

PROSPECTS FOR FORESTRY COOPERATION BETWEEN CHINA AND MONGOLIA IN THE “THE BELT AND ROAD” INITIATIVE

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***Abstract:** Mongolia, as one of the important neighbors in China, has a great role in maintaining soil and water and preventing land degradation, and the two countries have strong complementarity in forestry industry structure and broad prospects for forestry cooperation. Through the analysis of Mongolian forestry development status, to find out the root causes of its problems. It points out the advantages of cooperation between China and Mongolia, and puts forward the specific path of forestry cooperation between the two countries according to the main advantages of cooperation between the two countries. The focus of cooperation between the two countries should be on forest protection, forestry trade, and forest tourism and so on. China and Mongolia should take the “The Belt and Road” strategy as an opportunity to strengthen forestry cooperation and achieve mutual benefit and win-win situation.*

***Keywords:**Forestry cooperation ,Forestry trade ,Forest protection*

1. Introduction

Mongolia is located in the middle of the Eurasian continent, is connected to Northeast Asia and Central Asia, West Asia and Europe, an important bridge between the temperate continental climate, perennial rainfall less, the Gobi Desert accounted for 42.5% of the territory of the country (Long Chao, 2016). In recent years, Mongolia’s economic growth is rapid, but its socio-economic development has also caused a series of environmental

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problems, such as forest vegetation damage, drought, desertification, sandstorms frequent, environmental issues to Mongolia agriculture and animal husbandry, people’s production and life A major hazard. China has long been the largest investment country in Mongolia, trade and exporting countries, and the two countries have cooperated frequently in trade, labor, science and technology (Xie Wenxin, 2017). In 2013, in response to the grim international situation, General Secretary Xi Jinping put forward the “Silk Road Economic Zone” and “21st Century Maritime Silk Road,” the strategic concept of “The Belt and Road” strategy, hope that the neighboring countries through the open promotion area Cooperation and development (Yuhong Yang, 2015). In September 2014, Xi Jinping proposed the construction of the “China-Russia–Mongolian economic corridor” initiative at the meeting of the three heads of state of China and Mongolia, and received positive response from Russia and Mongolia (Huang Fengzhi, 2016). Mongolia as one of the neighboring countries in China, but also “The Belt and Road” strategy and the “China-Russia and China–Mongolian economic corridor” one of the important countries, the two countries in the policy, economic, trade, facilities, science and technology, humanities and other cooperation potential.

This paper analyzes the present situation and existing problems of forestry resources, forestry industry, forestry management organization and forestry policy in Mongolia, analyzes the advantages and concrete ideas of forestry cooperation between China and Mongolia, and provides the theory for the sustainable development of forestry cooperation between China and Mongolia stand by.

2. The Present Situation of Forestry Development in China and Mongolia

2.1. The Present Situation of Forestry Development in Mongolia

2.1.1. Forest resources

Mongolian forest resources as a whole is poor, the end of 2015 the total forest area of 12.5535 million hm², the national forest coverage rate of 8.1%, forest stock volume of 1.406 billion m³. Which accounted for 7% of forest production, soil and water conservation forest accounted for 45%, 47% of biodiversity conservation forest, social service forest accounted

for 1%. The country is located in the main transitional zone across the Central Asian Desert and the Siberian coniferous forest, covering six major biogeographic climates, followed by desert, desert steppe, grassland, forest grassland, northern forests and mountainous areas. Mongolian forests are mainly distributed in the northern part of the border with Russia and form a transitional vegetation type in the Siberian Tajaarin and the arid plains of Central Asia (Tian Gang, 2005). The western region and the eastern region are dominated by pine trees and other pine trees. The central region is mainly larch, *Pinus sylvestris*, white birch and other species. Southern and southwestern areas are distributed with large areas of arid forests and shrubs. Between 1990 and 2015, the area of Mongolia's forests continued to decrease due to large-scale harvesting, fires, pests and diseases, 0.67% in 1990-2000, 0.71% in 2001-2005 and 0.74% in 2006-2010, 2011-2015 Reduced by 0.80%. In view of the sharp drop in the area of the country's forests, Mongolian state-owned enterprises and private enterprises have been cultivated by the government for the past 20 years, with an annual afforestation area of 6000-8000 hm². In 2005, the Mongolian government approved the implementation of the "Green Great Wall" Strategy, plans to build 500,000 hm² green belt in 30 years.

