

China National Progress Report to the UNFF Secretariat on the implementation of NLBI and other relevant resolutions

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List of abbreviations

IFF	International Forum on Forests
IPF	Intergovernmental Panel on Forests
SFA	State Forestry Administration of P.R. China
NLBI	Non Legally Binding Instrument on all types of Forests
UNFF	United Nations Forum on Forest

Preface

The State Forestry Administration of P.R. China, directly under the State Council, is a government agency responsible for formulating forest laws and regulations, implementation of national forestry development strategy, carrying out afforestation programs, management of forest resources, conservation of wildlife, prevention and control of forest fire and implementation of international conventions including the Non-legally binding instrument on all type of forests (NLBI). The adoption of NLBI on December 2007 is a milestone in pushing sustainable forestry management worldwide. It will have great influence not only on the sustainable development of society, economy and ecosystems at national, regional and global levels, but also give greater priority to forestry in each country and provide a base for any future consensus on an international forestry convention.

Chinese forestry is a major component of the world's forestry. The Chinese government has always attached great strategic importance to forestry development and ecological improvement. Since 1978, shelterbelt projects have successfully taken shape throughout China in coastal, desert and mountainous areas, on plains, around major cities and in river valleys. After adjusting the structure of forestry development in 1998, China has since implemented 6 major nationwide programs and forestry projects including the:

- i. Natural Forest Protection Program
- ii. Grain for Green Program
- iii. Sandification Control Program in Beijing and Tianjin Vicinity
- iv. Shelterbelt Forestry projects in the North, Northeast and Northwest of China and the Yangtze River area
- v. Fast-growing and high-yielding program
- vi. Wildlife Conservation Program

By developing both forestry management and improving the natural environment, not only is there a more sustainable supply of timber and other forestry products available for Chinese people, but great contributions are made to decreasing the decline of the world's forest resources. Since the 1990s, China has acceded to many of the international conventions connected with the environment and is currently taking an active role in the work of the UNFF, in order to reach a consensus on the convention of international forestry management.

This document is a national periodic progress report based on China's action proposals for the Intergovernmental Panel on Forests (IPF) and the International Forum on Forests (IFF) and the NLBI. The report is written in accordance with the requirements of the UNFF and contains a summary of the forestry strategies, achievements and policies adopted in China since 2006.

1. The Importance of Forestry Development to the Chinese Government

The Chinese government has always paid great attention to the development of forestry, especially since the recent 17th Communist Party of China (CPC) National Congress. The government has attached strategic importance to forestry development and ecological improvement as they have become increasingly crucial factors to the sustainable development of society and the economy. Forestry has also been given priority in China's National Development Strategy. China's forestry has entered into the rapid development of three forestry systems and the building of modern forestry. For the first time in 2009, China held a Forestry Work Conference at the central government level. The conference clearly noted the strategic position and the mission of forestry in economic and social development. The status of forestry in these terms has been elevated. As a result of the steady progress in national forestry projects, development of mechanisms and systems and the strengthened management of forest resources, achievements have been made in the following areas:

- i. overall growth of forest resources;
- ii. improved ability to mitigate climate change; and
- iii. improved supply capacity of forest eco-products and eco-cultural outputs.

The government has laid a solid foundation to further build on China's forestry ecological, industrial and eco-culture development systems and promote a new scientific and integrative forestry development approach.

In September 2009 at the United Nation's Climate Summit, President Hu Jintao made a commitment to the world by stating that China would energetically increase forest carbon sinks and forest coverage by 40 million hectares and increase forest stock volume by 1.3 billion cubic meters by 2020 based on the 2005 levels. By the end of 2009, President Hu Jintao and other senior leaders issued important plans for the reform and development of forestry in China. Mr. Hu Jintao pointed out that through years of unremitting efforts, marked success has been attained in forestry

development and ecological improvement in China. He expressed his hopes that Chinese foresters would keep up the good work in the future by relying on human resources, science, technology and deepening reform. President Hu Jintao also stated that China would develop determination work for afforestation activity and aim to strengthen the conservation and management of forest resources to ensure the achievement of the goals for 2020.

In June 2009 at the Central Forestry Work Conference, Premier Wen Jiabao made a penetrating summary of China's forestry by noting the four important roles forests play in sustainable development, ecological development, western development and in the mitigation of climate change. At the same work conference, Chinese Vice-Premier Hui Liangyu also pointed out the four missions for forestry development in the new age. The missions state that forestry development should:

- i) be taken as a significant measure for the development of science;
- ii) work towards the development of eco-civilization i.e. living in harmony with nature;
- iii) act as the strategic choice to deal with climate change; and
- iv) act as an important approach to resolve problems facing farmers, agriculture and rural areas.

2. Major achievements in China's forestry development

Sixty years since the founding of The People's Republic of China, great achievements have been made in the forestry sector. Afforestation programs have been continuing forward and new progress has been made in the plantation of various types of vegetation. Key forestry programs have been implemented successfully, policies have been adjusted and the development of the ecological security system has been facilitated. Investment in the forestry sector is continuing to grow with more funds being used for key forestry programs. The forestry industry has developed steadily with both revenue and scale of production on the rise.

