



Trade Overview 2021

Bamboo and Rattan Commodities in China



International Bamboo and Rattan Organization

The International Bamboo and Rattan Organization

Established in 1997, the International Bamboo and Rattan Organization (INBAR) is an intergovernmental organization that promotes environmentally sustainable development using bamboo and rattan. INBAR's mission is to improve the well-being of producers and users of bamboo and rattan within the context of a sustainable bamboo and rattan resource base, by consolidating, coordinating and supporting strategic and adaptive research and development. INBAR consists of 49 Member States, 4 Observers and 5 Regional Offices responsible for Central Africa, East Africa, West Africa, South Asia as well as Latin America and the Caribbean. In 2017, INBAR was granted Observer status at the UN General Assembly.

About this report

This report can be cited as: INBAR (2022) *Trade Overview 2021: Bamboo and Rattan Commodities in China*. INBAR: Beijing, China.

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ACKNOWLEDGEMENTS

This report aims to collect, present and disseminate accurate and relevant statistical information on the trade of China's bamboo and rattan commodities in 2021 in a clear, concise and reader-friendly format.

This report was funded by the Fundamental Research Funds of ICBR (Grant No. 1632022027). We also grateful to Dr. Chen Jiaojiao from the Institute of Green Economy, International Center for Bamboo and Rattan for the preparation of the report.

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INTRODUCTION

Bamboo is a grass widely distributed in tropical and subtropical regions. Rattan is a spiky climbing palm distributed in tropical and southern subtropical regions. Published in 2017, *the World Checklist of Bamboos and Rattans* estimates the existence of 1642 bamboo species and 631 rattan species in the world, including over 100 species with commercial uses, and the global bamboo forest area is more than 35 million hectares.

China possesses the most abundant bamboo resources in the world. It is an important global distribution center for bamboo plants. Over 44 genera and 857 species of bamboo plants exist in China. The area of bamboo forest in China is 7.01 million hectares, ranking first in the world in terms of species number, area and yield. China is home to 2 genera and 36 species of rattan, and its natural rattan resources occur across an area of 300,000 hectares, with an annual output of 4000–6500 tons of wild rattan. Five-thousand hectares of artificial rattan forests are spread across southern and southwestern China.

China is the first country in the world to recognize and utilize bamboo. With a long history of bamboo culture, China is known as the "country of bamboo civilization." Since ancient times, bamboo has exerted a profound impact on the development of the country and livelihoods of locals. This has been captured in a historical idiom: "Five-thousand years of flourishing bamboo culture — food, clothing, shelter and transportation are all inseparable from bamboo." China's bamboo sector ranges across the primary, secondary and tertiary industries. Bamboo products have high value and wide use, being used in more than 100 products series and nearly 10,000 products, and are also used in construction, decoration, furniture, paper, packaging, transportation, medicine, food, textile, chemical and other industries. The rattan industry in China has a history dating back more than 150 years, and its main products include rattan furniture, mats, curtains, baskets and handicrafts.

As more countries around the world implement plastic bans and restrictions, bamboo has emerged as a nature-based alternative to plastics. Among all plastic replacement materials, bamboo is a fast-growing, easily renewable and degradable biomass material with obvious advantages in carbon fixation and environmental protection. Bamboo processing performance is good, cost effective and widely used. Products emerging from bamboo roots, bamboo shoots, bamboo sticks, bamboo

leaves, bamboo liquid and bamboo charcoal show the real applicability of bamboo in a low-carbon economy and green life. On 24 June 2022, at the High-level Dialogue on Global Development as part of the 14th BRICS Summit, China announced that it will jointly launch the Bamboo as a Substitute for Plastics Initiative with INBAR to reduce plastic pollution and combat climate change. Under this initiative, bamboo can replace materials and products with high-energy consumption and high emissions (such as plastics, concrete and steel) to achieve energy conservation and emissions reduction. If 600 million tons of bamboo were used to replace PVC products globally each year, an estimated 4 billion tons of CO₂ emissions would be reduced.

A wide variety of bamboo and rattan commodities can be found across all aspects of the clothing, food, housing and transportation sectors. However, most of these are locally consumed and never enter international markets. Accordingly, market share and recognition of bamboo and rattan commodities need to be improved around the world. Further promotion of their value, as well as the development and utilization of bamboo and rattan resources, not only protects the ecological environment and safeguards national security lumber, but also makes a positive contribution to promote rural development and supports the Belt and Road Initiative, ultimately forming an important building block of the low-carbon economy and green life. These two resources are crucial to the national project of building a beautiful China, and are capable of leading a green revolution. The Bamboo as a Substitute for Plastics Initiative can thereby reduce carbon emissions and contribute to the realization of the "double carbon" strategic goal, advancing the UN 2030 SDGs and promoting stronger, greener and healthier sustainable development around the world.

1 China's exports and imports of bamboo commodities

Over the past 20 years, China's bamboo industry has developed rapidly, innovating and producing more and more commodities and applications. In terms of the international market, China plays a pivotal role in the international trade of bamboo commodities and is the most important producer, consumer and exporter of bamboo commodities in the world. Meanwhile, China is also one of the major importers of bamboo commodities.

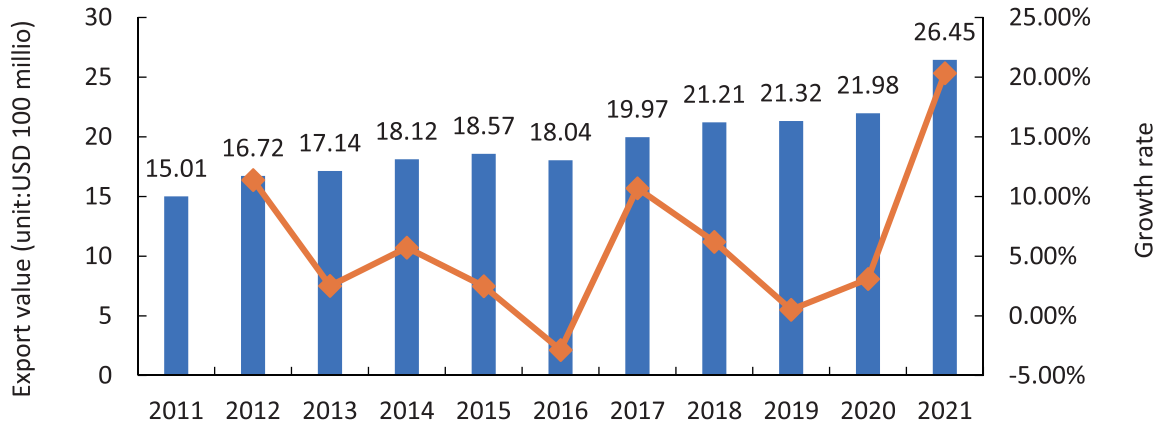
1.1 China's trade value of bamboo commodities

In 2021, China's import and export trade value of bamboo and rattan commodities amounted to USD 2.78 billion, of which the export trade value was USD 2.76 billion and the import trade value was USD 26 million. The import and the export trade value of bamboo commodities were USD 2.65 billion, and that of rattan commodities was about USD 128 million. The export trade value of bamboo commodities was USD 26.5 billion, and the import trade value of bamboo commodities was USD 8.12 million. The export trade value of rattan commodities was only USD 110 million, and the import trade value of rattan commodities was USD 18 million.

1.1.1 China's export value of bamboo commodities

The China's export trade value of bamboo commodities showed an overall growth trend from 2011 to 2021 (Figure 1). In 2011, China's export trade value of bamboo commodities was USD 1.50 billion, reaching USD 2.645 billion in 2021, with an increase of 176.22% and an annual growth rate of 17.62%. In 2016, China's export trade value of bamboo commodities decreased by 2.85%, and increased in the rest of the year. Affected by the global COVID-19 pandemic, the growth rate of China's bamboo export trade value slowed from 2019 to 2020, and the growth rate was 0.52% and 3.10% in 2019 and 2020, respectively. In 2021, the export trade value of China's bamboo commodities picked up, reaching a growth rate of 20.34%.

Figure 1 China's export value of bamboo commodities from 2011 to 2021



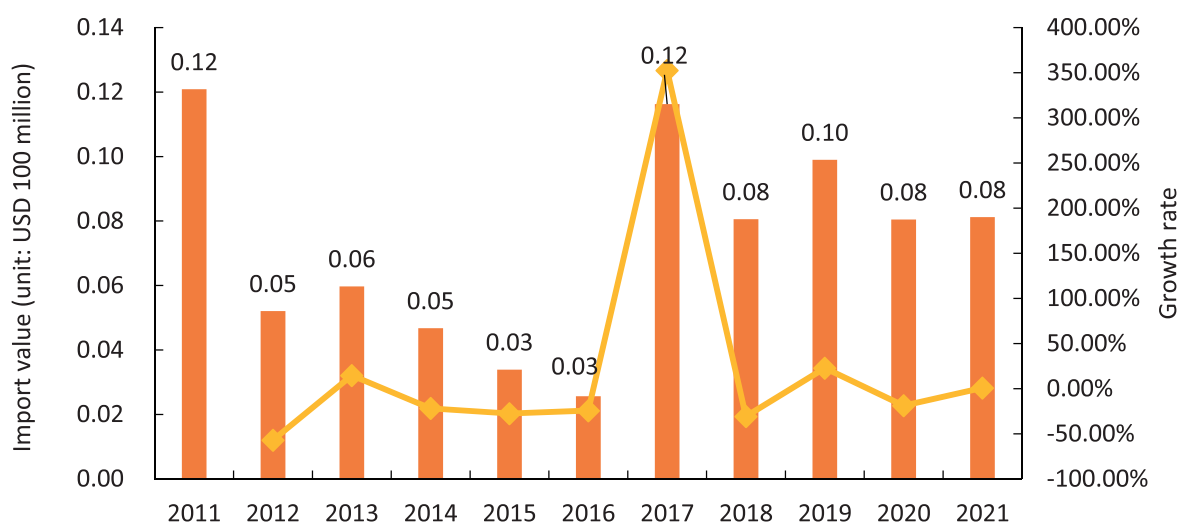
Data Source: Statistics and Collation from China Customs Database and the UN ComTrade database.

When examining China's export trade value of bamboo commodities from 2011 to 2021 (Annex 1), the export trade value of bamboo kitchenware experienced the most significant increase, from USD 380 million in 2011 to USD 1.14 billion in 2021, and its proportion increased from 25% in 2011 to 43% in 2021. The export trade value of woven bamboo products decreased gradually after 2011, from USD 390 million in 2011 to USD 260 million in 2016, and its proportion decreased from 26% in 2011 to 14% in 2019. After 2016, it increased slightly, recovering to USD 310 million in 2021, and the proportion was stable at about 13%. The export trade value of bamboo shoots increased steadily until 2017, peaking in 2016. The export trade value was USD 240 million in 2011, USD 320 million in 2016, falling to USD 230 million in 2020, and rising to USD 240 million in 2021. The proportion of China's total export trade value of bamboo commodities reached the highest level in 2016 at about 18%, before dropping to 9% in 2021. The export value of bamboo-based panels showed a gradual decline after 2012. The total export value gradually decreased from about USD 400 million in 2012 to USD 160 million in 2020, and its proportion gradually decreased from 24% in 2012 to 7% in 2020. In 2021, the trade value recovered to USD 190 million, accounting for 7%. Bamboo articles of daily use and bamboo furniture received new customs codes in 2017, after which their export value and share continued to grow. In 2021, the export value of these two categories, bamboo articles of daily use and bamboo furniture, reached USD 260 million and USD 200 million, accounting for 10% and 8%, respectively.

1.1.2 China's import value of bamboo commodities

The China's import trade value of bamboo commodities showed a fluctuating trend from 2011 to 2021 (Figure 2). In 2011, China's import trade value of bamboo commodities was USD 12.09 million, and it reached USD 8.12 million in 2021, with a decrease of 32.84% and an annual decline rate of 2.99%. China's import trade value of bamboo commodities showed a downward trend from 2011 to 2017. In 2017, China's import trade of bamboo commodities increased by 352.46%.

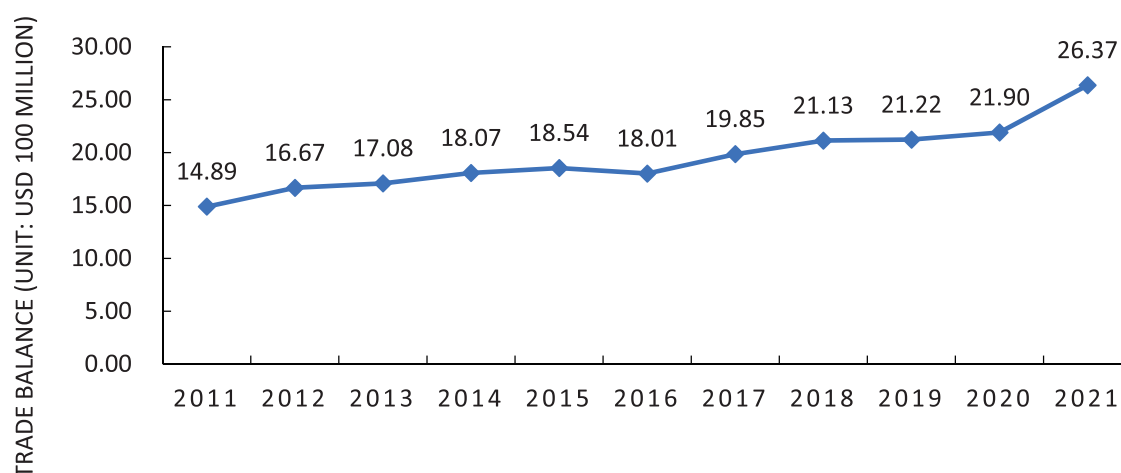
Figure 2 China's import value of bamboo commodities from 2011 to 2021



Data Source: Statistics and Collation from China Customs Database and the UN ComTrade database.

