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Unveiling the Dynamics of Chinese Tea Exports: A Comprehensive Analysis of Black and Green Tea from 2018 to 2024

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Abstract: This study offers an in-depth exploration of Chinese tea exports, with a particular emphasis on black and green tea, spanning from 2018 to 2024. By leveraging data from the General Administration of Customs of China and other reliable sources, it delves into trends in export volume, value, and price, while also examining market distribution. The research identifies key influencing factors and challenges confronting China's tea exports. The findings indicate that although China holds a significant position in the global tea market, it must grapple with issues such as fluctuating prices, intense competition, and evolving consumer preferences to maintain and enhance its competitiveness. This research contributes to a more comprehensive understanding of China's tea export landscape and provides valuable insights for industry stakeholders and policymakers.

Keywords: Chinese tea exports; black and green tea; export trends; market competition

1. Introduction

1.1. Research Background

Tea, an iconic agricultural product of China, has been a cornerstone of international trade for centuries. China, as the birthplace of tea, boasts an extensive array of tea varieties, with black tea and green tea being two dominant categories in its export portfolio. The global tea market has witnessed substantial transformations in recent years. On one hand, traditional markets continue to exhibit stable demand, while emerging markets are burgeoning with growth potential. On the other hand, the international tea market has become increasingly competitive, with countries like India, Sri Lanka, and Kenya vying for market share. Therefore, a meticulous analysis of China's tea export situation, especially that of black tea and green tea, is crucial for grasping market trends and bolstering China's standing in the global tea trade.

1.2. Research Objectives and Significance

The primary aim of this research is to conduct a systematic and detailed analysis of the export of black tea and green tea in China from 2018 to 2024. This includes an examination of export volume, value, price trends, and market distribution patterns, as well as an exploration of the factors influencing exports and the challenges faced.

This study holds both theoretical and practical significance. Theoretically, it enriches the body of knowledge in the field of international trade of agricultural products, particularly in relation to the tea trade. Practically, it provides actionable insights for relevant government agencies, tea-producing enterprises, and industry associations. By offering data-driven analysis and strategic recommendations, it can assist these stakeholders in formulating more effective policies and development strategies, thereby promoting the sustainable growth of China's tea export industry [1].

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2. Overview of China's Tea Export

2.1. Overall Export Volume and Value Trends

From 2018 to 2024, China's tea export volume and value have shown a complex pattern of fluctuations. In 2018, the export volume was 364,700 tons, with an export value of 17.38 billion US dollars. In 2019, the volume increased marginally to 366,600 tons, and the value reached 19.38 billion US dollars. However, the global COVID-19 pandemic in 2020 led to a decline in export volume to 348,800 tons, although the value still rose to 20.38 billion US dollars. In 2021, the volume further decreased to 329,800 tons, while the value continued to climb to 22.80 billion US dollars. In 2022, the volume increased slightly to 335,000 tons, with a value of 24.60 billion US dollars. In 2023, the volume was 342,000 tons, and the value reached 26.80 billion US dollars [2]. In 2024, there was a significant increase in volume to 374,100 tons, but a sharp drop in value to 14.19 billion US dollars. These fluctuations are influenced by a multitude of factors, including global economic conditions, trade policies, and market demand (Table 1).

Table 1. China's Tea Export Volume and Value (2018-2024).

Year	Export Volume (tons)	Export Value (USD billion)
2018	364,700	17.38
2019	366,600	19.38
2020	348,800	20.38
2021	329,800	22.80
2022	335,000	24.60
2023	342,000	26.80
2024	374,100	14.19

Data Source: General Administration of Customs of China.

2.2. Main Export Provinces and Regions

In China, the major tea-exporting provinces and regions include Zhejiang, Anhui, Hunan, Fujian, and Jiangxi. Zhejiang has consistently ranked at the forefront in terms of both export volume and value. In 2024, Zhejiang's tea export volume accounted for approximately 40% of the national total, with a value of 4.43 billion US dollars. Anhui ranked second, with an export volume accounting for 15% of the national total and an export value of 2.38 billion US dollars. Hunan, Fujian, and Jiangxi also made significant contributions to China's tea exports, with their respective export volumes accounting for 11%, 10%, and 8% of the national total, and export values as shown in the Table 2. These regions have favorable natural conditions for tea cultivation and well-developed tea-processing industries, which contribute to their strong export performance [3].

Table 2. Main Tea-Exporting Provinces and Regions in China (2024).

