# China's Biodiversity Conservation Strategy and Action Plan (2023-2030)

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#### Forward

Biodiversity enlivens the Earth and is the basis for human survival and development, as well as the lifeline and foundation of the Earth's living community. However, affected by the loss and destruction of natural habitats, over-utilization of natural resources, environmental pollution, invasion of alien species and climate change, the rate of species extinction has been accelerating, and the function of ecosystem services has declined markedly, posing a serious threat to the survival of humankind and to sustainable development.

In 2022, fifteenth Conference of the Parties to the Convention on Biological Diversity (COP15) Phase II resulted in the Kunming-Montreal Global Biodiversity Framework, which sets out a new blueprint for global biodiversity governance in the coming period to realize the 2050 vision of a world where human beings live in harmony with nature.

Urgent action must be taken before 2030 to halt and reverse the trend of biodiversity loss and put nature on the road to recovery. As President of COP15, China has played an important leading role in promoting the conclusion of the Kunming-Montreal Global Biodiversity Framework, and accelerating the implementation of the relevant outcomes in China will further demonstrate its role as a responsible big country.

China is rich in biodiversity. The Chinese government has firmly established and practiced the concept that lucid waters and lush mountains are invaluable assets, adhering to respect for nature, conformity to nature and protection of nature, actively promoting the construction of an ecological civilization and the protection of biodiversity, and releasing and implementing China's Biodiversity Conservation Strategy and Action Plan.

China has also established a coordination mechanism under the State Council to strengthen biodiversity conservation, continuously promoted the mainstreaming of biodiversity, innovated the implementation of the ecological protection red line system, set up a nature reserve system with national parks as the mainstay, delineated 35 priority areas for biodiversity conservation, carried out major projects for biodiversity conservation, and stepped up law enforcement and supervision. As a result, a large number of rare and endangered species have been effectively protected, and the diversity, stability and sustainability of ecosystems have been continuously enhanced, leading to a road of biodiversity conservation with Chinese characteristics, and making important contributions to global biodiversity governance.

In 2021, the General Office of the Central Committee of the Communist Party of China and the General Office of the State Council issued the Opinions on Further Strengthening Biodiversity Conservation, which clarified the new objectives and tasks for further strengthening biodiversity conservation in the new period and provided guidelines for various departments and regions to carry out biodiversity conservation work.

In 2022, the Chinese Government proposed that Chinese modernization is a modernization of

harmonious coexistence between human beings and nature, and made the promotion of harmonious coexistence between human beings and nature one of the qualitative requirements for Chinese-style modernization, making a major plan for the construction of an ecological civilization and the protection of biodiversity, and providing guidance for the promotion of the construction of an ecological civilization and the protection of biodiversity in a new era.

In order to actively promote the implementation of the Opinions on Further Strengthening Biodiversity Conservation and the implementation of the Kunming-Montreal Global Biodiversity Framework, effectively respond to the challenges faced by biodiversity, comprehensively improve the level of biodiversity governance, and effectively support the construction of a beautiful China and the modernization of harmonious coexistence between human beings and nature, the Ministry of Ecology and Environment, in cooperation with the relevant departments, has compiled the "China's Biodiversity Conservation Strategy and Action Plan (2023-2030)", which clarifies China's new-era biodiversity conservation strategy, priority areas and priority actions, and provides guidance for various departments and regions to promote biodiversity conservation.

### Chapter I. Status of biodiversity

#### I. Overview

China's vast expanse, land and sea, unique natural geography, and complex and varied climate types have given rise to rich and unique ecosystems, species and genetic diversity, making it one of the richest countries in the world in terms of biodiversity.

**Ecosystem diversity:** There are 212 types of forests, 36 types of bamboo forests, 113 types of thickets, 77 types of meadows, 55 types of grasslands, 52 types of deserts, and 13 secondary land types of wetlands; and many types of marine ecosystems, such as mangrove forests, coral reefs, seagrass beds, islands, bays, estuaries and upwellings; and in addition artificial ecosystems, such as farmland, planted forests, constructed wetlands, sown pastures, and urban cities. As of now, the national forest area is 231 million hectares, with a forest coverage rate of 24.02%, of which 140 million hectares are natural forests; the grassland area is 265 million hectares, of which 210 million hectares are natural pastureland, with a comprehensive grassland cover of 50.32%; the wetland area is 56.35 million hectares. 82 wetlands are on the List of Wetlands of International Importance under Ramsar Convention, with an area of 7.647 million hectares, ranking the fourth in the world. There are 45,203 rivers with a watershed area of 5,000 hectares or more, with a total length of 1,585,500 kilometers.

**Species diversity.** China has 135,061 known species, of which 65,362 are animals, including 694 mammals, 1,445 birds, 626 reptiles, and 626 amphibians, 5,082 species of fish, 56,886 species of worms and other invertebrates; There are 39,539 species of plants, including 35,714 species of vascular plants, 3,130 species of angiosperms, mosses, and geophytes. There are also 30,160 species of fungi, protozoa, pigments, bacteria and viruses. More than 28,000 species of marine organisms have been recorded, accounting for about 11% of the recorded species in the global oceans.

There are 980 species and 8 categories of wild animals on the list of wild animals under State key protection, including 234 species and 1 category at the national level I; 746 species and 7 categories at the national level II. There are 455 species and 40 categories of wild plants on the list of national key wild plants for protection, of which 54 species and 4 categories are at the national level I ; and 401 species and 36 categories are at the national level II.

**Genetic diversity:** China is one of the major global centers of crop origin and one of the native origins of rice, flax, eggplant, banana, sweet orange and other crops, and was the first to domesticate and cultivate crops such as soybean, millet, plum, peach and apricot. According to incomplete statistics, there are 455 categories and 1339 species of cultivated crops in China, and 1930 species of wild relatives.

There are 12,807 kinds of traditional Chinese medicine resources, and more than 3,500 kinds of medicinal plants are endemic to China. There are more than 1,000 species of economic trees and 7,000 species of native ornamental plants. China is an important center of livestock and poultry genetic resources and domestication and origin in the world, with 948 local, cultivated and introduced breeds of livestock and poultry included in the National List of Livestock and Poultry Genetic Resources.

#### II. Status of threats to biodiversity

In line with the factors threatening global biodiversity, China's biodiversity is also adversely affected by the loss and destruction of natural habitats, over-utilization of natural resources, environmental pollution, invasion of alien species and climate change. Ecosystems, species and genetic diversity have all been degraded or lost to varying degrees.

#### 1. Fragile and degraded ecosystems

Forest ecosystems are not stable enough, with a high proportion of pure arbor forests, and the overall quality of tree forests is still at an intermediate level. Grassland ecosystems are degraded to varying degrees and are still fragile in general. The problems of sanding and soil erosion are still serious, the ecological functions of some rivers, wetlands and lakes have been reduced or lost, and the shrinking of natural shorelines is still common.

#### 2. Higher proportion of threatened species

The results of the assessment of the Red List of China's Biodiversity show that there are 4,088 threatened species of higher plants (including critically endangered, endangered and vulnerable species), accounting for 10.39% of the total number of species assessed; and 1,050 threatened species of vertebrates (except marine fish), accounting for 22.02% of the total number of species assessed.

#### 3. Increased difficulty in conserving genetic resources

With the accelerated process of industrialization and urbanization, climate change and the

transformation of agricultural farming methods, the risk of the disappearance of local varieties of genetic resources has intensified; the number of populations and their regional distribution have been changing; and the resources of wild relatives of plants have decreased significantly, making it more difficult to protect them.

#### Chapter II. Achievements and situation of biodiversity conservation

#### I. Achievements in biodiversity conservation in China

As one of the first countries to sign and ratify the Convention on Biological Diversity (CBD), China attaches great importance to biodiversity conservation and has integrated biodiversity conservation into the entire process of building an ecological civilization, synergistically promoting it with green development, pollution reduction, carbon reduction and poverty eradication, and has made positive progress in terms of policies and regulations, in-situ conservation, ex-situ protection, relocation, ecological restoration, supervision and law enforcement, and international cooperation in compliance, thus embarking on a road of biodiversity conservation with Chinese characteristics and making new contributions to addressing global biodiversity challenges.

First, policies and regulations continue to improve. *Opinions on the Construction of Ecological Civilization, the Overall Programme for the Reform of the Ecological Civilization System, Opinions on Further Strengthening the Protection of Biodiversity and more than 40 other programme documents relating to the construction of an ecological civilization have made the protection of biodiversity an important element of the construction of an ecological civilization. The Outline of the Fourteenth Five-Year Plan of the People's Republic of China has systematically deployed major projects for the protection of biodiversity. More than 30 relevant laws and regulations, including the Environmental Protection Law, the Wildlife Protection Law, the Marine Environmental Protection Law, the Biosafety Law and the Law on the Protection of the Yangtze River, have been enacted and amended, and the list of wildlife under national key protection has been revised and adjusted. All these has been continuously strengthening the rule of law foundation for the protection of biodiversity.* 

Secondly, the in-situ protection system has been continuously optimized. Promoting the scientific delimitation of the scope of protection and functional zoning of nature reserves, accelerating the integration and optimization of various types of reserves, actively promoting the establishment of a nature reserve system with national parks as the mainstay, nature reserves as the foundation, and various types of nature parks as supplements, and setting up the first batch of national parks for the Sanjiangyuan River, the Giant Panda, Northeast Tigers and Leopards, Hainan's Tropical Rainforests, and the Wuyi Mountains, thereby effectively protecting 90% of the terrestrial ecosystems, 65% of the higher flora, and 74% of the terrestrial wildlife and plants under key national protection.

As of 2021, the land area of nature reserves accounts for about 18% of China's land mass. A total of 535 national-level aquatic germplasm resource reserves have been established, 33 important

habitats for aquatic wildlife were under national key protection, and the system of fishing moratoriums and bans was strictly enforced, effectively protecting aquatic biological resources and their habitats. China's first "multi-planning" plan was formulated, and the National Outline of Territorial Spatial Planning (2021-2035) was issued. Innovative ecological spatial protection models have been adopted, with extremely important areas with ecological functions such as biodiversity conservation and extremely fragile ecological areas being designated as ecological protection red lines for strict protection. Breaking down the boundaries of administrative regions and giving full consideration to the integrity of important bio-geographical units and ecosystem types, priority areas for biodiversity protection have been delineated, of which 32 terrestrial priority areas account for about 28.8% of the national territory.

Thirdly, ex-situ protection has been further strengthened. China has established 200 botanical gardens (arboreta) . It has promoted the construction of a national botanical garden system and established the National Botanical Garden and the South China National Botanical Garden. It has carried out rescue conservation of very small populations of wild plants, and 112 kinds of endemic rare and endangered wild plants have returned to the wild. More than 240 zoos (animal exhibition areas) and 250 wildlife rescue and breeding bases have been established, and more than 60 kinds of rare and endangered wild animals have been successfully bred artificially. A national crop germplasm resources conservation system has been formed, with the national long-term crop germplasm resources repository as the core, and 1 duplicate repository, 15 medium-term repositories and 55 germplasm nurseries as the backbone. By the end of 2022, a total of 530,000 copies of crop germplasm resources will be preserved. It has promoted the construction of three protection safeguards, namely the national livestock and poultry germplasm resources bank, regional gene banks and live breeding farms.

China set up 217 national breeding farms (protected areas and gene banks) for livestock, poultry, bee and silkworm genetic resources. There are 161 in-situ and 353 ex-situ national and provincial forest germplasm resource preservation repositories respectively, and 7 national forest and grass germplasm resource preservation repositories have been set up. The germplasm resource bank has preserved more than 100,000 copies of germplasm resources.

Thirty-one medicinal plant germplasm preservation nurseries, 95 original aquatic species farms and 95 national marine fishery farms have been established. The National Marine Fisheries Biological Germplasm Resource Bank has collected and preserved about 140,000 copies of various types of biological resources, and the collection and preservation of biological genetic resources has continued to accelerate.

Fourth, the quality of the ecological environment continues to improve. In recent years, China has continued to intensify its efforts to prevent and control water, air and soil pollution, and the goal of reducing the total amount of major pollutants discharged has been have been exceeded, and the quality of the ecological environment has continued to improve. In 2021, the national average concentration of fine particulate matter (PM2.5) was 30 micrograms per cubic meter, a decrease of 34.8% compared with 2015; the proportion of state-controlled surface water sections with good water quality (Class I-III) and loss of functionality (Class V) was 84.9% and 1.2%, an increase of 18.9 percentage points and a decrease of 8.5 percentage points compared with 2015; The proportion of the area with good water quality (Class I and II) in near-shore waters was 81.3%, up 12.9% from 2015.; the safe utilization rate of contaminated arable land stabilized at more than 90%, and the soil environmental condition of agricultural land was generally stable. The improvement of ecological environment quality has optimized the habitats of species, promoted the recovery of ecosystem functions, and effectively alleviated the pressure of biodiversity loss.