Forest pest and disease prevention and wildlife disease monitoring and prevention have also been enhanced. The development of an ecological cultural system started well with a diverse array of ecological cultural outputs including art exhibitions and publications. Scientific research ability has been greatly improved and forestry education is advancing steadily. The field of international cooperation and exchange

has expanded and major progress has been made in implementing international conventions. The reform of China's forestry management is going forward as planned and major progress has been made in all pilot areas. This progress will be discussed in more detail throughout the rest of this document.

2.1 Forest resources continue to increase

According to the 7th National Forest Resources Inventory (2009), by the end of 2008, China had 195.45 million ha of forest covering 20.36 percent of the total land area. The total standing stock volume of China's forests is 14.913 billion cubic meters, while the forest stock volume is 13.721 billion cubic meters. The area of forest land in mainland China, excluding Hong Kong, Macau and Taiwan, is 303.78 million ha, 193.33 million ha of which is actual forest. The total standing stock volume is 14.55 billion cubic meters, 13.363 billion cubic meters of this is forest stock volume. The area of natural forest in China is 119.69 million ha with a stock volume 11.4 billion cubic meters. There are 61.68 million ha of forest plantation in China with a stock volume of 1.96 billion cubic meters (Figure 1).



Figure-1 changes of China forest resource

Over the five year period 2004-2009, between the 6th and 7th national forest resource inventories, six major changes occurred in China's forest resources.

- 1) Both the forest area and its stock volume increased. The forest coverage grew steadily during the five-year period: The forest area rose by 20.54 million ha, resulting in the increase of forest coverage from 18.21 percent to 20.36 percent making a net increase of 2.15 percent. The standing stock volume grew by 1.128

billion cubic meters, while the forest stock volume increased by 1.123 billion cubic meters.

2) The natural forest area and its stock volume expanded. The obvious increase occurred in the natural forest protection program area, with natural forest area increasing 3.93 million ha and the stock volume reaching 676 million cubic meters. The net increase of forest area in the Natural Forest Protection Program site is 26.37 percent greater than the figures published in the 6th National Forest Resource Inventory. The net increase of stock volume is about 2.23 times more than the result published in the 6th National Forest Resource Inventory.

3) From 2004-2009, the area and stock volume of forest plantations increased and the trend of the potential forest or back up forest resource also increased. Over the same time period the net increase of plantation area was 8.43 million ha while the figure for stock volume was 447 million cubic meters. The area of immature plantation was estimated at 10.46 million ha of which arbor forest made up 6.37 million ha. This is a 30.17 percent increase compared to figures published in the 6th National Forest Resource Inventory.

4) The growing volume of forests increased by a large margin and harvesting activities were seen to move more towards plantations. The net increase in annual growing volume was 572 million cubic meters, while the increase in annual harvesting volume came to 379 million cubic meters. The growing volume of China's forests is still greater than its harvested volume and the surplus between the growing and harvested volumes continues to expand. From 2003-2008, the harvesting volume from natural forest decreased while plantation harvesting increased. The volume harvested from plantations represents 39.44 percent of China's total timber production – an increase of 12.27 percent.

5) The forest quality was improved and its ecological function was enhanced. The average stock volume per ha in the arbor forest increased by 1.15 cubic meters and the average growing volume increased by 0.30 cubic meters annually. The percentage of mixed forest also rose 9.17 percent nationwide. Due to the increase of forest resources, and the improved forest composition and quality, the ecological function of forest has been enhanced greatly.

6) The proposition of privately managed forest increased, which indicates that the tenure reform process has so far been successful. The percentage of privately run

forests in forested land area increased by 11.39 percent, representing 32.08 percent of the total area of forest. The percentage of privately managed plantations and immature forest is 59.21 percent and 68.51 percent respectively when compared with the corresponding figures at the country level.

The results of the 7th National Forest Resource Inventory (2009) indicate that China's forest resources have been in a period of rapid development. The implementation of key forestry programs has advanced steadily and the overall forest resource increases constantly. The multiple functions of forests are obvious and the provision of timber and other forest products such as ecological and cultural products has been enhanced. These results reflect the sound foundation that has been laid for an integrative forestry development approach, further ecological civilization and the advancement of scientific development.

2.2 Great steps forward in afforestation

By conducting a large-scale tree planting and land greening campaign, China has realized an increase in both forest area and stock volume. Over the last few years the plantation area has expanded at a speed of 4.67 million ha annually resulting in 61.68 million ha of plantation in total in 2009. During the period between 2006 and 2009, 19.36 million ha of plantation was completed. China's annual increase of plantation area and the total plantation size are both ranked first compared with the rest of the world representing 53.2 percent and 40 percent of the world's figures respectively.

