China's Voluntary National Contribution to Achieving the Targets of Global Forest Goals for the United Nations Strategic Plan for Forests (2017-2030)

The Chinese government fully recognizes the importance of the forests' multiple functions to people and has always attached great importance to forest conservation, restoration, and sustainable management. We continuously improved domestic policies and systems, increased input to better play the forests' role in poverty alleviation, addressing climate change, and biodiversity conservation. In order to further promote the implementation of the United Nations Strategic Plan for Forests (2017-2030), the following actions has been or will be taken by the Chinese government to achieve various targets of the Global Forest Goals as voluntary national contributions (VNC).

Global forest goal 1

Reverse the loss of forest cover worldwide through sustainable forest management, including protection, restoration, afforestation and reforestation, and increase efforts to prevent forest degradation and contribute to the global effort of addressing climate change

1.1 Forest area increase by 3 % worldwide

-- The forest cover in China will reach 23.04 % by 2020 through afforestation and reforestation efforts.

1.2 The world's forest carbon stocks are maintained or enhanced

--By 2020, the stock volume of arboreal forests per hectare will increase by 5.2 cubic meter compared with that of 2015, and the total forest carbon stocks will achieve 9.5 billion tons;

--By 2020, 7 million hectares of national reserve forest will be established.

1.3 By 2020, promote the implementation of sustainable management of all types forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally

- --China will prioritize the promotion of intensive management of commercial forests and rehabilitate the degraded forests, so as to improve the quality and stability of forests.
- --By 2020, forest management supporting system will be basically set up. By establishing forest management plan system and perfecting forest management standards at national, sectoral and local level, the promotion and implementation of sustainable forest management will be guaranteed institutionally.

1.4 The resilience and adaptive capacity of all types forests to natural disasters and the impact of climate change is significantly strengthened worldwide

- --By improving forest management, the resilience and adaptation capacity of forests will be strengthened.
- --Animal epidemic disease warning and forecasting system will be improved to strengthen the adaptation capacity of fauna and flora to natural disasters.
- --By 2020, 223 warning and forecasting stations and two national research centers of wildlife epidemic diseases will be built additionally to promote the monitoring, prevention and control of epidemic diseases of wildlife.
- --By 2020, the annual afforestation area will be above 5 million hectares, and forest stock volume will reach 16.5 billion cubic meters, with forest carbon sequestration capacity further improved.

Global forest goal 2

Enhance forest-based economic, social and environmental benefits, including by

improving the livelihoods of forest-dependent people

2.1 Extreme poverty for all forest dependent people is eradicated

- --China will enhance the protection of ecological resources in poverty stricken areas and improve ecological benefit compensation system with higher compensation standards to benefit more impoverished people.
- --According to local conditions of poverty-stricken areas, woody food and oil industry, under-forest economy, and forest tourism are encouraged to be developed on the basis of ecological conservation with supports from the government. Through such key forestry programs and policies as shelterbelt system development, conversion of farmland to forest and grassland, afforestation subsidies and forest tending subsidies, supports have been provided to enterprises, cooperatives, family forest farms, and individual farmer households to develop economic forest bases.
- --By 2020, the quantity of forestry employment will be increased to around 60 million, from 52.47 million in 2015, and the gross output value of forestry industry will exceed 8 trillion Yuan (approx. US\$ 1.23 trillion), compared with 5.94 trillion Yuan (approx. US\$ 913.8 billion) in 2015.
- --The Chinese government will compensate the impoverished people live in ecologically important and fragile areas to help them to get rid of poverty. For example, people with labor capacity can be employed as forest rangers and forest firefighters to achieve poverty alleviation through ecological approaches.
- --All impoverished people in China, including forest-dependent poor population, will be alleviated from poverty by 2020.

2.3 The contribution of forests and trees to food security is significantly increased

--In the past four decades, more than 400 thousand square kilometers of soil and water erosion areas have been restored by the Three-North Shelterbelt Development Programme. 44.1% of cropland in project areas has been sheltered by networks of

shelterbelt forests. Crop production has been raised by 8-15 %. Some 30.193 million hectares of cropland has been protected with the total amount of crop production increased by 423 million tons in accumulation.