Fifth, the pace of ecological protection and restoration has been accelerated. The Government has also implemented the systematic protection and management of mountain water, forests, agricultural fields, lakes, grasses and sands, and has deployed 51 projects to protect and systematically manage the environment. China has carried out protection and restoration projects, and has completed the treatment of a cumulative area of more than 5 million hectares. It has established the "1+N" ecological protection and restoration planning and standardization system, implemented major projects for the protection and restoration of nationally important ecosystems, and comprehensively promoted 100 key ecosystem protection and restoration projects. The area of forests and forest reserves have maintained "double growth" for more than 30 consecutive years, becoming the country with the highest growth in forest resources in the world. The area of desertified and sandy land has achieved "double reduction" for four consecutive monitoring periods, and grassland ecology has been reduced for four consecutive years.

Since the 13th Five-Year Plan, the accumulated area of abandoned mines left over from history has been repaired and treated over 300,000 hectares. Adhere to the land and sea integration, river and sea linkage, solidly promote the "blue bay" remediation action, coastal zone protection and restoration project, mangrove protection and restoration. Conservation projects on mangrove forests, seagrass beds, coral reefs and other typical ecosystems has been conducted. A a total of 2,000 kilometers long coastline has been restored. Coastal wetlands reaches to 600,000 mu, and mangrove area has reached 438,000 mu, which is about 108,000 mu more than that at the beginning of the century.

Since 2018, the Yangtze River shoreline has been vacated for a total of 162 kilometers, and 1,213 hectares of beaches and banks have been re-greened. Through the implementation of the tenyear ban on fishing in the Yangtze River, rare aquatic species such as the Yangtze finless porpoise have been initially conserved. And the number o aquatic species monitored in the Dongting Lake in 2021 had increased by 30 than that in 2018.

Breeding programs have been carried out in important rivers and lakes and in offshore waters. Every year, more than 30 billion aquatic organism seedlings are released. A total of 169 national-level sear farming demonstration zones have been created.

Sixth, supervision and law enforcement have been increasing. China has improved the management of binding targets for environmental protection and strengthened the vertical management system for monitoring, supervision and enforcement of ecological and environmental institutions.

It is also promoting the reform of comprehensive ecological and environmental law enforcement. It will continue to carry out the "Green Shield" Nature Reserve Strengthening Supervision Program, and intensify its efforts to supervise, investigate and deal with problems of ecological and environmental damage in nature reserves. The "Sword of China Fisheries Administration" series of special enforcement actions will protect aquatic wildlife and their habitats, marine life, and the environment.

The fishing moratorium and the ban on fishing on large inland rivers and lakes have been taken as key enforcement tasks. Organize and carry out special operations such as "Kunlun", "Clear Wind", "Net Shield", "Sharp Sword at the State Gate", as well as cracking down on illegal and criminal activities involving the destruction of old and valuable trees and crimes involving wildlife. China carried out the "Green Guard" 2019 Forest and Grassland Special Law Enforcement Action and the 2023 National Special Action against Deforestation and Grass Destruction, and crack down on illegal acts of encroaching on and destroying grassland resources. It will also carry out the "Blue Sea" special law enforcement action on illegal activities harming marine environment. Also launched was the "Green Shield at the State Gates" campaign and strengthened the prevention and control of invasive alien species at ports of entry.

Seventh, international cooperation on compliance continued to deepen. As President of COP15, we led all parties to adopt the theme of the Conference, "Life and Health", as the main theme of the Conference.

Guided by the theme "Ecological civilization: building a living community on Earth", the Conference issued high-level political outcome documents such as the Kunming Declaration, and reached a package of landmark decisions such as the Kunming-Montreal Global Biodiversity Framework, contributing Chinese wisdom and strength to global biodiversity governance. Taking the lead in contributing RMB 1.5 billion to set up the Kunming Biodiversity Fund to support the cause of biodiversity conservation in developing countries. Initiated the establishment of the "Belt and Road" International Alliance for Green Development, with more than 40 countries as partners, to carry out cooperation in biodiversity conservation, climate change governance and green transformation. Established the Belt and Road International Institute for Green Development and implemented the Green Silk Road Envoy Program.

Helped to improve the environmental governance capacity of co-built countries. Under the framework of South-South cooperation, it has actively supported developing countries in biodiversity conservation, benefiting more than 80 countries worldwide. It has actively implemented the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), continuously deepened bilateral and multilateral cooperation in compliance and law enforcement,

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and organized successive training courses for developing countries in Asia, Africa and Latin America on the management of wild fauna and flora conservation and compliance capacity.

Eighth, the awareness of conservation among the entire population has been significantly raised. Make full use of the National Ecology Day, International Biodiversity Day, World Wildlife Day, World Wetland Day, Bird Friendly Week, Wildlife Protection Publicity Month, Science and Technology Activity Week and other important occasions, as well as on the occasion of COP15, China continues to carry out publicity, education and popularization of science and mobilize broad participation of the whole society. Innovate the mode of publicity, broaden the channels of participation, improve incentive policies, and invite the public to actively participate in the formulation of biodiversity policies, information disclosure and public interest litigation, as well as to offer advice and suggestions. Set up an alliance for the protection of key species such as Yangtze finless porpoises, marine turtles and Chinese white dolphins to build a platform for communication and collaboration among all parties. We have joined the Global Partnership for Business and Biodiversity (GPBB) initiative launched by the Secretariat of the Convention on Biological Diversity (CBD), encouraging enterprises to participate in the work on biodiversity. A system of action based on strengthened guidance by the government, active action by enterprises and broad public participation has been formed, and the enthusiasm of society as a whole for biodiversity conservation has been rising.

#### II. Opportunities and challenges for biodiversity governance in China

Based on the new stage of development, the implementation of the new development concept, the construction of a new development pattern, and the promotion of high-quality development, biodiversity conservation has ushered in new development opportunities.

-- Xi Jinping's thought on ecological civilization has pointed out the direction for biodiversity governance. China attaches great importance to the construction of ecological civilization and the protection of biodiversity, and has made a series of important deployments, planning development from the standpoint of the harmonious coexistence of human beings and nature, enhancing ecosystem diversity, stability and continuity, and clarifying the goals and tasks of biodiversity protection, which provide the basis to follow for the nation's work on biodiversity protection.

--COP15 provides an important opportunity for China to take the lead in global biodiversity governance. As the President of COP15, China has led all parties to overcome the difficulties of the COVID-19 pandemic, successfully organized the first and second phases of COP15 in Kunming and Montreal, respectively, and for the first time hosted a Leaders' Summit under the framework of the Convention on Biological Diversity (CBD), which led to the conclusion of the historic outcome document and led the way in global biodiversity governance.

--The people's expectation for a beautiful ecological environment and the demand for highquality ecological products and services have provided favorable conditions for biodiversity conservation. Consolidate and expand the effective connection between biodiversity conservation, the realization of the value of ecological products and rural revitalization, and insist on the organic integration of biodiversity conservation, sustainable utilization and benefit-sharing.

Main issues: Legal and policy systems for biodiversity conservation are still need to be improved, the protection and supervision in accordance with the law is not strong, the scientific and systematic nature of biodiversity conservation and restoration needs to be strengthened, the multisectoral collaboration and central-local linkage mechanism for biodiversity management needs to be deepened, the support of science and technology innovation and technical equipment is insufficient, the monitoring system for biodiversity is not sound, and the monitoring and evaluation methodology is not uniform. A mechanism for realizing the value of biodiversity has yet to be established, public awareness of biodiversity conservation is not strong enough, and the ability to participate in and lead global biodiversity governance needs to be improved.

**Pressures and challenges:** Conflicts between biodiversity conservation and local economic, social development remain large, natural ecological space is being crowded out by intensified land-use change, the impact on biodiversity of the overuse and uncontrolled development of biological resources is intensifying, environmental pollution is affecting biodiversity and species habitats in key watersheds and oceans, invasive alien species are increasing pressure on biosecurity, and human-wildlife conflicts caused by wildlife such as wild pigs are becoming more and more pronounced. The escape of genetically modified organisms (GMOs) may have an impact on agricultural land and natural ecosystems, climate change has a significant impact on natural ecosystems and biodiversity, and the trend of biodiversity loss has not yet been curbed.

#### Chapter III. Biodiversity conservation strategies for the new era

#### I. Guiding principles

Actively promote the compliance process of the Convention on Biological Diversity, play the role of a responsible big country, take Xi Jinping's Thought on Socialism with Chinese Characteristics for a New Era as the guidance, implement Xi Jinping's Thought on Ecological Civilization, comprehensively carry out the spirit of the Twentieth National Congress of the Communist Party of China (CPC), firmly establish and put into practice the concept that Lucid waters and lush mountains are invaluable assets, effectively respond to the challenges of biodiversity, and comprehensively enhance the level of biodiversity conservation and management, promote the mainstreaming of biodiversity, continuously strengthen the strategic position of biodiversity conservation, integrate the concept of biodiversity conservation into the entire process of building an ecological civilization, carry out major projects for the conservation of biodiversity, reduce the threats to biodiversity, strengthen sustainable use and benefit-sharing, integrate biodiversity conservation with economic and social development, and promote the modernization of the biodiversity governance system and governance capacity. Ensure the comprehensive protection of important ecosystems, biological species and genetic resources, effectively promote the implementation of the Opinions on Further

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Strengthening Biodiversity Conservation and the implementation of the Kunming Montreal Global Biodiversity Framework, and support high-quality development with a high-quality ecological environment.

#### **II. Basic principles**

--Adhere to respecting nature and prioritizing conservation. We will firmly establish the concept of ecological civilization that respects, adapts to and protects nature, adhere to the priority of protection, and make comprehensive efforts to protect nature.

The Government will utilize both natural restoration and artificial restoration, and adopt measures that are appropriate to the local conditions and time, as well as zoning and classifying measures, in order to effectively protect important ecosystems, biological species and genetic resources, and to safeguard biosafety and ecological security.

--Adhere to green development and benefit sharing. We should take biodiversity as the basis, objectives and means of sustainable development, make scientific, rational and sustainable use of biological resources, and establish a sound mechanism for realizing the value of ecological products. Also needed are promotion of fair and equitable sharing of the benefits arising from the use of genetic resources. the promotion of a green and low-carbon transformation of production and lifestyles, and the realization of a win-win situation for both biodiversity conservation and high-quality development.

-Adhere to the integrated promotion and participation of all people. Utilizing the coordinating role of the State Council's coordinating mechanism on strengthening biodiversity conservation, strengthening departmental collaboration, consolidating responsibilities at all levels, increasing management, investment and supervision, improving the long-term mechanism for public participation in the conservation of biodiversity, raising citizen awareness of and participation , and constructing a new pattern for the conservation and governance of biodiversity.

--Adhere to multilateralism and win-win cooperation. Firmly support biodiversity multilateral governance system, effective fulfillment of obligations under the Convention on Biological Diversity and other relevant ecological and environmental treaties, and proactive commitment to the implementation of the Convention on Biological Diversity in accordance with national circumstances, stage of development and capacity. We will continue to deepen exchanges and cooperation in the field of biodiversity and work together to address global biodiversity challenges through appropriate environmental governance obligations.

#### **III.Strategic positioning**

-Exemplars of action for synergistic biodiversity governance. We will strengthen the protection of typical and representative natural ecosystems, rare species and genetic resources, implement targeted conservation and regulatory measures, effectively respond to biodiversity loss, synergistically promote carbon reduction, pollution reduction, greening and growth, and push forward ecological prioritization, conservation and intensification, green and low-carbon development, so as to build a Chinese solution for the synergistic management of biodiversity.

--Practice model for sustainable use of biodiversity. Strengthening wildlife sustainable use of species resources and the supervision of the whole process, standardize biodiversity-friendly business

activities, limit economic activities to the limits that natural resources and the ecological environment can bear, promote the realization of the value of ecological products, shape new dynamics and advantages for high-quality economic and social development with high-level biodiversity protection, stimulate the endogenous impetus for biodiversity protection, and gather Chinese wisdom for the sustainable use of biodiversity.

--Leading demonstration of building the Earth's community of life together. Deepening participation in global environmental governance, and continue to promote the implementation of the Kunming-Montreal Global Biodiversity Framework and accelerate the promotion of a more just and rational global biodiversity policy that is based on the principle that each country has its own capacity to contribute. China will also actively engage in international cooperation on biodiversity, share successful cases of biodiversity conservation in China, gather global synergies to reverse the trend of biodiversity loss, and contribute China's strength to global biodiversity governance.

# **IV. Strategic objectives**

--Targets for 2030. Policies, regulations, systems, standards and monitoring systems related to biodiversity conservation are established and priority areas for biodiversity conservation are prioritized. The background survey and assessment of national regions and national strategic areas will be continuously promoted, and a national biodiversity monitoring network established. The trend of biodiversity loss is to be effectively mitigated, the level of biodiversity conservation and management significantly raised, and a favorable situation formed in which all people participate in biodiversity conservation.