The compulsory tree planting campaign in China is believed to be the most effective and largest tree planting campaign in the world in terms of scale and number of participants. China has 29 years of experience in compulsory tree planting. People from all walks of life ranging from national leaders to primary school students have participated in the planting activities with 53.8 billion trees on the ground in the last 29 years. Perhaps, it was with the encouragement and inspiration of this compulsory tree planting in China that the international community developed the *Billion Tree Campaign*. At present, seven billion trees have been planted through the campaign - 2.6 billion of which were planted in China. The tree planting activities in China can also be considered very innovative with various initiatives including adoption of land for greening, purchase of carbon credits and a contribution fund for those who would rather give than plant trees.

Due to China's large-scale tree planting campaign, the vegetated area in cities has now reached 1.35 million ha with green coverage of 37.37 percent. The rate of green

land is about 33.29 percent and the green area of per capita is about 9.7 square meters.

2.3 Steady Advancement of Key Forestry Programs

2.3.1 Natural Forest Protection Program

In order to restore and increase forest resources and to improve forest ecosystems and the environment, China formally launched the Natural Forest Protection Program in 2000 after two years of trial. The Program was implemented between 2000 and 2010, covering 734 counties and 167 forest enterprises in 17 provinces including along the upper reaches of the Yangtze and Yellow Rivers and in the North-east and Inner Mongolia which are traditionally key state-owned forest regions. Since the inception of the program:

- i) the area of established plantation has reached 2.66 million ha;
- ii) 3.19 million ha of forests have been established by aerial seeding;
- iii) 12.08 million ha of newly enclosed non-forested land and open forest land was set aside for natural regeneration;
- iv) 101.23 million ha of forest was taken into management and protection; and
- v) 621,500 foresters have re-settled in other locations.

2.3.2 Grain for Green Program

Conversion of croplands to forests is one of the key measures implemented by the Chinese government to improve the environment and fragile ecological situation of the program areas. This land conversion also helps to control flooding. The croplands that are being converted to forestland are mainly sloping (more than 25 degrees) and have sandy soil with low productivity and unstable yield of grain. In order to ensure adequate grain production is maintained, the Chinese government is increasing investment in the agriculture sector and making fundamental improvements to existing croplands to increase grain yields and to offset any possible loss in grain production caused by the conversion program.

The program will run from 2000 to 2016 and will be rolled out in two phases i.e. 2000 to 2007 and 2008 to 2016. By the end of 2009, 9.06 million ha of croplands had been converted to forests, 14.14 million ha of barren hillside and waste land had been forested and 1.93 million ha of non-forested lands and open forest lands had been enclosed to allow for natural regeneration. The accumulated grain subsidies and the cash subsidies paid to farmers reached 161.04 billion RMB and 19.5 billion RMB respectively.

2.3.3 Key Shelterbelt Development Programs along the Yangtze River

In order to control and improve the deteriorated environment along the Yangtze, Pearl and Hai Rivers and in coastal regions, several programs have been launched since 1989, including the Yangtze River Shelterbelt, Coastal Shelterbelt, Pearl River Shelterbelt, Taihang Mountain Greening and Plain Greening Programs. Starting in 2000, these programs have now entered into their second phase which has attracted more investment from the central government. These programs have collectively produced 4.29 million ha of plantation.

2.3.4 Coastal Shelter-belt Program

The Coastal Shelter-belt Program was launched in 1991, covering 261 counties in 11 provinces. By the end of 2008, 4.2 million ha of plantation had been established and 9384 kilometers of coastal forest belt was strengthened and renewed. The newly established farmer land shelterbelt forest has reached 680,000 ha, the control rate is about 81 percent and green coverage at villages is about 35 percent.

2.3.5 Key Shelterbelt Development Program in the three-northern regions

The Shelterbelt Development Program in the three-northern regions of China was launched in 1978, and it has since played a very important role in improving the environment and combating desertification in the area. By establishing farmland shelterbelt forest and planting trees on barren land, by the end of 2008, 24.47 million ha of forest had been conserved by the program and the forest coverage in the three-northern regions had increased from 5.05 percent in 1978 to 10.51 percent in 2008. The program has overseen the improvement of 270,000 square kilometers of sandy lands and the stabilization of 380,000 square meters of water and soil erosion areas.

The natural environment in the program area has been improved through the establishment of shelterbelt forests for farmlands and pastures as well as afforestation on the barren lands. This planting has contributed greatly to the increase of food production and has promoted the socio-economic sustainable development of these areas.

2.3.6 Sandification Control Program in Beijing and Tianjin Vicinity

The Sandification Control Program was launched in 2001 and involves 75 counties in 5 provinces. By the end of 2009, 8.15 million ha of desertified land had been treated through various means including 5.33 million ha of afforestation, 2.03 million ha of grass establishment and 784,100 ha of small water basin treatment using a total of 21.84 billion RMB investments.

2.4 Development of nature reserves and biodiversity conservation

By the end of 2010, 2035 nature reserves in the forest sector were established all over China covering 124 million ha and accounting for 12.9 percent of total county area. The basic infrastructure of the reserves has been improved greatly and the capacity of the management has been enhanced. There are now 431 centers for wild animal and 244 for wild plant reproduction and genetics. There are 69 wild animal zoos or safari parks that have been set up and 142 hunting grounds have been established. Across China there are 4526 wildlife conservation centers, 638 research and monitoring institutes and 122 centers for bird ringing management.

