

**A Country Report on the Progress in
Implementing the IPF/IFF
Proposals for Action in China**

**State Forestry Administration
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Executive Summary

This is China's country report on the progress in implementing the IPF/IFF proposals for action. As a periodical report, it will be revised and updated in light of the advancement of the UNFF and China's national forestry development planning.

This country report consists of 5 parts: the preface is a review of the international efforts in forest policy dialogue and actions taken by the Chinese government; the second part is a brief overview of China's forestry, including forest resources, main achievements and remaining problems; the third part delineates the principles and methodology used for clustering and assessing IPF/IFF proposals for action; in the fourth part, all IPF/IFF proposals for action are clustered into 5 themes and 18 subjects based on the specific situations in China, an assessment is also given to the current progress in China's implementation of the IPF/IFF proposals for action. These 5 themes are: (a) formulation and implementation of NFP, (b) national implementation of sustainable forest management (SFM) strategy, (c) international cooperation on financial assistance and technology transfer, (d) work related to forestry by international organizations, multilateral institutions and instruments, (e) trade and environment issues related to forest products and services; the fifth part is a brief explanation on the proposals for action and the assessment.

Preface

A series of important documents were adopted at the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro of Brazil in June 1992, including the Rio Declaration on Environment and Development, Agenda 21, United Nations Framework Convention on Climate Change and Convention on Biological Diversity. However, due to the complexity of forest-related issues and controversies over an international forest convention, no consensus was reached on the development of an international forestry convention, and the conference adopted in stead a non-legally binding Forest Principles.

After the UNCED, many countries called for policy dialogues on international forest-related issues. In December 1992, the UN General Assembly ratified the outcomes of the UNCED and established by resolution the Commission on Sustainable Development (CSD) under the UN Economic and Social Council (ECOSOC). The ECOSOC decided in June 1995 to establish under the CSD an Intergovernmental Panel on Forests (IPF) to continue intergovernmental forest policy dialogue, with the mission to start deliberation, seek common understanding and provide recommendations on 5 areas related to international forest issues (i.e., a. implementation of UNCED forest –related decisions; b. international cooperation in financial assistance and technology transfer; c. research, forest valuation and formulation of criteria and indicators for sustainable forest management; d. trade and environment in relation to forest products and services; e. international organizations and multilateral institutions and instruments, including a legally binding instrument) through 4 sessions within it's 2-year mandate, and to present a final report to the 5th session of CSD held in 1997 for discussion. The IPF adopted after deliberations some 150 proposals for action on 12 themes in 5 fields. Despite of the consensus on some themes, substantial differences still remained on issues such as international forest instruments, financial

mechanisms, technology transfer, trade and environment, forest certification, traditional forest-related knowledge and the underlining causes of deforestation, etc.

In April 1997, the 5th session of the CSD reviewed and then adopted the IPF report. The 19th special session of the UN General Assembly held in June 1997 reviewed the progress of all UNCED decisions in 5 years. As far as forest is concerned, the session adopted the outcome of IPF and recommended to continue the intergovernmental forest policy dialogue.

Pursuant to the recommendations of the 5th session of the CSD and the resolution of the 19th special session of the UN General Assembly, the ECOSOC decided in July 1997 to establish an Intergovernmental Forum on Forests (IFF) under the CSD to address all pending issues of the IPF. The IFF also has a mandate of 2 years with the mission to find solutions to the global consensus on a legally binding instrument on international forest-related issues, and to submit its report to the 8th session of the CSD in 2000. The IFF finally adopted and submitted to the 8th session of the CSD a report including over 130 proposals for action. However, major differences still remained on such issues as financial mechanisms, technology transfer, trade and environment, international forest-related instrument, etc. Based on the recommendations of the 8th session of the CSD, the ECOSOC decided in October 2000 to establish the United Nations Forum on Forests (UNFF) as a subsidiary body of the ECOSOC, with the mission to recommend, through a 5-year intergovernmental forest policy dialogue, the parameters of a mandate for developing a legal framework for all types of forests.

Pursuant to the resolutions of ECOSOC, UNFF held its organizational meeting, or preparatory meeting, in New York from February 12 to 16, 2001. In the first substantial meeting held June 11-22, 2001 in New York, UNFF adopted after deliberations the Multi-Year Program of Work (MYPOW), the Plan of Action for implementation of the IPF/IFF

proposals for action and initiation of work of the UNFF with the Collaborative Partnership on Forests (CPF).

The 2nd session of the UNFF will be convened in New York March 4-15, 2002, during which a high-level ministerial segment will be organized to call on strengthening of political commitment by all countries. In accordance with the adopted UNFF MYPOW, each session starting from UNFF2 will address means of implementation (technology transfer, capacity-building and financial mechanisms), common items for each session and thematic items.

The Chinese government attaches great importance to sustainable development and has incorporated it in the national development strategy. Substantive resources are mobilized for forestry and environmental development to achieve sustainable forestry development through implementation of the sustainable forest management strategy. In order to achieve further forestry development driven by major programmes, China launched six grand forestry programmes in 2001. These grand national programmes have been incorporated in the 10th 5-year Plan for national economic and social development so as to achieve sustainable forestry development in China.

The Chinese government has been supporting the international forest policy dialogue, and is actively involved in the meetings of UN CSD, the IPF/IFF and the UNFF, and relevant activities. The Chinese State Forestry Administration (SFA) established a leading group on international forest-related issues in 1999. Moreover, the Chinese government has been creating favorable conditions for the implementation of the IPF/IFF proposals for action in China. Right after the UNCED, the Chinese government formulated a series of forestry action plans (such as the Forestry Action Plan for China's Agenda 21) and development programmes which are in close relation to the implementation of the IPF/IFF proposals for action. The on-going six

grand forestry programmes by SFA reflect the commitment of the Chinese government to the implementation of the IPF/IFF proposals for action. The Chinese Academy of Forestry also participates in the international forest-related processes by conducting thematic researches.

Chapter I

Forestry in China

Located in the east Asia and with 9.60 million km² of land territory and a population of 1.295 billion people, China is endowed with diverse natural, geographic and climatic conditions, where coniferous forest, a mix of coniferous and broadleaved forests, deciduous broadleaved forest, evergreen broadleaved forest, rainforest and tropical rainforest distribute in sequence from north to south in such climatic zones as frigid temperate, temperate, warm temperate, subtropics and the tropics.

According to the statistics of the 5th national forest inventory (1994-1998), the total land area for forestry use, the forested area and forest cover in China are 263 million hm², 159 million hm² and 16.55% respectively; the preserved area of plantation is 46.7 million hm², ranking No. 1 in the world; the stocking volume, annual increment and production are 11.27 billion m³, 458 million m³ and 371 million m³ respectively.

As a member of the international community and a country with the largest population on earth, China understands its responsibility in developing forest resources and protecting the global environment, and seeks to make unremitting efforts to this end.

1. Strengthening grand forestry programmes to promote sustainable forest management

Since 1978, China approved and launched successively 10 ecological forest programmes, covering 73.5% of the land territory in those major areas that are affected by soil and water erosion, sandy and windy weather and with fragile ecosystems, which aimed at increasing forest resources, controlling soil and water erosion and improving environment. Ever since 1998, the central government made a major decision in financial allocation by initiating 6 major national forestry programmes,

namely: the Natural Forest Protection Programme, the Programme to Convert Slope Farmland to Forest, the Sandification Control Programme for Areas in the Vicinity of Beijing, Key Shelterbelt Development Programmes in Such Regions as the Three North and the Middle and Lower Reaches of the Yangtze River, Wildlife Conservation and Nature Reserve Development Programme, the Forest Industrial Base Development Programme in Key Regions with a Focus on Fast-growing and High-yield Timber Plantations. These six major programmes, which cover 97% of the counties in China with a planned afforestation area of over 60 million hm², have created an unprecedented opportunity for forestry development by leaps and bounds.

