

China (*People's Republic of China, PRC*)

I. Country Overview

Land Area

China has a total land area of approximately 960,000,000 hectares (ha) and is the third largest country by area in the world. This total includes 134,900,000 ha of cultivated land and 252,800,000 ha of forest land. ¹ From the world's highest peak at 8,844 meters above sea level (Mount Everest, in the Himalayas along the Nepal-China border) to the lowest point of land at 155 meters below sea level (Xinjiang Aydin Lake), China has some of the world's most unique ecosystems and geographies.

China's vast and diverse landscape is home to a variety and abundance of wildlife. The main ecosystems in China include terrestrial ecosystems, such as forest, shrub, meadow, steppe, desert, wetland; and major marine ecosystems such as the Yellow Sea, East China Sea, South China Sea and Kuroshio Basin. As one of the 17 megadiverse countries, China has 34,984 known higher (vascular) plants, ranking third in the world. China also has 6,445 vertebrate animal species, accounting for 13.7% of the world total. There are more than 10,000 fungi species known in China, making up 14% of the world total.²

Land Ownership and Tenure

According to the Land Management Law of the People's Republic of China³, there are two types of land ownership in China: state and collective. No unit or individual is allowed to occupy, trade or illegally transfer land. Natural resources such as mineral deposits, water, forests, mountains, grasslands, wasteland, and tidal flats belong to the state. All urban land is state owned. Land in rural and suburban areas is collectively owned, except for land owned by the state as stipulated by law. Homesteads, self-reserved land, and self-reserved mountains are collectively owned⁴; forests, mountains, grasslands, wasteland, and tidal flats that are collectively owned by law belong to local collectives. Since 1998, the only way to convert agricultural land into nonagricultural use has been through government land requisition -- an extremely contentious process that many viewed as unfair for farmers. However, the newly revised Land Management Law of 2019 removed this

¹ National Bureau of Statistics of China, 2019

² China National Biodiversity Conservation Strategy and Action Plan (2011-2030)

³ Adopted June 25, 1986, effective Jan. 1, 1987; amended and effective Dec. 29, 1988; revised Aug. 29, 1998, effective Jan. 1, 1999; amended and effective Aug. 28, 2004; amended Aug. 26, 2019, effective Jan. 1, 2020

⁴ Self-reserved land, self-reserved mountains and self-reserved pasture are all collectively owned, and local farmers only have the use right. Those land cannot be rented, transferred or sold, nor used for non-agricultural production purposes such as building houses. The management rights of self-reserved land, self-reserved mountains and self-reserved pastures are protected by the state and shall not be illegally occupied.

conversion requirement. The new law allows collective landowners to transfer or lease legally registered collective construction lands as long as the land meets certain land use planning requirements (i.e. being zoned for industrial, commercial and other business purposes). The new law also limits the scope of government land requisition to purposes that serve the public interest.⁶

In China, land use rights are separated from land ownership. The state can transfer limited and short-term land use rights, but not ownership, to other parties such as collective land managers, state- or privately-owned enterprises, and individuals for a maximum period of 70 years. Rural land adopts the rural land contract management system, which gives farmers indefinite and guaranteed land use rights. Rural land is operated and managed by the collective land managers (usually the village collective economic organization or village committee).⁷ Managers of collective land can decide whether and how to transfer the use rights for their respective land to various parties under certain land use planning requirements.⁸

In 1986, China established a land management system in which the land administration department of the State Council was responsible for the administration and supervision of land throughout the whole country.⁹ In 1998, the nation's unified land management was extended to mineral, marine and other natural resources. Relevant central government agencies were merged to form Ministry of Land and Resources. In 2006, China established the National Land Inspection System to improve oversight of land managed by sub-national governments. At this point, China had formed a unified land management model of relatively centralized land management and top-down supervision.

Today, after recent reforms, the Ministry of Natural Resources is responsible for the planning, administration, protection and utilization of land, marine, mineral, and other natural resources as well as the conversion between different land uses. The Ministry is also in charge of the National Forestry and Grassland Administration (which includes the National Park Administration), and is therefore responsible for forests, national parks, wetlands and grasslands.

Forests in China: State-owned Forest Farms and the Recent Reform

⁵ Collective construction land refers to the land used by village collective economic organizations and peasants to invest or raise funds for various non-agricultural constructions. Collective construction land is divided into three categories: homestead, public facilities land and operational land.