Significant progress has been made recently for China's wetland legislation with the draft "*Wetland Conservation Regulation of the People's Republic of China*" being developed. There are 8 provinces in China that have formulated their wetlands conservation regulations covering jurisdiction of more than 30 percent of China's land. There are 14 provinces in China that have each set up special institutes for wetlands conservation management and 10 provinces that have developed their blue print plan for wetland conservation.

By the end of 2010, 550 wetland nature reserves had been established throughout China and 2.21 million ha of wetland demonstration sites had been developed. There were 36 RAMSAR sites of international importance in China covering 3.81 million ha and more than 49 percent of all wetlands were under effective management. In addition to this, there are currently 100 national wetland parks in trial processes. In provinces across China, 120 wetland parks were officially established covering an area of 60,000 ha.

3. Policies and measures

3.1 Collective forest tenure reform

China boasts a rural population of 900 million and 2.7 billion mu (one ha equals 15 mu) of collective forest land. Mountainous areas take up nearly 70 percent of the

national territory and the population in these areas accounts for about 60 percent of the national total. The collective forest tenure reform is aimed at realizing the enormous potential of millions of farmers and collective forest land to not only liberalize and develop rural productivity and social wellbeing, especially in mountainous areas, but also greatly promote urban economic development.

The collective forest tenure reform undertaken in China has turned the collective forest from being state run into being privately run. It has defined the business entity of farmers and thus farmers' enthusiasm for forest protection, tending and afforestation has become unprecedentedly high. The collective forest tenure reform has been carried out across the country in 30 provinces (or cities/prefectures), involving 147 million farmer households and 510 million people - this is 70 percent of the rural population. By the end of 2009, the total area of forest-land with clearly defined forest tenure had reached 2.2 billion mu, accounting for 81.69 percent of the total area of collective forest land. More than 63 million certificates have been issued and 300 million farmers benefited.

The tenure reform brings benefits to the farmers by increasing income from the forest and contributing to the social stability in the country-side. The tenure reform also brings incentives to farmer resulting in more enthusiasm to work in the forests. The average output from the forest has increased from 84 Yuan per mu in 2003 to 198 Yuan per mu in 2010. The income percentage from forests in some households has also been rising up to 60 percent of the total income.

3.2 Reform in forest management system

The State Forestry Administration promulgated on December 26, 2008 the *Notice on Undertaking Pilot Trials for Reform in Forest Harvest Management* and initiated pilot trials for reform in forest harvest management in 193 counties (cities and prefectures) in 24 provinces (autonomous regions and municipalities). The pilot trials aimed to establish a new sustainable forest management mechanism based on forest management plans and shifting from quota management to more sustainable forest management. The changes also included looking at the multiple functions of forests and using a target management style.

The major aims of the pilot trials included exploring new mechanisms for sustainable management through the following:

- i) the development of a new approach to the management of forest resources consumption by reforming management of forest harvest quota;

- ii) to explore a new mechanism for the classified management of forest harvest by reforming harvest management;
- iii) to explore a new model for effective management by simplifying the approval procedure for forest harvest;
- iv) to explore a new system for sustainable forest management by increasing scientific guidance.

3.3 Increasing investment in forestry

The total annual investment in forestry from 1998 to 2010 increased from 13.532 billion Yuan per year to 122.96 billion Yuan per year. This represents an average annual increment of 20.18 percent. The investment in forestry from the central government budget reached 72.003 billion Yuan, while the same figure in 1998 was 5.653 billion Yuan.

The government investment in forestry includes central government investment as well as money from the local government. The proportion of investment in forestry from the central government budget rose from 0.8 percent in 1998 to 2.2 percent in 2003 and has, remained at 2 percent throughout the period of 2004-2009 (see Figure 2).