Compared with China's export trade value of bamboo commodities, the import trade value of bamboo commodities has been insignificant. Accordingly, China's trade surplus of bamboo commodities has been increasing (Figure 3). In 2011, China's trade surplus of bamboo commodities was USD 1.49 billion. With the increasing export value, the trade surplus reached USD 2.64 billion in 2021.

Figure 3 Trade balance of China's bamboo commodities from 2011 to 2021



Data Source: Statistics and Collation from China Customs Database and the UN ComTrade database.

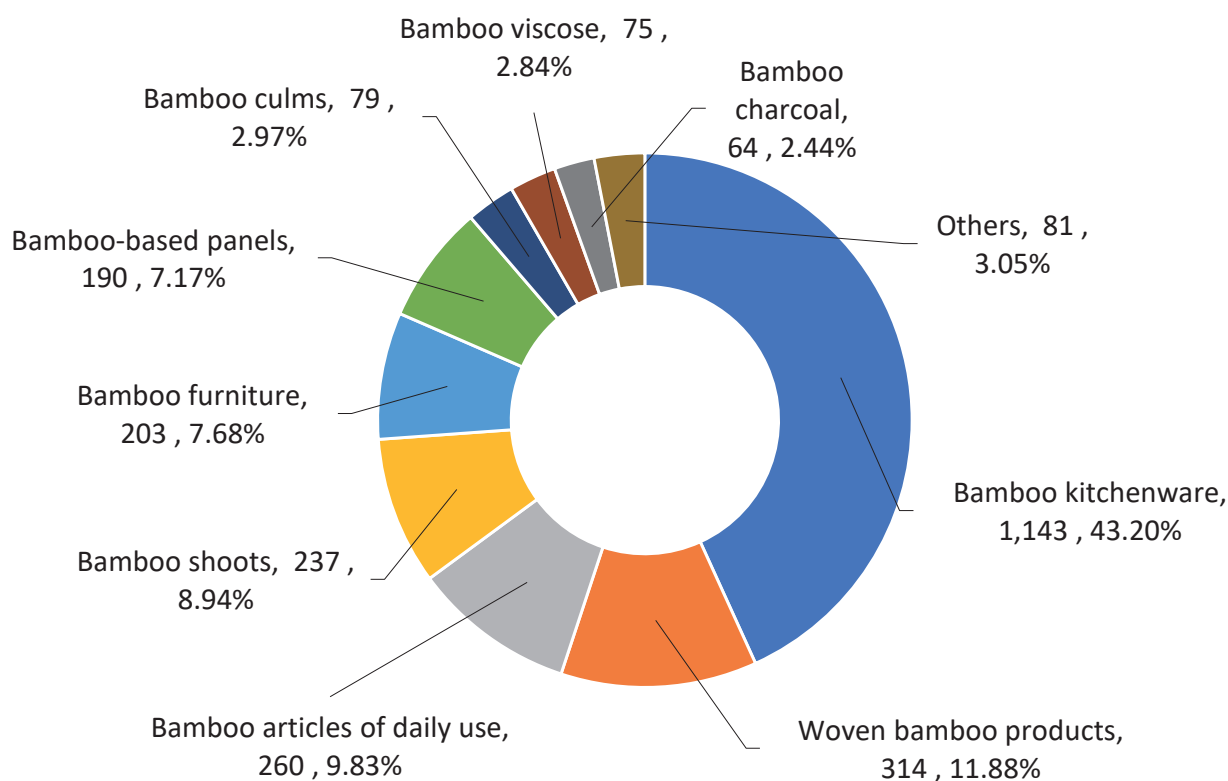
1.2 China's trade structure of bamboo commodities

Although there was a large gap between the export and import value of China's bamboo commodities, bamboo kitchenware and bamboo woven products were the most important export and import commodities. Commodities like bamboo articles of daily use, bamboo shoots, bamboo furniture and bamboo-based panels had an expected trade value, while bamboo culms, bamboo viscose, bamboo charcoal, bamboo construction materials, bamboo pulp and paper products, and bamboo handicrafts had a small trade value.

1.2.1 China's export structure of bamboo commodities

In 2021, China's total export trade value of bamboo commodities was about USD 2.65 billion. Among them, the export trade value of bamboo kitchenware (including bamboo chopsticks, sticks and chopping boards) contributed about USD 1.14 billion, accounting for 43.20%, followed by woven bamboo products (including baskets, screens and mats, and plaited products), with exports of USD 314 million (11.88%). Export trade value of bamboo articles of daily use, bamboo shoots, bamboo furniture (including bamboo seats and other furniture) and bamboo-based panels (including thin plywood, strips and veneer) were USD 260 million, USD 237 million, USD 203 million and USD 190 million, respectively, accounting for less than 10%. The export trade value of bamboo culms, bamboo viscose, bamboo charcoal, bamboo pulp and paper products, and bamboo handicrafts were less than USD 100 million, accounting for less than 3% (Figure 4).

Figure 4 Proportion of China's export of main bamboo commodities in 2021 (unit: USD million; %)

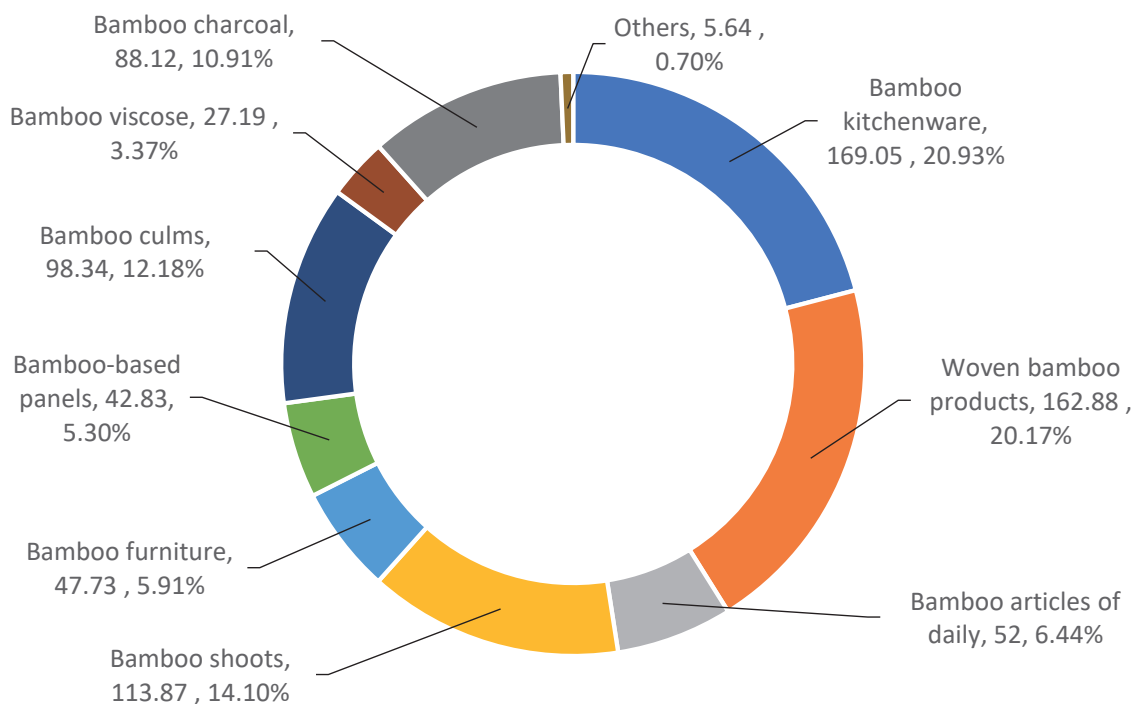


Data Source: Statistics and Collation from China Customs Database. Note: "Others" mainly includes bamboo construction materials, bamboo pulp and paper products and bamboo handicrafts.

1.2.2 China's import structure of bamboo commodities

In 2021, China's total import trade value of bamboo commodities was about USD 8.08 million. Among them, the import value of bamboo kitchenware and woven bamboo products were the highest, accounting for 20.81% and 20.05%, respectively. The import value of bamboo shoots was 1.14 million, accounting for 14.02%. Imports of bamboo culms, bamboo charcoal, bamboo articles of daily use, bamboo furniture, bamboo-based panels and bamboo viscose all amounted to less than USD 1 million (Figure 5).

Figure 5 Proportion of China's import of main bamboo commodities in 2021 (unit: USD million; %)



Data Source: Statistics and Collation from China Customs Database. Note: "Others" mainly includes bamboo construction materials, bamboo pulp and paper products and bamboo handicrafts.

1.3 China's trade partners of bamboo commodities

In 2021, China had 195 export partners of bamboo commodities. Among them, the USA and Japan were the main export partners of China's bamboo commodities. Other important export partners were Germany, India, the Netherlands, Vietnam, France, the UK, Australia and South Korea. Bamboo kitchenware featured the largest export range of bamboo commodities, reaching 174 countries or regions globally, and the USA was China's largest export partner of bamboo kitchenware.

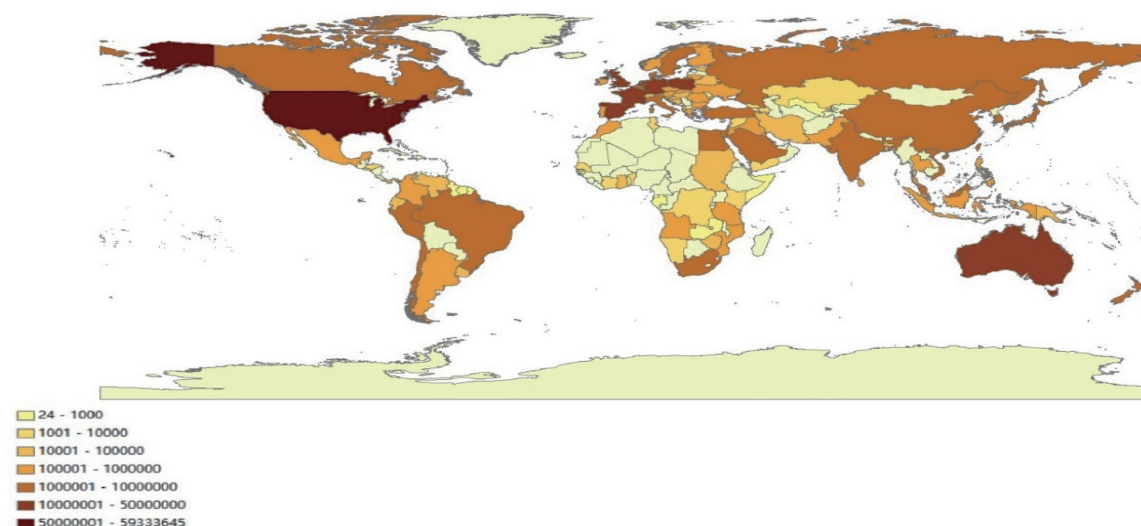
In 2021, China imported bamboo commodities from 63 countries. Vietnam was the main import partner of China's bamboo commodities, followed by Japan and Myanmar. Other important import partners were Italy, Indonesia, Poland and Thailand. The most common of bamboo commodities imported by China was bamboo kitchenware, which was imported from 30 countries or regions, among which Vietnam and Japan were the main import partners of bamboo kitchenware.

1.3.1 China's export partners of bamboo commodities

In 2021, China exported bamboo commodities to 195 countries. Global distribution is shown in Figure 6. China's bamboo exports were mainly concentrated in Asia (Japan, India, Vietnam, etc.), Europe (Germany, Netherlands, France, Britain, etc.) and North America (USA, Canada), with the export value of USD 989 million, USD 714 million and USD 588 million, accounting for 37.05%, 27.01% and 22.25%, respectively.

Bamboo kitchenware was China's largest export commodity for bamboo, with a total export value of USD 1.14 billion and 174 export partners globally. Among them, the USA was the largest export partner of China's bamboo kitchenware, with an export value of USD 206 million. The total export value of bamboo furniture reached USD 492 million, which was exported to 157 countries or regions globally, mainly exporting to the USA, Germany, the Netherlands, France, South Korea and the UK. The USA was the largest export partner of China's bamboo furniture, with an export value of USD 161 million, accounting for about 33%. China's woven bamboo products were exported to 140 countries or regions globally, mainly to the USA, Vietnam, Japan, the Netherlands and Germany. Among them, the USA was the largest export partner of China's woven bamboo products, with an export value of USD 67 million.

