An analysis on market potential of Chinese dairy products under the background of RCEP

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Abstract: Constrained by the impact of the novel coronavirus, the rising price of domestic raw milk year by year, and the slowdown in the growth of the domestic dairy industry, China's dairy industry has ushered in great challenges. The Regional Comprehensive Economic Partnership (RCEP) Agreement came into force one year ago and brings opportunities for Chinese dairy enterprises to expand overseas markets. This case study summarizes the global market for dairy products from the aspects of world production, consumption, and imports by comparing the relevant dairy products at the 5th China International Import EXPO (CIIE). However, China's dairy enterprises have to find new ways to overcome the difficulties such as low brand recognition, single export product structure, and weak multinational operation capabilities. This paper proposes countermeasures, including the establishment of cross-border e-commerce platforms in the RECP region such as Association of Southeast Asian Nations (ASEAN), focusing on dairy product brand building, enriching online and offline promotion of products through live streaming and other means, and improving the transnational operation capabilities of enterprises.

1. Introduction

The dairy industry occupies an important position in China's consumer goods market and is an indispensable industry for a healthy China and a strong nation. In recent years, affected by uncertainties such as the impact of the novel coronavirus and international conflicts, China's dairy industry has ushered in great challenges, and the global dairy industry has shown a strong elastic development trend. With the continuous promotion of the policies of the General Office of the State Council of People's Republic of China on the revitalization of the dairy industry and the promotion of the dairy industry in agriculture and animal husbandry^[1], China's dairy industry has formed a large-scale, standardized and mechanized industrial organizational structure, milk production has grown steadily^[2,3], and the supply capacity of dairy products has continued to improve. Since the signing of the RCEP Regional Comprehensive Economic Partnership Agreement (RCEP), which came into effect on January 1, 2022, it has significantly reduced the cost of goods trade among member countries, effectively promoted the deep integration of regional industrial chains, supply chains and value chains, and brought new opportunities for China's dairy industry to expand overseas markets and expand the scale of foreign investment^[4-6]. In 2023 (RCEP), Indonesia will officially enter into force, and the number of members of the world's largest FTA has increased to 14, namely Indonesia, Malaysia, the Philippines, Thailand, Singapore, Brunei, Cambodia, Laos, Myanmar, Vietnam, the 10 ASEAN countries, Japan, South Korea, Australia and New Zealand^[8,9]. It has been one year since the effective implementation of RCEP, dairy products enjoy preferential treatment such as substantial tariff reductions, cross-border e-commerce sellers have significantly reduced their overseas costs, and the institutional framework for e-commerce between RCEP cooperation countries has been formally established.^[10,11] In the face of uncertainties such as the slowdown in global dairy growth, the new crown epidemic, and international conflicts, as an

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important participant in regional economic cooperation, how to effectively use international dairy trade policies, find effective, high-quality and high-potential cooperative markets, adapt measures to local conditions, rationally layout, and optimize the allocation of resources is of great significance to the implementation of the internationalization strategy of Chinese dairy enterprises, further enhance the competitiveness of the dairy industry, promote the comprehensive and high-quality development of China's dairy industry, and promote the comprehensive revitalization of the dairy industry.

2. Overview of Dairy products

According to the new version of the "Organic Product Certification Catalogue" classification standards, organic processed products are divided into 30 categories, of which organic dairy products can be divided into three categories: liquid milk (including pasteurized milk, modulated milk, sterilized milk and fermented milk), milk powder (including whole milk powder, skim milk powder, partially skimmed milk powder, modulated milk powder, bovine colostrum powder, base powder), other dairy products (including condensed milk, cream, cream, anhydrous cream, cottage cheese, processed cheese, whey powder (liquid), lactose, butter, casein, lactoferrin, whey protein precipitate, whey protein powder). According to the statistics of China's food and agricultural products certification information system, in 2020, the total amount of organic dairy products (including the conversion period) produced and certified in China was 812,600 tons, of which organic liquid milk ranked first with an annual output of 797,000 tons [7], accounting for 98.08%, followed by milk powder and other dairy products, with annual output reaching 12 940.66t and 2 668.21t respectively, accounting for 1.60% and 0.33%.

2.1. Properties of Dairy products in 5TH CIIE

Taking the 5th China International Import Expo (5th CIIE) in 2022 as an example, many dairy exhibitors from all over the world will come to Shanghai, China to participate in the exhibition in 2022, including many well-known brands in RECP cooperative countries, which not only brings more product choices to domestic enterprises and the public, but also points out the reference direction for Chinese dairy products to go abroad and integrate into relevant countries and regions of RECP cooperation. Among the excellent products are: skimmed milk powder - GO milk, light cream - French tower, whey protein sports nutrition powder - Meiji Zabas, Bulgarian yogurt - Meiji, milk and other dairy products.