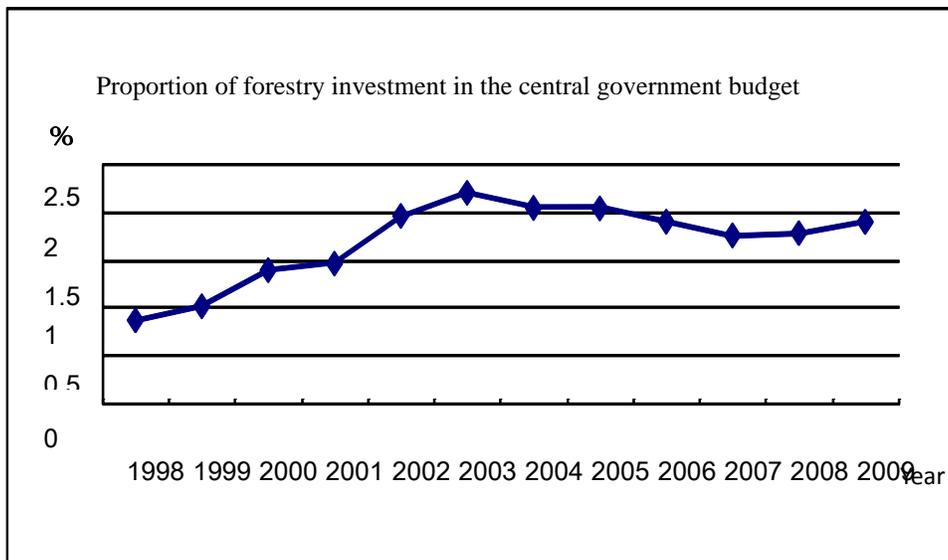


Figure 2: Proportion of Forestry Investment from the Central Government

3.4 Intensified efforts in forest fire management

The State Forestry Administration has initiated the National Mid- and Long-term Forest Fire Management Program. This program has aimed to increase infrastructure development for forest fire management and advance the pre-warning and monitoring systems for forest fire risks and fire fighting command. Program actions have included the “Ferretting out Forest Fire Causes” campaign and a helicopter deployment for the armed forest police; which has also enhanced the capacity for aerial forest protection and fire fighting in the northeast and southwest of China.

In 2009, the number and area of forest fires decreased by 38.4 percent and 18.4 percent respectively compared with those experienced in 2008. The number of forest-related fire cases handled in 2009 dropped by 23.1 percent from the previous year. Since the program’s inception, twenty-one grassland fire fighting command posts, 46 material storage warehouses and 70 grassland fire management stations have been established across the country. In addition to this 3000 km of fire breaks have been established annually along China’s borders throughout the country.

A total of 192 grassland fires broke out in 2009, with 24,800 ha of grassland affected. Fires have reached a historical low in China, with no casualties for the last two consecutive years.

3.5 Intensified management of forest pests and diseases

Efforts have been intensified in the control of *Hyphantria cunea* and *Bursaphelenchus xylophilus*, with *Hyphantria cunea* effectively controlled even though larva is still present. The area for rodent and pest control on grassland has increased each year, reaching 6.99 million ha for rodents and 5.17 million ha for other pests in 2009. This control has saved a potential direct economic loss of 1.09 billion RMB. Biological control has been adopted in China to bring 6.07 million ha of pest-affected areas under control. The use of biological controls increased remarkably during 2008.

3.6 Accelerating the development of the forest industry

China is a big world player in terms of production, processing, consumption and the import and export of forest products. The gross output value of the forest industry reached 1.44 trillion RMB in 2008 and 1.75 trillion RMB in 2009.

Over the last few years a new pattern of forest industry development has taken shape. It is based on market demands, development of industrial bases, elaborate and

profound processing and common development of multiple entities. First of all, the establishment and harvest of economic forest crops has become a highlight of the primary forestry industry. The output value arising from the establishment and harvest of economic forest crops including fresh and dried fruits, tea, traditional herbs and forest food reached 1.2979 trillion RMB during 2006-2009.

Secondly, the output of major products from the secondary forestry industry which focuses on the processing of timber and bamboo wood has had sustained growth. The output of sawn timber during 2006 to 2009 reached 113.86 million cubic meters, while the output of wood-based panels was 372.24 million cubic meters, the output of wood flooring was 1.332 billion cubic meters, the output of wooden furniture was 766.9 million pieces, and the output of rosin was 4.28 million tons.

Thirdly, emerging industries such as forest tourism have become new growth areas in the tertiary industry. The output value of forest tourism during 2006-2009 reached 258.2 billion RMB, with 2.17 billion tourists served. The forest industry has greatly supported and promoted the development of associated industries which have created a large number of employment opportunities, and have made significant contributions to supporting national economic development, facilitating ecological improvement and improving people's livelihoods.

3.7 Promoting development of ecological culture and enhancing public awareness

Since 2006 the theoretical and organizational system of China's ecological culture has been gradually improved, with a range of ecological culture associations, societies and other councils established. In addition, a host of ecological culture and civilization education bases have been set up and a group of modern forestry model cities and national forest cities have been named. The influence of ecological culture has been further extended in China and public awareness of ecological culture has been enhanced by means of a public benefit advertisement campaign, wildlife conservation publicity month, Bird-loving Week, Desertification Combating Day, Green Expo, Flower Expo, the Forest Tourism Festival and the Wetlands Cultural Festival.

3.8 Promoting forest certification

Forest certification was developed rapidly in 2009. It was developed in five stages:

- i. The Implementation Program and Criteria for Forest Certification was

initiated and implemented.

- ii. A forest certification institution was established and the review of forest certification entered a phase of substantive operations.
- iii. 24 demonstration plots for forest certification were established in 22 provinces. These plots were based on different forest areas and management entities in a bid to explore an effective management mechanism for the organic combination of forest certification and harvest management.
- iv. Capacity building was developed so that forest certification talents and teams could be fostered through extensive training at various levels.
- v. A program for accelerating forest certification and international recognition was initiated, which enhanced the capability of China's forestry to deal with such international trade barriers like the Lacey Act Amendment adopted by the U.S.