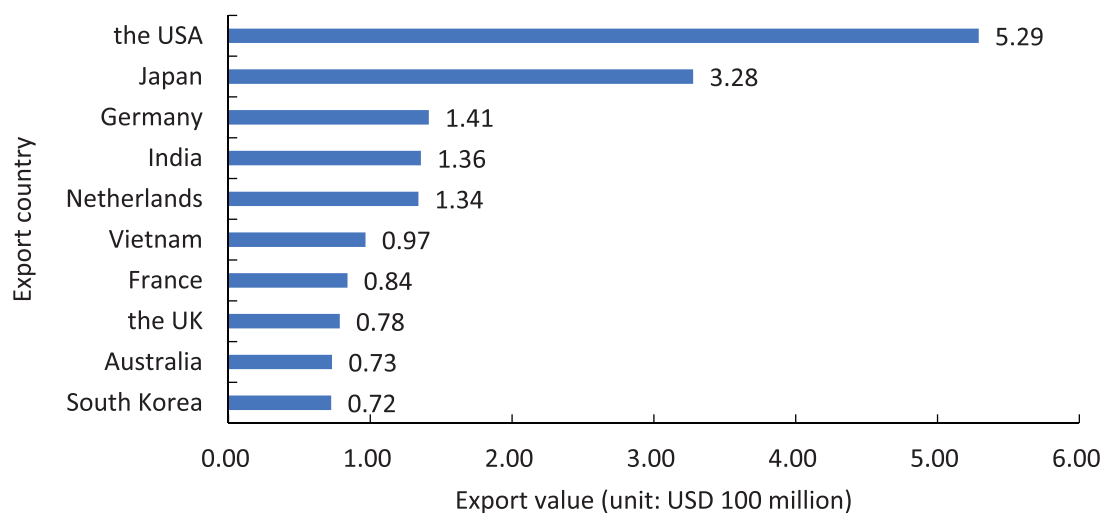
Figure 6 Global distribution of China's bamboo commodities exports in 2021



Note: This figure is drawn by ARCGIS with data from China Customs Database.

According to statistics from the Chinese Customs Database, the USA and Japan have been China's main export partners of bamboo commodities. In 2021, China's bamboo export trade value to the USA and Japan were USD 529 million and USD 328 million, accounting for 20.00% and 12.39%, respectively. In addition, Germany, India, Netherlands, Vietnam, France, the UK, Australia and South Korea were also important export partners of China's bamboo commodities (Figure 7).

Figure 7 Main export partners of China's bamboo commodities in 2021



In terms of commodities (Table 1), the USA was the leading export partner of China's bamboo commodities in 2021. Bamboo kitchenware was the main bamboo commodity exported from China to the USA at USD 206 million. Japan was the second-largest export partner of China's bamboo commodities, composed mainly of bamboo shoots and bamboo kitchenware, with export values of USD 135 million and USD 130 million, respectively, followed by woven bamboo products, bamboo charcoal and bamboo-based panels. The main bamboo commodities exported from China to Germany were bamboo kitchenware, with an export value of USD 58.20 million, and bamboo articles of daily use, with an export value of about USD 25 million. The main bamboo commodities exported from China to India were bamboo kitchenware and bamboo viscose, which were worth USD 88.48 million and USD 40.19 million, respectively. Bamboo kitchenware was the main bamboo commodity exported from China to the Netherlands, with an export value of USD 50.96 million.

Table 1 China's main export trading partners of bamboo commodities in 2021

unit: USD million

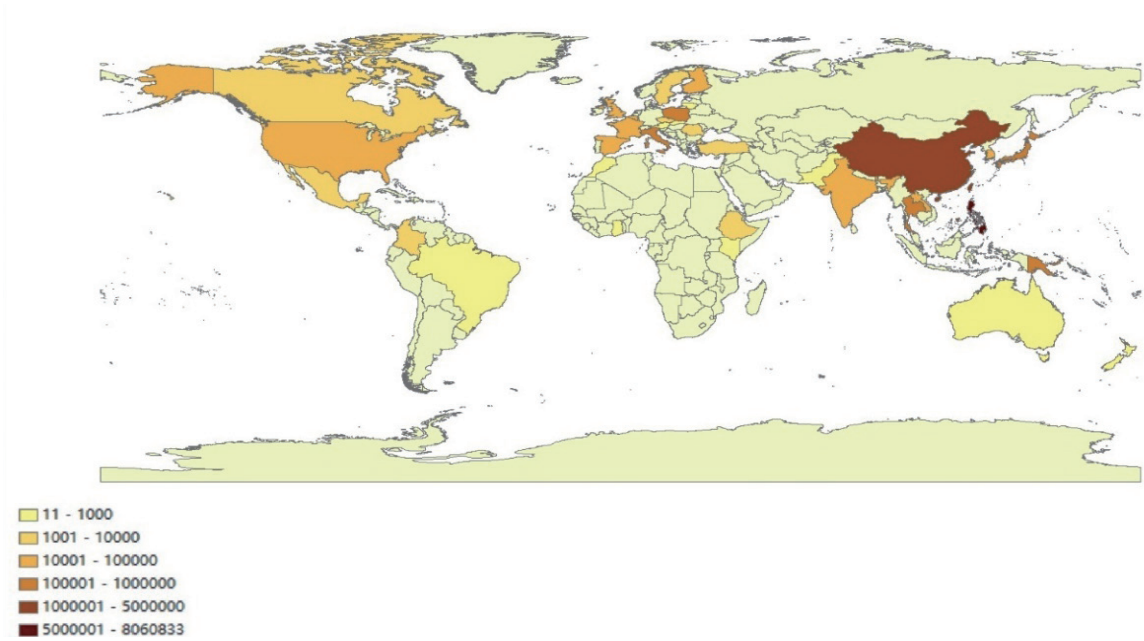
Category of Bamboo Commodities	the USA	Japan	Germany	India	Netherlands
Bamboo shoots	22.32	135.29	8.86	0.10	6.76
Bamboo culms	10.68	3.46	2.87	-	10.39
Bamboo charcoal	1.89	12.14	0.44	0.81	0.20
Bamboo-based panels	75.39	10.05	7.74	0.82	11.70
Bamboo construction materials	11.83	0.02	0.37	1.47	7.72
Bamboo kitchenware	206.12	130.10	58.20	88.48	50.96
Bamboo handicrafts	0.04	-	-	-	-
Bamboo articles of daily use	59.33	8.60	24.52	2.29	15.03
Woven bamboo products	66.78	17.18	11.62	0.44	21.74
Bamboo pulp and paper products	6.86	1.74	1.09	0.79	0.05
Bamboo viscose	0.15	0.03	0.43	40.19	0.16
Bamboo furniture	67.62	9.06	25.11	0.28	9.23

1.3.2 China's import partners of bamboo commodities

In 2021, China imported bamboo commodities from 63 countries. The global distribution can be found in Figure 8. China's bamboo commodities imports were mainly concentrated in Asia (Vietnam, Japan, Myanmar, etc.), Europe (Italy, Poland) and North America (the USA), with the import value of USD 4.82 million, USD 0.56 million and USD 52,200, accounting for 52.27%, 6.75% and 0.78%, respectively.

The leading type of bamboo commodity imported by China was bamboo kitchenware, with an import value of USD 1.69 million from 30 countries or regions. Among them, Vietnam and Japan were the main import partners of China's bamboo kitchenware, with an import value of USD 0.93 million and USD 0.26 million, respectively, accounting for 55.09% and 15.10%, respectively. The import trade value of woven bamboo products was USD 1.63 million, which was imported from 30 countries or regions. Vietnam was the largest import partner of China's woven bamboo products, with an import value of USD 1.26 million, accounting for 77.12%. The import value of bamboo culms was USD 0.98 million, mainly from Ethiopia, the USA, Myanmar, Japan, Thailand, Spain and Vietnam. The import value of bamboo charcoal was USD 0.88 million, which was mainly imported from Austria, South Korea, Japan and Indonesia.

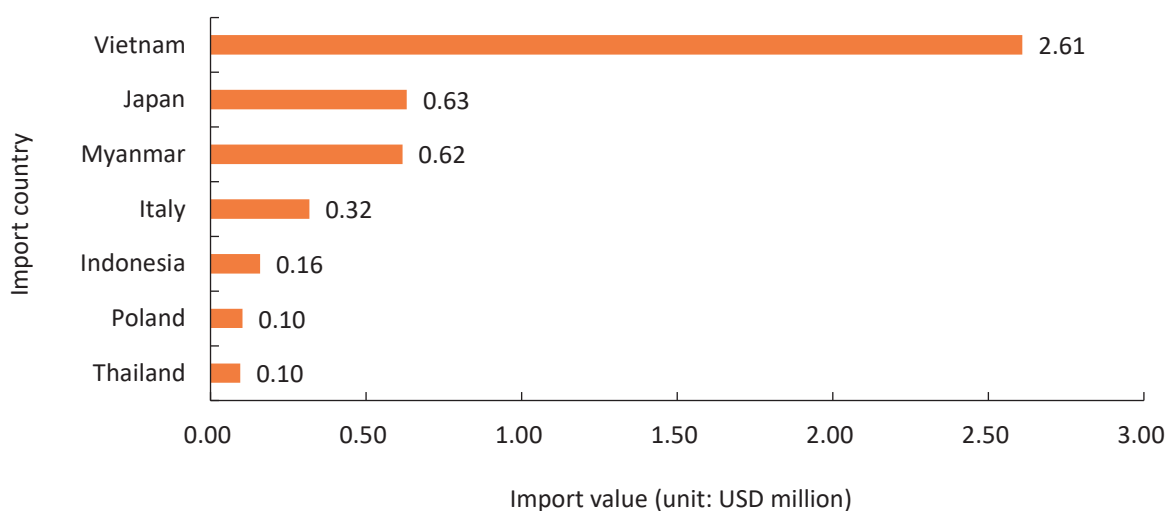
Figure 8 Global distribution of China's bamboo commodities imports in 2021



Note: This figure is drawn by ARCGIS with data from China Customs Database.

In 2021, the main import partner of China's bamboo commodities was Vietnam, with an import trade value of USD 2.61 million, accounting for 32.31%. Japan and Myanmar were important import partners of China's bamboo commodities, with an import trade value of both in excess of USD 0.60 million, accounting for more than 7%. Other important partners of China's bamboo imports were Italy, Indonesia, Poland and Thailand (Figure 9).

Figure 9 Main import partners of China's bamboo commodities in 2021



In terms of commodities (Table 2), China imported the amount of woven bamboo products, bamboo kitchenware and bamboo furniture from Vietnam about USD 1.26 million, USD 0.93 million and USD 0.26 million, respectively, due to the lower labor price in Vietnam compared with China. The main commodities that China imported from Japan were bamboo kitchenware and bamboo viscose, with import values of USD 0.26 million and USD 0.22 million, respectively. China mainly imported bamboo culms from Myanmar and Vietnam, with values of USD 0.62 million and USD 0.01 million, respectively.

Table 2 China's main import trading partners of bamboo commodities in 2021

Category of Bamboo Commodities	unit: USD million				
	Vietnam	Japan	Myanmar	Italy	Indonesia
Bamboo shoots	0.11	0.02	0.62	-	-
Bamboo culms	-	0.01	-	-	0.02
Bamboo charcoal	0.04	-	-	0.17	-
Bamboo-based panels	0.93	0.26	-	-	-
Bamboo construction materials	-	0.01	-	-	-
Bamboo kitchenware	0.01	0.09	-	0.04	-
Bamboo handicrafts	1.25	0.02	-	0.08	0.06
Bamboo articles of daily use	-	-	-	-	-
Woven bamboo products	-	0.22	-	0.02	-
Bamboo pulp and paper products	0.26	0.01	-	0.02	0.08

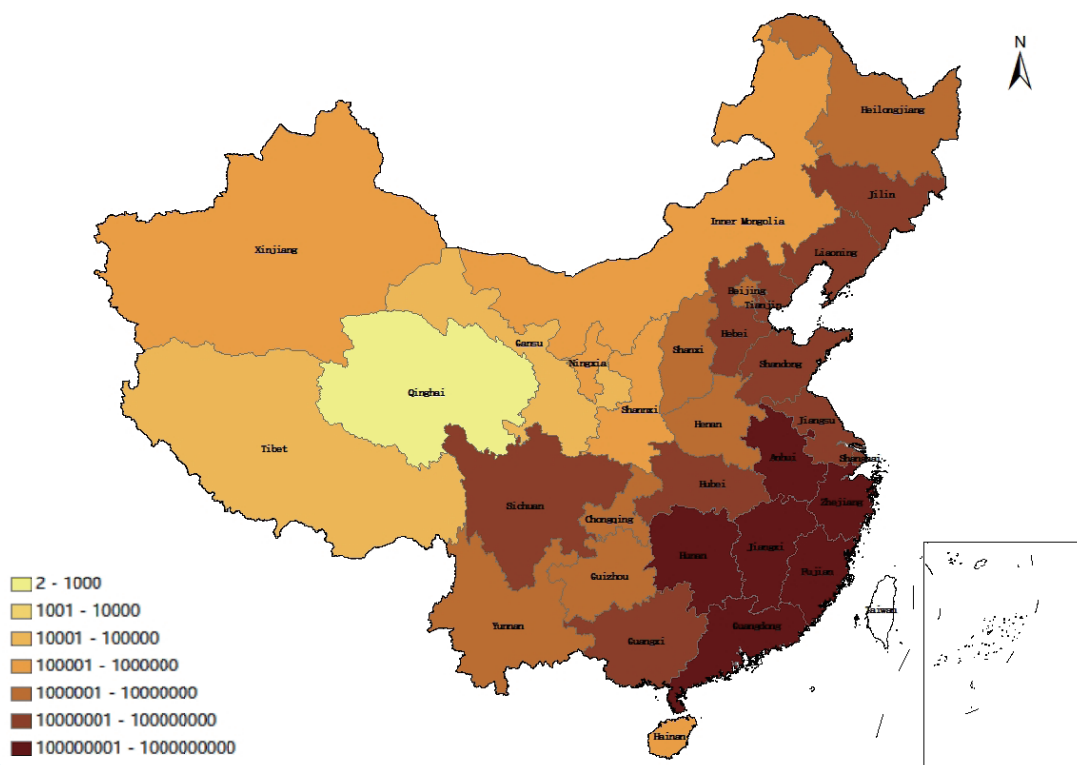
1.4 China's trade regions of bamboo commodities

In terms of the import and export regions of bamboo commodities in China, Fujian, Zhejiang and Guangdong Provinces were the main export regions of bamboo commodities, followed by Jiangxi, Hunan and Anhui Provinces. Shanghai was the main import region of bamboo commodities in China, followed by Fujian and Guangdong Provinces.