2. Improving forestry legal system in a phased approach

A forestry law and regulation system is initiated following the successive promulgation of a series of important laws, regulations and documents, including the Forest Law of the People's Republic of China, the Wildlife Conservation Law of the People's Republic of China, the Law of the People's Republic of China on Combating Desertification, the Regulations on the Implementation of the Forest Law of the People's Republic of China, the Regulations on the Implementation of the Wildlife Conservation Law of the People's Republic of China and the Resolution of the 4th session of the 5th National People's Congress on the Initiation of National Compulsory Tree Planting. The Forest Law, Wildlife Protection Law and Law on Combating Desertification are the core of China's forestry legal system and complemented by administrative regulations, sector rules and local regulations and rules of local governments. The law enforcement and monitoring system is gradually improved and enhanced.

3. Fund mobilization through various channels to increase financial input and improvement of financial mechanisms

While striving to increase financial input and credit to forestry and environment development and making substantial breakthrough in the implementation of ecological benefit compensation policy, the central and

local governments stimulate various kinds of contribution to the forestry development from domestic and foreign sources and by various sectors and the masses of farmers, and mobilize the initiatives of all aspects to participate in forestry development through deepening reform and institutional innovation.

4. Bringing R&D into full play in forestry development by means of forestry renovation through R&D

Hi-tech, such as bio-engineering and IT, is developed and widely applied in the formation of science and technology innovation system on the basis of the application of current industrial and technical achievements. The Principle of linking basic research with applied research, hi-tech with conventional technologies, independent research with introduced technologies, scientific research with technical extension is adhered in the readjustment of research division and layout to give special emphasis on key areas, and innovative ideas are encouraged in the joint research.

5. Further strengthening international cooperation

So far China has established cooperative relationship in forestry with 1/3 of the countries and regions in the world and dozens of international organizations and NGOs. China's international cooperation in forestry is entering into a stage of multi-channeled, multi-typed, fully integrated cooperation where bilateral and multilateral collaboration, official and NGO relation, economic cooperation and technical exchange, introduction and exportation are equally stressed. China is willing to continue its open-up policy, and develop extensive collaboration and exchange relations with all countries and international institutions and NGOs in the world in the field of forestry on the basis of equality and mutual benefit, and make our due contribution to the common prosperity of the mankind.

China strives to improve the laws, regulations and policy mechanisms in relation to forest conservation and sustainable forest management, bring

into full play the systematic advantages and mobilize the initiatives of all walks of life in participating in forest conservation and wise use, thus has achieved dual increments both in forest area and the stocking volume. Entering into a new century, forestry development in China has become a comprehensive undertaking penetrating into such sectors as economy, society, population and resources and covers various fields including afforestation and greening, biodiversity and wetland conservation, combating desertification, forest product industry, diversified management and forestry education. Forestry development in China is facing unprecedented development opportunities and austere challenges in the new century.

Firstly, the total volume of forest resources is insufficient with low quality. It should be noted that China is still a country deficient in forest resources, the per capita share of the forest area, the stocking volume and the forest cover are only 1/5, 1/8 and 63% of the world average respectively, the mean stocking volume per hectare is only 78 m³, accounting for 68.5% of the world average. Furthermore, the forest resources are unevenly distributed. The west part of China, with fragile ecosystems, has very limited forest resources, and in some areas the forest cover is even less than 1%.

Secondly, the trend of deteriorating ecosystem is not reversed fundamentally. The flooded area by soil and water erosion in China is 3.56 million km², taking up 37% of the land territory, and over 5 billion tons of soil is eroded each year. The desertified land area in the country is 2.62 million km², and is still expanding at an annual rate of 2436 km². Deficient forest resources have caused a dramatic decrease in wild fauna and flora, some 15% -- 20% of the total wildlife species are under the threat of extinction. Natural wetland is rapidly decreasing. Deficient forest resources have also caused frequent occurrence of natural disasters, each year natural disasters such as flood and draught result in a direct economic loss of dozens of billion dollars.

Thirdly, forest product supply could not meet the requirements for economic and social development. The annual consumption of commercial timber in China is around 150 million m³, and there is a gap of 40 million m³ between supply and demand.

Fourthly, the overall economic conditions of the forestry sector are relatively poor due to the sluggish forestry reform process. 2/3 of the State forest farms and State-owned nurseries are fighting for survival or in poor conditions. As a result of low competitiveness, industrial enterprises in forestry sector shoulder high asset liability ratio. Forest farmers' income increases at a very low rate, which leads to poor living conditions of farmers.

Chapter II

Principles for clustering and criteria for assessment

As they are derived from negotiations and compromise, the more than 270 proposals for action adopted by IPF/IFF are lengthy in text, and overlapped, regardless of their principle or physical nature, thus a clustering of all proposals for action is indispensable to assess at the country level the national progress in implementing the IPF/IFF proposals for action in China.

The principles for clustering are:

1. to master the essential part in each proposal for action;
2. to take into full consideration of the scientific and administrative systems in China;
3. to cluster proposals for action that are analogous or similar under the title “summary of proposals for action”;
4. to avoid overlapping to the extent possible unless a proposal for action spans over several fields.

The purpose for clustering proposals for action is not intended to replace the specific proposals for action, but rather for the convenience of assessing progress in implementing these proposals for action in China. The fourth part of this report contains the clustered summary of proposals for action. It should be mentioned that “sustainable forest management” in this report refers to “management, conservation and sustainable development of all types of forests”.

The criteria for assessment used in this report are based on two aspects: 1. analysis of the relevance of the area in the summary of proposals for action to China, i.e. prioritized area, general area, and in between, or no relevant, and indicated by H (high), L (low), M (medium) and NR (not relevant); 2. analysis of China’s progress in implementing the proposals

for action: not started, indicated by 0; just started, indicated by 1; on-going, indicated by 2; substantive progress made, indicated by 3; implementation completed, indicated by 4. A combination of these two aspects is the result of national assessment. For example, H2 indicates the proposal for action is a prioritized area and implementation is on-going in China.

Chapter III
Assessment on the progress of implementing the IPF/IFF proposal for action

Development and implementation of the National Forest Programmes

1 National Forest Programmes and key forestry programme planning

No.	Summary of proposals for action	IPF	IFF	National Assessment
1	develop a national forest programme or action plan in accordance with specific country conditions, forestry situations and national legislation, implement forest resource conservation and sustainable management, prevention of land degradation, wetland and other types of nature reserve conservation, incorporate the NFP into national and local economic and social development plans, and enhance monitoring, assessment and reporting of implementation;	17(a)	9(a), 9(b), 56(n), 66, 85(b), 85(f)	H3
2	Emphasize regional cooperation and national coordination mechanism in key areas, such as land degradation, sustainable forest management, biodiversity conservation, climate change, develop holistic and multidisciplinary participatory partnership coordination mechanism and key programme planning at the national level;	17(a), 17(h)	9(g), 30(a), 41(g), 96(a), 122(c), 129(b), 140(a),	H2

			140(b), 144	
3	Monitor, assess and report on implementation of the national forest programme based on the appraisal of the national forest conditions, development trends and assessment of sustainable forest management as well as application of the national C&I for sustainable forest management;		17(d)	M0
4	Call for emphasis on key and priority areas in the national forest programme, including fund mobilization and international cooperation, and take the NFP as forest policy and action framework, especially further strengthen multilateral and bilateral international cooperation to promote the development and implementation of sustainable forest development plan in developing countries;	70(a)		H3
5	Call for emphasis on technology in the development and implementation of national forest programmes; strengthen capacity-building at the national and local levels in technical application and extension mechanisms.	77(e)		H2