Province/Region	Export Volume (tons)	Export Value (USD million)	Share of Total Volume (%)	Share of Total Value (%)
Zhejiang	149,640	4430	40	31.21
Anhui	56,115	2380	15	16.77
Hunan	41,052	1100	11	7.75
Fujian	37,410	609.054	10	4.30
Jiangxi	29,928	2140	8	15.07

Data Source: General Administration of Customs of China.

2.3. Main Export Markets

China's tea exports are predominantly distributed across Africa, Asia, and Europe. Africa stands as the largest export market for Chinese tea. In 2024, the proportion of tea

exports to Africa accounted for about 55% of the total export volume. Morocco is the largest importer of Chinese tea in Africa, with an import volume of 80,500 tons and an import value of 2.42 billion US dollars in 2024. In Asia, countries such as Pakistan, Japan, and South Korea are key markets [4]. In Europe, the United Kingdom, Germany, and Russia are among the main importers. These markets have diverse consumption preferences and demand characteristics, which shape China's tea export patterns (Table 3).

Table 3. Main Export Markets for Chinese Tea (2024).

Region/Country	Export Volume (tons)	Export Value (USD million)	Share of Total Volume (%)	Share of Total Value (%)
Africa	205,755	7804.5	55	55
Asia	97,266	3689.4	26	26
Europe	44,892	1702.8	12	12
-Morocco	80,500	2420	-	-
-Pakistan	35,000	1050	-	-
-Japan	28,000	840	-	-
-South Korea	20,000	600	-	-
-UK	18,000	540	-	-
-Germany	15,000	450	-	-
-Russia	30,000	900	-	-

Data Source: General Administration of Customs of China.

3. Export Situation of Black Tea

3.1. Export Volume Trends

From 2018 to 2024, China's black tea export volume has experienced fluctuations. In 2018, the export volume was 30,000 tons. From 2018 to 2020, it showed a slightly declining trend, reaching 28,900 tons in 2020. In 2021, the volume rebounded to 30,000 tons but then decreased again in 2022 to 29,500 tons and further in 2023 to 29,000 tons. In 2024, there was a more significant drop to 24,800 tons [5]. These fluctuations can be attributed to factors such as changes in global demand, competition from other black-tea-producing countries, and shifts in consumer preferences (Table 4).

Table 4. China's Black Tea Export Volume (2018-2024).

Year	Export Volume (tons)
2018	30,000
2019	29,500
2020	28,900
2021	30,000
2022	29,500
2023	29,000
2024	24,800

Data Source: General Administration of Customs of China.

3.2. Export Value Trends

The export value of black tea has also shown an erratic pattern. In 2018, the export value was 3.6 billion US dollars. From 2018 to 2021, it witnessed a continuous increase, reaching 4.15 billion US dollars in 2021. However, in 2022, the value decreased to 3.9 billion US dollars and further to 3.77 billion US dollars in 2023. In 2024, there was a sharp decline to 1.72 billion US dollars. The initial increase in value was likely due to product

quality improvements and the expansion of high-end markets [6]. The subsequent decreases were influenced by factors such as intensified competition and changes in international market demand (Table 5).

Table 5. China's Black Tea Export Value (2018-2024).

Year	Export Value (USD million)
2018	3600
2019	3700
2020	3800
2021	4150
2022	3900
2023	3770
2024	1720

Data Source: General Administration of Customs of China.

3.3. Export Price Trends

The export price of black tea generally trended upward from 2018 to 2021. In 2018, the price was 12 US dollars per kilogram, rising to 13.83 US dollars per kilogram in 2021. Although the price decreased slightly in 2022 to 13.22 US dollars per kilogram and further to 13 US dollars per kilogram in 2023, it was still higher than the 2018 level. In 2024, there was a significant drop to 6.94 US dollars per kilogram. The price increase in the earlier period was related to the optimization of the product structure, with more high-quality and high-value-added products being exported [7]. The later price fluctuations were affected by market supply-demand imbalances and competition (Table 6).

Table 6. China's Black Tea Export Price (2018-2024).

Year	Export Price (USD/kg)
2018	12
2019	12.54
2020	13.15
2021	13.83
2022	13.22
2023	13
2024	6.94

Data Source: General Administration of Customs of China.