1.4.1 China's export regions of bamboo commodities

From the perspective of China's bamboo export regions in 2021 (Figure 10), Fujian, Zhejiang and Guangdong Provinces were the main export regions of China's bamboo commodities, with an export value of USD 757 million, USD 555 million and USD 393 million, accounting for 28.61%, 21.00% and 14.87%, respectively. Jiangxi, Hunan and Anhui Provinces all exported more than USD 100 million.

Figure 10 China's regional distribution for exporting bamboo commodities in 2021

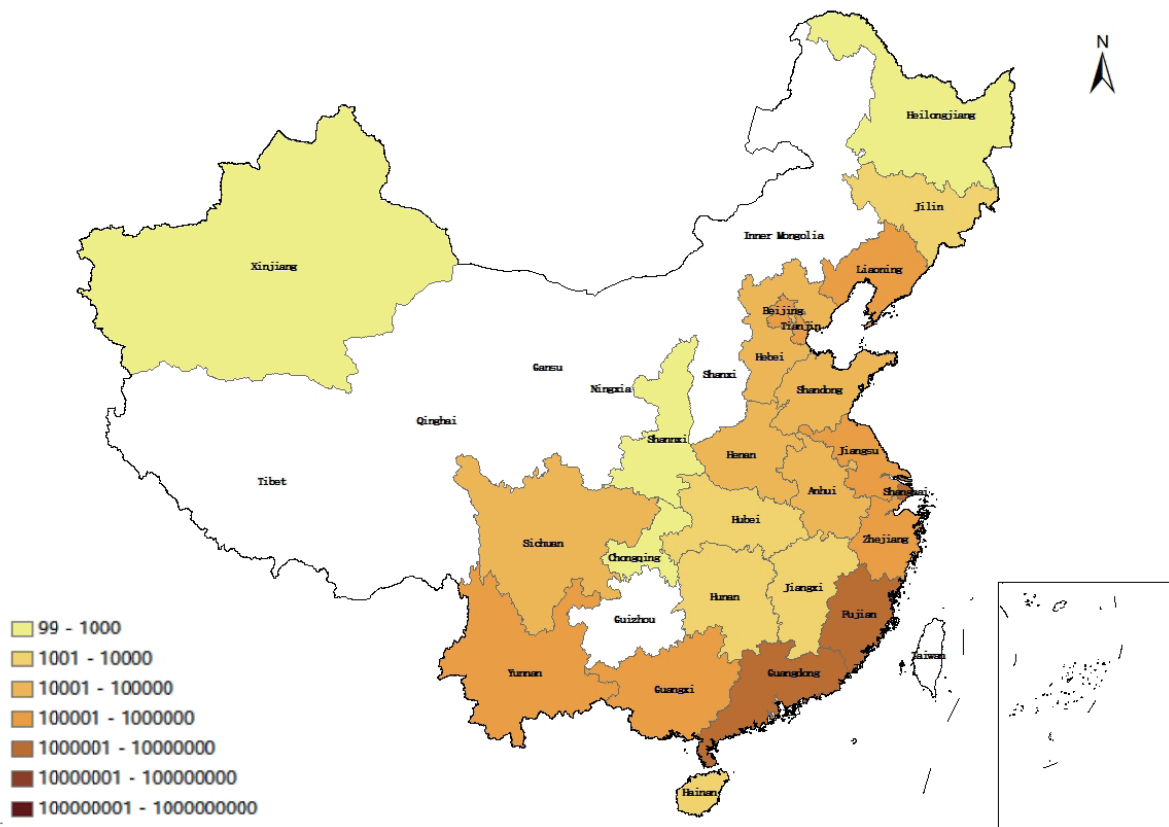


Note: Data are derived from China Customs Database and drawn by Arcgis.

1.4.2 China's import regions of bamboo commodities

From the perspective of import regions of China's bamboo commodities in 2021 (Figure 11), Shanghai was the region with the largest import trade value of China's bamboo commodities, with an import value of USD 2.98 million, accounting for 36.88%. Fujian and Guangdong Provinces were two provinces with larger import values at USD 1.22 million and USD 1.06 million, accounting for 15.07% and 13.13%, respectively. Other provinces accounted for less than 10%.

Figure 11 China's regional distribution for importing bamboo commodities in 2021



Note: This figure is drawn by ARCGIS with data from China Customs Database.

1.5 Conclusion

In recent years, the annual growth rate for exports of China's bamboo commodities has remained low. With rising demand for green commodities, both at home and abroad, it is now urgent to find a new growth point to stimulate the export of China's bamboo commodities.

Compared with the export of China's bamboo commodities, the import of China's bamboo commodities is significantly smaller. The export partners of China's bamboo commodities have mainly been the USA, Japan and other relatively developed countries, while import partners have mainly been less developed countries in Southeast Asia. The trade of bamboo commodities needs to diversify from the current model in which China dominates the scene and engage in more multilateral agreements and sharing. In particular, developing countries with rich bamboo resources should be encouraged to participate in the whole industrial chain of bamboo and rattan commodities, so as to form an active global bamboo and rattan industrial chain and enhance ecological environments.

Trade commodities were mainly composed of bamboo kitchenware and woven bamboo products, while other bamboo commodities nonetheless have a large market and demand. For example, bamboo articles of daily use, bamboo furniture and bamboo construction materials are low-carbon and green products with good functions and mature technology. Hence, it is necessary to increase export support for these bamboo commodities.

The import and export of bamboo commodities in China has mainly been concentrated in the developed southeast coastal regions, whereas Sichuan and Anhui Provinces, areas with rich bamboo resources, have remained relatively uninvolved in the trade.

2 China's exports and imports of rattan commodities

Rattan mainly grows in Southeast Asia, and income from rattan commodities is an important source of income for local farmers. The number of rattan commodities is significantly less than the number of bamboo commodities, with only three categories of rattan cane, woven rattan products and rattan furniture.

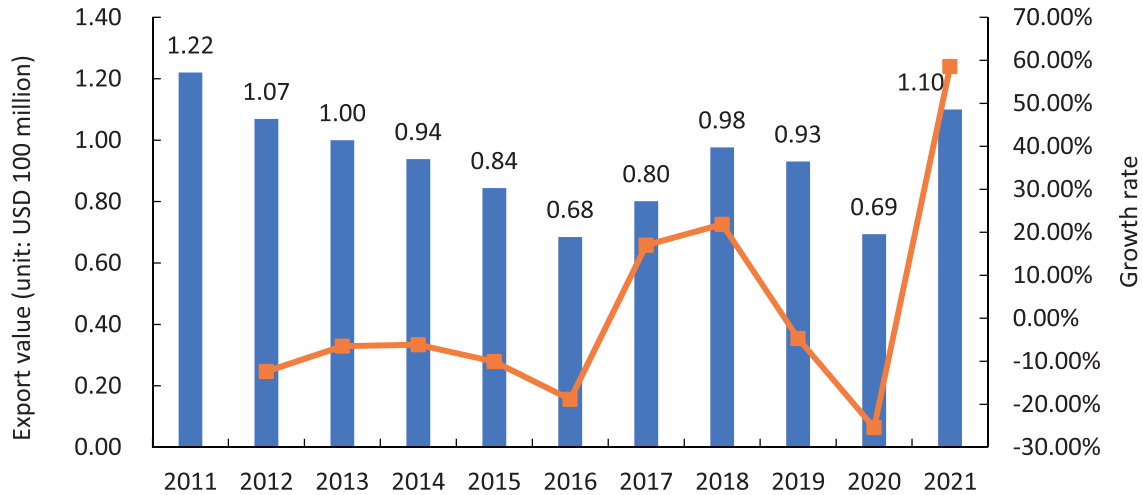
2.1 China's trade value of rattan commodities

Import and export trade values of rattan commodities in China were much smaller than those of bamboo commodities. In recent years, the overall export trade value of China's rattan commodities showed a fluctuating trend with weak growth momentum, while the overall import trade value of China's rattan commodities showed a fluctuating downward trend.

2.1.1 China's export value of rattan commodities

Import and export trade values of China's rattan commodities were smaller than that of bamboo products. In 2021, the export trade value of China's bamboo commodities was USD 2.65 billion, while the export trade value of rattan commodities was only USD 110 million. From 2011 to 2021, the export value of China's rattan commodities showed a fluctuating trend as a whole, as shown in Figure 12. The export trade of China's rattan commodities decreased continuously from 2011 to 2016 with the expand declining, and increased from 2017 to 2018. In 2016, the decline reached 18.85%. Due to the impact of the global COVID-19 pandemic, the export trade of China's rattan commodities decreased significantly from 2019 to 2020, with a decline of 25.44% in 2020, and picked up again in 2021 with a growth rate of 58.57%.

Figure 12 China's export value of rattan commodities from 2011 to 2021



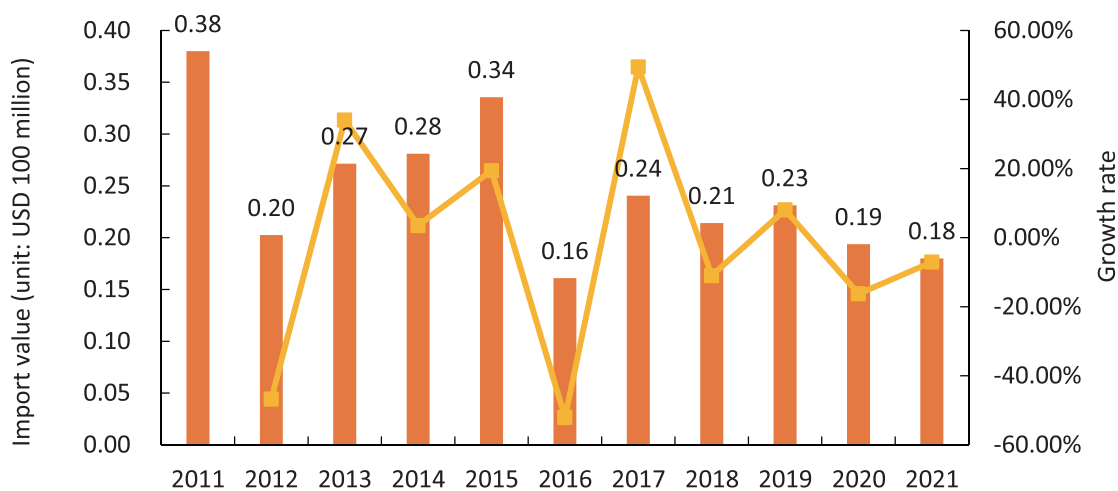
Data Source: Statistics and Collation from China Customs Database and the UN ComTrade database.

From the perspective of rattan commodities, the trend of the export value of woven rattan products was roughly consistent with the overall trend of rattan commodities, declining from 2011 to 2016, rising after 2017, declining again in 2020 due to the impact of the global COVID-19 pandemic, and rising sharply in 2021. Its proportion of China's export trade of rattan commodities remained roughly stable at about 95% from 2011 to 2016, decreasing to 78% in 2017, and recovering to 83% in 2021. The value of rattan export trade was small and fluctuated greatly year to year, with an average annual value of about USD 5 million, but it rose to USD 11.4 million in 2021, and its proportion increased from about 5% to 10%. Rattan furniture was added to the customs code in 2017, with an exports value of USD 7.3 million in 2021.

2.1.2 China's import value of rattan commodities

From 2011 to 2021, the import value of rattan commodities in China showed a fluctuating downward trend as a whole (Figure 13). In 2011, the import value of rattan commodities from China was USD 38 million, and it reached USD 18 million in 2021, marking a decrease of 111.11%. The growth rates of China's rattan products imports were higher with 34.03% and 49.42% in 2013 and 2017, respectively. In 2012, 2016, 2018, 2020 and 2021, the import growth rate of China's rattan products was negative, and in 2016, the import decreased by 52.05%.