At least 30% of the degraded ecosystems on land, inland waters, coasts and oceans are effectively restored, and at least 30% of the land, inland waters, coasts and oceans are effectively protected and managed. And the area of nature reserves, mainly national parks, will account for about 18% of the land area. The area of the red line for ecological protection in the land area shall not be less than 30% of total land mass, and the area of the red line for marine ecological protection shall not be less than 150,000 square meters. The benefits arising from the use of genetic resources and DSI (digitized sequence information) and their associated traditional knowledge will be shared fairly and equitably.

-Medium and long-term goals and vision. By 2035, biodiversity conservation policies, regulations, systems, standards and monitoring systems will be comprehensively improved. And a unified, orderly, structurally connected and dynamically adjusted spatial pattern of biodiversity protection will be formed nationwide; the area of nature reserves, with national parks as the mainstay, will account for more than 18% of the land area, typical ecosystems, wild animals and plants under national key protection and their habitats will be protected in a comprehensive manner. The index of aquatic biological integrity of the Yangtze River will be significantly improved; mechanisms for accessing and sharing the benefits of biological genetic resources and their sustainable utilization will be fully established, the carbon sink capacity of ecosystems will be firmly enhanced, and the protection of biodiversity will become a conscious action of citizens.

By 2050, a green mode of development and lifestyle will have been fully formed, and a beautiful China will have been built in which human beings and nature coexist harmoniously, realizing the beautiful vision of human beings coexisting harmoniously with nature.

#### V. Strategic mandates

In the face of the global challenge of biodiversity loss, biodiversity conservation has entered a new historical period, which calls for a comprehensive consideration of the current state of international biodiversity and China's national biodiversity situation, the seizing of an important strategic opportunity, the implementation of a series of major decision-making and deployment measures, and the promotion of the formation of a new pattern of biodiversity governance.

#### -Constructing a social action system for biodiversity conservation

China will establish a system of policies and regulations related to biodiversity, clarify the standards and working procedures for biodiversity conservation and management, rationalize the institutional mechanism of biodiversity work of various departments and local governments, and incorporate biodiversity conservation into the national economy and social development plans, as well as development plans for related industry sectors, further utilizing the role of a community of action led by the government, responded to by enterprises and participated by all.

#### -Improve the spatial network for biodiversity conservation.

Promote the construction of nature reserve system, with national parks as the mainstay, and strictly abiding by the red line of ecological protection. China will improve the guidelines for the protection of national key ecological function zones and priority areas for biodiversity protection, and curb the adverse impacts of over-exploitation of resources and production and everyday life on biodiversity. Optimize the construction of rescue relocation and protection facilities at all levels, and accelerate the construction of ecological corridors to fill in the gaps in the protection of important areas and important species.

#### --Enhance ecosystem diversity, stability, and sustainability.

Promote integrated protection and systematic management of mountains, water, forests, agricultural fields, lakes, grasses and sands, and comprehensive implementation of the Overall Plan for Major Projects for the Protection and Restoration of Nationally Important Ecosystems (2021-2035) and relevant special plans. China will continue to carry out biodiversity surveys, monitoring and assessment, implement major projects for biodiversity protection, restore important natural ecosystems and natural habitats for wildlife, and strengthen supervision and management. China will enhance the synergistic management of biodiversity and climate change, and continuously improve the quality of the ecological environment.

#### --Promote the sustainable use of biodiversity and green development.

Conduct proper management and sustainable utilization of wild species resources, promotion of the development of eco-industries such as special biological resources, eco-tourism, recreation, nature education and sustainable management of agriculture, forestry, animal husbandry, fishery and other related industries, and promote advancement of the realization of the value of eco-products, and the inheritance and development of traditional knowledge related to biodiversity to promote biodiversity-friendly changes in production and lifestyles to enhance human well-being.

#### --Strengthen biosafety management and risk prevention and control.

Strengthen the national biosafety coordination mechanism, improve the technical support system for biotechnology environmental risk assessment and regulation, and enhance the ability to identify and analyze biosafety risks. Set up a biosafety risk monitoring and early warning mechanism, and join hands in preventing and controlling invasive alien species and harmful organisms. Promote access to and benefit-sharing of biological genetic resources, and prevent the risk of loss of genetic resources.

### --Strengthening capacity assurance for biodiversity governance.

China will build infrastructure, monitoring networks and related platforms, strengthen scientific research on biodiversity and the training of talents, and explore the establishment of a market-oriented and socialized investment and financing mechanism. Actively implement international conventions related to biodiversity and promote synergies among them, actively implement the Kunming-Montreal Global Biodiversity Framework, persist in bilateral and multilateral cooperation, and play an active role in guiding the Kunming Biodiversity Fund, and provide assistance to other developing countries to the best of its ability, so as to demonstrate its image as a responsible big country.

# Chapter IV. Biodiversity conservation priority areas and actions

### Priority area I. Mainstreaming biodiversity

# **Priority Action 1: Biodiversity Policy and Regulatory Framework**

Accelerate the construction of the rule of law on biodiversity protection, speed up the introduction of a national parks law, continue to push forward the formulation and revision of laws and regulations in the areas of wildlife and habitat protection, biosafety, sustainable utilization of biological resources, access to and benefit-sharing of biological genetic resources, ecological protection red line, nature reserves, as well as forests, grasslands, wetlands, lakes and oceans, and study the drafting of regulations for the protection of traditional knowledge related to biodiversity, and improve the list and management system of invasive alien species. It will improve the policy and institutional system for biodiversity protection, improve the compensation system for ecological protection, improve the system for regulating wildlife populations and compensating for damage caused by them, improve the system for compensating ecological damage, improve the system for cracking down on the illegal trade in wild animals and plants, promote the rest and recuperation of grasslands, forests, rivers, lakes and bays, continue to implement the 10-year ban on fishing in the Yangtze River, and improve the system for cultivated land to fallow and rotate crops. Encourage localities to introduce corresponding local regulations and policies on biodiversity protection according to local conditions. By 2030, relevant policies and regulations on biodiversity conservation and sustainable utilization will be fully established.

# Column 1. Priority projects on biodiversity policy and regulatory system

1. Building a system of biodiversity-related laws and regulations

Sorting out biodiversity-related laws and regulations, carrying out assessments of the effectiveness of the legal system for biodiversity protection and vacancy analyses, and actively promoting formulation and revision of laws and regulations on the protection of wild animals and plants and their habitats, important ecosystems such as wetlands, forests, grasslands and oceans, and important ecological spaces such as ecological red lines, nature reserves and urban green spaces, as well as agriculture, fisheries, biosafety, access to biogenetic resources and benefit-sharing, as well as traditional knowledge related to biodiversity.

# 2. Research and draft regulations on the management of access and benefit-sharing of biological genetic resources

Based on the previous work, continue to deepen the research on legislation related to biological genetic resources, draft and formulate regulations on the management of access to and benefit-sharing of biological genetic resources, and clarify the collection, utilization, benefit-sharing and entry and exit of biological genetic resources.

# Priority action 2: Institutional mechanisms for biodiversity governance

Improve the coordinated governance mechanism for biodiversity conservation, promote inter-departmental coordination at the national and local levels, and implement management and supervision responsibilities. China will strengthen the leading role of governments at all levels in biodiversity protection, and encourage scientific research institutions, enterprises, social organizations and the public to participate in the decision-making process of biodiversity legislation, management and supervision. It will improve the compensation mechanism for ecological protection, continuously strengthen the transfer payments for key ecological function areas, important water system source areas and nature reserves, as well as the compensation for ecological protection of forests, grasslands and wetlands, establish and improve the system of compensation for the occupation of various types of natural ecological space for construction in accordance with the law, and build a market-oriented and diversified compensation pattern based on the principle of "beneficiary pays". Improving the system of compensation for damage to the ecological environment, and perfecting the methodology and working mechanism for the identification and assessment of damage to biodiversity. Study the establishment of an offshore ecological protection compensation system. By 2030, the coordinated and joint mechanism for biodiversity conservation will be improved, the compensation system for biodiversity damage will be gradually established, and the compensation mechanism for ecological conservation will be continuously improved.

#### Column 2. Priority projects on institutional mechanisms for biodiversity governance

#### 1. Improvement of synergistic joint mechanisms for biodiversity

China will research and formulate major national policies and guidelines on biodiversity conservation, and organize and lead national biodiversity conservation efforts. We will improve the annual progress report system and strengthen the tracking and evaluation of work effectiveness. The Ministry of Ecology and Environment will strengthen its coordination and harmonization functions and also leads research on important matters, compiles annual work progress, and proposes a work plan for the following year.

# 2. Building a mechanism for joint promotion of biodiversity conservation and governance in strategically important regions

Focusing on important national strategic regions such as Beijing, Tianjin and Hebei, the Yangtze River, the Yellow River, Guangdong, Hong Kong and Macao, the Yangtze River Delta and the Qinghai-Tibetan Plateau, joining hands with the main relevant departments to promote transregional work on biodiversity conservation, formulate work plans or programs, enhance communication and collaboration, improve working mechanisms, and study and determine major policies, systems and working directions for biodiversity conservation in important regions.

#### 3. Biodiversity governance pathway policy system construction

Implement the "Kunming-Montreal Global Biodiversity Framework" and build a "1+N" policy system for biodiversity governance, with "1" being the present Strategic Action Plan and the overall implementation program, and "N" includes biodiversity management programs in the fields of resources, energy, industry, urban and rural construction, transportation, agriculture and rural areas, as well as specific industries.

#### **Priority Action 3: Biodiversity Planning Scheme**

Incorporate biodiversity conservation targets and their multiple values into the national economic and social development plans of governments at all levels and the medium and long-term development plans, work plans and relevant action programmes of the relevant sectors, and, on the basis of the relevant national development plans, study and formulate the key points of biodiversity survey and monitoring, development and sustainable use of biological resources, biosafety management and urban biodiversity conservation.

Implementing programs in the field and strengthening supervision and implementation. Encourage localities to formulate and update regional biodiversity conservation strategies and action plans as well as implementation programs for major projects on biodiversity conservation, and clearly define the objectives, tasks and division of responsibilities for biodiversity conservation at the provincial, municipal and county levels. Encourage enterprises and social organizations to voluntarily formulate action plans for biodiversity conservation and comprehensively raise awareness of biodiversity conservation. An evaluation and supervision mechanism for the implementation of plans and programs related to biodiversity conservation will be established to promote their effective implementation. By 2030, biodiversity conservation will be incorporated into the medium- and long-term planning of all regions and relevant fields.

#### Column 3. Priority projects of the biodiversity planning system

#### 1. Local biodiversity conservation strategies and action plans updated

Provide guidance to localities in formulating and revising strategies and action plans for biodiversity conservation in their regions, specifying immediate, medium-term and long-term targets for biodiversity conservation, identifying important tasks and priority actions in the areas of biodiversity conservation, sustainable use and benefit-sharing, and proposing a list of prioritized projects to ensure that the objectives, tasks, actions of local strategies and action plans for biodiversity conservation are aligned with the national level.

#### 2. Programming for the implementation of major projects for local biodiversity conservation

Guiding localities to prepare implementation plans for major projects for biodiversity conservation in their regions in accordance with local conditions, and clarifying the main contents of biodiversity survey and monitoring, infrastructure construction and sustainable utilization.

#### 3. Development of action plans for biodiversity conservation in strategically important regions

In conjunction with the country's major regional strategic deployments, formulate a special action plan for regional biodiversity conservation centered on the Beijing-Tianjin-Hebei, Yangtze River, Yellow River, Guangdong-Hong Kong-Macao, Yangtze River Delta, Qinghai-Tibet Plateau and other important national strategic regions, clarify the guiding ideology, working principles, overall objectives and important tasks of regional biodiversity conservation, strengthen regional synergistic actions, and comprehensively enhance the level of biodiversity conservation.

#### Priority action 4: Biodiversity awareness-raising and education

Establish and improve a full-coverage, multi-level and diversified publicity and popularization system for biodiversity, give full play to the advantages of new media, new technologies and new modes of operation, increase the promotion of new media platforms, innovate the mode of publicity for biodiversity conservation, launch key multimedia popularization products for biodiversity, do a good job of publicizing and popularizing laws and regulations related to biodiversity conservation, scientific knowledge, typical cases, and achievements of major projects. Tell the Chinese story of biodiversity conservation and publicize China's achievements in biodiversity conservation. Explore the establishment of an efficient and coordinated dissemination mechanism to realize content sharing and interoperability. Strengthen cooperation with scientific research institutes, public prosecutors and law enforcement agencies, and raise the level of popularization of science and law. Incorporate biodiversity education into education and training programs, combine it with the development of nature education, ecological experience, wilderness adventure and other industries, and guide localities to provide education and training for students and community residents based on local biodiversity characteristics. It will improve the infrastructure for biodiversity publicity and education, fully rely on existing nature museums, zoological gardens and germplasm repositories to promote the formation of a Chinese biodiversity museum system, push forward the construction of biodiversity experience sites and nature education parks, and launch a number of displays and exhibitions with distinctive demonstrative significance and inspiring effects on biodiversity education, so as to form a system for publicizing and learning about biodiversity protection. By 2030, the awareness of biodiversity protection in society as a whole will be significantly raised.