2 Implementation of IPF/IFF proposals for action

No.	Summary of proposals for action	IPF	IFF	National Assessment
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1	Invite all relevant stakeholders to assess the progress of implementing the IPF/IFF proposals for action and measures to incorporate them into the national forestry development plans;	144	9(d)	M2
2	Establish a harmonious, integrated and participatory approach in implementation of the IPF/IFF proposals for action and in participation of other forest-related international mechanisms;	144	9(b), 9(e), 9(f)	M1
3	Report on the assessment and implementation of the IPF/IFF proposals for action.	144	17(c)	M2

3 Institution, policy, legislation and investment

No.	Summary of proposals for action	IPF	IFF	National Assessment
1	Establish market-oriented environmental service mechanism and other economic approaches to increase government financial input, encourage the use and development of environmentally sound technology by private sector and local communities to promote sustainable forest management;	69(a), 69(b), 69(c), 69(d), 70(b), 70(c)	56(b), 122(d)	M1
2	Formulate forest policies in favor of local communities and residents, including protection and respect of land tenure, increase of community financial input, protection of traditional knowledge and profit-sharing;	29(c), 40(c), 40(h), 40(r), 69(a), 70(c),	64(c), 64(d), 115(d), 122(b)	H1
3	Explore and expand financial channels to increase financial input in	70(b),	85(d),	H2

	sustainable forest management; formulate policies and incentive measures for re-investing forest income back to forestry; identify one national institution for seeking and coordinating government financial input and multilateral and bilateral development assistance;	70(c), 70(d), 81	85(f), 115(g), 122(b)	
4	Formulate and improve policies and related incentives concerning development, introduction and use of environmentally friendly technologies;	77(d)	56(b), 96(a), 98(b)	H1
5	Formulate and implement policies for the use of lesser known species with economic benefits for sustainable forest management;	132(b)		L0
6	Systematic analysis of on-going policies and plans related to sustainable forest management for the coordination of cross-sectoral policies;		90	H0
7	Strengthen research on forest science and exchange to support policy formulation.		96(c), 98(b)	H1

4 Conservation of forest and fragile ecosystems and combating desertification

No.	Summary of proposals for action	IPF	IFF	National Assessment
1	Develop programmes and strategies for national and provincial nature reserves in relation to forests, wild fauna and flora; wetland	17(a), 31(c),	56(j), 85(a), 85(e), 85(g),	M2

	conservation is a key component of nature conservation;	46(c)	86, 129(b)	
2	Conduct inventory, scientific research and protection grading in a phased approach, periodically issue and revise the List of Wild Fauna under National Protection, the List of Wild Flora under National Protection and the List of Terrestrial Wildlife of Benefits or of Important Economic, Research Value under Nation Protection;	17(a), 31(c)	56(j)	M3
3	Establish new cooperative instrument to mobilize the initiative of forest owners, local people and all walks of life in participation of planning, maintaining and management of protected areas;	40(a), 40(b), 40(e)	129(a)	M1
4	Summarize experiences, analyze the natural, economic, social and management causes for the destruction of fragile ecosystems, and recommend corresponding protection policies;	40(a), 40(f), 40(g), 40(q)	129(a), 129(e)	M1
5	Give special emphasis to conservation and rehabilitation of environment in national regional development plan, including the formulation and implementation of environment planning supported by international organization; special emphasize were given to the conservation and rehabilitation of eco-systems in desertified areas;	17(c), 46(a), 46(e), 46(f)	31(c), 129(d), 129(e)	M1
6	Give importance to the interest of various nationalities in dried areas and highland; collect and use the traditional knowledge and living practice of the indigenous people and development of alternative livelihood to alleviate the pressure on fragile ecosystems in the conservation of ecosystems in west China;	46(b), 46(e)	129(a), 129(b)	M1

7	Enhance the understanding of nature by local people and the importance of planted vegetation in maintaining a sound operation of ecological and economic system in dryland and mountainous areas and the publicity of relevant science and knowledge through media and convening training courses;	46(d)	129(a)	H2
8	Use of 3S technologies in a phased approach for the modernization of conservation of forest, related wild fauna and flora and fragile ecosystems.	40(n)	121(a)	L1

5 Monitoring, assessment and reporting as well as concepts, terms and definition

No.	Summary of proposals for action	IPF	IFF	National Assessment
1	Explore appropriate mechanisms and assessment indicators to monitor and assess the adequacy and effectiveness of forest programmes and projects supported by international cooperation highlighted by financial assistance and technology transfer acquired at the national and the local levels;	71(b)	17(a), 17(b), 17(c), 17(d), 17(e), 19(b)	NR
2	Support international organization and international financial institutions to establish and improve national forest information system with a view to enhance coordination and data-sharing among related parties regarding the implementation of national forest	78(a)	122(a), 129(a)	H2

	programmes, ODA programming, the provision of new and additional financial resources, increased private-sector investment, efficient development and transfer of technology;			
3	Establish mechanisms for the dissemination of information relevant to the management, conservation and sustainable development of all types of forests, and publicize to the society;	78(b)		M1
4	Encourage cooperation between international organizations and all countries to finalize concepts and terms related to sustainable forest management;	89(f)		H1
5	Support the UNFF in conducting national monitoring, assessment and reporting on the implementation of IPF/IFF proposals for action; assess the necessary technical requirements for sustainable forest management at the national level.	147(a), 147(b), 77(b)		H1

6 Natural forest protection

No.	Summary of proposals for action	IPF	IFF	National Assessment
1	Strengthen protection of natural forests, by applying log ban and/or reduction of allowable cut in major forest regions to promote rehabilitation of natural forest and its ecosystems;	27(b), 17(a)	9(d), 98(b)	H2
2	The interest of people living in the forest region should be	17(f),	129(d)	H1

	considered to the largest extent. Natural rehabilitation and reforestation should take full account of the restoration ability of nature and use multi-functional indigenous species;	28(b), 28(a), 29(c)		
3	Strengthen the development and sustainable use of non-wood forest products and eco-tourism so as to bring into full play the multi-functions and benefits of forest.	69(c), 69(d), 77(d)	121(b), 122(d)	H1

National implementation of the sustainable forest management strategy

7 Promote public participation

No.	Summary of proposals for action	IPF	IFF	National Assessment
1	Call for collaboration mechanism among stakeholders relevant to forest management at the national, sub-national and management unit levels; incorporate forest management into integrated rural development plan, development of alternative livelihood, enhance financial input for the upper and middle reaches of watersheds from the central and provincial governments;	89(h)	56(f), 56(m), 56(n), 64(b)	H2
2	Use various technologies and media to develop and improve means and mechanisms for public participation, promote multi-stakeholder, multi-sectoral and multi-disciplinary participation in the	17(e), 17(f), 29(a),	64(b)	M1

	formulation, monitoring, assessment and reporting of national and regional sustainable forest management programmes and plans;	89(h)		
3	Improve the formulation, implementation, monitoring and assessment process of national forestry programmes through an open and participatory process involving government officials, researchers, farmers and other interested parties;	29(b), 17(e), 17(f), 17(i), 89(h)	64(b), 64(f), 85(c), 84, 96(c)	M1
4	Enhance community capacity-building, improve the understanding of community on forest conservation by incentive measures and appropriate legal framework for sustainable forest management;		64(e), 64(f)	M3
5	Give full consideration of the benefits of local community, especially minority nationalities and women, in sharing forest and forest benefits, in the process of policy formulation.	17(f), 29(c)	56(m), 56(n)	M3