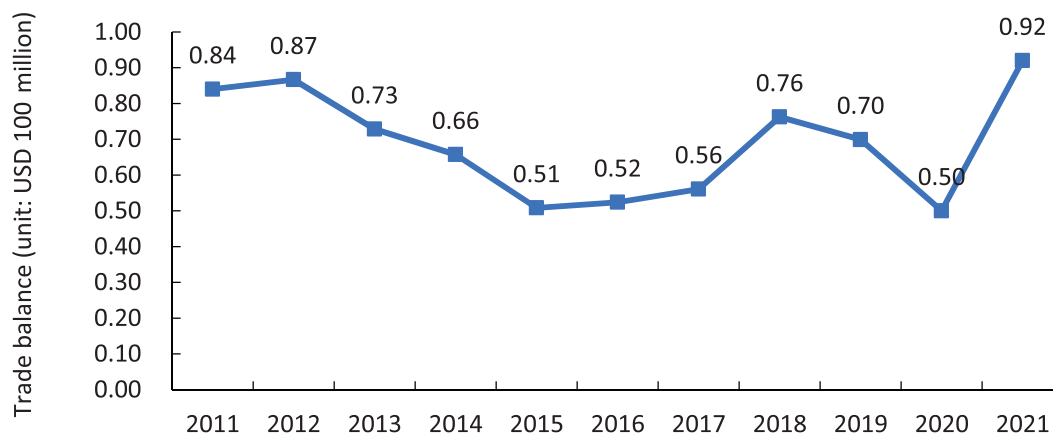
Figure 13 China's import value of rattan commodities from 2011 to 2021



Data Source: Statistics and Collation from China Customs Database and the UN ComTrade database.

China's rattan commodities showed a trade surplus (Figure 14). China had a trade surplus of USD 84 million in rattan commodities in 2011, and that reached USD 92 million in 2021.

Figure 14 Trade balance of China's rattan commodities from 2011 to 2021



Data Source: Statistics and Collation from China Customs Database and the UN ComTrade database.

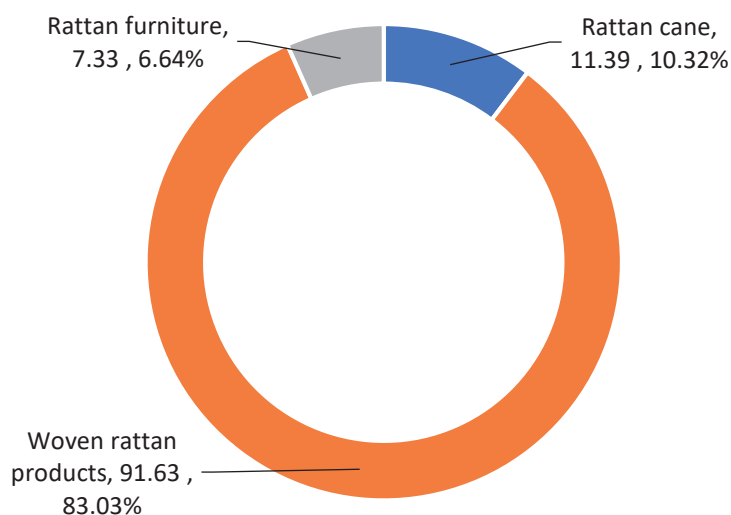
2.2 China's trade structure of rattan commodities

Among the three categories of rattan commodities, woven rattan products were the main export commodity, and export values of rattan cane and rattan furniture were less. Regarding China's import trade of rattan commodities, rattan cane was the most important imported rattan commodities, while rattan furniture and woven rattan products accounted for a relatively smaller proportion.

2.2.1 China's export structure of rattan commodities

In 2021, China exported USD 110 million worth of rattan products. The vast majority of these were woven rattan products (including baskets, mats and screens, and plaited products), which accounted for USD 91.63 million, or 83.03%, of China's total rattan commodity exports. Rattan cane exports (USD 11.39 million; 10.32%) constituted a much smaller proportion of the total, and the export value of rattan furniture (including seats and other furniture) was even smaller, accounting for USD 7.32 million, or 6.64%, of the total (Figure 15).

Figure 15 Proportion of China's export of main rattan commodities in 2021 (unit: USD million, %)

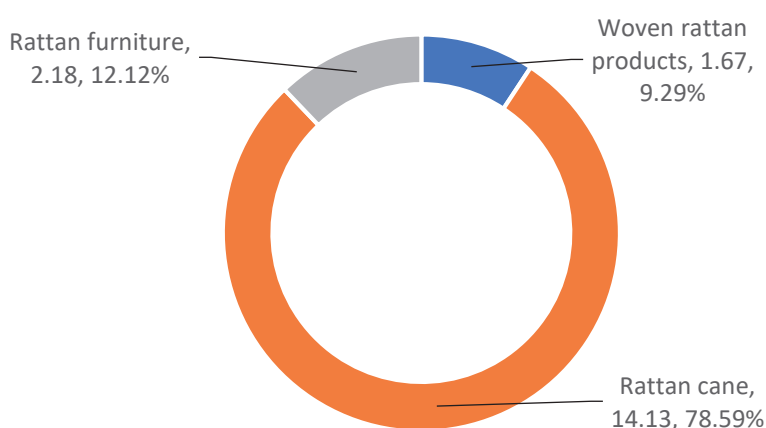


Data Source: Statistics and Collation from China Customs Database.

2.2.2 China's import structure of rattan commodities

In 2021, China imported USD 17.98 million worth of rattan products. The vast majority of these were woven rattan products (USD 14.13 million, 78.62% of China's total rattan product imports), followed by rattan furniture (USD 2.18 million, 12.12%) and woven rattan products (USD 1.67 million, 9.26%) (Figure 16).

Figure 16 Proportion of China's import of main rattan commodities in 2021 (unit: USD million, %)



Data Source: Statistics and Collation from China Customs Database.

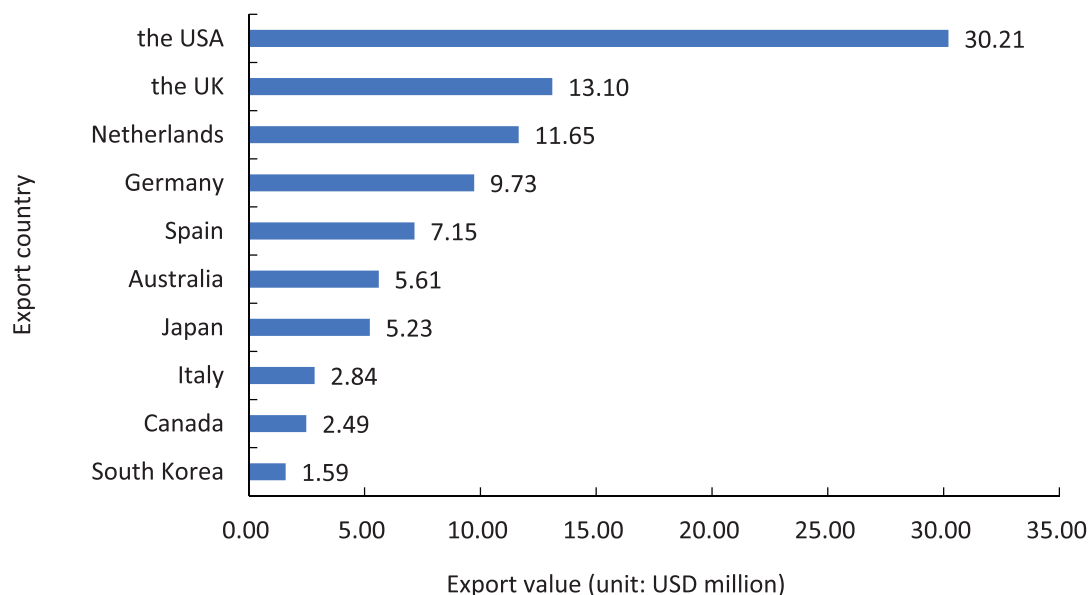
2.3 China's trade partners of rattan commodities

The USA was the leading export partner of China's rattan commodities, followed by the UK and the Netherlands. Other export partners of China's rattan commodities were Germany, Spain, Australia, Japan, Italy and South Korea. The Philippines, Malaysia and Indonesia were the main import partners, followed by Vietnam, Myanmar, Italy and Papua New Guinea.

2.3.1 China's export partners of rattan commodities

According to statistics from the Chinese Customs Database, the USA was the most important export partner of China's rattan commodities in 2021, accounting for 27.38%, with USD 30.22 million worth of rattan commodities. The UK and the Netherlands were another two countries with larger export values of China's rattan commodities, and the total export trade values of rattan commodities were USD 13.10 million and USD 11.45 million, accounting for 11.87% and 10.56%, respectively. Other trading partners were Germany, Spain, Australia, Japan, Italy and South Korea, with the export value of rattan commodities each exceeding USD 1 million (Figure 17).

Figure 17 Main export partners of China's rattan commodities in 2021



In terms of commodities (Table 3), the export value of China's rattan commodities was USD 11.39 million in 2021, which was exported to 56 countries or regions, mainly to Germany, the Netherlands and Spain. The export value of China's rattan cane was USD 91.63 million, which was exported to 109 countries or regions, mainly to the USA, the UK and the Netherlands, among which the USA was the largest export partner of China's rattan cane. The export value of China's rattan furniture was USD 73.28 million, exported to 81 countries or regions, mainly to Spain, Australia and the USA.

In 2021, China exported to the USA USD 29.38 million worth of woven rattan products, while rattan cane and rattan furniture reached USD 0.49 million and USD 0.83 million, respectively. Woven rattan products were the main commodity that China exported to the UK, with an export value of USD 13 million in 2021.

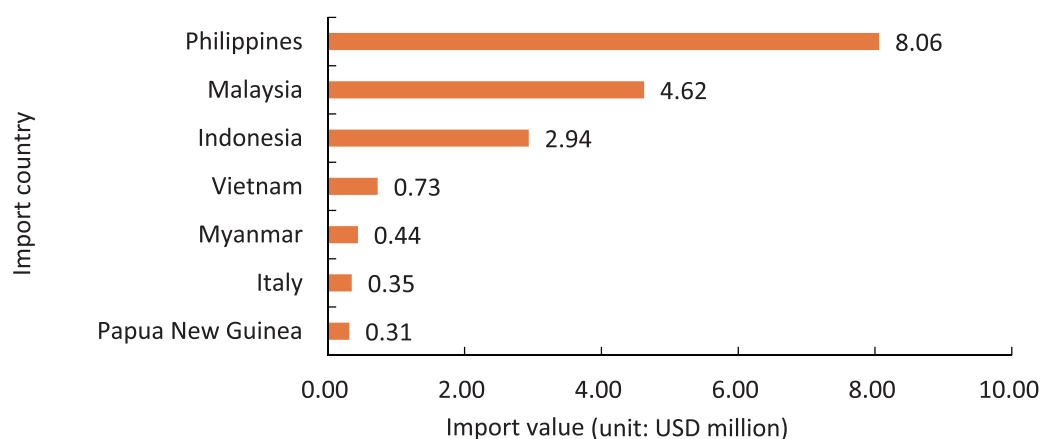
Table 3 Main export partners of China's rattan commodities in 2021

Category of Rattan Commodities	unit: USD million				
	The USA	The UK	Netherlands	Germany	Spain
Rattan cane	0.48	0.74	1.72	2.01	1.04
Woven rattan products	29.38	13.00	11.37	9.38	5.44
Rattan furniture	0.83	0.10	0.29	0.35	1.71
Total	30.70	13.84	13.37	11.74	8.19

2.3.2 China's import partners of rattan commodities

The Philippines, Malaysia and Indonesia were the main import partners of China's rattan commodities. In 2021, the trade value of rattan commodities imported by China from the Philippines, Malaysia and Indonesia were USD 8.06 million, USD 4.62 million and USD 2.94 million, respectively, accounting for 44.83%, 25.72% and 16.34%, comprising 87% of the total proportion. Other important import partners were Vietnam, Myanmar, Italy and Papua New Guinea (Figure 18).

Figure 18 Main import partners of China's rattan commodities in 2021



In terms of commodities (Table 4), the main importers of China's rattan commodities were the Philippines, followed by Malaysia and Indonesia. China imported rattan cane worth USD 14.14 million from 20 countries or regions, mainly from the Philippines, Malaysia, Indonesia, Vietnam and Myanmar. The import value of China's woven rattan products was USD 1.67 million, imported from 29 countries or regions, mainly from Vietnam, Indonesia, Italy, Myanmar and Philippines. The import value of China's rattan furniture was USD 2.18 million, mainly from Indonesia, Philippines, Italy, Vietnam and Thailand.