⁶ The new law also improves the procedures of land requisition. The original post-approval land requisition announcement has been changed to a pre-approval announcement. The government can take the land only after signing an agreement with farmers. The new law also changes the method by which land compensation fee and resettlement subsidy are calculated in a way that is more favorable to farmers.

⁷ Land Management Law of the People's Republic of China, Article 11

⁸ Land Administration Law, Article 9

⁹ Land Management Law of the People's Republic of China, Article 5

In China, the forest area is 220 million hectares, representing 22.96% of the total land area. The forest stock volume reached 17,560 million cubic meters in 2018.¹⁰ The forest area in China accounts for 5% of world's total, ranking fifth in the world.

China's forest area and forest stock volume have increased since the early 1990s. Especially in the 21st century, China's forest resources have grown rapidly. As China has become one of the countries with the fastest growing forest resource bases in the world, it plays an increasingly important role in maintaining global ecological balance, conserving biodiversity, addressing climate change and promoting sustainable economic, ecological and social development. The Central Government aims to achieve 23.04% forest coverage by the end of 2020, 26% by 2035 and 30% by 2050¹¹.

However, China is still a country with a shortage of forest resources, a fragile ecology and a deficiency of eco-products. This is due to the impacts of nature, history, population and economic development. The forest coverage nationwide is far below the world average of 30.7%. The forest area per capita stands at just 1/3 of the world average, while the forest stock volume per capita accounts for merely 1/6 of the world average. China has faced increasing pressure to supply ecological and wood products. At the same time, China continues to suffer from insufficient, low quality, and spatially uneven forest resources.

Forestland in China is predominantly used for cultivation, restoration and development of forest vegetation. The total forestland area is 310.46 million ha and is divided by ownership into the state-owned forestland and the collectively owned forestland. State-owned forestland is 124 million ha, accounting for 40% of the national total, and collectively owned forestland is 186 million ha, accounting for 60% of the national total.¹²

Collectively owned and managed forestland and forests are distributed to individual households. Local farm households enjoy, for a period of 30 to 70 years, forest ownership rights (i.e., the trees and vegetation) and forest use rights (including the right to occupy, manage, develop, transfer, and profit from the distributed forestland). A forestland rights certificate is issued to each household to confirm these rights as well as the size and location of the underlying forestland.¹³

State-owned forest farms are the principal type of institution that manages state-owned forestland and cultivates and protects state-owned forest resources in China. There are 4,855 state-owned forest farms across 31 provinces or provincial-level jurisdictions¹⁴. The total number of employees

¹⁰ China Forest Resources Report 2014-2018

¹¹ State Forestry Administration, 2018

¹² Forest Resources in China — The 8th National Forest Inventory

¹³ Central Committee and State Council 2008 Policy Announcement

¹⁴ Currently there are five levels of local government in China: the provincial (province, autonomous region, municipality, and special administrative region), prefecture, county, township, and village.

is 750,000 and the total area under management is 77 million ha. Those state forest farms are public institutions with enterprise-like management systems. Historically, state-owned forest farms and enterprises have suffered from low productivity and ineffective bureaucracy, and most of them have become financially unsustainable. State forest farm employees have also suffered from low income. In addition, the infrastructure in many state forest farms has been poor and some forest land has been occupied and transferred illegally.

In order to solve those problems, the Central Committee of the Communist Party of China and the State Council issued the "State Forest Farm Reform Plan" and "Guidelines on the Reform of State-owned Forest Areas" on February 8, 2015. These two documents are important milestones for China's forestry reform and development.¹⁵ By January 2019, 4,612 state forest farms have completed the reform tasks, accounting for 95% of the total. The average wage of state forest farm employees has increased threefold. The central government has also invested 107 million RMB (\$US 15 million) to improve the infrastructure. As of now, a new forest farm management mechanism can be implemented, with: clear functional positioning; streamlined and efficient staffing, forest management and procurement; and hierarchical implementation of resource supervision.