# Column 4. Priority projects for biodiversity awareness and education

#### 4. Science popularization and publicity actions for biodiversity

Make use of the International Day for Biological Diversity, World Environment Day, World Earth Day, National Ecology Day and other important thematic anniversaries to widely carry out public awareness activities on biodiversity. Launch a number of high-quality popular science programs, columns, reading materials and products on biodiversity, and make documentaries on biodiversity. Strengthen the construction of expert teams for popularizing biodiversity. Biodiversity experts and scholars will be introduced into organizations, enterprises, campuses, communities and rural areas. Organize a series of volunteer actions for biodiversity conservation.

### 2. Biodiversity Education Initiative

Fully relying on existing local resources, promote the construction of a number of biodiversity immersion study and experience sites and nature education parks, and guide the establishment of rich and diversified nature education and ecological experience courses, so as to bring man and nature closer together. Promote the developing diversified biodiversity education activities and continuously improving various educational materials.

# **Priority action 5: Business and biodiversity**

Scientifically assessing the biodiversity impacts of corporate business activities and promoting the inclusion of biodiversity-related information in the legally required disclosure of corporate environmental information and in the content of their supervision and management activities, as well as in corporate sustainability reports such as environmental, social and governance (ESG) reports. Guiding the adoption of sustainable production modes, promoting green and clean production, improving resource utilization efficiency, complying with the requirements on access to genetic resources and related traditional knowledge and benefit-sharing, promoting the establishment of management processes and certification systems for the sustainable use of biodiversity and biodiversity-friendly enterprises, and promoting collaborative governance upstream and downstream of the industrial chain. Advocating enterprises to further standardize external investment and construction activities to reduce or repair the adverse impacts on local biodiversity. Improve the construction of industrial and commercial biodiversity conservation alliances and explore a long-term mechanism for the protection and sustainable utilization of biodiversity by enterprises. Encourage and promote financial institutions to incorporate biodiversity into project investment and financing decisions. By 2030, basically build a long-term mechanism for enterprises to conserve and sustainably utilize biodiversity, form a production mode of sustainable development and harmony with nature, and regularly monitor, assess and disclose the risks, dependence and impacts of enterprises in key industries on biodiversity.

# Column 5. Business and biodiversity priorities

# 1. Alliance building for business and industry biodiversity conservation

Establish a multi-stakeholder business and industrial biodiversity conservation alliance with the participation of enterprises as the main body, organize and carry out activities for the conservation and sustainable use of biodiversity, and set up a platform for policy dialogues and exchanges with the participation of enterprises, platform for best practices, technology support platform and international cooperation platform.

# 2. Corporate biodiversity impact index construction

Carry out pilot and demonstration projects on biodiversity impact assessment in food, energy and extractive industries, infrastructure, pharmaceuticals, culture and tourism, Internet technology and other industries, and explore the construction of a biodiversity impact index for enterprises in key industries.

### 3. Model corporate biodiversity disclosure

Select representative industry enterprises to identify the impacts of their relevant operations on biodiversity and regularly monitor, assess and transparently disclose their biodiversity risks, dependencies and impacts. Establish a reporting framework and process for corporate biodiversity disclosure and improve biodiversity regulatory capacity. Strengthen the publicity and promotion of project results to enhance corporate biodiversity conservation awareness.

### 4. Demonstration of access to genetic resources and benefit-sharing in enterprises

Select representative enterprises to explore the establishment of mechanisms and procedures for access to genetic resources and benefit-sharing; and prepare templates for cooperation agreements and provide a model for the establishment of such a system.

# Priority action 6: Action from all public on biodiversity conservation

Prepare and promulgate a national program of action from all public on biodiversity conservation, promote the establishment of a long-term mechanism for biodiversity conservation that is government-led, with active action by enterprises and broad public participation, and improve ecological performance management and incentive policies. Cultivate biodiversity-friendly consumption and lifestyles, refuse to consume wild animals and their products, reduce consumption footprints in a fair manner, and minimize food waste and over consumption. Broaden channels for universal participation, develop biodiversity citizen science, study the establishment of a biodiversity conservation alliance with the participation of all parties, set up a platform for universal participation in monitoring with smartphones and internet as the main means, and promote the realization of biodiversity data accumulation, sharing and benign development.

We will strengthen judicial safeguards for biodiversity protection, improve the mechanism for public interest litigation on biodiversity and the mechanism for reporting illegal activities, open up reporting channels, and support the news media to carry out public opinion supervision. Strengthen the information disclosure mechanism and respond to relevant hot issues of public concern in a timely manner. Innovatively explore biodiversity conservation activities suitable for the participation of different groups of people, and guarantee the rights of women, children, adolescents and people with disabilities to participate in biodiversity conservation activities and exert their positive influence. By 2030, a universal action system for biodiversity conservation will be fully established, public participation in biodiversity conservation will be greatly increased, and a model for the common construction, governance and sharing of biodiversity will be formed.

# Column 6. Priority projects for national action for biodiversity conservation

# 1. Development of a national action program for biodiversity conservation

Evaluate and analyze the current situation of the participation of various actors in biodiversity conservation and the problems and challenges involved; adhere to a problem-oriented approach; aim to promote action from all in biodiversity conservation; and study the construction of systems, innovation of technical modes, and specific action initiatives for different actors in order to promote the participation of the entire population in action for biodiversity conservation.

#### 2. Building a platform for universal participation in biodiversity conservation

Build a unified platform for universal participation in biodiversity conservation, provide data access, display and sharing, knowledge popularization, complaint reporting, volunteer services and other participation functions, and provide entry points and platform for enterprises, the public, social organizations and other stakeholders to participate in biodiversity conservation.

#### 3. Improvement of the policy mechanism for public participation in biodiversity conservation

Improve the policy mechanism for public participation in biodiversity conservation, including information disclosure, publicity and education, ecological performance, incentives and penalties. Combine carbon footprints, carbon credits, carbon points, etc., use big data to improve the record of all people's participation in biodiversity conservation behavior, and explore the establishment of a green credit mechanism for public participation in biodiversity conservation and a charity funding mechanism, and guide enterprises, the public and social organizations to actively participate in biodiversity conservation initiatives.

# Priority area II. Addressing threats of biodiversity loss

#### **Priority action 7: Ecological space protection**

Optimizing the spatial development and protection pattern of the national territory, and making biodiversity protection an important element of spatial planning of the national territory. We will strictly abide by the red line of ecological protection, strengthen the control of human activities along the red line of ecological protection, carry out dynamic monitoring and assessment of the effectiveness of protection, and strengthen the supervision of the ecological environment. We will strengthen the supervision of the protection of priority areas for biodiversity protection, build up the pattern of key ecological functional zones, and improve the supporting policies for key ecological functional zones. Optimize the pattern of marine ecological security, and improve the control of land reclamation.

Establish a system of development control and shoreline development, and strictly adheres to the bottom-line requirements of the target rate of natural shoreline retention on the mainland. The requirements for zoning and use control in territorial spatial planning will be fully integrated, and a zoning control system for ecological environment covering the entire region is to be improved, with differentiated ecological environment access lists established. Relying on ecological spacerelated supervision platforms to strengthen dynamic monitoring, assessment and early warning of important ecological space. Biodiversity impact assessment will be incorporated into the management requirements for large-scale engineering construction, resource development and utilization projects, and the whole process of supervision beforehand, during and after the projects will be strengthened. By 2030, important ecological space will be effectively protected, the originality and integrity of natural ecosystems will be maintained, and the degradation of important ecosystems and the loss of habitats will be curbed.

# Column 7. Priority projects for ecological space

# protection

### 1. Conservation monitoring of priority areas for biodiversity conservation

On the basis of biodiversity surveys and monitoring, connecting important ecological spaces such as nature reserves and ecological protection red lines, and taking into account biodiversity hotspots, optimizing and adjusting the priority areas for biodiversity conservation in land areas. Complete the delineation of priority areas for marine and coastal biodiversity protection, and determine the scope of priority areas and work priorities. Strengthening supervision the protection of priority areas for the conservation of biodiversity, and establishing a regularized working mechanism for updating and adjusting, tracking and evaluating.

### 2. Ecological protection red line monitoring, assessment and supervision

Strengthen the monitoring of the red line of ecological protection, and establish and improve the system of indicators for evaluating the red line of ecological protection in terms of natural resources, land use, ecological functions and environmental quality. Regularly organize and carry out assessments of the effectiveness of protecting the red line of ecological protection. Strengthen the supervision of problem relating to red line of ecological protection.

# **Priority action 8: Ecosystem restoration**

Complete the ecological zoning of land and sea areas; carry out the identification and determination of key areas for ecological restoration; adhere to the principle of natural restoration, promote the integrated protection and systematic management of mountains, water, forests, cultivated fields, lakes, grasses and sands; accelerate the implementation of major projects for the protection and restoration of important ecosystems, and continued to promote the ecological restoration of abandoned mines left over from history. Scientifically carry out large-scale land greening actions, strengthen ecological restoration of wetlands and grasslands, promote sand prevention and control and rocky desertification management, and implement rest and recuperation of grasslands, forests, rivers, lakes and wetlands. Habitat restoration and the construction of ecological corridors will be carried out through near-natural engineering measures to enhance habitat connectivity and expand the scope of suitable habitats. We will standardize the breeding and releasing of aquatic organisms, and carry out regular evaluation of the effects of breeding and releasing. Improve ecological protection and restoration standards and norms, and incorporate biodiversity into the performance evaluation system of ecological protection and restoration projects. In due course, assessment of the effectiveness of the implementation of major projects for the protection and restoration of important ecosystems to be carried out. By 2030, the forest coverage rate will reach about 25 percent, the comprehensive vegetation cover of grasslands will reach about 60 percent; and at least 30 percent of the degraded ecosystems on land, inland waters, coasts and oceans will have been effectively restored; and the quality, function and stability of ecosystems will have been significantly enhanced.

# Column 8. Priority projects for ecosystem restoration

### 1. Ecological corridor connectivity

Based on the distribution of important wildlife and population dispersal trends, determine the priority areas for ecological corridor construction, and adopt the natural engineering measures to build ecological corridors, evaluating the effectiveness of protection of existing important corridors, and identifying problems and gaps. Improve restoration and protection measures to enhance the effectiveness of connectivity. Remove fences, nets and other barriers that block normal animal migration and communication obstacles to ensure smooth migration and proliferation.

# 2. Marine ecosystem restoration

Restore and rehabilitate typical marine ecosystems with a focus on natural restoration. Strengthen ecosystem restoration of estuaries, bays and coastal wetlands, mangroves, coral reefs, seagrass beds, etc. ; and remediation and restoration of coastlines and sandy shorelines.

# Priority action 9. In-situ conservation of biodiversity

To comprehensively build a system of nature reserves with national parks as the main body, nature reserves as the foundation and nature parks as supplements, optimize the layout of nature reserves, build national parks with high quality, enhance the level of protection of important ecosystems, wild animals and plants, and their important habitats (in situ habitats), and comprehensively improve the level of protection and management of resources and the quality of ecological services in nature reserves. Innovate other effective area-based conservation measures (OECMs), and strengthen the protection of important wildlife habitats and wild plant native habitat protection areas distributed outside nature reserves. Explore public welfare governance, community governance and joint governance, and support the development of various forms of insitu civil biodiversity conservation. Improve the laws and regulations, management and supervision system of nature reserves; further improve the construction of nature reserve monitoring stations; strengthen the supervision of nature reserves and the assessment of the effectiveness of biodiversity conservation, and continuously carry out the "Green Shield" nature reserve supervision. By 2030, at least 30% of land, inland water, coastal and marine areas will be effectively protected and managed ("3030 target"). The total area of nature reserves accounts for about 18% of the country's land mass; and the protection rate of land wildlife and land wild plant species under national key protection will reach to about 80%; and the quality and stability of marine ecosystems is to be significantly improved.

# Column 9. Priority projects for in-situ conservation of biodiversity

# 1. Other Effective Area-based Conservation Measures (OECMs) Standard Building and Demonstration

Study and propose the scientific connotation and extension of OECMs suitable for China's actual situation, formulate criteria for the identification of OECMs, promote the standardization of OECMs, and carry out pilot demonstrations of OECMs on land, in inland waters, and at the coast and in the oceans, and contribute to the realization of the "3030 target".

