the followings:

The Central Committee of Communist Party and State Council stipulated "the Decision on Speeding up Forestry Development" in 2003, the decision states that wild fauna and flora and nature reserve constructions are important components of ecological management, and strengthens that the governments of all levels should pay higher priority on forest biodiversity conservation and sustainable uses.

Wild fauna and flora and nature reserve construction has been included the 10th five-year-plan of the economic and social development of Peoples' Republic of China.

Wild fauna and flora and nature reserve construction is one of the most important sections of forest ecological projects in China.

State Council promulgated the Planning on National Ecological Environment Construction in 1998, clarified general objectives of national ecological environment construction. Forest biodiversity is the important component of the planning.

22. Has your country developed good governance practices, reviewed and revised and implemented forest and forest-related laws, tenure and planning systems, to provide a sound basis for conservation and sustainable use of forest biodiversity?

a) no	
b) review under way	
c) review and revision completed	
d) some good governance practices and related laws developed and implemented (please provide details)	
e) a comprehensive set of practices and laws developed and implemented (please provide details)	х

Further comments on the practices and laws developed and implemented to provide a sound basis for conservation and sustainable use of forest biodiversity

China amended the Forest Law on April 29,1998, and promulgated the Implementation Regulation on Forest Law in 2000, the Regulation on Conservation of Natural Forests in 2002, the Administrative Regulation on Forest Lands, the List of Key National Protected Wild Plants (the first part), the Administrative Regulation on Import and Export of Wild Plants and Animals and so on. China initially built up an effective supervision and enforcement system for forestry.

In 2003, National Committee of Peoples' Congress has approved "the Law on Rural Land Contract", which states the land use rights of farmers and other stakeholders, and the law is helpful to forestland tenure stable and forest resource management.

23. Is your country promoting forest law enforcement and addressing rela	ated trade?
a) no	
b) review under way	
c) potential measures identified	
d) yes, some measures in place to strengthen law enforcement and address related trade	х
e) yes, comprehensive measures in place to strengthen law enforcement and address related trade	
24. Is your country mitigating the economic failures and distortions the decisions that result in loss of forest biodiversity?	at lead to
a) no	
b) review under way	
c) potential measures identified	
d) yes, some measures taken (please provide details)	
e) yes, comprehensive measures taken (please provide details)	x
Further comments on the measures taken to mitigate economic failures and that lead to decisions that result in loss of forest biodiversity	nd distortions

Forest biodiversity has positive externality to some extend, which causes economic failures and price distortions, the Government of China has taken measures to mitigate economic failures and distortions that lead to decisions that result in loss of forest biodiversity.

From the beginning of 1950s, China has started the inventory of forest biodiversity. Based on the investigations and studies in the past 50 years, a lot of the first-hand materials were accumulated, and a series of catalogues were published such as the Flora of China, the Fauna of China, the Cryptograms of China, the Vegetation of China, the China Plant Red Data Book, and the Chinese Endangered Animals Red Data Book. China has established a number of databases and information networks such as China forest distribution database and China forest resources database and so on.

Some animal and plant specimen halls with regional characteristics were established in such forest and wildlife nature reserves such as Wuyishan national nature reserve and Changbaishan national nature reserve.

The basic studies on taxonomy and inventory are very weak in China. The national action plan on taxonomy is lack, henceforth, focuses on the basic research and key problems of forest biodiversity, the studies on taxonomy and inventory should been strengthened.

China set up the forest ecological benefit compensation foundation and launched the ecological forest compensation system. The compensation foundation is composed of the central and local compensation foundations. The central ecological benefit compensation foundation is mainly used for the construction and management of public welfare forests, such as state owned forests, state owned ecological forest farms, nurseries and nature reserves and so on, compensation for the direct economic losses due to limiting the development of public welfare forests and protecting wild plants and animals, and subsidy for the construction and management of rural afforestation and public welfare forests, and the subsidy for forest pests and diseases control. The local ecological benefit compensation foundation is used for the construction and management of public welfare forests defined by local governments.

25. Is your country increasing public support and understanding of the value of forest biodiversity and its goods and services at all levels?

a) no	
b) relevant programme under development	
c) yes, some programmes in place	х
d) yes, comprehensive programmes in place	

If your country wishes to provide additional information on implementation of this programme element, please do this in the following space.