Public Protected Areas in China

The development of a nature reserve system in China has played an important role in protecting ecosystems. A nature reserve is a clearly defined geographic space that is recognized, committed, and managed by law or other effective means to provide long-term protection of nature, ecosystem services and cultural values. China established the first nature reserve in Guangdong Province in 1956¹⁶ and has now established 2,750 nature reserves along with a system of various natural protected areas. The categories of protected areas include nature reserves, scenic spots, forest parks, geological parks, natural cultural heritage, wetland parks, aquatic germplasm resources protection areas, marine special protection areas, and special protected islands. According to National Forestry and Grass Administration of China, as of 2018, there were a total of 11,800 sites, covering an area of about 18% of the land area of China, exceeding the average level of land protected by countries around the world. This grouping of protected areas basically covers most of the important natural ecosystems and natural heritage resources found in China.

However, to date the nature reserve system in China has lacked a systematic design. Overlapping reserve boundaries and competing jurisdictional authorities among various protected areas types have resulted in unclear assignments of responsibilities and operational inefficiencies. Different types of nature reserves are sometimes divided into several government departments such as environmental protection, housing construction, forestry, agriculture, water resources, and marine

¹⁵ <http://www.forestry.gov.cn/main/4506/20150318/748772.html>

¹⁶ Dinghushan Nature Reserve in southern China's Guangdong Province

departments. Sometimes one protected area have had several names and protected area designations at the same time (for example, a single site might be simultaneously designated as a nature reserve, forest park, and a scenic spot). When different types of protected areas are established in the same geographic space, this may result in overlapping territories, conflicting protection targets and fragmented management.

In order to solve the problems in the development and management of nature reserves, the central government has issued several guiding documents since 2013. The central government officially launched the development of a national park system in China in 2015 and established the National Park Administration in 2018. In June 2019, the document offering "Guiding Opinions on Establishing National Parks as the Core of Protected Area System" (referred as the "Guiding Opinions")¹⁷ was issued. The central government proposed the establishment of a tiered protected area system where “national parks are the core, nature reserves are the foundation, and other types of natural parks are the supplements.” The new strategy aims to integrate and consolidate overlapping nature reserves, to maintain the integrity of ecosystems, and to make sure the total protected area and protection intensity will not diminish. Various nature reserves will be re-categorized based on natural attributes, ecological values, and management objectives of protected areas. Those areas with the highest rankings will be designated as national parks. Ten pilot national parks were established since 2015 and will officially become national parks in 2020.¹⁸ In addition to defining these guidelines, the document also points out that China should learn from international technologies and advanced experiences, and that China should actively participate in the protection of global natural ecosystems.

Private and Civic Protected Areas in China

According to the "Chinese Biodiversity Conservation Strategy and Action Plan (2011-2030)" issued by the State Council, 29% of the country's land needs to be protected. The investment of the government is far below the needs of the conservation and management objectives of the existing protected areas. In order to overcome the lack of funding and environmental deterioration, protected areas managed by civic and private institutions, communities or individuals are important to fill the gaps in funding, technology and human resources available to the land protection system.

¹⁷ Issued by the General Office of the Central Committee of the Communist Party of China and the General Office of the State Council

¹⁸ Ten pilot national parks including: Sanjiangyuan National Park in Qinghai Province; Panda National Park in Sichuan, Shanxi and Gansu Province; Northeast China Tiger and Leopard National Park in Jilin and Heilongjiang Province; Pudacuo National Park in Yunnan Province; Shennongjia National Park in Hubei Province; Qianjiangyuan National Park in Zhejiang Province; Nanshan National Park in Hunan Province; Wuyishan National Park in Fujian Province; The Great Wall National Park in Beijing; Qilianshan National Park in Gansu and Qinghai Province; Rainforest National Park in Hainan Province.

The establishment of Privately Protected Areas (PPAs) in China started in mid-1990s. Some individuals with enthusiasm for environmental protection obtained forestland management or use rights through leases and contracts for extended periods. These individuals voluntarily carried out afforestation, animal and plant protection efforts, with necessary funding mainly coming from the individuals themselves.

The first PPA in China was Baiyanggou in Changping District, Beijing. Chang Zhongming, a sales manager assistant at a hotel in Beijing, leased 10.7 ha of valley forest for 70 years. It is on that leased land that he established China's first privately protected area in 1995. Two years later, Chang resigned from his hotel position and concentrated on the daily management of his PPA. However, Chang run out of funding for the cost of daily management, the construction of a road, and accommodation facilities inside the protected area. In July 2001, he had to find a new job and left the PPA. Today, Baiyanggou is a scenic parkland managed by tourism companies.