In recent years, the process of desertification in Mongolia intensified, leading to a large number of rivers, lakes dry, land salinization increased, reduced soil fertility, frequent natural disasters. In addition to natural factors, human factors have had a very important impact on desertification. First of all, forest fires are the leading cause of the sharp drop in Mongolian forests. From the 1990s to the present, forest damage caused by forest fires has reached 6.78 million hm², of which 90% of the fire is man-made. As the forest fire is frequent, and the resistance of newly afforestation and young forest is weak, the pests and diseases of Mongolian forest are serious, and the loss caused by fire and forest pests and diseases is 80% of the growth, while commercial logging only accounts for the growth 10% -20%. Second, excessive logging, overgrazing, disorderly mining led to a sharp decline in forest resources at the same time, resulting in river pollution, groundwater dried up, further exacerbated soil erosion.

2.1.2. Forestry infrastructure

Mongolian infrastructure is also relatively weak, mainly in the transportation, power supply, communications and so on (Lamu Su Ren, 2017). Timber transport mainly by railways and highways, Mongolian railway coverage is low, the domestic railway line is very developed, the territory of only Ulan Bator railway this railway, a total length of 1811 km, due to railway equipment and technology aging, The use of wide-rail standard, greatly increasing the cost of transport between China and Mongolia. On the highway side, the Mongolian state highway is only 11218 kilometers, of which the asphalt road only less than 30%, plus old disrepair, poor road conditions. The interconnection of railways and highways is far from meeting the growing demand for forestry cooperation between the two sides. The increase in the production and transportation costs of timber products has hindered the development of timber trade between the two countries.

2.1.3. Forest industry

Due to the lack of forest resources and harvesting, backward processing technology, Mongolia forestry industry in raw materials, technology, equipment, mainly rely on imports. Mongolian domestic paper industry is relatively developed, the annual export of certain paper products and wood products, imports a lot of wood furniture, wood-based panels and other commodities.

2.1.4. Forestry management

Mongolian forests belong to the state-owned, central government with the Ministry of nature, tourism and the environment, responsible for the specific management of forests and forest policy regulations. Among them, the Forestry and Wildlife Research Institute, specifically responsible for forest resources survey and forestry science and technology development work. After the reform of the Mongolian market economy, the timber industry was managed by OI MOD, which was specifically responsible for forest resource harvesting, timber transportation, processing and some forestry update activities. The local governments of Mongolia have the management and management of forest resources and hunting, which is responsible for the management and management of local forest resources, including the definition of cutting area, the protection of natural resources

and the implementation of specific laws and regulations. Mongolian forestry legal framework and jurisdiction is unclear, forestry agencies (especially state-owned forest enterprises) administrative management, monitoring, law enforcement capacity is weak.

2.1.5. Forestry Policies and Regulations

The overall goal of Mongolian forestry development is to implement economic policies that “ecological protection” for the protection of forests, ensuring rational use, restoration of forest resources, reducing desertification and overgrazing, while increasing citizens’ participation in forest resource management. There are five specific objectives: one is to improve forest resource management, establish a new management system, improve forest use, conservation and recovery efficiency; the second is the use of advanced forest management and rational use of technology; third is to ensure that based on “community- Forest management “and” community-based management of natural resources management (2007-2021) “; four is to establish a complete management system to improve the ability of fire and pest control; five is to establish an” industrial technology park “ , The use of advanced technology and technology, the formation of industrial wood processing cluster. To achieve the above objectives, Mongolia has developed and refined a series of policies and regulations, such as “Forest Law”, “Mongolian Forestry Law”, “Natural Resources Development Law” “Mongolian Environmental Law Amendment.” The main principles are: focus on the protection of forest resources and the environment; no longer allow clear cutting, but can still be selected cutting; Ministry of Nature and the Ministry of the provisions of the local cutting quotas, the region according to the cutting limit to determine the cutting area; lack of land ownership safety and Forest ownership awareness, forestry policy, and regulations are not in place. Moreover, due to economic and technological constraints and other reasons, the Mongolian government investment in forest restoration is limited, economic incentives are not perfect, the lack of forestry professional and technical personnel.