8 Combating deforestation and forest degradation, promoting forest rehabilitation

No.	Summary of proposals for action	IPF	IFF	National Assessment
1	Study and analyze the historical background and causes for deforestation and forest degradation, including cross-boundary economic forces, cross-boundary pollution, poverty, firewood collection, external influence by non-forestry sectors;	27(a), 27(b), 27(c), 31(a)	64(a),122(c),	H1

2	Data collection, analysis and sharing of information in relation to deforestation and forest degradation;	30(a)		M1
3	Public awareness and participation in combating deforestation and forest degradation;		64(e), 142(a)	H2
4	International cooperation in exploring the domestic and external causes of deforestation and forest degradation, such as the convening of international workshop;	28(c)		M1
5	Develop and implement national strategy, policy and regulation, economic means to combat deforestation and forest degradation, especially the development of plantation forests to reduce the destruction of natural forest;	28(b), 29(a), 29(b)	64(g), 115(c), 115(g)	H2
6	Call for financial assistance and technology transfer by developed countries for combating deforestation and forest degradation;	30(b)		H1
7	Implementation of the national programme of converting slope farmland into forests in areas where vegetation has been destroyed, actively reconstruct the degraded eco-systems through artificial measures to facilitate the rehabilitation process.	46(a), 46(b), 46(c)	122(a), 128(a), 129(d)	H2

9 C&I and their application in sustainable forest management

No.	Summary of proposals for action	IPF	IFF	National Assessment
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1	Take active participation in international processes of sustainable forest management, develop and improve C&I system for sustainable forest management at the national level;	115(a), 115(c)	19(a)	H3
2	Develop and improve the C&I system for sustainable forest management at the regional and forest management unit levels;	115(b)		H1
3	Application of C&I in formulation, implementation, monitoring, assessment and reporting on national forestry programmes;	17(d), 89(a), 115(b)		H0
4	Develop internationally accepted concepts, terms and definitions used in C&I for sustainable forest management, and application of C&I in assessment of the trend of forest resources and sustainable forest management;	89(d), 89(f), 115(d), 115(e)		M1
5	Promote the coordination and compatibility among various C&I processes for sustainable forest management and all international conventions.	115(d), 115(f)		M1

10 Traditional forest knowledge

No.	Summary of proposals for action	IPF	IFF	National Assessment
1	Respect traditional forest-related knowledge in sustainable forest management practice, pay attention to the collection, identification,	40(a), 40(b), 49(c), 40(d),	67, 74(a), 74(c)	M1

	summarization and use of these knowledge and relevant capacity-building, as well as the protection of intellectual property of traditional forest-related knowledge;	40(e), 40(f), 40(g), 40(j), 40(k), 40(i)		
2	Develop related policies and mechanisms to encourage the sharing, use and dissemination of traditional knowledge and practice by relevant parties and institutions in a manner where the use and conservation of resources is well-coordinated;	40(b), 40(m), 40(n), 40(p)	56(m), 74(b), 75	M1
3	Urge international organizations and international conventions such as the Conference of Parties of the Convention of Biological Diversity to provide coordination in the protection and use of traditional forest-related knowledge.	40(a), 40(b), 40(o), 40(p), 40(q)		NR

11 Scientific research and scientific knowledge related to forest

No.	Summary of proposals for action	IPF	IFF	National Assessment
1	Identify areas of priority for research related to SFM in accordance with the global and national requirements, conduct multi-disciplinary integrated research, and share the research results through specific channels and mechanisms;	94(a)	96(a)	H1

2	Mobilize funds through various channels, foster capacity-building of research institutions through cooperative research and network development;	94(a), 94(d)	96(b), 97(b)	H1
3	Pay attention to the interest of local and community residents, conduct research on traditional forest-related knowledge and intellectual property system;	40(p), 133(d)		M1
4	Conduct experiments, pilot research on sustainable forest management through a participatory approach, and application of field research results in planning, implementation, monitoring and assessment;	94(a), 94(d)	97(d)	H1
5	Strengthen research on forest inventory and monitoring techniques, develop effective approach for forest assessment;	89(c), 104 (c)	107 (d)	M1
6	Research on forest certification and its relation with criteria and indicators for sustainable forest management;	133(d), 133(e)	31 (d)	H1
7	Research on cost internalization of wood products and non-wood substitutes.	134(a), 134(b)	41(c), 41(d)	M0

12 Forest health and productivity

No.	Summary of proposals for action	IPF	IFF	National Assessment
1	Review and monitor air pollution impact at the national and regional	50(c), 50(d)		H1

	levels;	27(c)		
2	Take effective measures to reduce harm of air pollution to forests;	50(a)		H1
3	Assess long-term trend of supply and demand for timber and non-wood forest products, meet increasing demand for timber and non-wood forest products, attaining sustainability of supply of timber and non-wood products;	28(a)	122(a), 122(b) 122(c), 122(d)	H1
4	Recognize and enhance functions of planted forests, develop fast growing and high yielding planted forest, ease up the pressure on the demand for natural forest resources, achieving sustainable forest management.	28(b)	9(e),64g, 122(a)	H3

13 Economic, social and cultural aspects of forest

No.	Summary of proposals for action	IPF	IFF	National Assessment
1	Take full account of the environmental, social, economic, moral, cultural and religious impacts in the forest product and service accounting;	104(a)		H1
2	Collect information about all kinds of forest product and service accounting methods and related data	104(b)		M1
3	Research on the environmental, social and economic impacts of the trade measures for forest products and services;	128(a)		H0

4	Research on market and economics of wood and non-wood substitutes	131(a)		M1
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14 Rehabilitation and conservation strategy of countries with low forest cover

No.	Summary of proposals for action	IPF	IFF	National Assessment
1	Further clarify the definition of low forest cover;	58(a)		H0
2	Formulate and implement national forest rehabilitation and conservation plan in countries with low forest cover;	58(b)(i)		H2
3	Establish planted forests to enhance production and supply capability of forest products and services, including use as many as possible the indigenous species, establishing mixed forests and rehabilitation and restoration of degraded ecosystems;	58(b)(ii), 58(b)(iii), 58(c)	129(c)	H2
4	Establish and expand as many as possible nature reserves, buffer zones and ecological corridor networks to conserve biological diversity.	58(b)(v)		H2
5	Take full consideration of the social, economic and environmental impacts and the cost and benefit in the development of non-wood substitutes and imports of forest product;	58(b)(iv)	41(h)	H1
6	Strengthen capacity building, including formulation and implementation of national forest programmes, traditional	58(b)(vi), 58(b)(vii)	64(a)	HI

	forest-related knowledge, research and information system;			
7	Intensify efforts in financial assistance and technology transfer to help developing countries and countries with economies in transition to increase their forest cover;	58(c)	30(b)	NR
8	Strengthen international cooperation in conservation of all types of forests, in particular capacity building in forest resources monitoring.	58(d), 58(e)		H1

International cooperation in financial assistance and technology transfer

15 Financial Mechanism

No.	Summary of proposals for action	IPF	IFF	National Assessment
1	Support international organizations and developed countries to provide financial assistance such as ODA to developing countries and countries with economies in transition to help implement priority proposals for actions in sustainable forest management, including national forest development plans, criteria and indicators for sustainable forest management, traditional forest-related knowledge, combating desertification and rehabilitation of fragile ecosystems;	17(c), 40(m), 46(d), 46(g), 58(d), 67(b), 67(c), 115(c), 133(b)	9(a), 9(c), 30(a), 30(b), 84, 85(c), 87, 97(a)	NR