Similar scenarios played out on China's other five early examples of individually managed PPAs. All were originally natural forests or wilderness areas which had initially been leased by locals for agriculture or business development. Conservation-minded individuals then leased the land, and by themselves created PPAs. Lack of continuous funding typically became the biggest challenge. When the conservation-minded managers ran out of funding, they had to seek financial support from local governments or alternatively had to rely on tourism to attract revenue from visitors. Another major challenge to PPAs in China was the lack of enforcement authorization to protect wildlife and other nature resources from illegal hunting or logging.

The concept and practice of participatory management was introduced into China in the early 1990s. The community-based land protection model was increasingly used in ecological protection projects. Many non-governmental organizations (NGOs) began to identify and assist communities in or around protected areas to establish and manage community protected areas. In 2008, the central government adopted a new policy to allow private individuals and organizations to assume management rights for collectively owned forestland. With this new policy, private institutions and NGOs have shown new interest in using new land protection models, including the establishment of land trusts to protect important parcels of open space. In 2010, The Nature Conservancy China (TNC China) began to test the US land trust reserve model in China.

The first land trust in China was established in 2011, in Pingwu County, Sichuan Province. The idea was launched in 2009 when TNC China signed a memorandum of collaboration with the State Forestry Administration to explore the creation of land trusts as a new conservation model in China. In collaboration with TNC China, more than twenty top Chinese entrepreneurs formed the Sichuan Nature Conservation Foundation (SNCF), later renamed the Paradise Foundation. With technical support from TNC China, the foundation started to raise funding to test the land trust concept in China. In 2011, TNC China initiated a collaboration with the local government of Pingwu County

to explore the establishment of the country's first land trust reserve. Two years later, the SNCF signed the nation's first conservation lease with Pingwu Forestry Bureau that owned the state forestland (which was a former state-owned forest farm), and with local villagers who owned the collective forestland. The conservation lease allows the Paradise Foundation to manage the parcel primarily for biodiversity conservation purposes for the next 50 years. The local government, TNC China, and the foundation promptly designated the leased land a county-level nature reserve, named Laohegou Land Trust Reserve, which protects over 11,000 ha of important giant panda habitat and connects existing protected areas for endangered species into a corridor of protected land.¹⁹ The foundation hired nearby residents and former employees from the state forest farm for the day-to-day monitoring and management of the reserve. The foundation also helps local communities to produce and sell eco-friendly agricultural products to high-end markets, thereby increasing residents' revenue and reducing their need to hunt and forage within the reserve. Subsequent to the establishment of the Laohegou Reserve, several other land trusts and NGOs have been created in China to protect and steward conservation land.

With the development of the land trust reserve model, several conservation NGOs in China believed that private forces needed to join together to contribute to the establishment and management of protected areas in China. On November 2017, 23 NGOs and foundations, including TNC China and the Paradise Foundation, launched the China Civic Land Conservation Alliance (CCLCA) in Beijing. The Alliance aims to work under the framework of the country's ecological civilization²⁰, harness and build the capacity of non-governmental entities (or civil societies), promote the development of protected areas, and, with the engagement of civic and private organizations and individuals, help the country effectively protect 1% of China's total land area by 2030.²¹ The Alliance also defines the civic protected areas (CPAs) as protected areas that are partially or solely managed by non-governmental entities (such as: individuals, for-profit and non-profit institutions, community organizations), including earlier PPAs and later community protected areas and land trust reserves.

In 2017, the Alliance drafted and released the *Definition and Evaluation Criteria of Civic Protected Areas* under the lead of International Union for Conservation of Nature (IUCN) China

¹⁹ Laohegou used to be part of World Wide Fund for Nature (WWF) Minshan land conservation project between 2006 and 2008. WWF's work had begun in-depth protection of Ping Wu county which is the core of Minshan zone in 1996. In July 1997, WWF and its partners co-launched the Ping Wu Integrated Conservation and Development Project (ICDP) with the aim to protect the giant pandas facing survival threats. WWF supported biodiversity surveying and monitoring in Laohegou area and restored a local nature education center. WWF also helped local communities try out alternative livelihood.