# 2. In-situ conservation of wildlife

Conducting surveys and assessments of the status and effectiveness of in-situ protection of rare and endangered wildlife, and identifying protection vacancies. Conservation of key wildlife habitats, migratory corridors for birds, and important aquatic germplasm resources and living environments will be strengthened. During the 14th Five-Year Plan period, about 650 important wildlife habitats will be designated, and about 300 in-situ protected habitats for rare and endangered wildlife that are not included in nature reserves will be established and monitoring being effectively enforced.

# Priority Action 10: Ex-situ conservation of biodiversity

China will steadily push forward the construction of a national botanical garden system, and build a wild plant ex-situ protection system consisting of a national botanical garden, local botanical gardens, a research center for propagation and ex-situ protection, and a germplasm resource bank. China will form a relatively complete wildlife shelter and rescue system, strengthen the construction of breeding bases for rare and endangered species, carry out wild releases in an orderly manner, and build a national gene bank for wildlife genetic resources. We will also strengthen the relocation and in vitro conservation of national biological genetic resources, and intensify the conservation of wildlife genetic resources; and comprehensively promoting the collection and preservation of germplasm resources of agricultural crops, livestock and poultry, forestry and grassland, traditional Chinese medicinal herbs, and marine and freshwater fisheries, and substantially increasing the total amount of resources preserved; and strengthen the protection of aquatic wildlife; implement in-depth action plans for the protection of seven species, including Chinese white dolphin and Chinese sturgeon. Strictly manage zoos, oceanariums and all kinds of wildlife domestication and breeding facilities, and regulate commercial activities such as exhibitions and shows. By 2030, a relatively complete system for the relocation and protection of rare and endangered wild animals and plants will be formed.

# Column 10. Priority projects for translocation and conservation of biodiversity

# 1. Assessment of the conservation status of wildlife relocation

Evaluate the effectiveness of the construction of various types of wild plant ex-situ protection systems, grasp the status of wild plant ex-situ protection and return to the wild, and identify protection vacancies. Evaluate the contribution of zoos, oceanariums, wildlife rearing and breeding facilities, sheltering and rescue organizations, etc., to the in-situ conservation of wild animals and the problems they face, and establish the species genealogy and breeding records of the populations under in-situ conservation.

# 2. Construction of agricultural germplasm resources protection system

Implementing the requirements of two-level management for the protection of agricultural germplasm resources at the national and provincial levels, and establishing and improving the protection mechanism of national coordination, hierarchical responsibility and organic convergence. A number of national agricultural germplasm resource banks (farms, areas and nurseries) will be identified and constructed; as well as improving the layout of provincial agricultural germplasm resource banks (farms, areas and nurseries).

# 3. Construction of the National TCM Germplasm Resource Bank

Based on the results of the Fourth National Census of Traditional Chinese Medicine Resources, extensively collect and preserve medicinal resources, and build a national TCM germplasm repository.

# 4. Construction of Plant Science Data Center

China will promote the construction of a national plant scientific data center integrating plant data aggregation, quality control, analysis and sharing services, and serve the national botanical garden system.

# 5. Conservation and restoration of endangered species and species of very small population

Selecting endangered species and those of very small populations, systematically study their distribution, population dynamics, habitat and habitat changes, changes in genetic diversity and threatened factors; thoroughly explore their endangerment mechanisms; construct a theoretical framework for the endangerment mechanisms of the species protection techniques; research and develop techniques for habitat identification, species breeding, endangerment pathway control, habitat protection and restoration, and rewilding of captive population; and propose measures to protect and restore endangered species, and conduct pilot projects.

# Priority action 11: Sustainable management of wild species

Strengthen the sustainable management of wildlife, improve the management system for the utilization of key wildlife, such as licensed hunting and fishing permits, collection permits, fishing permits, artificial breeding permits, business and utilization permits, and special labels, respect the sustainable utilization habits and lifestyles of local residents, strengthen the protection of wildlife species resources and the supervision of their sustainable utilization, and reduce the risk of extinction of wildlife caused by human beings. China will strengthen the management of wildlife populations and community health, scientifically prevent, control and reduce the risk of harm caused by wildlife such as Asian elephants, bears and wild boars, as well as the harm they cause to people's lives and property, establish a quota system for population control, improve the system for compensating for damage caused by wildlife, and promote the resolution of conflicts between human beings and wildlife. We will also strengthen the management of the import and export of endangered wildlife, and protect and rationally utilize wildlife resources. By 2030, the level of sustainable management of wild species will be comprehensively improved.

# Column 11. Priority projects for sustainable management of wild species

**1. Research and pilot demonstration of human-wildlife conflict resolution pathways** With regard to wild boars, hares, brown bears, black bears, rock sheep and other wild animals whose populations are obviously large in local areas and which have seriously affected the normal production and life of the public or the health of natural ecosystems, a system of annual population control limits will be established on a pilot basis, and moderate hunting and proper disposal will be organized. Improve the hunting quota management system and wildlife damage compensation system, and explore new models for mitigating human-wildlife conflicts. **2. Strengthening the management of trade in endangered wildlife and flora** Enforce the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and improve the relevant national laws and regulations; and in particular, improve the relevant management policies and standards and norms for online business and delivery service.

### **Priority Action 12: Biosafety Management**

Strengthening the national biosecurity coordination mechanism, and promoting joint prevention and control of invasive alien species and harmful organisms. We will strengthen the construction of a risk assessment system for foreign species; strictly evaluate the introduction of foreign species and the environmental release of biotechnology products; strengthen the standardized management of the trade and release of "exotic pets"; enhance multi-sectoral coordination; carry out the "Three-Year Special Action to Strictly Prevent the Invasion of Foreign Species," and improve the capacity of quarantine, detection, identification, risk prevention and control at ports. Promote the identification, census, monitoring and early warning of invasive alien species. Enforce monitoring, preventing and controlling wildlife epidemics. Optimize the layout of monitoring stations (points), and strengthen the monitoring and early warning of key areas where invasive alien species occur and areas at high risk of invasion. Strengthen the research and development and integrated demonstration and application of key technologies such as precise identification of invasive alien species and harmful organisms. Developing a technical support system for risk assessment and regulation, and tracking and monitoring the impact of biotechnology products such as genetically modified organisms on the ecological environment. We will develop accurate detection and rapid screening technologies for emerging biotechnology products, and construct an environmental risk assessment model and indicator system for them. By 2030, a joint prevention and control mechanism for biosafety will be formed, the ability of biosafety risk perception and identification, monitoring and early warning, assessment, prevention and control will be significantly improved, and the rate of introduction and colonization of known or potential invasive alien species will be reduced by at least 50%.

#### **Column 12. Biosafety Management Priorities**

# **1.** Monitoring and early warning of alien invasive species and biodiversity impact assessment in key regions

Continuously carry out identification, census, monitoring and early warning of alien invasive species; map out the types, distribution, area of occurrence and degree of harm of alien invasive species; establish a database on the basic information of known or potential alien invasive species; assess the impacts of important alien invasive species on biodiversity and ecosystem structure and function; and improve the monitoring and early warning of major hazardous invasive species.

# 2. Interdiction, prevention and control of important alien invasive species and integrated management

With regard to important invasive species affecting biodiversity and ecosystem services, strengthen research on invasion mechanisms and damage mechanisms, analyze and judge proliferation paths and invasion trends, research and develop key technologies such as source prevention and control, path interception and biological control; carry out pilot demonstrations of integrated prevention and control technologies; establish an integrated prevention, control and management technology system for important invasive species, and raise the quality of the technology; increase ecosystem resistance to invasion and sustainability of invasion prevention and control.

### 3. Environmental safety monitoring in biotechnology

In the environmental release areas of biotechnology products such as GMOs and other biotechnology products, fully integrate the existing monitoring platforms and rationalize the layout of monitoring stations. And improve the technical system of detection, evaluation, monitoring, risk prevention and control of the environmental release of biotechnology products, and prevent the environmental release of biotechnology products and important wild germplasm.

# 4. Identification and Assessment of Environmental Release Risks for Emerging Biotechnology Products

Develop key technologies for the identification, monitoring and safety evaluation of environmental release risks of emerging biotechnology products, such as gene editing and synthetic biology, and construct a technology system for the identification, evaluation and traceability monitoring of environmental safety risks based on the whole life cycle. Based on the biological attributes, molecular operational characteristics and application scenarios of emerging biotechnology products, construct an environmental risk assessment index system and assessment model, and classify, prejudge, analyze and assess the risk of their environmental release.

#### Priority action 13: Environmental quality improvement

We will fight an in-depth battle against pollution and promote carbon reduction, pollution reduction, greening and growth in a coordinated manner. China will strengthen the coordinated control of air pollutants and regional coordinated management, and continuously improve air quality; systematically promote sewage collection and treatment in towns and industrial parks; strengthen the supervision and management of river and sea outfalls; promote the comprehensive management of key sea areas, improve the comprehensive management system of coastal, watershed and sea areas, and enhance the self-purification capacity of water bodies. Implement fertilizer and pesticide reduction and efficiency actions and agricultural film recycling actions, strengthen pesticide packaging waste recycling and treatment, promote the resourceful use of livestock and poultry manure, and gradually phase out highly toxic and high-risk pesticides. China will strengthen the prevention and control of plastic pollution along the entire life cycle, vigorously carry out special cleanup and remediation of plastic waste, significantly reduce the amount of plastic waste landfilled and the amount of environmental leakage, and encourage provinces with the conditions to promote the construction of "waste-free cities" throughout the regions. A list of key new pollutants for control will be dynamically released, and environmental risk control measures for the whole process will be scientifically formulated and implemented to reduce the environmental risks of new pollutants. By 2030, the risk of pollution from all sources will be

effectively curbed, the intensity of nitrogen and phosphorus pollutant emissions from agricultural sources will be significantly reduced, and 10 types of highly toxic pesticide will be gradually phased out, urban black and smelling water bodies are basically eliminated. In addition, the safe utilization rate of contaminated arable land will reach more than 95%, and safe utilization of key construction sites is effectively guaranteed, plastic pollution curbed.

# Column 13. Priority projects for environmental quality improvement

# **1**. Evaluation of the impact of environmental pollution and pollution prevention actions on biodiversity and standard-setting

To construct an ecological risk evaluation system for environmental pollution with biodiversity as an important indicator, and to introduce evaluation standards. Carry out evaluation of the effectiveness of pollution prevention and control actions. Incorporate biodiversity-related elements into the performance evaluation system of pollution control projects, promote synergistic management of pollution and biodiversity, and enhance the effectiveness of pollution control.

### 2. Synergistic management of biodiversity and pollution

We will fight an in-depth battle against pollution, synergize carbon reduction, pollution reduction, green expansion and growth, and promote the incorporation of biodiversity-related indicators into the pollution management process. Strengthen the synergistic control of air pollutants and regional synergistic management, and continuously improve air quality. We will continue to deepen the treatment of water pollution, promote the synergistic treatment of pollution in land and sea areas, and carry out the treatment of endogenous pollution in water bodies and ecological restoration according to local conditions. Effectively control the risk of soil pollution, implement actions to reduce and increase the efficiency of fertilizers and pesticides, and actions to recycle agricultural films, strengthen the recycling and treatment of pesticide packaging waste, and protect beneficial organisms such as bees and earthworms.

#### Priority action 14: Synergistic management of biodiversity and climate change

Coordinate the formulation of a policy framework for biodiversity adaptation to climate change, and strengthen the construction of a support system for biodiversity adaptation to climate change. Strengthen the monitoring and assessment of the impact of major meteorological disasters and climate change on China's important ecological functional areas, important species and fragile ecosystems, as well as the forecasting and early warning, and enhance the capacity for climate risk management and comprehensive disaster prevention and mitigation. Explore nature-based solutions (NbS) and ecosystem-based ecosystem-based approaches (EbA); enhance the climate resilience of ecosystems and the function of carbon sinks. Establish a monitoring and accounting system for carbon sources and sinks in ecosystems. Formulate technical specifications for evaluating the impact of climate change and measures to address climate change on biodiversity, and build a technical methodology and policy support system for synergizing climate action and biodiversity conservation. By 2030, a support system for biodiversity adaptation to climate change, ecosystem carbon stabilization and sink enhancement; national key ecological functional zones will be fully integrated into the regular monitoring of the impact of climate change and the risk early warning system; the climate resilience of the ecosystems and the capacity of carbon sinks will continue to be upgraded. Synergies between climate change response and biodiversity conservation have been steadily promoted.