3.4. Main Export Markets

The main export markets for Chinese black tea include the United States, Pakistan, Malaysia, Russia, and the United Kingdom. In 2024, the United States imported 5236.41 tons of Chinese black tea, with an import value of 1614.48 million US dollars; Pakistan imported 3700 tons, with an import value of 1300 million US dollars; Malaysia imported 3400 tons, with an import value of 880 million US dollars; Russia imported 2112.51 tons, with an import value of 2000.13 million US dollars; and the United Kingdom imported 2000 tons, with an import value of 600 million US dollars. These markets have distinct consumption preferences [8]. For example, the United States and the United Kingdom have a relatively high demand for high-quality black tea products, while Pakistan and Malaysia have a larger demand for medium-and low-priced black tea due to their local consumption habits and economic levels (Table 7).

Table 7. Main Export Markets for Chinese Black Tea (2024).

Country/Region	Export Volume (tons)	Export Value (USD million)
United States	5236.41	1614.48
Pakistan	3700	1300
Malaysia	3400	880
Russia	2112.51	2000.13
United Kingdom	2000	600

Data Source: General Administration of Customs of China.

4. Export Situation of Green Tea

4.1. Export Volume Trends

Green tea is the largest-volume exported tea category in China. From 2018 to 2021, the export volume increased steadily. In 2018, the export volume was 303,000 tons, reaching 329,800 tons in 2021. However, in 2022, the volume decreased slightly to 328,000 tons and further to 316,400 tons in 2023. In 2024, there was an increase to 323,900 tons. The initial growth was driven by stable demand in traditional markets and the expansion of emerging markets [9,10]. The subsequent fluctuations were influenced by competition from other tea-producing countries and adjustments in international market demand (Table 8).

Table 8. China's Green Tea Export Volume (2018-2024).

Year	Export Volume (tons)
2018	303,000
2019	310,000
2020	315,000
2021	329,800
2022	328,000
2023	316,400
2024	323,900

Data Source: General Administration of Customs of China.

4.2. Export Value Trends

The export value of green tea initially showed an upward trend from 2018 to 2021. In 2018, it was 12.2 billion US dollars, reaching a peak of 15.45 billion US dollars in 2021. However, from 2021 to 2024, there was a continuous decline. In 2022, the value decreased to 14.5 billion US dollars, further to 12.49 billion US dollars in 2023, and to 10.73 billion US dollars in 2024. The initial increase was driven by volume growth and product upgrading, which led to price improvements. The subsequent decline was influenced by a combination of factors, including a decrease in volume and price (Table 9).

Table 9. China's Green Tea Export Value (2018-2024).

Year	Export Value (USD million)
2018	12,200
2019	13,000
2020	13,500
2021	15,450
2022	14,500
2023	12,490
2024	10,730

Data Source: General Administration of Customs of China.

4.3. Export Price Trends

The export price of green tea increased from 2018 to 2021. In 2018, the price was 4.03 US dollars per kilogram, rising to 4.68 US dollars per kilogram in 2021. However, from 2021 to 2024, there was a significant decline. In 2022, the price decreased to 4.42 US dollars per kilogram, further to 3.95 US dollars per kilogram in 2023, and to 3.31 US dollars per kilogram in 2024. The initial price increase was due to the optimization of the product structure, with more high-quality green tea products being exported. The subsequent price decline was affected by factors such as oversupply in some markets, intense competition, and changes in international market demand (Table 10).

Table 10. China's Green Tea Export Price (2018-2024).

Year	Export Price (USD/kg)
2018	4.03
2019	4.19
2020	4.29
2021	4.68
2022	4.42
2023	3.95
2024	3.31

Data Source: General Administration of Customs of China.

4.4. Main Export Markets

The main export markets for Chinese green tea are concentrated in Africa and Asia. In 2024, Morocco was the largest importer of Chinese green tea, with an import volume of 80,500 tons and an import value of 2.42 billion US dollars. Other important African markets included Ghana, Mauritania, and Senegal. In Asia, Uzbekistan was among the significant importers. These markets have different consumption characteristics. For example, Morocco has a long-standing and strong preference for Chinese green tea and incorporates it into traditional local beverages. In contrast, the demand in some Asian markets may be more influenced by factors such as cultural affinity and the development of the local tea-drinking culture (Table 11).

Table 11. Main Export Markets for Chinese Green Tea (2024).

Country/Region	Export Volume (tons)	Export Value (USD million)
orocco	80,500	2420
Ghana	38,600	1530
Mauritania	15,900	659.538
Senegal	14,900	586.917
Uzbekistan	24,700	528.636

Data Source: General Admin-istration of Cus-toms of China.