Table 4 Main import partners of China's rattan commodities in 2021

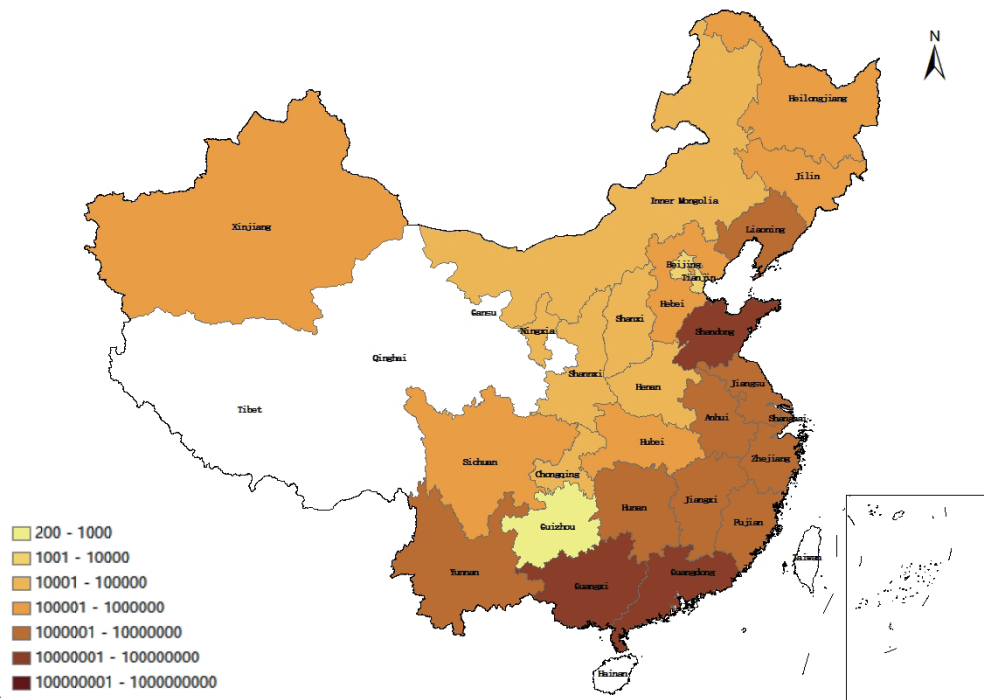
Category of Rattan Commodities	unit: USD million				
	Philippines	Malaysia	Indonesia	Vietnam	Myanmar
Rattan cane	7.82	4.62	0.66	-	0.37
Woven rattan products	-	-	0.50	0.70	0.07
Rattan furniture	0.22	-	1.78	0.03	-
Total	8.06	4.62	2.94	0.73	0.44

2.4 China’s trade regions of rattan commodities

2.4.1 China’s export regions of rattan commodities

Guangdong Province was the largest export region of rattan commodities in China. In 2021, the export value of Guangdong Province was USD 35.64 million, accounting for 32.30%. Followed by Guangxi Zhuang Autonomous Region and Shandong Province, the export value was USD 15.20 million and USD 14.34 million, accounting for 13.77% and 12.99%, respectively. Other provinces accounted for less than 10% of exports.

Figure 19 China’s regional distribution for exporting rattan commodities in 2021

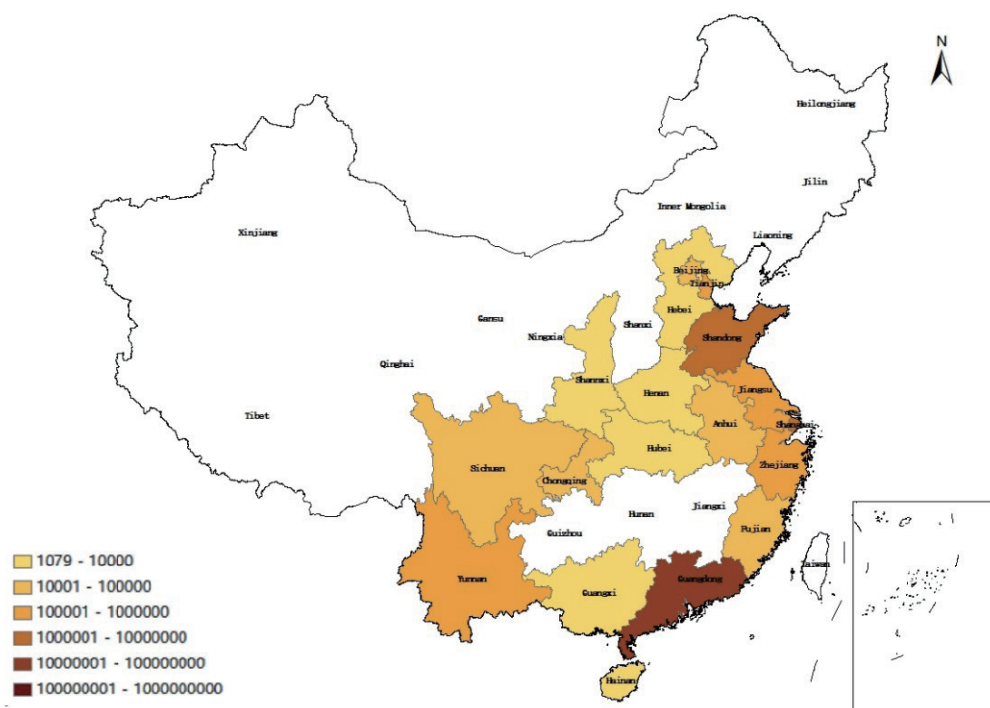


Note: This figure is drawn by ARCGIS with data from China Customs Database.

2.4.2 China's import regions of rattan commodities

China's rattan commodities were imported mainly from Guangdong Province. In 2021, the import value of rattan commodities was USD 11.93 million, accounting for 66.32%, followed by Shanghai at USD 2.30 million, accounting for 12.78%.

Figure 20 China's regional distribution for importing rattan commodities in 2021



Note: This figure is drawn by ARCGIS with data from China Customs Database.

2.5 Conclusion

In general, the import and export trade values of China's rattan commodities were small, trading partners were few, and the trade structure was limited. The import and export scenario of China's rattan commodities was revealed to be weak, showing decreasing trade value. The export of China's rattan commodities was concentrated on woven rattan products from a few developed countries, while the import was concentrated on rattan cane from a few developing countries. As an important plant in tropical and subtropical regions, rattan is an important source of livelihoods for local people. Therefore, it is still necessary to develop rattan commodities to meet market demand while also stimulating increased demand and consumption of rattan commodities in domestic and foreign markets, so as to bolster the income of local residents.

3 China's exports and imports of the commodities concerning the Bamboo as a Substitute for Plastics Initiative

On June 24 2022, China announced that it would jointly launch the Bamboo as a Substitute for Plastics Initiative with INBAR to reduce plastic pollution and combat climate change. Plastic products are widely used in China, straining environmental protection efforts. In 2019 alone, China's annual consumption of plastic straws reached nearly 30,000 tons, or about 46 billion units, with the average individual using more than 30 straws a year. From 2014 to 2019, the market size of disposable fast-food boxes in China grew from 3.56 billion yuan to 9.63 billion yuan, an increase of 21.8%. In 2020, China consumed about 44.5 billion disposable meal boxes. China's express delivery industry generates about 1.8 million tons of plastic waste every year, according to data from the State Post Bureau.

As science and technology continues to advance, new applications of bamboo continue to be developed and refined in sectors like construction, water conservancy, transportation, furniture and industrial production, and other fields, providing novel solutions to reduce plastic use. Many enterprises in China have begun to produce alternative commodities in alignment with the Bamboo as a Substitute for Plastics Initiative, such as bamboo fiber towels, fiber masks, toothbrushes, paper towels and other daily necessities. Other products like bamboo straws, ice cream bars, plates, disposable boxes, folders, notepads, pens and office supplies as well as equipment like USB drives, keyboards, monitors, mice and more are also being developed. At the same time, automotive interior components such as bamboo furniture and construction materials are under development. Ultimately, when considering which plastic products can be most readily substituted for bamboo alternatives, tableware and daily necessities are the main ones with direct applications on human lifestyles (Table 5).

Bamboo commodities have quietly entered people's daily life as an organic integration of sustainability and aesthetic. The ultimate vision of bamboo is to fully harmonize technology, industry innovation and development to achieve the “double carbon” strategic goal.

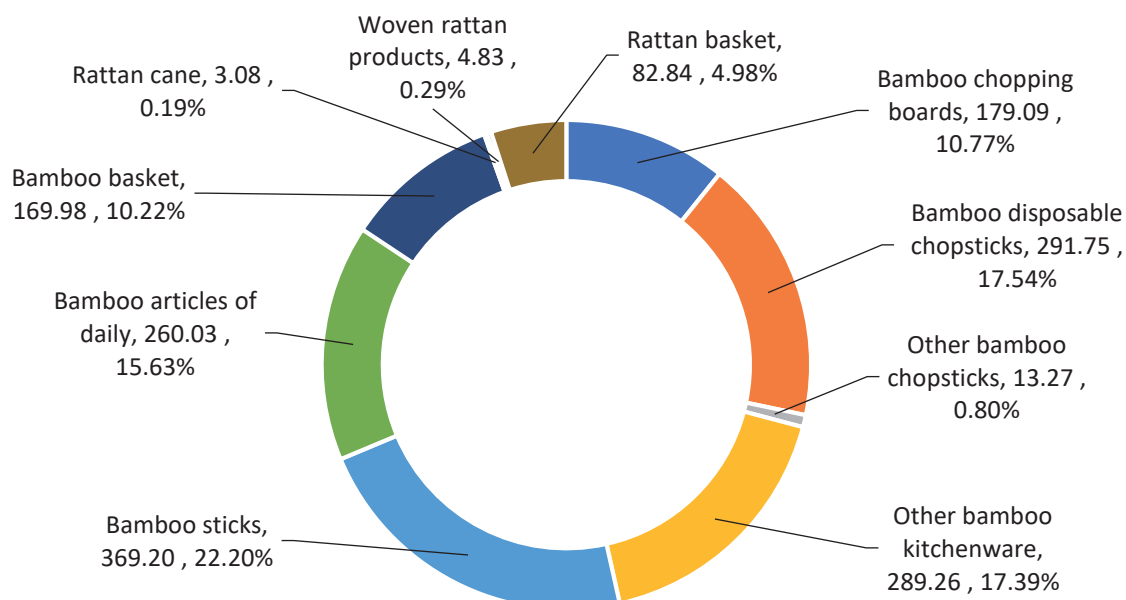
Table 5 Commodities concerning the Bamboo as a Substitute for Plastics Initiative and corresponding China customs import and export tariff code

The commodity code	Name of commodity
44191100	Bamboo chopping boards
44191210	Bamboo disposable chopsticks
44191290	Other bamboo chopsticks
44191900	Other bamboo kitchenware
44219110	Bamboo sticks
44219190	Bamboo articles of daily use
46021100	Bamboo basket
46019310	Rattan cane
46019390	Woven rattan products
46021200	Rattan basket

3.1 Export trade of China's commodities concerning the Bamboo as a Substitute for Plastics Initiative

According to statistics from the Chinese Customs Database (Figure 21), the export value of China's commodities involved with the Bamboo as a Substitute for Plastics Initiative was USD 1.66 billion, accounting for 60.36%. Among them, the most exported commodity was the bamboo stick, with an export value of USD 369 million, accounting for 22.20%. This is followed by bamboo disposable chopsticks and other bamboo kitchenware, accounting for USD 292 million and USD 289 million, respectively, at 17.54% and 17.39%. The export of bamboo articles of daily use, bamboo chopping boards and bamboo baskets accounted for more than 10%, while the export of other commodities was less.

Figure 21 China's export value of commodities concerning the Bamboo as a Substitute for Plastics Initiative in 2021 (unit: USD 100 million, %)



Data Source: Statistics and Collation from China Customs Database.

Table 6 Main export partners of China's commodities concerning the Bamboo as a Substitute for Plastics Initiative in 2021

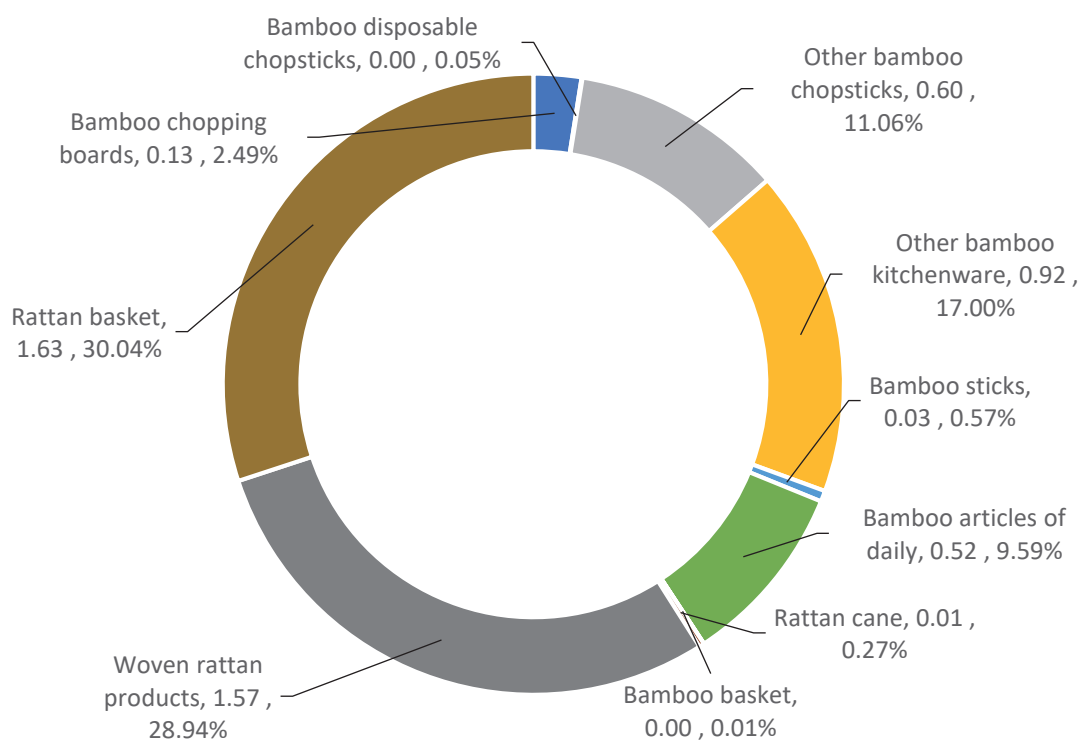
unit: USD million

Category of Commodities	Germany	Netherlands	The USA	Japan	India	The UK
Bamboo chopping boards	21.15	11.67	57.15	3.08	2.84	8.98
Bamboo disposable chopsticks	2.79	2.60	25.97	93.03	0.34	1.44
Other bamboo chopsticks	0.14	0.71	1.54	6.34	0.09	0.07
Other bamboo kitchenware	29.66	14.32	93.60	7.71	0.99	11.15
Bamboo sticks	4.46	21.66	27.87	19.95	84.23	5.69
Bamboo articles of daily use	24.52	15.03	59.33	8.60	2.29	12.49
Bamboo basket	0.47	0.04	0.04	0.02	-	1.11
Rattan cane	0.18	0.53	0.64	0.79	0.13	0.13
Woven rattan products	6.54	8.58	46.24	7.66	0.21	8.08
Rattan basket	6.70	9.07	28.12	4.09	0.08	11.01

3.2 Import trade of China's commodities concerning the Bamboo as a Substitute for Plastics Initiative

According to statistics from the Chinese Customs Database (Figure 22), the import value of China's commodities concerning the Bamboo as a Substitute for Plastics Initiative was USD 5.44 million, accounting for 20.87%. Among them, the top imported commodities were bamboo baskets and rattan baskets, with an import value of USD 1.63 million and USD 1.57 million, respectively, accounting for 30.04% and 28.94%. This was followed by other bamboo kitchenware and bamboo chopsticks, with import values of USD 0.92 million and USD 0.60 million, accounting for 17.00% and 11.06%, respectively.