²⁰ It is an explicit goal of the Communist Party of China (CPC). Ecological civilization emphasizes the need for major environmental and social reforms that are both long-term and systemic in orientation. It implies that the changes required in response to global climate disruption and social injustices are so extensive as to require another form of human civilization, one based on ecological principles. Broadly construed, ecological civilization involves a synthesis of economic, educational, political, agricultural, and other societal reforms toward sustainability.

²¹ *Sponge Cities and Panda Habitat*, James N. Levitt and Emily Myron, Land Lines 2017.10

office. Based on this document, the Alliance published *Guidelines for Civil Protected Areas*²² in 2019. According to these guidelines, an area that meets the following three criteria at the same time will be recognized by the Alliance as a civic protected area: 1) has a clear geographic boundary and scope; 2) non-government private institutions, communities or individuals are involved in the governance or management of the protected area under official agreements with binding roles and responsibilities; and 3) Non-governmental entities have established long-term and rational protection actions in the protected area.

In order to better understand the current status of China's civic protected areas, the Alliance initiated a nationwide collection of information. As of September 2020, the audit team received 128 records of civic protected areas, of which 90 met the above-mentioned criteria, covering an area of 1,794,100 ha, and accounting for 0.0188 per cent of the total land area of China²³. Among the 90 CPAs, most of them are managed by community-based organizations and NGOs and have full-time patrol teams to carry out regular patrol and monitoring work. The main funding source for CPAs is private donations. Other sources of funds include community self-financing, government purchase of services, nature education programs or ecological product operations.²⁴

II. Law and Policy for Civic Land Conservation

Law for CPAs and PPAs

Private individuals and organizations cannot own land in China but can lease forest land from the state or the collectives and have partial or complete management rights of the land. The maximum period for a land lease agreement is 70 years. All CPAs and PPAs in China are thus leasehold. To date, land protection efforts in China have almost exclusively been led and managed by the government. However, the increasing transfer of use rights from the government and collective land managers to individuals presents new opportunities for conservation by private parties such as NGOs and developers, who can acquire use rights for extended periods of time in order to protect natural values.

National Policy Changes

June 2008 – The Central Committee of the Communist Party of China and the State Council issued the "Opinions on Comprehensively Promoting the Reform of the Collective Forest Tenure System", marking the comprehensive reform of the collective forest tenure system. The reform clarified

²² <http://www.civilpa.org.cn/upload/portal/20190917/d72651fe014db7491b8c74db435961c2.pdf>

²³ According to Paradise International Foundation, there were 51 civic protected areas met the criteria in 2020, covering an area of 1,031,100 ha.

²⁴ 2019 Civic Protected Areas Observation Report

property rights and contracted the rights to households and allowed private individuals and organizations to assume management rights for collectively owned forestland.

March 2015 – The reform of state-owned forest farms and state-owned forest areas was formally launched. The reform improved the management system of public benefit forests based on purchasing services, allowing social capital to participate extensively in the restructuring of state-owned forest enterprises and allowing different property rights entities to actively participate in forests related activities such as management and protection, forest economic development, and forest ecological tourism.

October 2016 – The General Office of the Central Committee of the Communist Party of China (CPC) and the General Office of the State Council issued the "Opinions on Improving the Method for the Separation of the Management Right of Rural Land Ownership Contracting Rights." Collective land ownership, contracting right of peasant households, and land management rights are parallel under the new policy. The management right is separated from the bundle of rights as an independent power and allowed to circulate, which provides protection of property rights for other entities to participate in forestry development.

2017 – The report of the 19th National Congress of the CPC proposed to focus on addressing acute environmental issues and build an environmental governance system that is led by the government with broad participation of enterprises, social organizations and the public. The participation of social organizations in the establishment of nature reserve system with national parks as the core has become an important part of environmental protection in the new era.

June 2019 – The General Office of the CPC Central Committee and the General Office of the State Council issued the "Guiding Opinions on Establishing National Parks as the Core of Protected Area System". The Opinion pointed out the importance of exploring land conservation methods such as public welfare governance, community governance and joint governance. These three forms are completely consistent with the type of governance advocated by IUCN and the Alliance. CPAs and PPAs have gained greater policy space in the new nature reserve system. In the future legislation of nature reserves, the registration system of CPAs and PPAs is also being considered by the legislature.