2.2. The Present Situation of Forestry Development in China

2.2.1. Forest resources

China’s forest area ranks fifth in the world, the forest volume ranked seventh. China’s forest area of 158.941 million hm², forest reserves of

15.13 billion m³, the national forest coverage rate of 20.36%. But China's forest coverage is only equivalent to 61.3% of the world's forest coverage, the per capita forest area is only 21.30% of the world's per capita share, per capita forest volume is only 1/8 of the world's per capita volume, and China as a whole Forest quality is not high, forest age structure is unreasonable, harvesting resources are decreasing. In short, China is a relatively poor forest resource in the country. After the reform and opening up, China's resource-consuming development makes the resources and environment has been seriously damaged, the short-term consumption of natural forests is very serious, sharp drop in forest area, the ecological environment deteriorated sharply.

2.2.2. Forest industry

The rapid development of China's forest industry began in the reform and opening up, into the 21st century, the pace of development, in personnel training, management philosophy, processing technology, forestry, high-tech and other aspects of faster progress. After decades of development, China has gradually become the world's largest wood forest products processing countries, has entered the world of wood forest products production and trade power ranks. China's forest industry is mainly concentrated in the wood-based panels, wood furniture, paper products and other products processing and manufacturing. In 2015, China's total exports of wood forest products amounted to 60.395 billion US dollars, ranking first in the world.

2.2.3. Forestry management

China's forest resources all owned by the state, the State Council under the State Forestry Administration for the subordinate units, responsible for the management of the country's forestry affairs. The State Forestry Administration has 11 internal institutions and a large number of subordinate units. The responsibility of the State Forestry Administration is to be responsible for the supervision and management of forestry and its ecological construction throughout the country; to organize, coordinate, direct and supervise the afforestation and afforestation work of the country; to assume responsibility for the supervision and management of forest resources protection and development; to organize, coordinate, direct and supervise the national wetlands Protect the work; organize, coordinate, guide and supervise the national desertification prevention and control

work. Organize and guide the protection and rational exploitation and utilization of terrestrial wild animal and plant resources; be responsible for the supervision and management of the forestry system nature reserve; bear the responsibility to promote forestry reform and safeguard the legitimate rights and interests of farmers to operate forestry; supervise and inspect the industry for forests, wetlands, And the development and utilization of terrestrial wild animal and plant resources; to participate in the formulation and implementation of the ecological compensation system for the financial, financial, price and trade of forestry and its ecological construction, to organize and guide the establishment and implementation of ecological compensation system for forestry and its ecological construction; Forestry and its ecological construction of science and technology, education and foreign affairs work, to guide the construction of the national forestry team.

2.2.4. Forestry policy

In order to ensure the sustainable development of forestry in China, China began to implement the “Natural Forest Protection Project Plan” in 1998, reclassified and divided natural forests, made policy decisions on “Closing Hillside to Afforestation, Returning Farmland to Forest” and “Protection of forest resources, to stop deforestation, land occupation of the notice, “and in the upper reaches of the Yangtze River to implement the full implementation of natural forest protection project. By adjusting the direction of forest resources management, to prohibit excessive logging, strict control of production, the forest workers in batches in order to maintain and improve the ecological environment, to solve the natural forest in China recuperate and restore development. March 30, 2015, the Ministry of Finance and the State Forestry Administration held a “comprehensive stop key state-owned forest natural forest commercial cutting video and telephone conference.” The meeting decided that in 2014, Heilongjiang key state-owned forest areas to stop the natural forest commercial logging on the basis of starting from April 1, 2015, the scope of the ban to expand to Inner Mongolia, Jilin key state-owned forest, which marked the size of Xing’an Mountains, Changbai Mountain forest of natural forests all included in the outage range. The implementation of the “natural forest protection project” and the implementation of the “comprehensive forest stop policy” ended the history of China’s excessive access to forests over