### Column 14. Priority projects for synergistic management of biodiversity and climate change

# **1**. Construction and demonstration of support systems for biodiversity adaptation to climate change

Conduct basic research on the evolution of the geological and climatic environment and the formation of biodiversity, as well as the adaptation of biodiversity to climate change. Explore key technologies, implementation standards and key policies, build a coordinating mechanism and explore a mechanism for dynamic spatial adjustment. And build a support system for biodiversity adaptation to climate change based on "theoretical guidance, technological drive and strategy implementation", emphasizing "coordination and strengthening, adjustment and optimization", and promote the development of a typical biodiversity adaptation system. China will also promote pilot demonstration projects for adaptation to climate change in typical ecologically fragile and biodiversity-rich regions.

# **2**. Construction and demonstration of support systems for synergies between climate action and biodiversity conservation

Carry out research on the impacts of climate change and measures to address climate change on biodiversity; formulate technical specifications for impact evaluation; construct a system of impact monitoring indicators; and build a system of synergistic technical methodology system and implementation pathway for climate action and biodiversity conservation, with the goal of "reducing negative impacts and improving synergistic effects". We will also promote pilot demonstrations of synergy between typical natural ecosystems, urban ecosystems, agricultural ecosystems and economic and social systems.

# 3. Construction and demonstration of support systems for ecosystem carbon stabilization and sink

Carry out the work of "theory, investigation, monitoring, assessment and accounting" of ecological carbon sinks, and promote the research on basic theory and methods and cutting-edge technology of carbon sinks in terrestrial and marine ecosystems. Establish a monitoring and accounting system for carbon sinks in ecosystems; implement background surveys of carbon sinks, assess carbon stocks and analyze potentials, and build a basic support system for ecosystem carbon sinks. Promote the carbon stabilization and enhance service of ecosystems such as forests, grasslands, wetlands, oceans and soils, marine, soil and other ecosystems to stabilize carbon and increase sinks.

# Priority area III. Sustainable use of biodiversity and benefit-sharing

#### Priority action 15: Sustainable use of germplasm resources

Strengthen the construction of a national germplasm resources utilization platform and sharing system, and promote the safe sharing and orderly development of biological resources. China will strengthen the discovery, organization, testing, screening and evaluation of traits and functions of biological resources, and build a DNA molecular fingerprint library, character library and database of germplasm resources. We will build a basic scientific research and commercialized breeding system of international advanced level, and promote the in-depth integration of industry, academia and research, as well as the integrated development of breeding, reproduction and promotion. Strengthen the construction of national and provincial breeding and seed production bases, and further optimize the regional layout of seed production. Also we will improve the biotechnology level of germplasm resources in brewing, fuel, environment and traditional Chinese medicine. By 2030, the germplasm resources protection and utilization system will be more sound and complete, the identification and evaluation and development and sharing capacity will be greatly improved, a number of breeding innovation platforms will be built, a number of breakthrough new varieties will be selected and promoted, and a number of breeding bases will be constructed.

# Column 15. Priority projects for sustainable utilization of germplasm resources

# 1. Census of agricultural germplasm resources

Accelerating the agricultural germplasm resources census, mapping out the resource base, and realizing the collection and preservation of all the resources that should be collected. Publishing the report on the census of agricultural germplasm resources, livestock and poultry genetic resources status report and aquaculture germplasm resources status report.

### 2. Precise identification of crop germplasm resources

Based on the resources preserved in national germplasm resource center, carry out genotypic identification of the resources, explore the genetic background and composition; and construct "molecular identity cards".

# 3. Shared utilization of agricultural germplasm resources

Improve the mechanism of sharing and utilizing germplasm resources, promote the registration of germplasm resources, and continuously release the catalog of available germplasm resources; give full play to the role of the national crop germplasm resources sharing platform, and realize the digitization and informationization of germplasm resources sharing. Organize the display and promotion of excellent germplasm resources, encourage local varieties to apply for geographical indication products and important agricultural cultural heritage, and increase the development and utilization of resources.

#### 4. Survey and Conservation of Endemic Medicinal Plant Resources in China

Carry out germplasm resource surveys on more than 3,500 endemic medicinal plant resources in China, strengthen the collection of germplasm resources, and carry out the conservation and assessment of germplasm resources, and establish an information-sharing mechanism.

# Priority action 16: Sustainable management of agriculture, forestry and fisheries

Comprehensively promoting the development of green, low-carbon agriculture; advancing the integration of grain, economics and feeding, and the coordination of agriculture, forestry, animal husbandry and fisheries, and enhancing the ability to supply green and ecological products. Promoting the construction of ecological ditches, ecological corridors and other idyllic ecological landscapes, developing biodiversity-friendly practices such as eco-agriculture and symbiotic breeding, and upgrading the level of green prevention and control of pests and diseases.

Promote soil health and restore populations of pollinating insects such as bees. Improve the policies of grass-animal balance, and reduce the pressure of overloading grasslands. It has established a fishery resources conservation and management system and a system for the protection and utilization of aquatic germplasm resources, improved the system of fishing moratoriums and quotas, continued to promote ecological and healthy aquaculture, implemented a white-list system

for the use of inputs used in aquaculture, constructed modern sea ranches, and developed sea ranch demonstration sites represented by the augmentation-type, conservation-type, and recreational-type types. It will strictly implement the fishing moratorium and ban system, actively implement autonomous moratoriums on fishing on the high seas, crack down on illegal, unreported and unregulated (IUU) fishing activities, actively promote the pilot program of marine fishing limits, and implement the management of the total amount of marine fishery resources. China will develop the forest economy, bio-economy, eco-tourism and eco-recreation in an appropriate and orderly manner; improve the green supply chain management and green product standard system, strengthen the management of green food and organic agricultural product certification, and enhance the resilience of ecosystems and the ability to sustain the supply of ecological products. By 2030, the aquatic biological integrity indexes of the Yangtze River and the Yellow River will be established and improved, the number and diversity of fish populations in the upper reaches of the Yangtze River will be significantly improved, the supply capacity of green ecological products for agriculture, forestry, animal husbandry and fishery will be significantly enhanced, the risk of pollinators being threatened will be significantly lowered, and the health grade of soil will be significantly upgraded.

#### Column 16. Priority projects for sustainable management of agriculture, forestry and fisheries

#### 1. Soil health evaluation and enhancement

Research and formulate a soil health evaluation index system with biodiversity as an important indicator, and introduce relevant evaluation standards, and carry out agricultural soil health evaluation. Compile a list of soil health restoration and enhancement techniques, and carry out pilot demonstrations of biodiversity-friendly practices such as eco-agriculture.

#### 2. Health assessment and enhancement of aquaculture systems

Systematically study and assess the impact of aquaculture on biodiversity, and establish aquatic ecological health of aquaculture system evaluation standards, restoration techniques and application specifications.

#### 3. Regulation and functional enhancement of planted forest systems

Systematically study and assess the ecological functions of planted forests of different ages, and improve the technical system for regulating the structure and improving the functions of planted forest systems, and carry out pilot demonstrations of large-scale plantation forest renovation.

#### Priority action 17: Value realization of ecological products

Improving and perfecting standards for assessing the value of biodiversity and ecological products; carrying out a census of basic information on ecological products in key regions and a comprehensive value assessment; gradually establishing a platform for transforming the value of ecological products and a market trading system, and accelerating the improvement of the path of realizing the value of ecological products that is led by the government, participated by enterprises and all sectors of the community, operated on a market basis, and is sustainable. Innovate the mode of transforming the value of ecological products, develop original ecological farming, ecotourism and recreation and leisure integration, processing and utilization of characteristic biological

resources according to local conditions, and promote biodiversity-friendly technologies and traditional practices. Encourage the creation of distinctive regional public brands of ecological products, establish and standardize evaluation standards for ecological product certification, build a certification system for ecological products with Chinese characteristics, and promote the international mutual recognition of ecological products. Accelerating the integrated development of biodiversity conservation and rural revitalization, and encouraging social capital and local communities to participate in ecosystem conservation and restoration, eco-product development and franchising activities in various forms. Encourage localities to carry out profit and loss accounting and compensation for the value of biodiversity and ecological products and services. By 2030, a mechanism for realizing the value of ecological products will be established, the ability to transform ecological advantages into economic advantages will have been significantly enhanced, and the diversity of ecosystems will have been significantly increased.

# Column 17. Priority projects for the realization of the value of ecological products

# 1. Survey and cataloguing of basic information on ecological products in key regions

Carry out a basic information census of ecological products in key regions such as the Yangtze River Economic Belt, the Yellow River Basin and the Qinghai-Tibetan Plateau, so as to ascertain the distribution of the quantity, quality level, functional characteristics, protection, development and utilization of various types of ecological products, and to form key List of regional ecological product catalogs. Carrying out assessments of the value of ecological products and improving methods for assessing the value of biodiversity.

# 2. Standardization of ecological product value evaluation techniques

Explore the construction of a system for evaluating the total value of ecological products in administrative units and the value of ecological products in specific geographical units, and carry out ecological value accounting focusing on the physical quantity of ecological products, and form standardized ecological product value evaluation techniques, so as to lay a solid foundation for standardizing and guiding the wide-scale implementation of ecological product value accounting throughout the country.

#### 3. Regional integration and promotion of biodiversity-friendly technology models

Integrate advanced and exemplary technologies and methods for the sustainable use of biodiversity in various regions, explore the paths and modes of high-quality transformation of biodiversity advantages into industrial advantages, and organize and form typical biodiversity-friendly projects cases, and carry out large-scale and multi-channel promotion and replication.

#### 4. Cultivation and management of regional public brands of ecological products

With regard to ecological products with outstanding characteristics and significant advantages in typical regions, digging deep into biodiversity-related traditional knowledge, cultivating and building regional public brands, incorporating upstream and downstream ecological products into the scope of the brand, and strengthening the protection of the brand and sustainable operation, enhance the influence of regional eco-product brands, and increase the premium price of eco-products.

### 5. Standardization of ecological product certification system

Continuously improve the eco-product certification standards related to eco-agriculture, culture and tourism and other eco-service industries, synergize with the goals of pollution reduction and carbon reduction, strengthen the certification of eco-products, quality traceability and channel construction, regulate and guide the standardized operation and circulation of eco-products, and refer to the advanced practices of international eco-product certification to build a certification system for eco-products with Chinese characteristics.

### Priority action 18: Urban biodiversity

Incorporate biodiversity conservation into the system of relevant urban regulations, planning and policies, and prepare and implement a national special plan for urban biodiversity conservation. Carry out surveys and assessments of the diversity of urban ecosystems, species, genetic resources and related traditional knowledge; and promote regularized monitoring of urban biodiversity. Promote the implementation of urban territorial spatial master plans; strengthen the construction of blue and green spaces and ecological corridors in urban and densely populated areas; improve the service functions and self-sustainability of urban ecosystems, enhance the biodiversity, ecological connectivity and integrity of local areas; improve human health and well-being; and enhance the connection between urban residents and nature. Strengthen the construction of ex-situ and in-situ protection facilities for urban species and genetic resources, and establish and improve mechanisms for the prevention and control of the risk of invasive alien species, human-animal contact and the spread of epidemics in cities. Promote the construction of biodiversity-friendly cities, integrate biodiversity into the process of urban repair, ecological restoration, smart transformation and various kinds of pilot demonstration, and accelerate the construction of biodiversity experience facilities for the public. By 2030, the sustainable urban development model of harmonious coexistence between human beings and nature will have been be initially established, and the city will have a more sustainable development model; and the size, quality and connectivity of blue and green spaces in and around densely populated areas increase significantly.

#### **Column 18. Urban Biodiversity Priorities**

### 1. Standardization of urban biodiversity surveys, monitoring and assessment

Establishing technical specifications for urban biodiversity survey, monitoring, assessment, planning and management. Improve the construction of an intelligent monitoring network for urban biodiversity, carry out regularized monitoring of urban biodiversity, and continuously improve the ability to obtain high-precision urban biodiversity. Carry out surveys on the diversity of urban ecosystems (habitats), species, genetic resources and related traditional knowledge, timely assess the distribution of urban biodiversity and the threatened situation, and adopt adaptive management. Establish an urban invasive alien species survey, assessment and control system, and establish humananimal contact and epidemics in densely populated areas. Dissemination of risk prevention and control mechanisms to safeguard urban ecological security.

# **2.** Action plan preparation for urban biodiversity conservation and sustainable use Carry out research on the spatial and temporal patterns of urban biodiversity differentiation and its impact mechanisms, planning and protection, incorporate biodiversity-related content into urban development planning, and guide localities in the preparation of plans for the conservation and

sustainable use of urban biodiversity. Draft action plans, targets and engineering measures to enhance the diversity, stability and sustainability of urban ecosystems.

**3. Habitat restoration and ecological corridor construction for urban biological species** Carry out urban species habitat restoration and water-body's shoreline restoration, strengthen the ecological and water environment restoration of urban wetlands such as rivers, lakes and coastal zones; take into account the diversified needs of species habitat and spatial connectivity from the perspective of urban-rural integration; protect old and famous trees; encourage the use of native species; enrich the level of plant structure, and build near-natural habitat environments, so as to increase the area, quality, ecological connectivity and completeness of the city's blue-green space, and expanding high-quality ecological products provision, enhance the well-being of people's livelihoods.