Conservation Easements in China

The concept of conservation easements is very new to China, where land cannot be owned privately. The easement system achieves the protection goal by restricting certain rights of land rights holders. Compared with purchasing or leasing, it is cheaper and easier to operate. It has less impact on the rights of grantors and is therefore a solution that deserves further exploration. Based on the concept of the conservation easement, there were several conservation lease pilots in China.

The term “conservation lease” refers to the transfer of use rights from one party to another for a specified period of time, through contracts or use rights certificates, for conservation purposes²⁵. The conservation lease was first used in Laohegou land trust reserve, Sichuan China in 2011 when SNCF obtained the land management rights from the Pingwu Forestry Bureau and local villagers. It was again used in the establishment of Qianjiangyuan National Park in 2018 when local villagers transferred their management rights of collective forestland to the national park management committee. In April 2020, Zhejiang Province issued the first “easement certificate” to the management team of Baishanzu National Park in Guanpuyang Village, Lanju Township to better manage the newly created Qianjiangyuan-Baishanzu National Park pilot. However, the use of the conservation easement is not yet standardized nor legally clarified in China.

In 2019, Guojun Shen, board member of the Paradise Foundation and a member of Chinese People’s Political Consultative Conference (CPPCC) submitted a proposal on strengthening conservation easements for natural resources to the CPPCC National Committee. The Ministry of Natural Resources responded positively to the proposal and reported that they will work with relevant departments to study conservation easements. They also encouraged social organizations that participated in the easement pilot to engage with the study of conservation easements method. Ultimately, before easements can become effective land protection tools in China, the government would need to enact policies and regulations to enable their application. Factors needed for the success of conservation easements include: a legal foundation, a method of valuation, an incentive system, the establishment of clear tenure, clear conservation goals, and monitoring and enforcement guidelines.

III. Financial Incentives for Civic and Private Protected Areas

The main sources of funding include private donations, community self-financing, government purchase of services, natural education or ecological product operations. Private donations are the major source of funding.

IV. Organizations for Private Land Conservation

Important organizations engaged in the consideration of private land conservation in China include: TNC China, The Paradise Foundation, Shanshui Conservation Center, World Wide Fund for Nature (WWF), SEE Foundation, Alibaba Foundation, Shenzhen Mangrove Wetlands Conservation Foundation (MCF), Conservation International, Wildlife Conservation Society

²⁵ The “conservation lease” in China is a total transfer of management rights and the leaseholder will be responsible for daily management of the land, while “conservation easement” is a set of permanently enforceable rights in real property, held by a private nonprofit corporation (typically a land trust) or a government agency. These rights impose a negative servitude on the encumbered land, and they are permanently enforceable by the easement holder.

(WCS), Heyi Institute, Lao Niu Foundation, Guangxi Biodiversity Research and Conservation Association, Global Protected Area Friendly System, Global Environmental Institute, Shenzhen One Planet Foundation, International Union for Conservation of Nature (IUCN), Tencent Foundation, Yintai Foundation, China Green Foundation, China Green Carbon Foundation, China Environmental Protection Foundation, Friends of Nature.

V. Case Studies

Laohegou Land Trust Nature Reserve²⁶

Laohegou Nature Reserve, formerly a state-owned forest farm, is the first land trust nature reserve founded in China. When a natural forest conservation program was rolled out nationwide in 1998, logging was prohibited in the area, making it necessary to consider a balance between conservation and livelihood development. Laohegou used to be part of WWF's Minshan land conservation project between 2006 and 2008. However, the program was suspended because of the 2008 Wenchuan earthquake.

In September 2011, a group of entrepreneurs who were enthusiastic about public welfare joined efforts to build the Sichuan Nature Conservation Foundation (the SNCF, now known as 'Paradise Foundation'), an agency dedicated to providing ongoing financial support for local conservation efforts. SNCF entered into an agreement with the Pingwu County government in 2012 for the placement of the land in the foundation's trust for a 50-year period, paving the way for SNCF to exercise managerial authority over the land. In 2013, SNCF managed to make the land a county-level nature reserve. In the following year, SNCF established the Laohegou Nature Reserve Conservation Center, a localized agency that took in the staff of the former forest farm and brought the land under long-term protection and management. Laohegou is China's first nature reserve that is established and managed by private, non-profit organization. The total area is 11,000 ha which is under the jurisdiction of Pingwu County, Mianyang City, Sichuan Province. Pingwu County is well-known for sheltering giant pandas.