2	Urge developed countries to fulfill their commitment on ODA made at the UNCED and provide new and additional financial resources to developing countries to help achieve sustainable forest management;	67(a), 67(d), 67(e)		NR
3	Encourage each country to mobilize public and private financial resources to promote capacity building in sustainable forest management;		30(a), 30(c), 85(d)	H2
4	Make full use of the existing financial mechanisms and creating new mechanisms to promote sustainable forest management;	67(f), 67(g), 69(e)		NR
5	Set up new financial mechanisms like Global Forest Fund to promote sustainable forest management.	68(a), 68(b), 68(c)		NR

16 International cooperation in capacity building and acquisition and transfer of environmentally sound SFM technologies

No.	Summary of proposals for action	IPF	IFF	National Assessment
1	Strengthen and improve international cooperation and coordination, develop partnership and promote sustainable forest management in the process of formulating and implementing national forestry development plans;	17(b)	19(b), 64(b), 66 140(a)	M2
2	Emphasize, in the national forestry development plan, capacity	17(g),	17(a),	H1

	building, promote implementation of sustainable forest management strategies and the IPF/IFF proposals for action, in particular strengthen capacity building of forest management entities, people in forest farms and local communities; enhance capabilities in forest resources assessment, statistics and analysis, and the establishment and application of forest resources information system;	70(e), 77(f), 89(b), 40(g)	19(b), 56(d), 64(e), 64(i), 75, 107(d)	
3	Identify needs in forest management including needs to implement IPF/IFF proposals and determine research priority.	30(b), 133(b)	17(c), 30(b)	M1
4	Intensify efforts in research on traditional forest-related knowledge, enhance research abilities, disseminate and apply traditional knowledge.	40(k)		M1
5	Develop partnership between forest enterprises and community, reflecting traditional mode of living, ease up pressure on forest in arid land and promote new management approaches for sustainable forest management;	46(d), 46(e)		M1
6	Strengthen international cooperation in research of impact of air pollution upon forest health	50(b)		M1
7	Take active measures in rehabilitation, afforestation and conservation of forests, including degraded forest and trees in other areas outside forest	58(c)	30(b), 129(c)	H2
8	Strengthen south-south and south-north cooperation to urge developed countries to provide preferential terms to developing	77(a), 77(c), 77(g)	56(a), 56(e), 56(g), 56(h),	M1

	countries and promote the export and transfer of environmentally sound technologies, knowledge and information;		56(i), 56(l), 129(e)	
9	Urge international organizations to further support the developing countries and countries with economies in transition in data collection and analysis so as to monitor changes in forest resources;	58(e)		H1
10	Improve forest-related research plans and strengthen the ties between forestry policies and research;	94(c)	98(a), 98(b), 98(c)	M2
11	Support secondary processing and <i>in situ</i> processing of wood and non-wood forest products in developing countries;	131(b)		M1
12	Develop and apply technologies including traditional forest-related knowledge and increase sustainable use of lesser-known species;	132(c)		M1
13	Take measures to realize cost internalization of wood and non-wood product substitutes and share the research outcomes, improve market transparency of forest products and services, and reduce illegal trade of wood and non-wood forest products.	134(b), 135(a)	41(c), 41(f)	M0

Trade and environment related to forest product and service

17 Promoting international trade of forest products and services to support sustainable forest management

No.	Summary of proposals for action	IPF	IFF	National Assessment
1	Take effective measure to promote market access of forest	128(a),	31(d),	H2

	products and services, increase market transparency including tariff and non-tariff measures;	128(b), 128(c)	41(a), 41(h)	
2	Make full use of the existing International Tropical Timber Agreement and explore possibilities of extending the Agreement to all types of forest;	129(a), 129(b), 129(c), 129(d), 129(e)		NR
3	Make efforts in eliminating trade policies that are in conflict with international agreements;	130(a), 130(b), 130(c)		H3
4	Make use of forest certification mechanism to promote sustainable forest management and international trade in forest products;	133(a), 133(c), 133(f), 133(g)	41(b)	L1
5	Take necessary measures to cracking down on illegal timber trade.	135(b)	41(f)	L3

Forest-related work of international organizations and multilateral organizations and instruments

18 Forest-related work of international organizations and multilateral organizations and instruments

(1) Country participation in international processes

No.	Summary of proposals for action	IPF	IFF	National Assessment
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1	Support each country to strengthen cooperation with international organizations and international arrangements and instruments to promote fulfilling their respective missions.	17(i), 40(f), 58(d)	19(a), 19(b)	M2
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(2) Work of international organizations

No.	Summary of proposals for action	IPF	IFF	National Assessment
1	Implement the IPF/IFF proposals for action jointly by international organizations in cooperation with country governments;	144	9(g)	H2
2	Strengthen cooperation and collaboration between international organizations, the developed countries and other international institutions in preventing deforestation, forest degradation, biodiversity conservation, implementation of international agreements in reducing distant trans-boundary air pollution and key terms and definitions in assessing forest resources;	31(b), 40(a), 50(e), 89(f)	17(e), 98(b), 129(a)	NR
3	Conduct joint forest research through cooperation among international organizations;	94(a)		NR
4	Make efforts through international arrangements and instruments, in particular Convention on Biological Diversity and Convention to Combat Desertification, to promote biodiversity conservation and desertification combating and prevention;	31(c), 40(a), 40(q), 46(g)	9(b), 75	NR
5	Promote inter-agency cooperation among international	40(o), 46(f),	19(a),	NR

	organizations, international arrangements and instruments to facilitate forest resource assessment, information sharing, forestry research, valuation of forest products and services and the implementation of international instruments.	71(a), 89(e), 89(g), 94(a), 94(b), 104(b), 145, 146(a), 146(b), 46(c), 146(d), 146(e)	139(a), 139(b), 139(c), 141(b), 141(c), 142(a), 143, 144	
6	Strengthen cooperation among members of the Collaborative Partnership on Forest (CPF) and information exchanges with countries.	78(c)	18, 19(a), 98(a), 67	NR
7	Support countries to continue their efforts in maintaining the international forest policy dialogue.	147(b), 147(c), 148, 149		M1

Chapter IV

Brief comments on the assessment

1. National forestry development planning and major forestry programmes

National forestry development planning and the complementary major forestry programmes are the basis for implementing the IPF/IFF proposals for action.

China is a developing country with large areas of diverse types of fragile ecosystems. The Chinese government has been attaching great importance to mobilizing all walks of life to participate in conservation of resources and ecosystems, with considerable progress made in many areas in relation to implementation of the IPF/IFF proposals for action.

Ever since 1978 and by assuming a dual responsibilities of environmental conservation and economic development, China's forestry sector has witnessed constant growth in both the quantity and quality of forest resources while adhering to the principle of land-greening by the masses and the objective and responsibility system for forest resources conservation and development by governments at various levels.

In the 21 century, forestry in China is facing the great challenge of balancing economic development and environmental conservation. A key to the effort of reversing the trend of deteriorating environment in the new century is to properly address the relationship between economic development and environmental conservation, by placing ecological protection as the basis of economic development and incorporate ecological protection into the national economic accounting system encouraging financial inputs and social involvement, driven by major ecological forestry programmes.

2. Implementation of IPF/IFF proposals for action

Proposals for action under this theme are closely related to the country report. The on-going major forestry action plans in China are linked with most parts of the IPF/IFF proposals for action, and substantial progress has been made in many fields.

3. Institution, policy, legislation and investment

China is in transition from the conventional planned economy to a market-oriented economy. With regard to forest management, this is a process of establishing and improving new forest management and legislative systems that comply with the principles of market economy. In the process of advancing legislative development, China is striving to establish and improve the legislative system and law enforcement and monitoring system with the Forest Law of the People's Republic of China, the Wildlife Conservation Law of the People's Republic of China, the Seed Law of the People's Republic of China and the Law of the People's Republic of China on Combating Desertification as the core and complemented by administrative regulations, sectoral rules and local regulations.