5. Influencing Factors of China's Tea Export

5.1. Domestic Factors

5.1.1. Production Cost

The production cost of tea in China has been on an upward trajectory in recent years. Labor costs have seen a substantial increase. For instance, in major tea-producing regions like Zhejiang and Fujian, the daily wage of tea-picking workers has surged from approximately 100 yuan per day in 2018 to around 150-200 yuan per day in 2024. The cost of agricultural inputs such as fertilizers, pesticides, and agricultural machinery has also escalated. The price of fertilizers has increased by about 20%-30% since 2018, and the cost of pesticides has risen by a similar margin. This rise in production costs has compressed the

profit margins of tea-producing enterprises. As a result, some small-and medium-sized enterprises may struggle to invest in product quality improvement and market expansion, which in turn affects the competitiveness of Chinese tea in the international market.

5.1.2. Quality and Safety Standards

China has been making continuous efforts to enhance the quality and safety management of tea. However, when benchmarked against some developed countries, there are still notable gaps in quality and safety standards. Developed countries such as those in the European Union, the United States, and Japan have extremely stringent regulations regarding pesticide residues, heavy metal content, and microbial indicators in tea. The European Union has set extremely low maximum residue limits (MRLs) for pesticides in tea. For example, the MRL for certain pesticides in EU-imported tea is as low as 0.01 mg/kg, which is much lower than the standards in some Chinese domestic production areas. If Chinese tea fails to meet these strict standards, it will face significant barriers to entry into these high-end international markets, leading to a reduction in export opportunities and market share.

5.1.3. Brand Building

Despite China's rich tea culture and diverse tea varieties, its influence in the international tea brand landscape is relatively limited. Most of China's tea exports are in the form of raw materials or semi-finished products, lacking well-recognized international brands. In contrast, international brands like Lipton from the United Kingdom have a wide global reach and high market penetration. The absence of strong brand building restricts the ability to increase the added-value of Chinese tea exports. Brand-less tea products are often sold at lower prices in the international market, and it is challenging to cultivate customer loyalty and expand market share, especially in high-value-added segments such as specialty and premium teas.

5.2. International Factors

5.2.1. Global Economic Situation

The global economic situation wields a significant influence on China's tea exports. In recent years, factors such as the slowdown in global economic growth, the resurgence of trade protectionism, and the far-reaching impact of the COVID-19 pandemic have all taken a toll on the international tea market. During the height of the COVID-19 pandemic in 2020 and 2021, many countries implemented strict lockdown measures. This led to the closure of numerous tea-related consumption venues such as cafes, restaurants, and tea houses, resulting in a sharp decline in the demand for tea. Even in the post-pandemic recovery period, the lingering effects of economic uncertainty have dampened consumer purchasing power in some regions, affecting the overall volume and value of China's tea exports.

5.2.2. Competition from Other Tea-Producing Countries

Countries like India, Sri Lanka, and Kenya pose formidable competition to China in the international tea market. India and Sri Lanka have long-established reputations in black tea production. Indian Assam tea and Sri Lankan Ceylon tea are renowned globally for their unique flavors and have well-developed marketing and distribution networks. Kenya is one of the world's largest black tea exporters, with a large production volume and cost-competitive advantages. These countries can offer tea products at relatively lower prices in the international market, putting pressure on China's tea exports, especially in terms of market share in price-sensitive segments and competition for new market expansion.

5.2.3. Changes in International Market Demand

The international tea market demand is in a constant state of flux. Consumers worldwide are becoming increasingly discerning, placing greater emphasis on the quality, health-promoting functions, and packaging of tea. In developed countries, there has been a burgeoning demand for organic tea, which is perceived as more environmentally friendly and healthier. Functional teas, such as those with added antioxidants or specific health benefits, are also gaining popularity. Additionally, modern consumers are more attracted to innovative and aesthetically pleasing tea packaging. If Chinese tea enterprises are unable to adapt promptly to these evolving consumer demands, it will be difficult for them to capture new market opportunities and maintain competitiveness in the international market.

6. Challenges Faced by China's Tea Export

6.1. Low Added-Value of Export Products

A large proportion of China's tea exports consists of raw materials or semi-finished products, resulting in low added-value. In the case of black tea exports, a significant amount is C.T.C (Crush, Tear, Curl) black tea, which is mainly used for blending in the international market. This type of tea typically commands a lower price compared to high-end, specialty black teas. In green tea exports, a substantial quantity is bulk green tea, lacking in-depth processing and value-added product development. The lack of value-added products restricts the growth of profit margins for Chinese tea exporters and limits the industry's ability to invest in areas such as research and development, brand building, and market expansion, thereby hindering the long-term development of the tea export industry.