Figure 1 Dairy Products – 5th CIIE

2.1.1. Skimmed milk powder- GO milk

Skimmed milk powder refers to raw milk that is skimmed and then dried, and finally classified according to the degree of heat treatment., skimmed milk powder the natural nutrients in fresh milk, provides rich protein and calcium, and is not prone to oxidation, which is convenient for preservation. Go-Milk, for example, contains 1,380mg of calcium per 100g, which is equivalent to 13 times the calcium content of fresh milk.

2.1.2. Light cream - French tower

Light cream adopts ultra-high temperature sterilized cream, suitable for baking and whipping, good stability, high milk fat content, convenient to make into mousse and other baking products.

2.1.3. Whey Protein Sports Powder – Meiji Zabass

Whey protein sports nutrition powder - Meiji Zabass as a milk protein raw material, the use of New Zealand whey protein, no casein, plant protein, and rich in 4 vitamins, through the SAVAS protein powder powder "granulation" process, the powdered raw materials polymerized into granules, so that rich nutrients in the protein powder more evenly distributed, can be more suitable for sports people to drink.

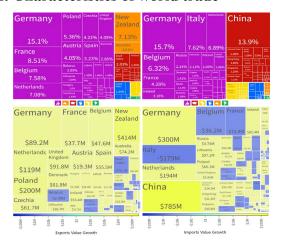
2.1.4. Skim milk powder – Meiji Bulgarian-style yogurt

Bulgarian-style yogurt - Meiji, raw milk from pastures is directly picked, transported in low-temperature cold chain, thus retaining a large milk fat rate and protein content. The raw milk is heated and sterilized after the mixture is homogeneous, and when cooled to a temperature where lactic acid bacteria are easy to multiply, lactic acid bacteria are added and finally fermented into Meiji yogurt.

2.1.5. Milk and other dairy products

Milk refers to the milk of mammals, which is a natural food with complete nutrients, suitable composition, easy digestion and absorption, and high nutritional value.

2.2. Characteristics of world trade



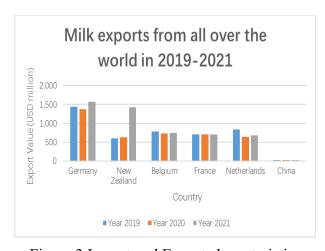


Figure 2 Import and Export characteristics

Figure 3 Import and Export characteristics

The Figure above shows exporters of dairy products and importers of dairy products with a total of \$9.07B.

In 2020, the largest exporters of milk were Germany (\$1.37B), France (\$772M), Belgium (\$688M), New Zealand (\$647M) and the Netherlands (\$642M). The top five exporters accounted for 45.4 per cent of the share. Four of the top five exporters are concentrated in Europe, and exports are more concentrated. As well as the five largest importers of milk were Germany (\$1.42B), China (\$1.26B), Italy (\$691M), the Netherlands (\$625M) and Belgium (\$573M), which accounted for 50.43% of the share. Similar to exporting countries, importers are also concentrated in Europe, and the largest exporter and largest importer are Germany, indicating that Germany has an absolute advantage in dairy products.

Between 2019 and 2020, the fastest growing countries for milk exports were Spain (\$49 million), Denmark (\$32.2 million), Thailand (\$31.8 million), Kuwait (\$28.9 million) and Austria (\$26.8 million). From 2019 to 2020, the fastest-growing milk importers were China (\$229 million), Germany (\$48.9 million), the United States (\$20.8 million), Singapore (\$18.6 million) and Iraq (\$18.5 million).

In the ranking of world exports and market share, according to the table, from the United Nations Commodity Trade Statistics database, it can be seen that China is not dominant in dairy exports, the top five are basically occupied by Germany, New Zealand, Belgium, France, the Netherlands, China with a large gap in the bottom position. Looking at the world, China's ranking is not high, compared with the data of the past three years, China's dairy exports are due to a steady upward stage.

In the most recent year, the three largest importers of dairy products were China, Germany and Belgium. At the same time, Germany, New Zealand and Belgium, as the countries that export the most dairy products, occupy a relatively large share of the market. In today's economic globalization, global dairy exports are concentrated.

In summary, the export performance of China's dairy products does not have obvious advantages, but combined with the preferential RCEP policy, grasp the geographical conditions of the RCEP cooperation region and other factors, and take cross-border e-commerce as the entry point to expand China's dairy exports, there are still certain opportunities.