Programme Element 3: Knowledge, Assessment and Monitoring

26. Has your country reviewed and adopted a minimum forest classification harmonized and accepted forest definitions and addressing key forest elements?	
a) no	
b) review under way	
c) review completed	х
d) a forest classification system adopted	
27. Has your country developed national forest ecosystem classification maps that use agreed international standards and protocols?	systems and
a) no	
b) early stages of development	
c) advanced stages of development	
d) yes, classification systems in place	х
28. Has your country developed specific forest ecosystems surveys in proconservation and sustainable use of forest biodiversity?	iority areas for
a) no	
b) under consideration	
c) relevant surveys being planned	
d) relevant surveys completed (please provide details)	х
e) results of relevant surveys available (please provide details)	
Further comments on the surveys of specific forest ecosystems in priori conservation and sustainable use of forest biodiversity	ity areas for

From the beginning of 1950s, China has started the inventory of forest biodiversity. Based on the investigations and studies in 50 years, a lot of the first-hand materials were accumulated, and a series of catalogues were published. For example, the Flora of China, the Fauna of China, the Cryptograms of China, the Vegetation of China, the China Plant Red Data Book, the Chinese Endangered Animals Red Data Book. China has established a number of databases and information networks, such as China forest distribution database and China forest resources database and so on.

The basic studies on taxonomy and inventory are very weak in China. The national action plan on taxonomy is lack, henceforth, focuses on the basic research and key problems of forest biodiversity, the studies on taxonomy and inventory should been strengthened.

29. Is y	our	country	advan	cing	the o	develor	ment	and	imple	menta	tion	of .	international	,
regiona	l and	d nation	nal cri	lteria	a and	d indic	ators	base	ed on	key	regio	nal,	, subregional	and
nationa	l mea	asures v	within	the f	frame	ework o	f sus	tain	able :	fores	t man	agen	ment?	

a) no
b) relevant programme under development
c) some criteria and indicators developed (please provide details)
d) comprehensive indicators developed (please provide details)

Further comments on the development and implementation of criteria and indicators

For the sake of raising conservation and management level of forest biodiversity in China, China set up the planning and objectives for the conservation and development of forest biodiversity in next several years, they are:

State Council promulgated the Planning on National Ecological Environment Construction in 1998, clarified general objectives of national ecological environment construction. It is suggested that, before 2010, the harnessed area of soil and water erosion rises by 600 thousand km², the treatment area of desertification is up to 22 million hectares, the harnessed grasslands are up to 33 million hectares, the forest area increases by 39 million hectares with forest coverage over 19%.

China compiled the Planning on Forest Nature Reserve System Construction. The planning is aimed that, before 2005, the number of national forest nature reserves rises by 224, and their area rises by 15 million hectares. At the same time, combined with the project of national natural forest conservation, a number of forest nature reserves are founded or enlarged, and their area is up to 3 million hectares. A number of wild plant and animal nature reserves are founded in other areas with abundant biodiversity, and their area is no less than 5 million hectares.

Forest fires are brought under control basically. The damaged rate due to forest fire is less than 0.1%, and the occurrence rate of forest pests and diseases is less than 6%.

30. Has your	country	conducted	key	research	programmes	on	the	role	of	forest	
biodiversity	and eco	system fur	actio	ning?							

a) no	
b) research programs under development	
c) yes, some research programs conducted	
d) yes, comprehensive research programs conducted	х

31. Is your country enhancing and improving the technical capacity at the national level to monitor forest biodiversity, benefiting from the opportunities offered through the Clearing House Mechanism of CBD?

a) no	
b) capacity building programme under development	X
c) yes, some programmes in place (please provide details)	
d) yes, comprehensive programmes in place (please provide details)	

Further comments on the programmes to enhance and improve the technical capacity at the national level to monitor forest biodiversity $\frac{1}{2}$

Chinese government preliminarily established China National Clearing House for Biodiversity Information. It aims at exchanging and synthesizing biodiversity information (including information related to China nature reserves, bio-safety, alien invasive species, the obtainment of genetic resources, the protection of traditional knowledge, and etc.) within China and between countries to contribute to the information sharing and technology communication in these fields.

Chinese departments concerned have also developed some databases and information networks of biodiversity. For instance, Chinese Academy of Science has developed Biodiversity Information System and its institutions have developed over 50 databases of biodiversity, mainly including species inventory database, rare endangered species database, specimen database, ecosystem database, taxonomical code database and etc. Agricultural departments have also developed a database of crop germplasm resources and an external information exchange network of germplasm, being convenient for the searching of foreign countries. Departments of environmental protection, forestry, oceanology and etc. representatively developed environment database system, forestry database system and oceanology database system. The development and use of these databases promotes the cooperation in science and technology between China and other countries, and furthers technology communication and transfer. But this database and database system separated in departments concerned need conformity and standardization in order to exert adequately the function of the database system.

implementation of this programme element, please do this in the following space.

- - - - - -