Concerning proposals for action No.1 and No.2, the key in China's advancement of reform on forest management system is the establishment of a long-term, stable and transparent property system which conforms to the requirements of market economy and WTO rules so as to promote the role of market-oriented mechanism in forest management. Market-oriented policies such as auction, lease, transfer and contracted management are being tested; forest ecological benefits compensation being established and improved at the national and local levels; material and spiritual incentives such as reform of taxes and fees, technical and institutional support and publicity being introduced, and the use of environmentally sound forest management technologies by private

sectors and local communities are encouraged in a bid to achieve environmental benefits.

In the course of the reform of public financial system, the State Forestry Administration and local forestry departments strive for the financial input from the State to forestry and environment development to incorporate investment on forest for public benefits and infrastructure construction to the public financial budget of the government, which has insured a long-term and stable investment channel and increased input to forestry development of ecological benefits. Bilateral and multilateral cooperation is accelerated. A system for the compensation of forest ecological benefits is established, and forestry fund system is further improved. Grand national forestry programmes are implemented along the upper and middle reaches of main rivers and in areas with fragile ecosystems such as desertification and soil and water erosion in a bid to promote forestry development driven by major programmes. Unpaid use of forest resources shall be gradually replaced through macro-readjustment and market-oriented measures. A complete timber pricing system is established. The policy for compensated use of forest resources is developed and implemented in a phased approach. Planning and financial policies adaptable to market economy, such as taxation, financial insurance, development, protection and use of traditional forest-related knowledge, especially environmentally sound technology are explore and improved for sustainable forest management.

Forest renovation through R&D is implemented to make full use of R&D in forestry development. Hi-tech such as bio-technology, IT is developed and widely applied, and environmentally sound technologies are developed, introduced, digested and disseminated in the formation of science and technology innovation system in addition to the application of current technical achievements.

Governmental restructuring is promoted to change the functions of government. Cross-sectoral cooperation and structural readjustment is

enhanced in a bid to accommodate the requirements of socialist market economy.

4. Conservation of forests and fragile ecosystems and combating desertification

4.1 Nature reserves and conservation of wild fauna and flora

The Chinese government attaches great importance to biodiversity conservation. Inventory of wild fauna and flora resources and the subsequent classification of their endangered and protective status are the scientific basis for measures of protection, management and trade of wild fauna and flora. Since the founding of the People's Republic of China, China has conducted many theme-oriented and comprehensive investigations on wild fauna and flora and wetland resources. 355 terrestrial wildlife species of 1st and 2nd classes are named in the List of Wild Fauna Under National Protection issued by the State in December 1988, 246 wild flora species in 8 families of 1st and 2nd classes are named in the List of Wild Flora Under National Protection issued in September 1999. At present the State Forestry Administration is updating the list for wild fauna and flora based on the result of recent inventory.

By June 2001, the whole country had established 310 nature reserves for wetland conservation with a total area of 49.45 million hm². Since its accession to the RAMSAR Convention in 1992, China has been active in the implementation of convention by finishing the compilation of China Wetland Conservation Action Plan and identifying 40 projects of priority; completing the investigation on wetland resources in China; and initiation of pre-investigation on wetland legislation, etc.

Before 1980, nature conservation in China was basically run as per State plan, local communities scarcely participated in the planning and decision-making process. Since the UNCED in 1992, the role of nature conservation is more and more important in forestry development.

Guided by the principle of sustainable development, China began to realize the importance of participation of local people and all walks of life in the process of planning, decision-making and management in establishing a cooperative mechanism, which is gradually being established and still requires improvement.

3S technologies are widely applied in the management of wild fauna and flora and nature reserve management, and conservation and rehabilitation of fragile ecosystems in developed countries, whereas China is in the beginning stage. China wishes to have cooperation with relevant countries and international organizations to advance application of these technologies.

4.2 Combating land degradation in arid and semi-arid areas

Combating land degradation in arid and semi-arid areas is a subject of wide concern in UNFF and IPF/IFF proposals for action.

China is a country with large areas of desertified land and serious threat by desertification. According to statistics, the desertified land area in China at present is 2.62 million km², taking up 27.3% of the total land territory, of which 1.61 million km² is sandy land, or 61.45% of the desertified area. The annual direct loss from desertification values at RMB 54 billion yuan. Desertified land mainly distributes in the vast arid and semi-arid areas of north China and partly in semi-humid area. The transcending areas of agriculture and animal husbandry, grassland in the north and the marginal area of big deserts are where the most serious desertification occurs.

Based on information, the main types of desertification in China's diverse desertification classification include wind erosion, water erosion, and salinization, etc. Desertification has become a serious danger to the Chinese nation by encroaching farmland which people rely on and homeland where people dwell.

The top priority in combating desertification is planting trees and grass and protecting forest vegetation. As the main body of terrestrial biosphere, forests play an irreplaceable role in wind breaking and sand fixation, soil and water conservation, biodiversity conservation, agricultural ecosystem improvement, urban air pollution control and national economic development.

China established a special Coordinating Group for Combating Desertification with clear role and responsibility defined and promulgated the Law of the People's Republic of China on Combating Desertification in 2001, which, together with other State laws, such as the Forest Law of the People's Republic of China, the Soil and Water Conservation Law of the People's Republic of China and the Grassland Law of the People's Republic of China, form an integrated legislative framework. Besides, special focus is given by the Chinese government to the development of science and educational network and demonstration and extension system to enlarge technological component and scientific and educational support in combating desertification. This includes the operation of the National Research and Development Center for Combating Desertification in China, the National Training Center for Combating Desertification in China and the National Monitoring Center for Combating Desertification in China. Multi-channel input mechanism is explored to mobilize funds from various sources. Being a party to the UNCCD, China strives for support from international community, such as the successful cooperation with UN organizations and the World Bank, to help China deal with its desertification issue and make its due contribution to the global endeavor of combating desertification.

Western regions are primary areas with fragile ecosystems in China, thus the environment development in western regions is of very important significance. Environment development in western regions covers two aspects: protection of existing ecosystems and rehabilitation and restoration of degraded ecosystems. China started the Three North

Shelterbelt Programme as early as 1978. In 2000, the Chinese government initiated the Western China Development Strategy, and it was in the same year that China, together with GEF, developed the OP-12 Programme in western China to start the demonstration of integrated management for sustainable development in these regions through effective land degradation control.

The dryland and highland areas in western China are dwelling place for several minority nationalities, and these minority nationalities have constituted their unique national culture and life style after many years of adaptation to the local environment. The interests of different nationalities are given full consideration in the Western China Development Strategy to help develop alternative livelihood and the application of traditional knowledge in a bid to alleviate the pressure on environment.

Insufficient knowledge of local environment and ecosystems and the related science and technology is an important reason for the destruction of environment by local people. By dissemination of relevant knowledge through various media and convening training courses, the Chinese government has been and is still trying to enhance the local people's understanding of the important role natural and planted vegetations play in maintaining a favorable cycle of ecological and economic systems in arid and mountain areas.

5. Monitoring, assessment and reporting as well as concepts, terms and definitions

Improvement of monitoring, assessment and reporting as well as concepts, terms and definitions is a fundamental issue of UNFF. Today there are still divergent ideas on concepts, terms and definitions at the international level. For instance, deforestation and its definition, forest degradation and its definition, unique forest type and its definition, fragile ecosystems, low forest cover and its definition, and illegal logging and its definition,

further more the definition and classification method concerning forest, natural forest and planted forest. China, with the full participation of the whole society, adheres to implementing the strategy of revegetation and conservation of forests, rehabilitation of degraded land, and development of plantation forests. In the mean time, it pays great attention to scientific research and makes steady improvement on related concepts, terms and definitions to comply with the international standards. It also takes active part in international efforts to implement UNFF resolutions and carry out monitoring, assessment and reporting on the process of China's implementation of the IPF/IFF proposals for action.