Laohegou Nature Reserve explores possibilities for sustainable management in its adherence to both evidence-based conservation and community development. By the time the Laohegou started to be established, the conservation center had already joined with several research institutes and universities to carry out detailed baseline surveys on wildlife resources in the Laohegou area, report on wildlife diversity, select 8 main conservation targets (giant pandas and their habitat, the mountain stream ecosystem, evergreen and secondary broad-leaved forest, forest ungulates, Asian golden cats and other large and medium-sized carnivores, golden snub-nosed monkeys, alpine shrubs and meadows), and to analyze the main threats of the protected objects.

²⁶ <http://www.pfi.org.cn/en/nature-reserve/>

Bayuelin Land Trust Protected Area²⁷

Bayuelin is a county-level nature reserve entrusted to the management of Paradise Foundation. It has an area of 10,200 ha under the jurisdiction of Jinkouhe District, Leshan City, Sichuan Province. This is the historical range area of the Xiaoliang Mountain giant panda population. It is also home to other rare species, such as takin, Sichuan partridge, and dove-trees.

Even though Bayuelin Nature Reserve was designated as a giant panda reserve back in 2006, little substantial conservation impact had been achieved due to the lack of financial, human, and technical resources. The populations of many protected species were declining.

After a series of studies, the Jinkouhe District government decided to transfer the management right of state-owned forestland to Paradise Foundation in 2014. This was due, in part, to the earlier successful experience of the Paradise Foundation at Laohegou. Experts from TNC China were invited to provide scientific guidance for the protected area. Bayuelin Conservation Center is working together with local governments and local communities. The center recruited local villagers as patrol members and supported community tea sales.

Xianghai Land-trust Protected Area²⁸

Xianghai is a national-level protected area partially entrusted to the management of non-governmental public welfare organizations. The total area is 17,500 ha and is placed under a land trust as part of the 105,400 ha Xianghai National Nature Reserve on the Songnen Plain, one of China's priority regions for biodiversity conservation. The area is under the jurisdiction of Tongyu County, Baicheng City, Jilin Province.

Xianghai is an important breeding place and feeding site for migratory birds. The biological resources are very rich. Birds have been recorded to 17 orders, 53 families, 132 genera and 293 species. Ten of the species recorded there belong to the set of national first-class protected animals. There are only about 2,000 red-crowned cranes in the world, and at most, more than 200 breed and thrive here. There are abundant types of landscapes here including sand dunes, elm forests, vast grasslands, pampas grass reeds, and lakes and waters. However, Xianghai's current protection condition is problematic, and natural resources are seriously degraded. One reason is that the protected area is massive and the protection investment is insufficient. The second is the complex land ownership and the existence of many human activities in the area, which poses great difficulties for protection management.

In 2015, with the support of the Jilin provincial government, the Tongyu county government launched the relocation project in the core area. It was planned that within two years, farmers and cultivated land in the core area would be completely transferred out of the protected area. The Tongyu county government, Xianghai Nature Reserve Administration and Paradise Foundation

²⁷ <http://www.pfi.org.cn/en/nature-reserve/>

²⁸ <http://www.pfi.org.cn/en/nature-reserve/>

signed a tripartite agreement to hand over the 17,500 ha core area to Paradise Foundation for 30 years, under the supervision of the Tongyu government and the Nature Reserve Administration.

In order to implement the management of Xianghai Protected Area, Paradise Foundation funded the Tongyu Xianghai Conservation Center in January 2017. The Center recruited 10 local villages to the patrol team till the end of 2018. After two years of protection work, the red-crowned crane, which had been absent from the area for 10 years, returned to Xianghai wetland for breeding in 2018. From April 2017 to December 2018, a total of 8,1621.6 km was patrolled, and 894 violations were handled with the support of law enforcement from Xianghai Nature Reserve Administration.

Jiulongfeng Land-trust Protected Area²⁹

Jiulongfeng is a provincial-level Nature Reserve entrusted to the management of non-governmental public welfare organizations. The total area is 4,000 ha under the jurisdiction of Huangshan District, Huangshan City.