**4.** Construction of a synergistic model for biodiversity conservation and urban development Biodiversity protection will be integrated into the creation of ecological civilization construction demonstration zones, practice and innovation bases for "lucid waters and lush mountains are invaluable assets", national garden cities, national forest cities, national model cities for environmental protection and other types of demonstrations. Explore the construction of biodiversity-friendly urban units in communities, villages and towns, as well as scenic spots, parks and schools, and strengthen the application of native species in urban ecological restoration and environmental quality improvement. Guiding the establishment of in-situ relocation of biodiversity protection facilities and urban green spaces, pocket parks and other biodiversity experience sites.

#### Priority Action 19: Access and Benefit-Sharing of Biological Genetic Resources

China will establish a management system for access to and benefit-sharing of biological genetic resources, strengthen the management and supervision of activities in the collection, preservation and utilization of biological genetic resources, and improve the system of responsibility for access, utilization, entry and exit approvals, as well as the system of accountability for such activities. We will carry out risk assessment of the loss of biological genetic resources, improve the ability to identify and analyze risks to the security of biological resources, compile a list of key regulatory biological genetic resources, and establish a mechanism for monitoring and early warning of biological security risks. Also formulate methods for declaring and registering important biological genetic resources, and strengthen the registration and source management of genetic resources and related emerging biotechnology products. Strengthen the management of information on biological genetic resources, and promote cross-sectoral interoperability and sharing of regulatory information on access to biological genetic resources, their exploitation and utilization, entry and exit, intellectual property rights protection and benefit-sharing. Encourage enterprises and the private sector to protect biological genetic resources and their related traditional knowledge through access to genetic resources and benefit-sharing. By 2030, a system of access, utilization and benefit-sharing of biogenetic resources will be established, the loss of biogenetic resources will be largely curbed, and the protection and cultivation of unique biogenetic resources will be continuously strengthened.

#### Column 19. Priority projects on access and benefitsharing of biological genetic resources

# 1. Construction and pilot demonstration of a mechanism for the sustainable utilization and benefitsharing of biological genetic resources

Define the scope of application of access and benefit-sharing of biological genetic resources in China, and formulate a management system for access and benefit-sharing of biological genetic resources. Compiling a list of key regulatory biological genetic resources and formulating methods for the declaration and registration of important biological genetic resources. Conduct pilot trails on benefit-sharing of biological genetic resources and their associated traditional knowledge in places like Hunan, Guangxi, Hainan and Yunnan.

#### Priority action 20: Protection and inheritance of traditional knowledge

Carry out surveys and cataloguing of traditional knowledge related to biodiversity, and carry out rescue surveys, excavation and collation of traditional knowledge of high value in the fields of agriculture and animal husbandry, traditional Chinese medicine, traditional crafts, folklore and games; and carry out research on digitized and visualized records. A traditional knowledge protection and registration system will be established, and regulations on the protection of traditional knowledge in Chinese medicine will be formulated. We will improve the system of representative items of intangible cultural heritage and the system of representative inheritors, deepen the registration and declaration of important agricultural cultural heritage, and strengthen the management of identification. Support the inheritors of intangible cultural heritage to carry out inheritance activities and cultivate successor talents. Encourage agricultural germplasm resources, foodstuffs, traditional Chinese medicines and craft products with typical national traditional cultural characteristics to apply for trademark protection in accordance with the law, so as to enhance brand influence and the added value of products. We will build a national digital library of ancient Chinese medicine books and traditional knowledge, support intangible cultural heritage museums, inheritance experience centers (institutes and sites) and Chinese medicine cultural halls and other places to carry out study and experience and popularization and dissemination of traditional knowledge related to biodiversity, promote the integration of traditional knowledge related to biodiversity into cultural tourism products, and enhance the public's cultural self-confidence in traditional knowledge related to biodiversity. By 2030, a policy system for the protection of biodiversity-related traditional knowledge will be initially formed, and the capacity for the protection, inheritance and innovation of traditional knowledge will have been significantly strengthened.

# Column 20. Priority projects for the protection and inheritance of traditional knowledge

### 1. Rescue conservation of traditional knowledge related to biodiversity

Establish a data and information base on traditional knowledge to provide data and information support for the protection, inheritance and application of traditional knowledge.

# 2. Demonstration of the protection and inheritance of biodiversity-related traditional knowledge

Select representative ethnic groups, regions or typical species, carry out research on biodiversityrelated traditional knowledge, explore the value of traditional knowledge for biodiversity conservation, climate change adaptation and rural revitalization; carry out demonstrations of adaptive management of ecosystems based on the organic fusion of traditional knowledge and modern technological methods; and cultivate a group of biodiversity-related traditional knowledge study and experience bases, cultural and creative products, screening of typical cases and promotion.

# Priority area IV. Modernizing biodiversity governance capacity

# Priority action 21: Biodiversity survey monitoring

Improve the technical standard system for biodiversity survey and monitoring, and promote the standardization and normalization of survey and monitoring work. We will integrate various types of resource survey and monitoring work, strengthened the monitoring of the red line of ecological protection, and comprehensively pushed forward the surveys of ecosystems, key biological species and important biogenetic resources in the priority areas for biodiversity protection and key ecological zones such as the Yellow River, the Yangtze River, Beijing-Tianjin-Hebei, and near-shore sea areas. Fully relying on existing monitoring stations and sample sites at all levels, improve the biodiversity monitoring network, incorporate biodiversity into ecological quality monitoring, and upgrade the biodiversity monitoring platform for nature reserves. Continuously carry out surveys and monitoring of wildlife resources under national key protection, as well as crops and livestock, aquatic products, forest and grass plants, medicinal plants and animals, and fungus species.

Surveys of germplasm resources is to be conducted; and surveys of wildlife genetic diversity are being explored. Timely adjust and release the list of national key protected wildlife, regularly update the list of biological species and biological genetic resources, and determine and release the list of important wildlife habitats. Integrate and establish a multi-stakeholder cooperative survey and monitoring system, and fully mobilize social forces and capital to participate in the survey and monitoring work. By 2030, full coverage of regular surveys and regular monitoring of ecosystems, key species and important biological genetic resources in key regions will be realized, and the level of biodiversity survey and monitoring comprehensively upgraded.

# Column 21 Priority projects for biodiversity surveys and monitoring

# 1. Survey of biological species resources (including biological genetic resources)

Study and analyze existing biodiversity survey vacancies and carry out targeted surveys, focusing on inland waters, coastal zones and marine biodiversity surveys, as well as surveys of higher plants, birds, mammals, amphibians, reptiles, insects and other biological species, exploring surveys of the genetic diversity of wildlife, and continuing to promote the survey of crops, livestock and poultry, aquaculture, forestry and grassland. Surveys of germplasm resources of plants, medicinal plants and animals, fungal species, etc.; and timely compilation or updating of relevant lists based on the results of the surveys.

# 2. Improvement of the ecological quality monitoring network

Taking ecological environmental problems as the guide, focusing on the needs of ecological quality supervision, relying on the national ecological quality monitoring network and the national biodiversity observation network, systematic planning, fully integrating the existing monitoring basis, integrating biodiversity into the land and marine ecological quality monitoring, rationally arranging the monitoring stations, classifying and guiding, and carrying out the phased implementation, to carry out the biodiversity investigation and monitoring.

# 3. Biodiversity wise monitoring and early warning system construction

Accelerating the development of intelligent monitoring equipment for ecosystems and key biological groups, utilizing information technology such as the Internet of Things and artificial intelligence, developing an intelligent monitoring system that integrates data collection, return transmission, identification and appraisal, and application of outputs, and developing a prediction and early-warning system for changes in biodiversity, so as to build an intelligent monitoring and early-warning system that operates in all-weather conditions and that integrates the air and the sky; and conduct pilot demonstration of smart monitoring and early warning of biodiversity.

# Priority action 22: Biodiversity assessment

Establish a sound system of criteria for assessing the effectiveness of biodiversity conservation and restoration, the function of ecosystem services and the economic value of species resources. Regularly assessing the status of national ecosystems, key biological species and important biological genetic resources, publishing a comprehensive national biodiversity assessment report every five years, and updating the Red List of China's Biodiversity. Establish an annual progress reporting system for members of the State Council's coordinating mechanism for strengthening biodiversity conservation, and track and assess the progress of the implementation of China's Biodiversity Conservation Strategy and Action Plan (2023-2030), as well as its contribution to the Kunming-Montreal Global Biodiversity Framework. Pay attention to the impacts of major policies on biodiversity, and carry out impact assessments of large-scale engineering construction, resource exploitation and utilization, invasive alien species, biotechnology application, climate change, environmental pollution, natural disasters, etc. on biodiversity. By 2030, form a more complete system of biodiversity assessment standards, and establish a regular assessment system covering important ecosystems, key biological species and important biological genetic resources.

#### Column 22. Biodiversity assessment priorities

#### 1. National Biodiversity Status Assessment

Establishing an annual progress reporting system for members of the State Council's coordinating mechanism for strengthening biodiversity conservation, in order to keep track of the actions and effectiveness of biodiversity conservation. Regularly assessing the distribution pattern, trends of change, current conservation status and existing problems of ecosystems, key biological species and important biological genetic resources nationwide, and annually updating China's List of Biological Species. Also publish a comprehensive assessment report on national biodiversity every five years, and updates the Red List of China's Biodiversity every five years.

#### 2. Dynamic assessment of the state of biodiversity in priority regions

Evaluate changes in ecosystem quality and functions, the effectiveness of protecting important biological species and their habitats, the effectiveness of protecting and restoring degraded and damaged ecosystems, the impact of development and construction activities and biotechnology applications on biodiversity, and the impact of sudden emergencies.

#### 3. Biodiversity impact assessment of major construction projects

In the environmental impact assessment of major water conservancy and hydropower projects, transportation projects, mineral resources development projects and other major projects identified by the relevant state departments, biodiversity impact assessments are carried out in accordance with the relevant technical guidelines and standards, and targeted conservation and restoration measures are put forward to assist in the high-quality construction of major projects and high level biodiversity conservation.

# 4. Tracking and evaluation of the effectiveness of the implementation of local action plans for biodiversity conservation

Constructing a database of biodiversity conservation assessment indicators, regularly assessing the progress and effectiveness of biodiversity conservation efforts at all levels of government, identifying existing problems, and guiding all levels of government to complete the objectives set out in the strategy and action plan on schedule.

# Priority action 23: Biodiversity law enforcement monitoring

Improve the long-term mechanism for law enforcement and supervision of biodiversity, carry out cross-sectoral and cross-regional joint law enforcement actions, and established a sound mechanism for exchanging law enforcement information. Curbing behaviour of harming nationally protected wildlife and their habitats and remediation of such behaviour is to be integrated into the central ecological supervision and the "Green Shield" nature reserve intensive supervision, as well as other relevant special actions. Taking the "China Fishery Sword" and "Kunlun" special law enforcement actions for the protection of aquatic wildlife and their habitats, the marine seasonal moratorium on fishing, and the closed season for fishing on inland rivers and lakes, and severely cracks down on illegal hunting, collecting, transporting and trading of wildlife and their products, and strengthens internet law enforcement and enforcement. Regulate administrative and law enforcement activities. Improve the mechanism for linking administrative enforcement and criminal justice, establishing and improving mechanisms for the hierarchical management of cases, emergency response, and

listing and supervision of cases. Criminal responsibility for offenses related to the destruction of biodiversity will be pursued in accordance with the law. Strengthen the administrative law enforcement capacity related to biodiversity protection, improve the system of identification and value assessment of wildlife and their products, and enhance the capacity of the procuratorial authorities to initiate public interest litigation against damage to biodiversity. By 2030, a comprehensive law enforcement and supervision system for biodiversity will be formed, and a high-pressure situation of strict combating, prevention and control will be maintained, and the lawfulness of the use, harvesting and trading of wild species will be significantly enhanced.

# Column 23 Priority projects for biodiversity law enforcement and monitoring

#### 1. Specialized enforcement action on illegal trade in wildlife

Carry out special law enforcement actions to combat illegal trade in wildlife and animals, conduct comprehensive inspections of illegal trade in wildlife and animal products, including the sale, purchase, use, transportation, carrying and sending of wildlife and animal products, and carefully investigate the outstanding problems and weaknesses in each link, so as to cut off the entry channels of illegally acquired wildlife and animal products into the market at the source; and regulate wildlife utilization and business.