Forest certification is the necessary requirement of integrative forestry development. It is an effective channel for the development of the forest products market, an important means to consolidate the achievements of the collective forest tenure reform and a strategic option for accelerating the international integration of China's forestry. The State Forestry Administration has formulated the immediate objectives for the forest certification scheme:

By 2015:-

- i) trials in forest certification will be conducted in the state-owned and collectively-owned forest areas.
- ii) major export-oriented forest product production and marketing businesses will be encouraged to carry out Chain of Custody (CoC) certification and explore the extension of certification categories areas so that a national forest certification system can be initially established and international recognition achieved.

By 2020:-

- i) forest certification will be conducted in the state-owned and collectively-owned forest areas;
- ii) major export-oriented forest products production and marketing businesses will be encouraged to carry out CoC certification; and
- iii) further expand certification categories and areas so that the national forest certification system will be improved and the areas of international recognition expanded and sustainable forest management enhanced.

4. International cooperation

4.1 The establishment of the Asia-Pacific network for Sustainable Forest Management and Rehabilitation (APFNet)

The establishment of the Asia-Pacific Network for Sustainable Forest Management and Rehabilitation (APFNet), proposed by China and co-sponsored by Australia, the United States, Japan, Indonesia, Mexico, the Philippines, Brunei and Singapore was agreed to by the 15th APEC Economic Leaders' Meeting in September 2007 in Australia. The APFNet and the website of the Network launched on the 25th September 2008 in Beijing. The mission of the Network is to promote and improve sustainable forest management and rehabilitation in the Asia-Pacific region through capacity-building, information-sharing, regional policy dialogues and pilot projects.

The APFNet has four functions:

- i) Promote sharing of information.

The APFNet aims to improve communication and share the experience of sustainable forest management, protection and rehabilitation throughout the region. This function will initially be achieved through the establishment of the APFNet website.

- ii) To advance collaboration.

APFNet will develop pilot projects to spread criteria and indicators relating to existing forest in the Asia-Pacific region. The network will also explore the possibility of local communities taking part in reforestation and sustainable management as well as working towards fostering an effective partnership between the public and private sectors.

- iii) Unfolding policy dialogue.

APFNet will develop policy dialogues to enhance mutual understanding on the policies and practices of forest rehabilitation and sustainable management, as well as the prevention of deforestation. The "Network" will provide a platform for organizations and stakeholders to share applications and proposals for forest rehabilitation and sustainable forest management.

- iv) Improve capacity building.

The APFNet will hold symposiums and training courses focusing on forest rehabilitation and sustainable management, technologies and policies to

monitor carbon sinks, and to help the members to develop practical guidelines.

The nature of the APF network will work on two main principles :

i) Openness.

The APFNet will be open to economies and other interested partners outside of APEC.

ii) Complementary nature

The APFNet will collaborate with all regional forest initiatives and processes to identify synergies, avoid duplication, identify opportunities and facilitate cooperation.

The Network is intended to support the Multi-Year Program of Work of the United Nations Forum on Forests (UNFF) and the implementation of the NLBI, including the Global Objectives on Forests. The Network will also complement the Australian Government's International Forest and Carbon Initiative, as well as the regional work of the International Tropical Timber Organization (ITTO) and the Food and Agriculture Organization (FAO) of the UN.

The Chinese government has provided support to fund and staff the operation of the APF Network and its website.

4.2 China's International Forestry Co-operation: Signed Agreements

China does not only positively advocate, with respect to other countries, the carrying out of responsibilities to one another in order to achieve mutual benefit, a win-win result, acceleration of development and ensure funds and technology, but China also practices what is proposed. As mentioned, the Chinese government has helped establish the Asia-Pacific network for Sustainable Forest Management and Rehabilitation (APFNet). As well as this, for developing countries around China, the government has adjusted its policies of international forestry cooperation in order to strengthen forestry management and provide assistance through funds, technology and training. China has made a positive contribution in these countries in both forest rehabilitation and sustainable management, through increasing carbon sinks and reducing deforestation and the degradation of forests.

In the field of forest management, China cooperates with the European Union (EU), Germany, Australia, the UNFAO and many other countries and non-government

organisations (NGOs). Such collaboration has allowed for the implementation of successful forestry programs involving sustainable management and pest control as well as discussions on effective models for sustainable forest management.

China and the European Union has signed the agreement to establish *the mechanism of correspondence on law enforcement in forest and the management of governance between China-EU*. According to the agreement, China and the EU will discuss and promote the cooperation of forest law enforcement and the management of governance.

In the field of combating illegal logging and related trade, China has signed the memorandum of cooperation with Indonesia, the United States, the European Union and Australia. China has actively promoted the bilateral cooperation, improved green purchasing and cracked down on illegal logging.

5. Support given to UNFF

5.1 UNFF Affairs Office

In April 2009, the UNFF Liaison Affairs Office was set up within the International Forestry Cooperation Center, State Forestry Administration, P.R.China (IFCC-SFA) to fulfill the mandate in terms of UNFF affairs, including without limitation, to support the implementation of the NLBI in China. The UNFF Affairs Office has formulated a work plan and has formed a series of expert consultation groups. At present, the UNFF Liaison Office is drafting the National Action Plan (NAP) for the implementation of UNFF in China.