However, improvement is still needed in this field. In particular, reflecting the IPF/IFF proposals for action, comprehensive multidisciplinary research needs to be incorporated into the monitoring, assessment and reporting of the implementation of IPF/IFF proposals and should be closely related to national forestry development plan so as to promote forestry development in China and the world at large.

6. Natural forests conservation

Natural forests play a key role in balancing ecological environment and creating a favorable cycle of regional ecological and economic development. In the past, due to low awareness of environment protection and short-sighted economic benefit, natural forests in China used to be excessively logged. This led to the drastic decrease of the virgin forests in the natural forest and the remaining forests are mostly logged stands and secondary forests damaged to certain extent. In order to totally prevent destroying natural forest, the Chinese government launched a natural forest conservation programme in 1998, which is of great significance to effective protection of the existing natural forests and attaining steady expansion and rehabilitation, facilitating sound cycle of ecological and economic development on forest land and achieving sustainable development.

China is a country with low per capita share of timber resources, but with large demand for timber. In long run, China cannot meet its need for timber merely depending on natural forest and timber import. Thus, development of planted forest especially fast growing and high yielding plantations is the way to meet the domestic demand and release the pressure on natural forests.

Due to population growth and lack of knowledge on ecosystem functions, in many regions of China, particularly the western region, these fragile areas have been cultivated into arable land. This situation results in deterioration of the local ecosystems, hence posing threat to the ecological and economic development in the lower reaches of river basins. To resolve this problem, the Chinese government initiated a programme to convert slope farmland into forestland and take active measures to restore ecosystems that have been degraded. All these efforts are of great importance to China forestry and regional sustainable social and economic development.

Differentiated management in natural forest has been widely used. With the emphasis on ecological conservation, commercial forest is developed in some suitable areas. Native species and those that have high ecological and economic values are also utilized to resolve the conflict between natural forest conservation and community economic development.

In the past, focus was just given to the productive functions of forest and little attention was paid to the non-wood products in forest ecosystems. After implementation of the natural forest conservation programme, efforts were strengthened in development and sustainable utilization of non-wood products and eco-tourism, which is inductive to bring the multiple functions of forest into full play and reach the expectation of the programme.

7. Enhancement of public participation

The main reasons for the first proposal for action within the context of the theme are two folds: (1) most of the China's forest land are located in the middle and upper reaches of river basins, which are very important to the ecological safety of the lower reaches of the rivers. However, these areas are usually the poverty-stricken areas; (2) these areas have a long history of community participation in forest management and generated various models of community participation. China attaches great importance to combine sustainable forest development with poverty alleviation and rural development. The central government has initiated ecological environment development programmes for middle and western regions, such as natural forest conservation programme, programme to convert slope farmland into forestland and so on. The input from central financial resources was also intensified to promote substitute industries of the local community and reach win-win goals in environment protection and economic development.

For the second and third proposals, when China is formulating its national forest programs and development plan, and during the process of implementation, monitoring and assessment, due considerations are given to advice and comments from government agencies and experts. The participation of the local governments, local inhabitants and other interested parties are also encouraged. These efforts aim at establishing an improved participatory approach and making it as regulatory practice.

China also emphasizes capacity building in community participation in sustainable forest management, facilitating internal and inter-agency connections in participatory forest community organizations, and strengthening knowledge and skill training in community forestry for local government officials, foresters, non-governmental organizations and farmers. Women, particularly in minority regions and poverty-stricken areas, are encouraged to participate in decision making of the local forestry development. The central government gives preferential terms in policy and finance in the forestry development of minority regions. China has set up quite a few participatory forest projects including cooperative

projects with World Bank and other multilateral and bilateral aid agencies. Introduction, development and experiment of participatory mechanism, method and means have been undergoing to suit the various kinds of social and economic conditions. During the process of implementing the natural forest conservation programme, a new way has been tested and disseminated to establish community joint management mechanism and family responsibility system on forest management and conservation.

8. Prevention of deforestation and degradation of forest and promotion of forest rehabilitation

There are various causes for deforestation and forest degradation. As far as China is concerned, it is mainly due to the improper land use. The Chinese government gives high priority to combating forest degradation and made great efforts in this regard. The issues related to this agenda are mostly the priority areas in China.

China has formulated and is improving a series of laws, regulations and policies concerning logging ban, degradation and forest rehabilitation.

The natural forest conservation programme contributes to preventing damages of natural forests and facilitating rehabilitation, while the land conversion program helps rehabilitate destroyed or degraded forest and forestland.

China's efforts on developing planted forest have been strengthened. On one hand it aims at meeting the demand of socio-economic development for timber resources and releasing the pressure on natural forest, on the other hand it helps expedite the process of restoration and rehabilitation of degraded land, particularly through the implementation of a series of shelterbelt programmes including the "Three North" (northeast, northwest and central north) shelterbelt programme.

9. Criteria and indicators for sustainable forest management and

their application

Technically speaking, criteria and indicators are important tools supporting sustainable forest management and the basis of the sustainable development assessment system. The establishment of China's criteria and indicators of sustainable forest management accommodates requirements to comply with international standards and the principles to suit the practical situations of China, and fully absorbs rational elements of other criteria and indicators system at the international level. When determining indicators, considerations are given to the differences in population, social economic development and natural conditions of each region in China and the characteristics of each forest type, quantity, quality and management status. Within the context of the national framework, criteria and indicators suitable for different ecological regions have been set up and experimented at different levels. In 1995, a working group for formulating criteria and indicators of forest sustainable management was established in China, consisting of experts from various fields. After commented by each party concerned, China's draft framework of Criteria and Indicators for Conservation and Sustainable Management of Forests was adopted. This draft also complies with the criteria and indicators of the Montreal Process. Coordinated with international cooperation projects, the draft was experimented in State-owned forest farms in Yichuan, Heilongjiang Province, arid and low forest cover region in Zhangye, Gansu Province, in western China and collective-owned forest farms in Fenyi, Jiangxi Province in south China. The draft national framework of Criteria and Indicators for Conservation and Sustainable Management of Forests will be issued recently. Research on criteria and indicators covering humid and sub-humid temporary zones, arid and sub-arid temporary zones, sub-tropical areas, forest mountain areas in the southwest and tropical areas has started and at the same time it is being experimented and put into practice in model forest. Under the regional framework, criteria and indicators for different forest management units will be determined as well. After being studied extensively, monitoring scales are being

formulated and experimented in other sustainable forest development demonstration areas.

In addition to involvement in the Montreal Process, China also takes an active part in academic activities sponsored by the Helsinki Process and ITTO criteria and indicators and will continue to participate international process in this field and scientific and technical exchanges to contribute to sustainable forest management in China and the world at large.

10. Traditional forest related knowledge

Many forest regions have accumulated their own traditional knowledge suitable for local forest ecosystems and environment biosphere. They play an important role in local people's lives and maintenance of forest ecosystems. The long historical practice proves that traditional knowledge and resources utilization method of many areas is valuable. Influenced by the sustainable development concept, relevant departments of China are beginning to collect and put into practice of the knowledge.

Chinese foresters have a systematic summarization of the traditional knowledge from different regions and reflect in articles about forestry, community forestry, participatory forestry and Chinese traditional medicine. This kind of knowledge and models gives valuable reference to sustainable forest management.

In the past, forest development strategy seldom gave consideration to the intellectual right of traditional forest related knowledge. Promoted by the concepts of sustainable development and the popularity of the intellectual property right protection, this kind of work will be strengthened in future. Traditional forest related knowledge shall not only be summarized but also needs to be disseminated in the practices of forest management. The government is formulating policies and mechanism to encourage organizations and entities to share, utilize and disseminate the traditional technology and models that have coordination between resources use and

conservation.