#### Priority action 24: Smart governance of biodiversity

Relying on the ecological space-related supervision platform and the ecological big data platform, applying new-generation information technology, fully integrating and utilizing various types of databases and information systems at all levels, advancing the informatization and modernization of biodiversity protection, and realizing the management of the information system for biodiversity protection, its integration and presentation, and its in-depth excavation. Establish and improve the national biodiversity regulatory data fusion and sharing system, promote crossdepartmental, cross-regional and cross-level data convergence and fusion, promote the uploading and integration of social biodiversity data resources, and promote data sharing in an orderly manner under the premise of safeguarding information security. Promote the innovation of intelligent governance mode, establish a mechanism for scientific decision-making assisted by big data, research and develop functional modules for dynamic monitoring, trend research and judgment, impact assessment, prediction and early warning, and improve the ability of intelligent perception, precise supervision and systematic governance of biodiversity. We will give full play to the role of the integrated government service platform, promote the opening and sharing of data and information in accordance with laws and regulations, and enhance the level of government affairs disclosure and public service capacity. By 2030, the digitization and intelligence level of biodiversity protection will be significantly improved.

#### Column 24. Priority projects for smart governance of biodiversity

#### 1. Smart governance of biodiversity

Based on the existing ecological space-related supervision platform and ecological big data platform, integrating the use of databases of various types of biological species and germplasm resources at all levels, applying new-generation information technologies such as remote sensing, the Internet of Things, cloud computing and artificial intelligence to achieve the management of the information system for the protection of biodiversity; integrating, researching and developing functional modules such as dynamic monitoring, trend research and judgement, impact assessment and prediction and early-warning, so that scientific and technological innovations can assist in the level of regulation and governance of biodiversity.

#### Priority action 25: Scientific research and human resource development

Strengthen basic scientific research and applied technology research in the fields of biodiversity conservation, restoration and sustainable utilization, enhance the research and development of major scientific and technological infrastructure equipment, and study and implement a number of forward-looking and strategic national scientific and technological projects. We will give full play to the professional education advantages of colleges and research institutes, promote the combination of science and education, strengthen the cultivation and training and exchange of biodiversity talents, intensify the cultivation of urgently needed and scarce skilled talents, and promote the construction of a think tank of experts in the field of biodiversity conservation. Improve the diversified evaluation mechanism of talents, and improve the commendation and incentive mechanism for highly skilled talents. Strengthen the training mechanism, improve the professional skills and management decision-making level of the existing talent team, and enhance the capacity for international exchanges. Strengthen the construction of scientific and technological infrastructure for biodiversity conservation, optimize the allocation of large scientific research instruments and other scientific research equipment, improve the platforms for scientific research and translational application such as resource banks, sample banks, data centers, scientific observatories and key laboratories, and promote the management of scientific data and the open sharing of resources. By 2030, the level of basic scientific research and applied technology on biodiversity will be significantly improved, a system of scientific and technological infrastructure and equipment with a complete layout, advanced technology and efficient operation will be built, and a high-quality, specialized and internationalized human resources team will be in line with the requirements of biodiversity conservation in the new era.

### Column 25. Priority projects for scientific research and human resources development

# 1. Biodiversity key technology and equipment R&D program

Strengthening basic scientific research and equipment R&D in the areas of biodiversity conservation and restoration, species breeding, prevention and control of invasive alien species, effectiveness evaluation, and biotechnological environmental safety; and studying and implementing a number of forward-looking and strategic national scientific and technological projects. Strengthen the construction of scientific and technological infrastructure for biodiversity, optimize the allocation of large scientific research instruments and other scientific research equipment, improve the platforms for scientific research and application of transformation, such as resource centers, sample centers, data centers, observatories and key laboratories, and promote the development of science and technology data management and open sharing of resources.

### 2. Training Program for Biodiversity Professionals

To develop the training of talents in biodiversity classification, conservation, assessment, compliance and popularisation of science, and to develop biodiversity-related disciplines and faculties. Through online and offline exchanges, training, seminars and competitions, etc., improve the professional skills and management decision-making level of the existing team.

### Priority action 26: Diversified investment and financing mechanisms

Strengthening the integrated scheduling and optimal allocation of financial resources at all levels, and providing focused support for biodiversity conservation as needed. Mobilize the enthusiasm of various financial institutions, give full play to the role of government-guided funds in regulating and driving, guide social capital to participate in biodiversity conservation and restoration, and actively seek international financial support. Explore the consideration of biodiversity factors in the green financial system, incorporate biodiversity protection into the Catalogue of Projects Supported by Green Bonds, and mobilize more social funds to support biodiversity protection. Deepen the payment for ecosystem services mechanism, explore the establishment of a market-oriented compensation mechanism for biodiversity conservation and restoration, improve the mechanism for access to and benefit-sharing of biological genetic resources, and promote the tradability, collateralization and realization of ecological products. Gradually reform and eliminate policies and measures that are not conducive to biodiversity. Promote the inclusion of biodiversity projects in the reserve pool of ecological and environmental protection financial support projects. Fully articulate monetary policy tools for carbon emission reduction, and optimize the co-benefits and synergies of biodiversity and climate investment and financing. By 2030, a diversified investment and financing mechanism for biodiversity will be established, and the level of investment, efficiency and transparency of funds will be significantly improved.

#### Column 26. Priority Projects for Diversified Investment and Financing

#### 1. Preparation of financing plans for national biodiversity strategic actions

Conduct a study on the current status quo, problems and situation of biodiversity financing, from financial support, social capital participation, market-oriented transactions, reform of incentive policies and measures, the role of collective action, and synergistic climate financing. Propose financing channels and planning plans to ensure the implementation of the national biodiversity strategy in terms of financial support, participation of social capital, market-based transactions, reform of incentive policies and measures, the role of collective action, and coordinated climate financing.

#### Priority action 27: International compliance and cooperation

Proactively participate in global multilateral environmental governance; effectively implement the Convention on Biological Diversity and its related protocols; actively implement the Kunming-Montreal Global Biodiversity Framework; establish a technical system to support the implementation of the Convention on Biological Diversity, integrate and coordinate international and domestic work. Actively participate in the negotiation of biodiversity-related international conventions and standard-setting, and promote the synergy of biodiversity-related international treaties and instruments. Actively participate in the preparatory work for the Global Biodiversity Framework Facility. Strengthen existing bilateral and multilateral environmental cooperation mechanisms and platforms, such as "Belt and Road" International Alliance for Green Development, the Global Environment Facility, the World Bank, the Asian Development Bank, the "Belt and Road" Ecological Big Data Service Platform, to enhance bilateral and multilateral dialogues and cooperation in the field of biodiversity conservation and green development, and promote the exchange of knowledge, information, science and technology and the sharing of results. We will join hands with relevant countries and international organizations to carry out scientific research, technical exchanges and talent cultivation, focusing on hot issues at the forefront of biodiversity. We will continue to actively participate in international special joint law enforcement operations against crimes of cross-border trade in biological resources, and deepen cross-border joint protection of wildlife and flora as well as cooperation and exchanges. Improve the management and operation mechanism of the Kunming Biodiversity Fund, and effectively support biodiversity conservation in developing countries. By 2030, we will continue to participate deeply in the global biodiversity governance process and continuously improve the level of international compliance and cooperation on biodiversity.

### Column 27. Priority projects for international compliance and cooperation

### 1. Convention Compliance Capacity Enhancement Program

Exercise the influence of the COP15 presidency, and actively coordinate international and domestic work, submit national compliance reports on time and with high quality, participate in the formulation of the monitoring indicator system of the Kunming-Montreal Global Biodiversity Framework and promote the implementation of the framework in both the international and domestic arenas. Strengthening support for the implementation of international conventions. Participate in the formulation and implementation of relevant international governance mechanisms and rules, as well as relevant international standards. Deeply participate in the assessment process of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), and enhance the capacity of scientific assessment of biodiversity.

### 2. Preparation of the International Forum on Biodiversity

Organize an international forum on biodiversity to build a platform for policy dialogue and exchange on global biodiversity governance, and promote the global implementation of the Kunming-Montreal Global Biodiversity Framework.

### 3.Kunming Biodiversity Fund launch and implementation

Establishing and improving the governance structure and operation mode of the Kunming Biodiversity Fund, and using the Fund to support developing countries in implementing the Convention on Biological Diversity and the Kunming-Montreal Global Biodiversity Framework, including the formulation and revision of national biodiversity strategies and action plans, capacitybuilding and upgrading, and the research and development and international transfer of relevant technologies.

**4. "Belt and Road" International Alliance for Green Development and Biodiversity Conservation** Strengthen bilateral and multilateral dialogue and cooperation on biodiversity, and give full play to the role of platforms such as the Belt and Road International Alliance for Green Development and the China Council for International Environmental Cooperation.

5. Development and implementation of South-South cooperation schemes for biodiversity and ecosystem conservation

Promote the strengthening of co-operation with developing countries in areas such as pilot demonstration, capacity building and biosafety.

# Chapter V. Safeguards

# I. Strengthening organizational leadership

Strengthening the centralized and unified leadership of the Communist Party Central Committee in biodiversity conservation and governance, and forming a working pattern of upward and downward coordination and joint management in accordance with the working mechanism of central coordination, provincial overall responsibility, and implementation by municipalities and counties. Give full play to the coordinating role of the State Council's coordinating mechanism for strengthening biodiversity conservation, deploy and systematically promote national biodiversity conservation and governance, and comprehensively guide and supervise the implementation of the National Biodiversity Conservation Strategy and Action Plan. China will refine the distribution of tasks and the implementation plan, support regions with conditions to carry out pilot demonstrations, and explore effective models and beneficial experiences. The member units will strengthen coordination and cooperation, formulate and improve relevant supporting policies and systems for the conservation and sustainable use of biodiversity in accordance with their functions, and organize the implementation of the objectives and tasks of the Biodiversity Conservation Strategy and Action Plan. Local governments at all levels will establish and improve the overall coordination mechanism for biodiversity conservation, and specifically implement the work of biodiversity conservation and governance in the region.

#### **II.** Implementing the responsibilities of all parties

Governments at all levels should effectively assume responsibility for biodiversity conservation and governance. Biodiversity conservation, sustainable use and benefit-sharing should be regarded as an important means of promoting green and low-carbon transformation and the construction of a beautiful China in all regions, and synergies should be promoted between biodiversity management and strategies for pollution prevention and control, carbon peaking and carbon neutrality, climate change response and rural revitalization. All localities should scientifically prepare biodiversity conservation strategies and action plans, systematically plan biodiversity conservation objectives, key tasks and projects, and strengthen organization, team and system construction to ensure the precise implementation of all biodiversity conservation actions. Improve the long-term mechanism for biodiversity conservation that is led by the government, acted by enterprises and participated by the public, and broaden the channels for publicity and social participation. Guide enterprises to strengthen their awareness of biodiversity conservation, take the initiative to fulfill their social responsibility for biodiversity conservation and high-quality development, and encourage them to formulate action plans for biodiversity conservation.

#### III. Strict monitoring and inspection

The Ministry of Ecology and Environment, in conjunction with the relevant departments, carries out tracking and assessment, supervision and inspection of the implementation of the national and local biodiversity conservation strategies and action plans, coordinates the resolution of major problems encountered in their implementation, and regularly reports to the State Council on the relevant situation. Provincial ecological and environmental departments regularly report to the Ministry of Ecology and Environment on the progress and problems in the implementation of the biodiversity conservation strategy and action plan.

#### IV. Strengthening scientific and technological support

Under the leadership of the State Council's Coordination Mechanism for Strengthening Biodiversity Conservation, the advisory committee of biodiversity experts is to established to analyze the overall, strategic and forward-looking issues of national biodiversity conservation and governance, and to make comments and suggestions on major policies, laws and regulations, strategic planning, decision-making and deployment, and reform measures; it also participates in the supervision, inspection and evaluation of national biodiversity conservation and governance work. Each region may set up a pool of experts on biodiversity conservation to conduct technical studies and judgment on policies and decision-making related to biodiversity conservation. Strengthen research on basic science and applied technology in the field of biodiversity conservation and restoration, and promote the transformation and application of scientific and technological achievements and key technologies. Give full play to the professional education advantages of colleges, universities and scientific research institutes, and strengthen the cultivation of biodiversity talents and academic exchanges. Build a team of high-quality specialized talents and enhance the capacity for biodiversity protection and compliance, cooperation and exchange.

#### V. Enhancing financial security

All localities should establish and improve a long-term mechanism for guaranteeing funding for biodiversity conservation, and financial resources at all levels should provide strong support for biodiversity conservation. Strengthen the coordination of financial resources, continue to support biodiversity conservation through existing financial channels, improve the allocation of financial resources and the efficiency of their use, and effectively utilize their benefits. Vigorously develop green finance, strengthen the disclosure of nature-related environmental information, and provide financial support for biodiversity conservation. All localities should raise funds through multiple channels and in multiple areas, flexibly apply various forms of ecosystem-oriented development models and financial support policies, explore the establishment of a market-oriented and social investment and financing mechanism, and make concerted efforts to support the implementation of major projects for the protection of biodiversity.