the years, and the key state-owned forest areas have been transferred to a new stage of comprehensive protection and development.

3 .The Present Situation of Forestry Cooperation between China and Mongolia

China and Mongolia in forestry cooperation mainly concentrated in the timber trade, forestry science and technology, forestry management, forestry education and so on. First of all, China is the main target country of Mongolian timber exports. As early as 1983, the two countries had stipulated that the export of plywood and paper products from China would have been exported to China for some logs and sawn timber. After the 21st century, the trade of wood products in China and Mongolia has developed rapidly. From 2006 to 2015, the trade volume of timber wood products in China and Mongolia increased from US \$ 1.4459 million to US \$ 4.5483 million with a growth rate of 210.95%. Among them, mainly to China's exports to Mongolia, China's annual exports to Mongolia, a large number of wood-based panels and paper products, as well as a small amount of wood products and wood furniture, imports from Mongolia, a small amount of wood products and paper products. In the field of forestry science and technology, China and Mongolia in the forestry seed gene pool construction, forestry resource information base construction, outside the wind and sand source management, cross-border ecological management, cross-border ecological corridor construction, mining and other degraded areas of vegetation restoration, By-product deep processing and so have a good foundation and prospects. In forestry education, according to statistics, there are already nearly 10,000 Mongolian students studying in China, while this part of the students also enjoy the Chinese government funding, scholarship incentives. Especially in the Inner Mongolia Autonomous Region, by virtue of the geographical location and the advantages of the language environment, the exchange of cooperation between the two sides more frequently. Inner Mongolia University has begun to accept Mongolian students since the beginning of the 1990s, and has now trained more than 3,000 Mongolian students. At present, Mongolian students studying in Inner Mongolia University are distributed in Mongolia, law, life sciences, agriculture and forestry. Good cooperation base and broad cooperation prospects for the long-term development of Sino-Mongolian forestry cooperation provides a favorable opportunity.

4. Advantages of China and Mongolia Forestry Cooperation

For a long time, Mongolia's international cooperation in forestry has been more dependent on international financial and technical assistance, and forestry development has been difficult to maintain a high degree of consistency with national overall planning and domestic forestry development. Among them, Japan, South Korea, Germany, Russia are Mongolian forestry partners, cooperation mainly includes forestry infrastructure construction, forest fire prevention, forest resource inventory and financial assistance. Mongolia as one of the "The Belt and Road" strategy of the country, is an important hub connecting China and East Asia, so to strengthen China and Mongolia forestry cooperation is of great strategic significance. Through the above analysis can be concluded that Sino-Mongolian cooperation in forestry has the following advantages.

4.1 .The two sides have a consistent forestry development goal

China and Mongolia have a consistent goal in forestry development, namely, the cultivation and protection of forests and the smooth flow of forest products. The Chinese government attaches great importance to the role of forests in protecting the environment, regulating climate change and greening the urban environment. In order to achieve the sustainable development of forestry, China put forward the "natural forest protection project" and "natural forest stop test" in 1998 and 2014, and actively fulfilled the international conventions and agreements to strengthen the protection of natural resources (Wang Yanqin, 2017). In the forest products trade, China after 10 years of development, has become the world's largest timber processing countries, and gradually into the ranks of the worlds forest products trade. After the 21st century, Mongolia began to gradually strengthen the focus on the development of forestry, stressed that the forest is an important resource for the country, and should strengthen the sustainable management of forests and development and utilization. The common development goals laid a solid foundation for the smooth development of cooperation between the two sides.