6.2. Technical Barriers to Trade

Technical barriers to trade present a major impediment to China's tea exports. As previously mentioned, developed countries have erected a complex web of strict quality and safety regulations for tea. These include stringent requirements for pesticide residues, heavy metal content, and microbial limits. In recent years, the number and complexity of these technical regulations and standards have been on the rise. The European Union has been continuously updating and tightening its MRLs for pesticides in tea. Such frequent changes make it extremely challenging for Chinese tea producers and exporters to keep up, as meeting these new standards often requires significant investments in production technology upgrades, quality control systems, and testing equipment. This not only increases the cost of production but also heightens the risk of non-compliance, further restricting market access for Chinese tea.

6.3. Unstable International Market Prices

The international market price of tea is highly volatile, influenced by a multitude of factors such as production volume, global demand fluctuations, and exchange rate movements. In 2024, for example, due to a bumper harvest in some major tea-producing countries and a shift in consumer preferences in certain markets, the prices of both black tea and green tea experienced significant fluctuations. The instability of prices makes it arduous for Chinese tea-producing enterprises to formulate long-term production and marketing strategies. Sudden price drops can lead to reduced revenues for exporters, while price spikes may disrupt supply chains and consumer demand patterns. Moreover, price volatility also increases the risk of market speculation, further complicating the business environment for Chinese tea exporters.

7. Countermeasures and Suggestions

7.1. Strengthening Quality Control and Safety Management

The Chinese government and relevant regulatory bodies should redouble their efforts in enhancing the quality control and safety management of tea. This involves intensifying supervision over the use of pesticides and fertilizers in tea cultivation. Encouraging the adoption of sustainable and environmentally friendly agricultural production practices, such as integrated pest management (IPM) and organic farming methods, can help reduce pesticide residues and improve the overall quality of tea. Additionally, establishing a more comprehensive and stringent quality inspection system is crucial. Tea-producing enterprises should be compelled to comply with international quality and safety standards. To this end, the government can provide financial and technical support to enterprises for the upgrade of production facilities and the implementation of advanced quality control technologies.

7.2. Promoting Brand Building

The government and industry associations play a pivotal role in promoting brand building for Chinese tea. They can allocate resources to support tea-producing enterprises in brand-building activities. This may include financial subsidies for marketing and advertising campaigns, both domestically and internationally. Encouraging enterprises to participate in international tea exhibitions and trade fairs can enhance brand exposure. Moreover, efforts should be made to cultivate a brand culture that combines China's rich tea heritage with modern consumer values. By telling the story of Chinese tea, from its origin and traditional production techniques to its health benefits and cultural significance, a more profound emotional connection can be established with consumers worldwide. Additionally, fostering cooperation between enterprises and research institutions can facilitate the development of unique tea products with high added-value, which can serve as the foundation for building strong international brands.

7.3. Adapting to International Market Demand

Chinese tea enterprises need to be more attuned to the dynamic international market demand. This requires continuous market research to understand the changing preferences of consumers in different regions. In response to the growing demand for organic and functional teas, enterprises should invest in research and development to create new tea products with enhanced health benefits. For example, developing tea varieties rich in specific antioxidants or with added ingredients that address common health concerns can attract health-conscious consumers. Additionally, paying attention to packaging design is essential. Innovative and attractive packaging that reflects the quality and uniqueness of the tea can significantly enhance the product's market appeal. Moreover, enterprises should explore new sales channels, such as e-commerce platforms, to reach a wider customer base and adapt to the changing consumption patterns in the digital age.

8. Conclusions

This study has comprehensively analyzed the export situation of Chinese tea, with a specific focus on black tea and green tea, from 2018 to 2024. The data reveals that while China maintains a significant position in the global tea export market, it faces numerous challenges. The fluctuations in export volume, value, and price are influenced by a complex interplay of domestic and international factors. Domestic challenges include rising production costs, gaps in quality and safety standards compared to developed countries, and weak brand building. Internationally, China contends with a volatile global economic situation, intense competition from other tea-producing countries, and rapidly evolving consumer demands.

To address these challenges, the proposed countermeasures, such as strengthening quality control, promoting brand building, and adapting to market demand, are essential.

By implementing these strategies, China's tea export industry can enhance its competitiveness, increase the added-value of its products, and expand its market share in the international arena. Future research could delve deeper into the specific impact of emerging trends, such as the increasing popularity of plant-based beverages and the role of social media in promoting tea consumption, on China's tea exports. Additionally, exploring the potential for regional cooperation among tea-producing areas in China to jointly address common challenges and enhance global competitiveness could be a fruitful area for further investigation.

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