Figure 22 China's import value of commodities concerning the Bamboo as a Substitute for Plastics Initiative in 2021 (unit: USD million, %)



Data Source: Statistics and Collation from China Customs Database.

Table 7 Main import partners of China's commodities concerning the Bamboo as a Substitute for Plastics Initiative in 2021

unit: USD million

Category of Commodities	Vietnam	Indonesia	Italy	Japan	Thailand
Bamboo chopping boards	0.09	-	-	0.01	-
Bamboo disposable chopsticks	-	-	-	-	-
Other bamboo chopsticks	-	-	-	0.23	-
Other bamboo kitchenware	0.84	-	-	0.02	-
Bamboo sticks	-	-	-	-	-
Bamboo articles of daily use	0.01	-	0.04	0.09	-
Bamboo basket	-	-	-	-	-
Rattan cane	-	-	-	-	-
Woven rattan products	1.22	0.06	0.07	0.01	0.08
Rattan basket	0.70	0.48	0.26	-	0.01

3.3 Conclusion

At present, commodities concerning the Bamboo as a Substitute for Plastics Initiative are generally limited to those used as daily necessities. Bamboo straws, a new product, are expected to replace paper straws and polylactic acid (PLA) biodegradable straws as a more ideal substitute for plastic straws due to their superior qualities, such as their heat resistance, durability, firmness, simple manufacturing process and low cost. Bamboo wound composite can replace steel, cement, plastic and other common industrial materials. Bamboo as a raw material can not only be renewable, biodegradable, lower cost and help with carbon fixation, but processing can also result in energy savings and carbon reduction. Disposable bamboo fiber kitchenware has been entered the market in large quantities and been exported to Europe and the USA. It has potential as a replacement for disposable plastic lunchboxes. Raw materials for disposable kitchenware can also be made from thin bamboo and bamboo strips, such as plates, cups, knives, forks, spoons and more. With the rapid development of logistics, there are now many types of bamboo packaging, including woven bamboo packaging, bamboo sheet packaging, bamboo lathe packaging, string packaging, raw bamboo packaging, container floor and more. In addition, the performance of bamboo keyboards, bamboo mice, bamboo stereos, bamboo calculators, bamboo solar lamps, bamboo radios and other alternative plastic products has been significantly improved through continuous advances in technologies and processes.

Bamboo can be an effective alternative material for plastic construction, but the scope of its application needs to be expanded. Bamboo shower packing can replace about 100,000 cubic meters of PVC packing every year. The cost of a carbon composite bamboo-woven geogrid is much lower than a common plastic geogrid, which has advantages in durability, weather resistance, flatness and overall bearing capacity. The product can be widely used in railways, highways, airports, wharfs, water conservancy facilities, and soft foundation treatment, with applications in agricultural infrastructure such as breeding fence nets, crop scaffolding and more. Bamboo fiber-reinforced thermoplastic and thermosetting composites are also increasingly favored by automobile manufacturers. These materials can be applied to the bottom, front end, door, instrument panel, interior decoration and other areas of automobiles. Bamboo fiber-reinforced composites can also replace plastics in the field of engineering applications. Biodegradable bamboo plastics, different from traditional petrochemical plastics, can effectively replace the market demand for plastics.

Bamboo products that replace plastic products not only meet consumer needs, but also play an important role in environmental protection. However, most bamboo commodities are still at a preliminary stage of development, and market share and recognition need improvement. The Bamboo as a Substitute for Plastics Initiative can reduce and sequester carbon, develop economies and bolster income streams. It can also meet consumer demands for sustainable products and enhance consumer sense of social responsibility and happiness. It is a green industry, a rich industry and a happy industry brimming with great potential.

Annex

Annex 1 China's export value of bamboo commodities from 2011 to 2021

unit: USD 100 million

Category of Commodities	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Bamboo shoots	2.39	2.52	2.62	2.55	2.92	3.17	2.97	3.08	2.74	2.26	2.37
Bamboo culms	0.40	0.48	0.52	0.60	0.73	0.70	0.75	0.66	0.61	0.67	0.79
Bamboo charcoal	0.10	0.12	0.20	0.31	0.31	0.33	0.36	0.49	0.84	0.90	0.64
Bamboo -based panels	3.07	3.98	3.83	3.79	3.34	3.28	3.14	2.74	1.89	1.60	1.90
Bamboo construction materials	1.18	1.32	1.57	1.74	1.50	1.12	0.60	0.30	0.28	0.33	0.41
Bamboo kitchenware	3.82	4.42	4.80	5.81	6.62	6.59	7.25	8.41	9.04	9.16	11.43
Bamboo handicrafts	-	-	-	-	-	-	-	-	-	-	-
Bamboo articles of daily use	-	-	-	-	-	-	0.58	0.92	1.36	1.83	2.60
Woven bamboo products	3.85	3.75	3.42	3.11	2.87	2.56	2.83	2.73	2.70	3.16	3.14
Bamboo pulp and paper products	0.02	0.03	0.05	0.10	16	0.11	0.14	0.14	0.11	0.10	0.39
Bamboo viscose	0.18	0.10	0.13	0.11	0.11	0.17	0.37	0.56	0.57	0.54	0.75
Bamboo furniture	-	-	-	-	-	-	0.97	1.17	1.18	1.43	2.03
Total	15.01	16.72	17.14	18.12	18.57	18.04	19.97	21.21	21.32	21.98	26.45

Annex 2 China's exports and imports of bamboo and rattan commodities in 2021

Code	Product name	Product category	Export		Import	
			Value(USD million)	Proportion (%)	Value(USD million)	Proportion (%)
7099910	Fresh bamboo shoots	Bamboo shoots	4.84	0.18	-	-
7119031	Salted bamboo shoots		5.58	0.20	1.06	4.07
20059110	Preserved bamboo shoots		190.72	6.92	0.06	0.23
20059190	Other preserved bamboo shoots		35.43	1.29	0.02	0.07
14011000	Bamboo culms	Bamboo culms	78.66	2.86	0.98	3.77

Code	Product name	Product category	Export		Import	
			Value(USD million)	Proportion (%)	Value(USD million)	Proportion (%)
44021000	Bamboo charcoal	Bamboo charcoal	64.27	2.33	0.88	3.38
44089013	Bamboo veneer	Bamboo-based panels	0.30	0.01	-	0.01
44092110	Bamboo strips		106.28	3.86	0.01	0.02
44092190			6.65	0.24	-	-
44121011			-	-	-	-
44121019			15.74	0.57	0.42	1.60
44121020	Bamboo plywood		3.81	0.14	-	-
44121091			0.01	-	-	-
44121092			0.41	0.01	-	-
44121099			56.43	2.05	-	0.01
44187320	Bamboo flooring		Bamboo panels for construction	10.11	0.37	0.01
44187390		29.06		1.05	-	-
44189100	Bamboo construction materials	2.30		0.08	-	-
44191100	Bamboo chopping boards	Bamboo kitchenware	179.09	6.50	0.01	0.52
44191210	Bamboo chopsticks		291.75	10.59	-	0.01
44191290			13.27	0.48	0.60	2.30
44191900	Bamboo kitchenware		289.26	10.50	0.92	3.54
44219110	Bamboo sticks		369.20	13.40	0.03	0.12
44201012	Bamboo carvings	Bamboo carvings	0.04	-	0.01	0.03
44219190	Bamboo articles of daily use	Bamboo articles of daily use	260.03	9.44	0.52	2.00
46012100	Bamboo mats	Woven bamboo products	102.21	3.71	0.04	0.14
46019210	Bamboo plaits		1.05	0.04	-	-
46019290			40.84	1.48	0.02	0.08
46021100	Bamboo baskets		169.98	6.17	1.57	6.03
47063000	Bamboo pulp	Bamboo pulp and paper articles	6.51	0.24	0.02	0.08
48236100	Bamboo paper articles		32.74	1.19	0.02	0.07

Code	Product name	Product category	Export		Import	
			Value(USD million)	Proportion (%)	Value(USD million)	Proportion (%)
54033110	Bamboo viscose fibre	Bamboo viscose fibre	41.21	1.50	0.02	0.07
54033210			0.01	-	0.01	0.03
55041010			33.81	1.23	0.02	0.94
94015200	Bamboo seats	Bamboo furniture	23.48	0.85	0.03	1.12
94038200	Bamboo furniture		179.56	6.52	0.02	0.72
Subtotal of bamboo products			2644.63	95.99	0.08	31.1
14012000	Rattan cane	Rattan cane	11.39	0.41	14.14	54.25
46012200	Rattan mats	Woven rattan products	0.88	0.03	0.02	0.08
46019310	Rattan plaits		3.08	0.11	-	-
46019390			4.83	0.18	0.01	0.06
46021200	Rattan baskets		82.84	3.01	1.63	6.26
94015300	Rattan seats	Rattan furniture	3.77	0.14	1.56	5.99
94038300	Rattan furniture		3.55	0.13	0.62	2.38
Subtotal of rattan products			110.35	4.01	0.18	68.9
Total			2754.99	100	0.26	100

Annex 3 Major import and export partners of China's bamboo commodities in 2021

Serial number	Export			Import		
	Country/Region	Value (USD million)	Proportion (%)	Country/Region	Value (USD million)	Proportion (%)
1	The USA	529.01	2-	Vietnam	2.61	44.83
2	Japan	327.68	12.39	Japan	0.63	25.72
3	Germany	141.25	5.34	Myanmar	0.62	16.34
4	India	135.66	5.13	Italy	0.32	4.06
5	Netherlands	133.94	5.06	Indonesia	0.16	2.45
6	Vietnam	96.63	3.65	Poland	0.10	1.95
7	French	83.88	3.17	Thailand	0.09	1.75
8	The UK	78.42	2.97	South Korea	0.09	0.98
9	Australia	73.06	2.76	Germany	0.07	0.78
10	South Korea	72.47	2.74	The USA	0.05	0.16
11	Thailand	69.67	2.63	India	0.01	0.13
12	Italy	60.85	2.30	Spain	0.01	0.11
13	Spain	49.39	1.87	Belgium	0.01	0.10
14	Indonesia	47.15	1.78	Finland	0.01	0.07
15	Poland	46.21	1.75	French	0.01	0.05
16	Canada	42.17	1.59	Ethiopia	0.01	0.05
17	Brazil	36.79	1.39	Cambodia	0.01	0.03
18	Belgium	36.58	1.38	Mexico	-	0.03
19	Malaysia	36.27	1.37	Turkey	-	0.02
20	Israel	35.67	1.35	Canada	-	0.01
	Others	511.88	19.36	Others	3.24	40.09
	Total	2644.63	100	Total	8.08	100