4.2. The two sides have a strong willingness to cooperate

In August 2014, Xi Jinping, chairman of the People's Republic of China, paid a state visit to Mongolia. The leaders of the two countries signed the Joint Declaration on the Establishment and Development of a

Comprehensive Strategic Partnership between the People’s Republic of China and Mongolia, and decided to establish a comprehensive strategic partnership. On April 1, 2015, Mongolian Foreign Minister Hippud Sulun came to China for official and good visits. Mongolia will actively support and participate in China’s “The Belt and Road” and “China-Mongolia-Russia Economic Corridor” initiative, hope that the Mongolian “grassland road” plan and Chinese “ The Belt and Road “ initiative organic convergence, the infrastructure, technology and other areas of cooperation in the first place, and began to implement cross-border economic cooperation policy, to further strengthen bilateral relations, in politics, economy, humanities and other aspects of communication. According to the Joint Declaration of the People’s Republic of China and Mongolia on the Establishment and Development of a Comprehensive Strategic Partnership, the two sides agreed to actively cooperate and benefit the two countries and the two peoples. In terms of forestry, the two sides decided to expand bilateral cooperation under the framework of China’s ecological civilization construction and Mongolian green development policy. Consolidate desertification, water use and protection, climate change, fight against natural disasters and forest grassland fires and other areas of cooperation. Strong cooperation willing to carry out forestry cooperation in China and Mongolia has played a great role in promoting.

5. The Path Choice of Cooperation between China and Mongolia

5.1. Vigorously carry out Sino-Mongolian forestry economic and trade cooperation, enhance the level of forestry cooperation

China and Mongolia should be in the wood forest products deep processing, non-wood forest products deep processing and forestry tertiary industry and other aspects of co-operation. In the timber industry trade, Mongolia due to its own forestry resources and processing technology constraints, each year from China to import a large number of wood processed products, China has become Mongolia’s most important timber forest products trade partners. Moreover, with the development of Mongolia’s domestic economy, in the future for some time, Mongolian domestic demand for wood products will continue to expand, China and Mongolia should be “The Belt and Road “ strategy as an opportunity to expand the scale of wood products trade The In the deep processing of wood products, the two

sides should increase the cooperation of the high value-added products in the feasibility study, the use of advanced wood cutting technology, heat treatment technology and restructuring technology to improve the timber production rate, product quality and additional value. Development of commercial fuelwood substitutes such as biomass briquette. China and Mongolia should increase cooperation in the deep processing of non-wood forest products, such as forest herbs, food, private chat, fuelwood, etc., and the establishment of non-wood forest product information database, including production, product range, policy, Countries, state-owned forest enterprises, the economic value of rural communities and the relevant provisions of the effectiveness and sustainability of the country for the development of non-wood forest product development planning to provide important information support (Long Chao, 2015).

In the tertiary industry of forestry, with the Inner Mongolia Autonomous Region bordering the East and Sukhbatuo province, flat, grassland plants and animals rich, abundant rivers and lakes, may be considered with China's Inner Mongolia Aershan joint development of forest, grassland tourism. The relevant departments of China and Mongolia can jointly study and establish a large-scale transnational forest tourism cooperation mechanism, and actively hold the China-Mongolia forest tourism cooperation forum to promote the sustainable development of forestry tertiary industry.