- --China will improve the germplasm resources collection and reservation system and fine seeds production-supply system of the woody oil plants, develop database of woody oil plant germplasm resources, including Camellia Oleifera, walnut, peony (for edible oil), olive, Eucommia ulmoides Olive, oil palm and etc., and promote the construction of fine seeds bases, designated seedling production bases and standardized demonstration bases.
- --By 2020, the size of Camellia Oleifera plantation will reach 4.4 million hectares.
- --By 2020, 16.78 million hectares of bio-energy plantations will be established, with annual forest biomass utilization exceeding 20 million tons of standard coal, and the contribution rate of liquid bio fuel and biomass heat utilization up to 30 % and 70 % respectively.

2.4 The contribution of forest industry, other forest-based enterprises and forest ecosystem services to social, economic and environmental development, among other things, is significantly increased

- --The Chinese Government will expedite the upgrading of forest product processing industry, and strengthen the transformation and upgrading of wood and bamboo processing, forest chemical industry, pulping and paper-making, as well as forestry equipment manufacturing industry.
- --Great support will be given to the development of emerging strategic industries, development of green building industry featured by wood framed building, forestry biological industry, biomass energy and new materials industry, and promotion of high-efficient transformation and integrated utilization of forestry biomass.
- --Forestry chemical industry will be upgraded. By 2020, the gross output value of

forest chemical industry will exceed 120 billion Yuan (approx. US\$ 18.46 billion).

- --By 2020, the steady growth on the total output value of under-forest economy and farmers' income from forestry will be realized, and the area of under-forest plantation will reach 18 million hectares, with the total output value of 1.5 trillion Yuan (approx. US\$ 230.77 billion). Meanwhile, the total output value of bamboo industry will be over 300 billion Yuan (approx. US\$ 46.53 billion), driving the employment to more than 10 million.
- --By 2020, 800 counties will reach the standard of "key woody oil production counties", with 13.33 million hectares of oil-bearing plantation area established and 1.5 million tons of oil produced annually.
- 2.5 The contribution of all types of forests to biodiversity conservation and climate change mitigation and adaptation is enhanced, taking into account the mandates and ongoing work of relevant conventions and instruments
- --China has set up pilot and demonstration sites to implement the *UN Forest Instrument* at national and sub-national levels.
- --China is promoting green financing system and enhancing the application of the criteria and certification system for low carbon green technologies.
- --The Overall Plan on the Development and Management of National Parks System has been formulated to establish a mechanism of diversified sources of funds with government's financial input as the main part based on the public benefit functions of national parks.
- --Utilizing the funds from the Global Environment Facility (GEF), China is collaborating with the United States Food and Agriculture Organization (FAO) in conducting the project of Sustainable Forest Management in China for Improving the Capacity of Forests in Combating Climate Change.

Global forest goal 3

Increase significantly the area of protected forests worldwide and other areas of sustainably managed forests, as well as the proportion of forest products from sustainably managed forests.

- 3.1 The area of forests worldwide designated as protected areas or conserved through other effective area-based conservation measures is significantly increased.
- --China is establishing national park system and solving various problems of protected land management, resulted from multi-sectoral management, through establishing integrated management institution and carrying out natural resources asset registration, so as to push forward the reform of protected lands management system in an orderly manner.
- --By the end of 2017, some 2750 nature reserves had been established in China with a total area of 1.47 million square kilometers, accounting for about 14.86% of land territory.

3.2 The area of forests under long-term forest management plans is significantly increased

--The Chinese government will establish a system by which the management bodies develop forest management plans according to forest management program and carry out forest management activities according to forest management plans, so as to gradually build a forest management system featured by the integration of "forest management program, forest management plan and annual production plan".

3.3 The proportion of forest products from sustainably managed forests is significantly increased

--China is developing green ecological industry, especially establishing plantations of trees of valuable species, fruit trees, herbal medicines and woody grain and oil trees.

--A complete institutional framework and criteria system, China Forest Certification Council (CFCC), has been established. The CFCC certification expands from traditional forest management and chain of custody to non-wood forest products, bamboo forests, carbon sequestration forests, ecological and environmental services of forest and rare and endangered species bred in captivity for commercial use.

--By 2020, the category and scope of forest certification will be expanded through encouraging forest management certification in state-owned forests and collective forest areas and chain of custody certification among major forest product enterprises. A comparatively mature forest certification market will take shape, national forest certification system be improved, and international mutual recognition be further expanded so as to enhance sustainable forest management.