5.2 UNFF Country Led Initiative Conference

In November 2009, SFA organized *A Country-Led Initiative by the People's Republic of China in Support of the United Nations Forum on Forests* in Gui Lin, Guang Xi province, China. More than 300 representatives from 87 countries attended the conference and extensive discussions were provoked throughout its duration. *The Gui Lin statement* was finally published at the end of the conference to witness the consensus successfully achieved there.

5.3 Reform of the Forest Tenure System

On June 8th 2008, the CPC Central Committee and the State Council promulgated the “*Opinions on Overall Promotion of the Reform of Collective Forest Tenure System*”, which sets down that the property rights of Collective Forest tenure must be defined clearly and that farmers should be regarded as the main body of forest management with the management right to be provided to them within 5 years. Throughout the phase of reform, a development mechanism would gradually be worked out through the continuous amelioration of policy and correlated management measures, in order to achieve both resources growth and the increment of farmers’ income. This would improve the social prosperity in forest areas and therefore work towards harmonized societies with sound ecosystems. Such kind of reform has become the extension of land tenure reform in China. The adoption of the reform corresponds with public opinion and the need to innovate land use in the rural areas of China.

5.4 Nature Reserves

By the end of 2010, through efforts made by the national forestry system, 2035 nature reserves, of four different types (forest, wetland, desert and wildlife), with the total area of 124 million ha were identified – they represent 12.9 percent of China’s territory. The nature reserve listings include 246 national nature reserve parks, which collectively cover an area of 77 million ha, forming the main part of nature reserves in China. The nature reserve area effectively maintains the integrity of 90 percent of China’s terrestrial ecosystem, 85 percent of its wild animal stocks, 65 percent of its high-rank plant community and is covered by 20 percent primary forest, 47 percent natural wetlands and 30 percent typical desert. The reserves have played a pivotal role in preserving China’s ecosystems and biodiversity as well as contributing to sustainable development in China.

6. Strengthening of political commitment for future sustainable forest management in China

6.1 Afforestation

From 2004 to 2008, the net area of artificially planted forest increased 8.4311 million ha, which shows an increase of 31.21percent when compared with data for last five-year period. Also between 2004-2008, the net growth of stock volume for artificially planted forests reached 0.447 billion cubic meters. In 2009, China’s total afforestation area was 6.2623 million ha.

6.2 Double Increase

By 2020, the total forest area in China is expected to increase 40 million ha compared with 2005 figures. The national net stock volume has manifested an increase of 0.13 billion cubic meters.

6.3 Climate Change National Action Plan

In 2007, China published the “*National action plan for adopting and mitigating Climate Change*” in which the protection and improvement of forest resources has been listed as a significant means by which to address climate change, it is also proposed to be the key component for the national action plan.

7. Capacity Building and Technology Transfer

China has established a relatively comprehensive system for forestry-related personnel training and capacity building, including higher education, secondary education and vocational education. This education meets the basic demands required for employment in forestry management and operation. In 2008, 56 656 people were enrolled in forestry higher institutions, 31008 people graduated from these institutions and 120 training workshops were held across China training approximately 12 000 people.

8. Forest Law Enforcement and Governance

In October, 2007, the State Forestry Administration of China (SFA) and the European Union co-sponsored the International Conference on Sino-EU Forest Law Enforcement and Administration which was convened under the framework of political commitment to combat illegal logging with participants from timber producing countries, consumption countries, various enterprises, environmental protection institutions and other stakeholders.

The agreement of *The Bilateral Coordination Mechanism on Sino-EU Forest Law Enforcement and Governance* was inked by China and the EU Environment Council. Based on this agreement bilateral cooperation in terms of forest law enforcement and governance will be discussed and conducted.

9. Promotion of Global Forest Objectives

China is equipped with a comparatively thorough monitoring and evaluation system for forest resources. There are particular teams with expertise on forest resources management on both national and provincial levels with several years experience of monitoring and evaluation practices. Forest resources monitoring and evaluation is conducted every five years, focusing on forest resources and biological diversity. An inventory report is published after each monitoring and evaluation period.

The Global Forest Objectives have been promoted in China through the following efforts:

- i) China's continued large-scale afforestation, and stock volume plantation forests program, which is the largest in the world with over 60 million hectares already planted.
- ii) China continues to carry out the forestry ecological program to increase forest coverage.
- iii) Continued rollout of forest tenure reform to improve income of forest farmers.
- iv) Continued issuing of preferential forestry policies to enhance livelihood in the forest regions.
- v) Formulation of forest certification standards and the launch of forest certification activities to increase the number of certified forest products.

10. Opportunities and Challenges

10.1 Opportunities

With the implementation of the national strategy for sustainable development, forestry is playing an increasingly significant role in social and economic development. There are a growing number of preferential forestry policies that bring good opportunities for sustainable forestry development.

10.1.1 National opportunities

On the national front, changes have been taking place with influence from both home and abroad. The growing population and economic development are the driving forces behind China's profound changes. Accelerated industrialization and urbanization will further exacerbate natural resources and therefore environment and society has to go through economic and social transition to embark on a new stage of sustainable development.