The way of China to disseminate traditional forest related knowledge is to go through mass media like TV, broadcasting and newspapers, training workshops and establishment of demonstration areas.

Traditional forest related knowledge is the treasure of human beings. It will be helpful to promote the world's sustainable forest development that the traditional knowledge and management mode of China such as agro-forestry management system is brought to the world and the knowledge and experience of other countries is introduced to China through the international organizations like UNDP, FAO and ITTO.

11. Scientific research and forest related knowledge

Along with the shift from the conventional forestry emphasizing timber production to sustainable forestry, the direction of China forestry research has taken great changes, ranging from fast growing and high yielding planted forest programme in the sixth five-year plan period to the planted forest nursery and forest ecological engineering research in the eighth five-year plan period, from the strategy of focusing on quantity and quality, increasing benefit and maintaining forestry stability under sustainable development in the ninth five-year plan to the priority on environment functions and multiple objective benefit in the tenth five-year plan. In the national major projects study, emphasis is put on the multi-disciplinary participation and coordination in the research. The results of the study will be the basis for decision making in forestry. In 1997, China established sustainable forest management model forest network, and then participated activities of the International Model Forest Network. These experiment and demonstration areas play a key role in formulating criteria and indicators for sustainable forest management and improving China's forest development strategy. They are also the base for materializing scientific research results and monitoring, assessment and reporting of sustainable forest management. In 2001, a national forest

certification working group was established, with Chinese Academy of Forestry as the technical supporting institute and World Wide Fund for Nature (WWF) as partner, to carry out studies and experiments in forest certification.

12. Forest health and productivity

The harmful gases produced by human activities will do harm to forest health when the density and scale increase beyond the durability of forest ecosystems. The assessment and monitoring of airborne pollution at national and regional levels will provide information in trans-boundary air pollution, and help take effective measures in the heavily polluted areas according the extent of pollution so as to safeguard the health and sound growth of forest.

According to estimated projections by relevant department, timber shortage in China between 2000 and 2010 will rise from 40 million m³ to 90 million m³. In order to meet the demand of the national economy for timber, the Chinese government has made corresponding policies to increase the forest resource base by vigorous development of plantation forests. As non-wood product plays an active role in providing opportunities in food, health and employment and improving the living standard of mountain inhabitants, it is necessary to study the yielding of non-wood products and take effective measures to materialize the sustainable management, utilization and development of non-wood products.

Along with the economic development, the demand for timber is increasing and the allowable resources for logging becoming less and less. Planted forest especially industry planted forest has become the priority in China's forestry development. As the Chinese government initiated the natural forest conservation programme in 1998, timber supply will mainly depend on the planted forest. In this connection, planted forest will assume the two major tasks of timber supply and ecological conservation.

13. Economic, social and cultural aspects of forest

The development of China's forestry gives priority to the establishment of two systems --- ecological forest system and forest industry system, complemented by implementing the differentiated management strategy. In China's western arid region and ecologically fragile regions, emphasis is given to forest ecosystem development and intensify efforts in building ecological shelterbelts. In the areas suitable for tree growing, efforts will be made to produce forest products. In the national forest projects, optimal results of economic, social and ecological benefit of forest will be sought.

China has carried out studies on forest resources assessment and explored various kinds of methods. The assessment process requires definition on various functions of forest including social benefit and ecological functions of forest, value of culture, aesthetics and religion, etc. Eco-tourism and leisure functions have been paid more and more attention.

Accounting of forest resource values shall be incorporated in the national policy formulation.

At the national level, workshops to exchange assessment method of forest product and services, information and research outcome were held.

It is still inadequate to study the impact of the trade measure of forest product and services on the country's environmental, social and economic functions. Study on the market research and economy of forest product is extensive, but there is little research on the non-wood product substitute and its economy.

14. Rehabilitation and conservation strategies of countries with low forest cover

From the point of view of the IPF/IFF proposals for action, low forest cover is related to the following 6 issues:

- (1) Rehabilitation and re-establishment of degraded ecosystems, conservation of fragile ecosystems, prevention of deforestation and land degradation (including desertification), among which the impact of planted forest in ecological rehabilitation and re-establishment has received great attention;
- (2) Poverty, fuel wood and the use of non-wood forest products;
- (3) Biodiversity conservation;
- (4) Use of traditional knowledge;
- (5) Trade of forest product and non-wood forest product
- (6) Financial and technical assistance and technology transfer.

Countries with low forest cover mainly distribute in Asia and Africa and are mostly developing countries facing drought and desertification. Among them, there are 63 countries and regions with a forest cover below 10% covering 24.62 million km², and 21 countries and regions with a forest cover between 10%-18% covering 18.12 million km².

Now the forest cover of China is 16.55% with uneven distribution. The figure is quite small in northwest and north China that is less than 6% in the northwest covering 314 million hm² and less than 9% in the north covering 70 million hm². Though in the southwest the forest cover goes beyond 18%, it is only between 21%-34% and most of these areas are mountain areas with vulnerable ecosystems, where 40%-50% forest cover is required for a sound ecological conservation.

15. Financial mechanism

In addition to the IFF proposal to mobilize public and private financial resources, all the IPF/IFF proposals for action require international organizations, developed countries to provide financial assistance to developing countries and countries with economies in transition to

achieve sustainable forest management.

The Chinese government attaches great importance to forestry and environment conservation. Especially in recent years, government has made huge input in forest programmes and takes incentive measures to use foreign private finance in afforestation and forest management.

16. International cooperation in capacity building and transfer of environmentally sound technologies for forest sustainable management

China supports exporting technology to apply new and advanced techniques. Through some international cooperation projects, China, in its national programmes, supports capacity building in sustainable forest management, such as structure establishment, staff training, research ability enhancement, policies and regulations, public participation, and management and decision making ability in cross sector and cross region comprehensive projects.

China pays great attention to apply environmentally sound technologies in forest product processing industry and is intensifying efforts in enlarging input for technology introduction and transfer, especially the environmental protection techniques.

China has conducted extensive international cooperation to strengthen capacity building and technology transfer and conduct research on technologies in forest management, reforestation, afforestation and forest product processing. Many international projects and foreign aid programs will take capacity building as an important part.

China supports the export of advanced technology to developing or less developed countries. For instance, China has held several international training workshops in agro-forestry management and bamboo and rattan management to help the poor countries and regions to boost its economy.

17. Promoting international trade of forest products and services to support sustainable forest management

China has just entered into WTO and committed to steady tariff reduction and non-tariff measures. China is also an important member of APEC and committed to liberalize nine sectors to promote trade and investment. Now China has banned all non-tariff measures of forest product trade and the tariff of forest products decreases in consecutive years.

The Chinese government has always attached great importance to elimination of any trade policies in conflict with WTO. Trade of forest product has seen high liberalization. Now any trading company that has import and export authority can do international trade in forest products. The Chinese government adheres to cracking down on any forms of trafficking and illegal trading. It is rare to see illegal trading in forest products.

The proposal to explore the possibility of using ITTO to all types of forests applies to the international community.

The Chinese government makes sustainable forest management as the ultimate goal and attaches great importance to certification as a market mechanism for sustainable management and international trade. Appropriate actions have been taken.

18. Forest related works in international organizations, multilateral organizations and mechanism

(1) Participation in international processes

The Chinese government always supports international organizations, arrangements and instruments to assume their respective responsibilities within their mandate.

(2) International organizations

The Chinese government supports and will take active measures to implement the IPF/IFF proposals for action in cooperation with international organizations and is willing to go with the international community to continue constructive dialogues on forests.