5.2. Cooperate in forest conservation and soil and water restoration

China and Mongolia have a long border line, sand on both sides of the border mostly. In recent years, China has accumulated rich experience in sand control, returning farmland to forest and sandstorming. China and Mongolia should combine China's "The Belt and Road" strategy and Mongolia's "Green Great Wall" plan to make use of seabuckthorn, salix, willow, carrots and other trees in the sandy border of Mongolia and China to carry out wind and sand source control Roads, railways, residential protection systems, fixed mobile dunes, protection of traffic routes and oasis surrounding areas, to restore mining ecosystems, especially in the Zhalandoude area along with Erlianhaote, the construction of afforestation nursery, shelter, vigorously develop water Irrigation technology. In the wind and sand control at the same time, strengthen the watershed management, selection of salt-tolerant tree species to transform, such as red willow, Haloxylon forest, Chinese wolfberry, etc., for desertification control. Supporting the promotion of

water-saving irrigation technology, in particular the urban sewage treatment for agricultural and forestry irrigation, to solve the problem of irrigation water shortage in arid areas.

5.3. Conduct forestry research and technical training

China and Mongolia should carry out forestry research and technical training from both the enterprise and the government. First of all, the two countries should regularly organize research institutions, NGOs on forestry enterprises in the forest sustainable management, forest certification, timber processing and other aspects of professional training and education to enhance the competitiveness of enterprises and social responsibility (Jiang Hongfei, 2016) The Secondly, the two sides should improve the capacity of forestry officials of the two governments to develop forest management plan and forestry policy planning through capacity training and expert consultation, improve the ability of technical personnel to carry out forest resource inventory, establish national and local forest resources and Carbon sinks and actively organize international and regional forest management experience and technical exchanges.

5.4. Jointly crack down on illegal logging and illegal trade in timber

China and Mongolia should join forces to strengthen cross-border biodiversity conservation and forest law enforcement management. The government should work closely with forestry enterprises to crack down on illegal logging and illegal trade, strictly enforce the legality and sustainability of fuelwood, and protect the rare species and forest resources in the border areas of China and Mongolia.

CONCLUSION

Through the above analysis can be concluded that the two countries to carry out forestry cooperation, in line with the common interests of both countries, the two sides should be based on their own national conditions and forestry development status, based on the current advantages of cooperation, adhere to the principle of complementarity, mutual benefit. To deepen the comprehensive strategic partnership of cooperation in the fields of economy, trade, humanities and science and technology, and promote the long-term development of Sino-Mongolian forestry cooperation.

REFERENCES

1. Long Chao, Long Yue, Jiang Jinghui, Xiao Jun, Sun Weina. (2016). The Present Situation of Forestry Development in Mongolia and the Prospect of Sino-Mongolian Forestry Cooperation. *Journal of World Forestry Research*. 4,92-96.
2. Xie Wenxin.(2017). “Sino - Mongolian Economic and Trade Cooperation and Development” under the “ The Belt and Road “ Construction. *Journal of Economic issues*.2,14-18.
3. Yu Hongyang, Oudeka, Pakistan Dianjun.(2015). On the Basis and Obstacles of “ China-Mongolia-Russia Economic Corridor “. *Journal of Northeast Asia Forum*.24.96-106+128.
4. Huang Fengzhi.(2016). A Strategic Analysis of the Construction of “ China-Mongolia-Russia Economic Corridor “. *Journal of People ‘ s Forum • Academic Frontier*.13.62-73.
5. Tian Gang.(2005). Study on Forestry Economic and Trade Cooperation in Northeast Asia. Northeast Forestry University doctoral thesis.
6. Rumu Su Ren.(2017). A Study on the Development Model of Sino - Mongolian Trade from the Perspective of “ China-Mongolia-Russia Economic Corridor “. Inner Mongolia University doctoral thesis.
7. Wang Yanqin, Chen Jie, Gu Yali.(2017). The Present Situation of Forestry Development in Central and Eastern Europe and the Prospect of “16 + 1” Cooperation. *Journal of Forestry Resource Management*.1.153-159.
8. Long Chao, Rude, Long Yue, Jiang Jinghui. Prospects for forestry development and international cooperation in the five countries of Central Asia. *Journal of World Forestry Research*.28.80-84.
9. Jiang Hongfei, Xiao Jianmin.(2016). Current Situation of Forestry Development in Mozambique and Forestry Cooperation between China and Mozambique. *Journal of World Forestry Research*.5.87-91.