Annex 4 Major import and export partners of China's rattan commodities in 2021

Serial number	Export			Import		
	Country/Region	Value (USD million)	Proportion (%)	Country/Region	Value (USD million)	Proportion (%)
1	The USA	30.21	27.38	Philippines	8.06	44.83
2	The UK	13.10	11.87	Malaysia	4.62	25.72
3	Netherlands	11.65	10.56	Indonesia	2.94	16.34
4	Germany	9.73	8.82	Vietnam	0.73	4.06
5	Spain	7.15	6.48	Myanmar	0.44	2.45
6	Australia	5.61	5.08	Italy	0.35	1.95
7	Japan	5.23	4.74	Papua New Guinea	0.31	1.75
8	Italy	2.84	2.57	The Republic of Congo	0.18	0.98
9	Canada	2.49	2.25	Singapore	0.14	0.78
10	South Korea	1.59	1.44	Laos	0.03	0.16
11	Turkey	1.54	1.40	Denmark	0.02	0.13
12	French	1.38	1.25	Thailand	0.02	0.11
13	Vietnam	1.05	0.95	French	0.02	0.10
14	Denmark	1.03	0.93	The UK	0.01	0.07
15	Singapore	0.97	0.88	The USA	0.01	0.05
16	New Zealand	0.97	0.88	Spain	0.01	0.05
17	Philippines	0.78	0.70	Bangladesh	0.01	0.03
18	Cambodia	0.71	0.65	India	-	0.03
19	Belgium	0.67	0.61	Poland	-	0.02
20	Poland	0.67	0.61	Cambodia	-	0.01
	Others	10.97	9.94	Others	0.07	0.37
	Total	11035.44	100	Total	17.98	100

Annex 5 China's export value of bamboo commodities by regions in 2021

unit: USD million

Province/City	Bamboo shoots	Bamboo culms	Bamboo charcoal	Bamboo -based panels	Bamboo construction materials	Bamboo kitchenware	Bamboo handicrafts	Bamboo articles of daily use	Woven bamboo products	Bamboo pulp and paper products	Bamboo viscose	Bamboo furniture
Anhui Province	1.55	1.87	1.47	24.60	4.87	73.40	-	4.06	10.50	0.93	0.01	0.61
Beijing	0.63	0.68	-	1.29	0.03	1.37	-	0.34	0.49	-	-	4.34
Fujian Province	88.28	3.13	21.68	25.83	8.84	404.95	-	84.65	24.25	12.62	0.01	82.45
Gansu Province	-	-	-	-	-	0.01	-	-	-	-	-	-
Guangdong Province	50.15	42.76	0.16	5.70	0.04	119.15	-	50.75	98.82	3.29	0.15	22.18
Guangxi Zhuang Autonomous Region	1.05	12.42	0.08	2.67	-	20.24	-	1.94	44.39	1.01	-	0.14
Guizhou Province	3.56	-	-	0.06	-	-	-	0.63	-	-	-	-
Hainan Province	-	-	-	-	-	0.14	-	-	-	-	-	0.01
Hebei Province	-	0.79	1.00	0.27	-	1.53	-	4.22	0.88	0.35	32.93	2.37
Henan Province	-	0.06	-	0.39	-	1.10	-	1.51	0.77	0.17	-	1.58
Heilongjiang Province	0.08	-	0.19	-	-	8.22	-	0.06	0.31	0.01	-	0.05
Hubei Province	0.15	2.39	0.79	0.42	-	7.95	-	2.01	1.07	0.14	-	2.59
Hunan Province	7.86	0.69	4.06	3.82	0.56	86.97	-	14.73	7.01	6.12	-	0.91
Jilin Province	0.04	-	-	-	-	0.17	-	0.04	-	0.12	41.17	0.01
Jiangsu Province	0.73	1.29	6.25	30.73	0.12	12.19	-	4.58	18.15	6.13	0.21	4.49
Jiangxi Province	6.48	1.39	2.76	8.29	2.30	111.75	-	25.09	8.05	0.16	-	4.38

Province/City	Bamboo shoots	Bamboo culms	Bamboo charcoal	Bamboo -based panels	Bamboo construction materials	Bamboo kitchenware	Bamboo handicrafts	Bamboo articles of daily use	Woven bamboo products	Bamboo pulp and paper products	Bamboo viscose	Bamboo furniture
Liaoning Province	6.51	-	-	0.58	0.01	36.75	-	0.23	0.79	0.02	-	0.01
Inner Mongolia Autonomous Region	0.01	-	-	-	-	0.09	-	-	-	-	-	-
Ningxia Hui Autonomous Region	-	-	0.02	0.01	-	0.22	-	0.01	0.01	-	-	-
Qinghai Province	-	-	-	-	-	-	-	-	-	-	-	-
Shandong Province	6.38	0.77	9.75	1.50	0.10	14.49	0.04	5.42	22.44	1.88	0.05	2.00
Shanxi Province	-	-	1.70	0.05	-	0.09	-	0.04	0.15	-	-	0.28
Shaanxi Province	-	0.02	0.04	0.19	-	0.13	-	0.02	-	0.05	-	0.06
Shanghai	2.27	2.74	0.25	4.96	-	21.67	-	5.31	3.61	4.41	0.13	6.89
Sichuan Province	13.44	0.09	0.13	0.08	-	2.18	-	1.54	2.43	0.17	-	0.18
Tianjin	0.08	0.02	0.20	0.72	-	12.89	-	0.34	0.54	0.01	0.35	0.08
Tibet Autonomous Region	-	-	0.02	-	-	-	-	-	-	-	-	-
Xinjiang Uygur Autonomous Region	-	-	-	0.02	-	0.36	-	0.04	0.07	0.06	-	0.02
Yunnan Province	0.06	-	-	0.15	-	3.60	-	0.77	0.72	0.04	-	0.44
Zhejiang Province	45.40	7.53	13.06	77.30	24.60	199.94	-	51.58	67.68	1.51	0.01	66.81
Chongqing	1.86	0.02	0.67	0.03	-	1.02	-	0.14	0.93	0.04	-	0.17
Total	236.57	78.66	64.27	189.63	41.47	1142.58	0.04	260.03	314.07	39.24	75.03	203.04

Annex 6 China's import value of bamboo commodities by regions in 2021 (unit: USD million)

unit: USD million

Province/City	Bamboo shoots	Bamboo culms	Bamboo charcoal	Bamboo -based panels	Bamboo construction materials	Bamboo kitchenware	Bamboo handicrafts	Bamboo articles of daily use	Woven bamboo products	Bamboo pulp and paper products	Bamboo viscose	Bamboo furniture
Anhui Province	-	-	-	-	-	-	-	-	0.01	-	-	-
Beijing	-	-	-	-	-	0.06	-	0.05	0.01	-	-	0.03
Fujian Province	0.07	0.34	0.78	0.02	-	-	-	-	-	-	-	-
Gansu Province	-	-	-	-	-	-	-	-	-	-	-	-
Guangdong Province	1.06	-	0.01	0.04	-	0.03	-	0.33	0.13	0.01	0.01	0.01
Guangxi Zhuang Autonomous Region	-	-	-	-	-	0.02	-	-	0.18	-	-	-
Guizhou Province	-	-	-	-	-	-	-	-	-	-	-	-
Hainan Province	-	-	-	-	-	-	-	-	-	-	-	-
Hebei Province	-	-	0.02	-	-	-	-	-	-	-	-	-
Henan Province	-	-	-	-	-	-	-	0.01	-	-	-	-
Heilongjiang Province	-	-	-	-	-	-	-	-	-	-	-	-
Hubei Province	-	-	-	-	-	-	-	-	-	-	-	-
Hunan Province	-	-	-	-	-	-	-	-	-	-	-	-
Jilin Province	-	-	-	-	-	-	-	-	-	-	-	-
Jiangsu Province	-	-	-	-	-	0.09	-	0.02	0.01	0.01	0.06	-
Jiangxi Province	-	-	-	-	-	-	-	-	-	0.01	-	-

Trade Overview 2021: Bamboo and Rattan Commodities in China

Province/City	Bamboo shoots	Bamboo culms	Bamboo charcoal	Bamboo -based panels	Bamboo construction materials	Bamboo kitchenware	Bamboo handicrafts	Bamboo articles of daily use	Woven bamboo products	Bamboo pulp and paper products	Bamboo viscose	Bamboo furniture
Liaoning Province	-	-	-	-	-	0.01	-	0.02	-	-	0.18	0.01
Inner Mongolia Autonomous Region	-	-	-	-	-	-	-	-	-	-	-	-
Ningxia Hui Autonomous Region	-	-	-	-	-	-	-	-	-	-	-	-
Qinghai Province	-	-	-	-	-	-	-	-	-	-	-	-
Shandong Province	-	0.01	-	-	-	-	-	-	0.01	-	-	-
Shanxi Province	-	-	-	-	-	-	-	-	-	-	-	-
Shaanxi Province	-	-	-	-	-	-	-	-	-	-	-	-
Shanghai	0.01	-	0.01	0.36	0.01	0.97	-	0.03	1.21	0.01	0.03	0.35
Sichuan Province	-	-	-	-	-	0.01	-	0.04	-	-	-	0.01
Tianjin	-	0.01	-	-	-	0.13	-	-	0.01	-	-	0.02
Tibet Autonomous Region	-	-	-	-	-	-	-	-	-	-	-	-
Xinjiang Uygur Autonomous Region	-	-	-	-	-	-	-	-	-	-	-	-
Yunnan Province	-	0.62	-	-	-	-	-	-	0.05	-	-	0.01
Zhejiang Province	-	-	0.06	0.01	-	0.36	-	0.03	0.02	-	-	0.05
Chongqing	-	-	-	-	-	-	-	-	-	-	-	-
Total	1.14	0.98	0.88	0.43	0.01	1.69	0.01	0.52	1.63	0.04	0.27	0.48

Annex 7 China's export value of rattan commodities by regions in 2021

unit: USD million

Province/City	Rattan cane	Woven rattan products	Rattan furniture
Anhui Province	0.43	3.01	0.46
Beijing	-	-	1.09
Fujian Province	0.34	8.29	1.20
Gansu Province	-	-	-
Guangdong Province	1.91	32.54	-
Guangxi Zhuang Autonomous Region	0.77	14.42	0.01
Guizhou Province	-	-	-
Hainan Province	-	-	-
Hebei Province	0.01	0.64	-
Henan Province	0.01	0.04	-
Heilongjiang Province	-	0.46	-
Hubei Province	0.20	0.31	0.40
Hunan Province	1.36	1.84	0.33
Jilin Province	-	0.29	-
Jiangsu Province	1.42	2.75	0.86
Jiangxi Province	0.39	4.45	0.13
Liaoning Province	0.20	0.94	-
Inner Mongolia Autonomous Region	-	0.02	-
Ningxia Hui Autonomous Region	0.04	-	-
Qinghai Province	-	-	-
Shandong Province	1.55	11.04	1.75
Shanxi Province	-	0.02	-
Shaanxi Province	0.01	-	-
Shanghai	0.39	1.15	0.50
Sichuan Province	0.22	0.56	0.01
Tianjin	-	-	-
Tibet Autonomous Region	-	-	-
Xinjiang Uygur Autonomous Region	-	0.19	-
Yunnan Province	0.60	2.09	0.24
Zhejiang Province	1.54	6.49	0.34
Chongqing	-	0.08	-
Total	11.39	91.63	7.33

Annex 8 China's import value of rattan commodities by regions in 2021

unit: USD million

Province/City	Rattan cane	Woven rattan products	Rattan furniture
Anhui Province	0.05	-	-
Beijing	-	0.01	0.02
Fujian Province	-	-	0.04
Gansu Province	-	-	-
Guangdong Province	11.52	0.10	0.30
Guangxi Zhuang Autonomous Region	-	-	-
Guizhou Province	-	-	-
Hainan Province	-	0.01	-
Hebei Province	-	-	-
Henan Province	-	0.01	-
Heilongjiang Province	-	-	-
Hubei Province	-	-	-
Hunan Province	-	-	-
Jilin Province	-	-	-
Jiangsu Province	0.11	0.03	0.04
Jiangxi Province	-	-	-
Liaoning Province	-	-	-
Inner Mongolia Autonomous Region	-	-	-
Ningxia Hui Autonomous Region	-	-	-
Qinghai Province	-	-	-
Shandong Province	1.19	0.08	0.46
Shanxi Province	-	-	-
Shaanxi Province	-	-	-
Shanghai	0.28	1.31	0.71
Sichuan Province	-	-	0.02
Tianjin	-	0.04	0.47
Tibet Autonomous Region	-	-	-
Xinjiang Uygur Autonomous Region	-	-	0.01
Yunnan Province	0.36	-	0.04
Zhejiang Province	0.63	0.07	0.06
Chongqing	-	-	-
Total	14.14	1.67	2.18



In 2022, the International Bamboo and Rattan Organization celebrated its 25th anniversary. On the 25th anniversary of its establishment, the International Bamboo and Rattan Organization and the National Forestry and Grassland Administration co-hosted the Second Global Bamboo and Rattan Conference in Beijing, China. Under the theme of "Bamboo and Rattan — Nature-based Solutions for Sustainable Development," the conference brought together representatives from various sectors, including government departments, research institutes, international and non-governmental organizations, the private sector and the media, to discuss the development and cooperation of bamboo and rattan under the new situation.

Over the past 25 years since its establishment, INBAR has worked with partners from its Member States and international organizations to actively promote the potential and value of bamboo and rattan as nature-based solutions for sustainable development. With its increased influence, INBAR has championed the role of bamboo and rattan as part of UN conventions on biodiversity, climate change and desertification, the UN Decade on Ecosystem Restoration 2021–2030, and a number of other prestigious organizations, networks and think tanks and also strives to advance South-South and triangular cooperation as well as highlight the role of bamboo and rattan for meeting the UN 2030 Sustainable Development Goals.

Looking ahead, the International Bamboo and Rattan Organization will continue to work with its global partners to promote the healthy and sustainable development of the world bamboo and rattan industry.