Jiulongfeng is home to 35 national key protected animals, including five first-class species. Some critically endangered species can also be found in the area, such as the endangered Chinese wild pangolin, wild giant salamanders and the golden-headed shell turtles, in addition to 50 key protected animals in Anhui Province, and 190 species nationally recognized as beneficial or having high economic and scientific value to humanity.

However, frequent human activities, logging and poaching occurred in the reserve from time to time, and the natural forest around the reserve was seriously fragmented. Local communities relied heavily on access to natural resources (tea picking, herbal medicine, hunting, etc.). Despite many measures taken against these problems, incidents of illegal logging and poaching persisted. There was also illegal fishing in streams flowing through protected areas.

In March 2018, the Paradise Foundation signed a cooperation agreement with the Huangshan District People's Government to obtain 50-year entrusted management rights for the Jiulongfeng Protected Area. Anhui local environmental organization Green Anhui and the Paradise Foundation established the Green Anhui Conservation Center in Huangshan City to manage the daily operations of the protected area. The Conservation Center formed a 12-person protection team to complete a three-tier patrol system and established two checkpoints in the area and the annual patrol kilometrage reached 2348 kilometers.

Board members of Paradise Foundation took the lead in setting up the social enterprise called Fivestars Paradise -- a social enterprise whose profits will all be used to fund the conservation of the Jiulongfeng Protected Area. Fivestars Paradise supported the development of ecological agricultural products in the local communities around Jiulongfeng. The foundation also supported

²⁹ <http://www.pfi.org.cn/en/nature-reserve/>

the local communities to set up a "Huangxianyue B&B Tourism Cooperative" which helped local villagers increase their income over the past two years of operation.

*Taiyangping Land-trust Protected Area*³⁰

Taiyangping is a protected area established in a land trust as authorized by the state-owned forest farm to achieve a balance between conservation and community development. The total area is 8,500 ha and is under the jurisdiction of Songluo Town, Shennongjia Forest District, Hubei Province.

The Shennongjia Forest District Government entrusted the management rights of 8,500 ha state-owned forest to the Paradise Foundation in the end of 2018. The major conservation targets identified in this area are rare species such as dwarf musk deer, black bear, dove trees, and Chinese yew. There are 6 communities around the protected area. Local villagers earn income by gathering herbs and grazing in the protected area. There is a certain conflict between the development of the villagers and the conservation. The Taiyangping Conservation Center is working on identifying ways to allow surrounding communities to benefit from sustainable use of resources while supporting conservation efforts. The Center also recruited local villagers to form the patrol team to protect this area.

VI. Challenges and Policy Recommendations

In the process of reintegrating the protected area system with national parks as the core, the status and government's recognition of CPAs will be affected to a certain extent. Many independent CPAs may become civic management/community management/co-management protected areas within the government led protected area system. **It is necessary to further clarify the role of civic participations in the reintergrated protected area system.**

At present, the relevant laws of protected areas are aimed at government-led protected areas, and there is no formal legal and policy recognition for CPAs. Various existing policies encourage social participation in land conservation, but they still lack a clear expression of the channels and forms of social participations. **It is necessary to provide legal and policy protection for easements and entrusted management agreements and the channels for civic entities to obtain land management rights need to be diversified.**

The lack of funding and human resource of CPAs is also a challenge. All CPAs rely heavily on charitable donations and the long-term development and operation of CPAs require continuous funding from NGOs. Such charitable donations will be greatly affected by the external environment and may not be sustainable. **It is necessary to have some incentives from the**

³⁰ <http://www.pfi.org.cn/en/nature-reserve/>

government and explore more diversified funding channels in the future. Talent training and capacity building is also important.

At present, many CPAs have accumulated experience in their local practices, but there's a lack of unified standards and analytical summaries of their work. **It's important to sum up lessons and practices from different cases with different management types and formulate operational standards and technical guidelines for different types of CPAs.**

Conservation organizations can take advantage of the 2021 UN Biodiversity Conference in Kunming, China as an opportunity to strengthen the functions of conservation NGOs in China. NGOs, communities and other non-government entities' contributions to biodiversity are becoming a core content of the Convention on Biological Diversity. As the host country of the UN Biodiversity Conference, China also encourages the contributions of non-government entities to be included in the objectives of the Convention on Biological Diversity. **There is an opportunity to take advantage of the Kunming Conference to launch guidelines for CPAs, and expand stable funding sources for CPAs.**