--China will promote the acceptance of CFCC certification by the market and incorporate certified forest products into government procurement system and green market system, in a bid to promote the development of green forest product market.

Global forest goal 4

Mobilize significantly increased, new and additional financial resources from all sources for the implementation of sustainable forest management and strengthen scientific and technical cooperation and partnerships.

- 4.1 Mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation.
- --China establishes and perfects the financial supporting system for forest management, develops forest tenure mortgage loan system and motivates financial institutions to develop financial products that reflect the features of forest

management with matching loan period and grace period, preferential interest rates and simplified procedures.

- --Local governments are motivated to subsidize forest management with local finance. Establishment of the forest ecological benefits compensation mechanism with dynamic adjustment and graded compensation is being explored.
- 4.2 Forest-related financing from all sources at all levels, including public (national, bilateral, multilateral and triangular), private and philanthropic financing, is significantly increased.
- --In 2018, the total investment from the central government of China in forestry and grassland amounted to 140 billion Yuan (approx. US\$ 20.9 billion).
- --State-owned Forest Farms Project financed by the GEF are launched to assist pilot forest farms in formulating and implementing sustainable forest management plans;
- --The cooperation between China and the World Bank in forestry developent has yielded extraordinary achievements, with 6 loan projects of US\$ 1.724 billion having been implemented, including US\$ 897 million from the Word Bank and US\$ 827 million dollars from local co-financing at different levels.
- --The guiding role of the public finance was given full play to encourage and attract business entities of various kinds to invest in forest management, so as to establish a multi-investment system of forest management participated by the central government, the local governments and business entities.
- --Forest catastrophe insurance fund and forest catastrophe reinsurance are being established to improve forest insurance system.
- 4.3 North-South, South-South, North-North and triangular cooperation and public-private partnerships on science, technology and innovation in the forest sector are significantly enhanced and increased.
- -- The Association for the Promotion of International Investment and Trade (APIIT) of

China National Forestry Industry Federation (CNFIF) has been founded to assist the government in guiding and supervising the overseas investment of Chinese enterprises and promoting the "going out" strategy of forestry;

- --Public-Private Partnership (PPP) mechanism has been actively promoted and implemented to introduce capital from financial institutions, private sectors and social funds into forest management through equity cooperation and other models.
- --Element resources of all kinds have been accumulated to promote financing for forest management by accelerating the establishment of forestry property transaction system, forest tenure trading market and forestry carbon sequestration market.
- --Collaborative forestry scientific researches have conducted in cooperation with Europe Forest Institute and other institutions in the UK, Russia and Estonia.

4.4 The number of countries that have developed and implemented forest financing strategies and have access to financing from all sources is significantly increased.

- --The Chinese government actively supports sustainable forest management in Asia-Pacific region and the development of Asia-Pacific Network for Sustainable Forest Management and Rehabilitation (APFNet);
- --Research Report on the Development Status and the Investment and Financing Planning of China's Forestry Development (2018-2023) was compiled to offer references for forestry investment and financing.

4.5 The collection, availability and accessibility of forest-related information are improved through, for example, multidisciplinary scientific assessments.

- --The informatization rate of forestry in China will reach 80% in 2020, 17.65 percentage points higher than that of 2016 (62.25%).
- --The National "One-Map" Public Service Platform for Forestry established by the National Forestry and Grassland Administration provides foundation for the

management, monitoring and supervision for forest resources, and offers services for shared application by the forestry sector and for cross-sectoral work.

- --The Platform for Shared Forestry Resources has been established as a tool used for the management, collection, storing and sharing of various types of forestry data sources, and also a component of informatization and integration of forestry resources.
- --The integration of Beidou Navigation Positioning System with forestry work is being promoted to accelerate its application in such emergency commands as forest fire prevention, diseases and pests control and sand storms control.
- --China has established the Forest Biological Diversity Monitoring System to monitor the change of biological diversity of forests in China.
- --The National Forest Resources Monitoring System has been set up to update the fluctuation of forest resources, forecast the development tendency of forest resources and provide scientific decision-making services for forestry management.