Since the recent 17th Party Congress, the central party committee and state council have integrated ecological civilization into the overall National plan, together with the political, economic, cultural, societal undertakings of China. China adheres to coordinated green development, with dedication to the development of a resource conservative and environmentally friendly society. China is currently accelerating the expansion of public services, improving the ability of local governments to provide essential public services and accelerating structural adjustment, environmental protection and livelihood improvement as well as pursuing other strategic objectives. These initiatives provide forestry with unprecedented development opportunities.

10.1.2 International Opportunities

On the international level, there has been deepening global understanding of forestry's role in maintaining the human race's survival and the future of the earth. In the context of economic globalization and increasingly fierce political games, forestry has manifested itself in the global arena - becoming a commanding force of diplomatic strategy and playing an increasingly important role in enhancing national influence and safeguarding national interests.

Looking at the trend of the world's economic development, the development of forestry has become an important indicator of national wealth, prosperity and social progress. During such critical international meetings as the United Nations Climate Change Summit, the Copenhagen Climate Conference, the APEC leaders meeting, and the 13th World Forestry Congress, the irreplaceable capability of forestry to address climate change and the sustainable development of economic society attracted considerable attention. China's forestry actions to reduce climate change include working towards:

- i) reducing deforestation and forest degradation, whilst planting forests and improving forest quality; and
- ii) strengthening development and management of nature reserves and urban forests

Looking to the future, China will take the opportunity to actively participate in global ecological conservation and increase the influence of forestry in China.

10.2 Challenges

China lacks forest resources, and the conflict between the supply and demand of these resources is becoming increasingly acute. Sustainable forestry development still remains a rigorous undertaking in China.

10.2.1 Poor Basis for Forest Resources Management

Forest resources in China are low in amount and quality, providing insufficient ecological services. The forest coverage rate is only about two-thirds of the global average rate, forest area per capita is less than one-quarter of the global average, and stock volume per capita is only one-seventh of global average. The stock volume of arbor tree forests per hectare in China is only 78 percent of world's average. Medium age and young forests account for two-thirds of total forests and are characterized by poor quality and low yielding forest stands. Therefore, the basis for sustainable forest development in China can be seen to be somewhat lacking.

10.2.2 Forest Resource Conservation

Forest resource conservation still has some prominent problems. Besides insufficient forest resources, the fragile ecological situation has not been fully improved, with low quality forests, increasing conflict between demand and supply, and substandard existing land suitable for afforestation. It is predicted that afforestation in the future will become more difficult for China. Therefore, China will continue to depend on technological innovation, striving to increase the total amount and quality of forest, enhance ecological services, focus on the ability to address climate change and promote scientific research development of an integrative forestry approach.

10.2.3 Forest management

China will continue to promote sustainable forest management, aiming to improve the quality and benefits of forests. Sustainable forest management is the eternal theme of an integrative forestry approach. Starting with a deficient basis, China has plenty of room for improvement in terms of productivity and utilizing the multiple functions of forests. Therefore, sustainable forest management must be a crucial issue for scientific research development. China will establish and perfect the compensation system of afforestation, tending, protection and management to strengthen overall forestry management and effectively address problems of the extensive management system, low quality forests and inefficiency.

10.2.4 International Co-operation

China will continue to strengthen and expand international cooperation and learn from the experiences of forestry in developed countries regarding the following issues:

- i) forest management and technology;
- ii) illegal logging and related trade; and

iii) healthy development of the global forests.

11. Recommendations to UNFF

11.1 Fulfillment of political commitments

It is advisable that UNFF encourage governments to fulfill their commitment in forestry and enhance their implementation on UNFF action proposals and resolutions. Governments should raise awareness of forestry management through supporting UNFF work and taking the initiative to implement UNFF resolutions.

11.2 Co-ordination and pilot projects

It is advisable that the UNFF secretariat aim to strengthen synergy with other conventions, especially the relevant activities of UNFCCC. It is recommended that organizing side events and sustainable forest management (SFM) work in different countries would be beneficial, as would conducting pilot projects to review the feasibility of implementing IPF/IFF and NLBI's action proposals with outputs focusing on experience and achievements.

11.3 Communication

It is advisable that the UNFF secretariat strengthen exchange and cooperation with all relevant countries especially those responsible for UNFF implementation on a regular basis. It is also recommended to make good use of international conferences to encourage information exchange between related officials.

11.4 Experience sharing

It is advisable that the UNFF secretariat aim to share the good experiences in implementing NLBI resolutions via training workshops or seminars and help countries to solve practical problems.

11.5 Support of Implementation Office

It is advisable that the UNFF secretariat support and guide implementation offices around the world in terms of finance, technology and by virtue of technical training and/or delegating experts to different countries.

11.6 Expansion of regional office network

It is advisable that the UNFF secretariat work in different regions globally and that

local offices be set up for coordinating and organizing regional countries to carry out sustainable forestry management work and explore effective approaches of implementing action proposals.