Global forest goal 5

Promote governance frameworks to implement sustainable forest management, including through the United Nations forest instrument, and enhance the contribution of forests to the 2030 Agenda for Sustainable Development

- 5.1 Number of countries that have integrated forests into their national sustainable development plans and/or poverty reduction strategies is significantly increased.
- -- The Chinese government has always attached great importance to forestry and incorporated forestry development goals into the outlines of national development plan which regulate forest cover and forest stock volume as key obligatory targets with a 5-year cycle.

- --The Chinese government devotes greater efforts constantly by implementing a number of significant forestry programs for ecological conservation and restoration, including the Natural Forest Protection Program, Conversion of Farmlands to Forests and Grassland Program, and the Program for the Development of Key Shelterbelts.
- --In implementing national strategies for poverty alleviation, the Chinese government took major actions on poverty alleviation via ecological approaches which takes forestry as the main player, formulated the Working Plan of Poverty Alleviation with Ecological Approaches and incorporated forestry development and ecological improvement into the Outline of Development-oriented Poverty Reduction Program for Rural China (2011-2020).
- 5.2 Forest law enforcement and governance are enhanced, including through significantly strengthening national and subnational sorest authorities, and illegal logging associated trade are significantly reduced worldwide.
- --Through legislation and formulating administrative regulations, the Chinese government has built up and implemented a whole set of system for forest resources management, comprised of, inter alia, forest harvesting quota system and licensed logging system. Law enforcement by timber inspection stations and forest police will also be strengthened to ensure the legality of logging, transportation, and processing of timer or wood products within the territory of China.
- --China is considering formulating regulations on enhancing the management of the legality of imported timber which will be linked with international market and be integrated into domestic forestry administrative and law enforcement system.
- --The Forest Law of the People's Republic of China will be amended and improved to bring the formulation and implementation of forest management plans into the legal system.
- --China will set up and improve the system of legality verification of timber in China

to connect with other relevant countries and economies.

- --China has formulated the Guide on the Sustainable Management and Utilization of Overseas Forests by Chinese Enterprises and the Guide on the Sustainable Cultivation of Overseas Forests by Chinese Enterprises to provide guidance for Chinese companies in the sustainable cultivation, logging and processing of overseas forest resources, regulate overseas investment and trade on forests by Chinese enterprises, and explore win-win cooperation models that are integrated with the sustainable social, economic and environmental development of local communities.
- --China has signed bilateral Memoranda of Understanding on combating illegal logging and associated trade with relevant countries and regional economic organizations, including the United States, European Union, Indonesia, Australia and Japan, to promote policy dialogue and information sharing.
- 5.3 National and subnational forest-related policies and programs are coherent and complementary across ministries, departments and authorities, consistent with national laws, and engage relevant stakeholders, local communities and indigenous peoples, fully recognizing the United Nations Declaration on the Rights of Indigenous Peoples.
- --China puts into action the strategic thought of considering mountains, rivers, forests, farmlands, lakes and grasslands as a community of shared life by setting up one single ministry to be responsible for the management of all space use within China's territory and to conduct unified conservation and restoration of all land resources.
- --Legislation is enhanced in key areas of forestry to improve the system of laws and regulations covering the eco-systems of forests, wetlands, deserts and grassland, and bio-diversity, with focus on the amendment of Forest Law and Wildlife Conservation Law and the formulation of regulations on wetland conservation.

Global forest goal 6

Enhance cooperation, coordination, coherence and synergies on forest-related issues at all levels, including within the United Nations system and across member organizations of the Collaborative Partnership on Forests, as well as across sectors and relevant stakeholders.

- 6.3 Cross-sectoral coordination and cooperation to promote sustainable forest management and halt deforestation and forest degradation are significantly enhanced at all levels.
- --By formulating the Guide on the Sustainable Management and Utilization of Overseas Forests by Chinese Enterprises and the Guide on the Sustainable Cultivation of Overseas Forests by Chinese Enterprises, China has made concerted efforts with other countries in combating deforestation and forest degradation.
- 6.4 A greater common understanding of the concept of sustainable forest management is achieved and an associated set of indicators is identified.
- --Through active participation in the international initiatives on the conservation and sustainable management of forests, such as the Montreal Process and ITTO Process, China is engaged in the development of the international criteria and indicators system and has developed the criteria and indicators system at national and sub-national level.