3. ASEAN export data on Chinese dairy products

Number	Target Country	Imports in Year 2021 (tons)	Year 2021 Import Value (USD million)	Unit Value (USD/unit)	2017-2021 Annual value growth rate	Tariff
1	New	2884	5685	1971	4%	15% down to 0
	Zealand					
2	Australia	4903	10132	2066	-3%	15% down to 0
3	Japan	156	805	5160	34%	15%
4	Korea	58,710	124,640	2123	14%	15%
5	ASEAN	299126	429785	1319	5%	15% down to 0

Table 1 RCEP major dairy market analysis.

3.1. RCEP major dairy market analysis

ASEAN as China's largest trading partner, its many member countries (Brunei, Cambodia, Indonesia, Laos, Malaysia, the Philippines, Singapore, Thailand, Myanmar, Vietnam), its total consumer population is large, and year by year increase, with the steady improvement of the country's living standards so that the demand for dairy products continues to increase, and many ASEAN member countries because of the small national territory, incomplete economic development and relatively backward agriculture, resulting in a large number of imports of dairy products, there is a very large domestic demand. And under the RCEP policy, ASEAN has tariffs from 15% to duty-free, which greatly reduces trade barriers to imports and exports. Therefore, in general, ASEAN countries are the first choice for enhancing the international competitiveness of Chinese dairy brands and exploring new dairy marketing models such as "Internet +" and experiential consumption from various aspects such as consumer demand and market prospects.

With the opportunity of the RCEP agreement, China's dairy products should not only target dairy countries such as New Zealand and Australia, but also actively seek trading partners and expand overseas markets, targeting ASEAN countries such as Cambodia, Laos, Vietnam, and the Philippines that are not dairy powers.

The flow characteristics of China's dairy exports to the 10 ASEAN countries from 2011 to 2021 are shown in Figure 4, and the flow of Chinese dairy exports to ASEAN countries is not stable. From 2012 to 2013, export flows showed a downward trend, and after the implementation of the "Belt and Road" initiative in the second half of 2013, export flows increased significantly from 2013 to 2014. After the implementation of the "Belt and Road" initiative, China has aligned with the development plans of ASEAN countries and promoted the import and export of dairy products. In the five-year period from 2015 to 2020, China's flow of dairy exports to it has declined compared to previous and is also in a state of volatility (the decline in the year 2019-2020 was affected by the coronavirus). The new crown virus is a huge challenge for dairy exports, and after 2019, the ratio of total exports has steadily increased slightly, which shows that RCEP has a good role in promoting China's dairy exports to ASEAN.

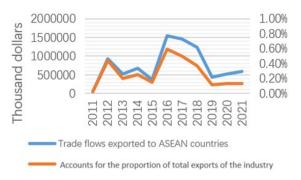


Figure 4 China's export of dairy products to the 10 ASEAN countries and its ratio Table 2 Cross-border e-commerce platform for major ASEAN countries and China

Country/area	E-commerce platforms		
Regional platforms	Shopee, Lazada		
Cambodia	J-TAO, L192		
Indonesia	Bukalapak, Tokopedia		
Malaysia	PG Mall, Zalora		
Philippines	Beauty MNL, Galleon		
Singapore	Qoo10, Castlery		
Thailand	Central Online, HomePro		
Vietnam	Tiki, Sendo		
Brunei	Bruvera		
China	Tmall, JinDong		

3.2. Target market background analysis based on PEST factors

3.2.1. Volatile political factors

According to the degree of political stability, the ten ASEAN countries can be divided into three types - political stability, relative stability and political instability. Among the politically stable types, Singapore performs best, while Indonesia and Malaysia are also relatively stable countries. In recent years, Indonesia's political and social situation has also been stabilized and the efficiency of government administration has improved, but Malaysia's political disputes have continued to lead to domestic political chaos, and the political situation is still fragmented. Among the relatively stable countries, Brunei, the Philippines, Laos and Vietnam have maintained a more stable and pragmatic and flexible situation for a long time, while the political turmoil in Thailand, Myanmar and Cambodia is their more prominent feature.

3.2.2. Well-developed economic factors

The economic development of the ASEAN region can be summarized as good development before the epidemic and greatly affected after the epidemic. Good pre-pandemic development refers to the continuous expansion of the total GDP of the ASEAN region.

3.2.3. Multi-ethnic, multilingual social factors

From the analysis of social environment, there are challenges in the ASEAN region with many ethnic groups and languages. Specifically, Myanmar and Indonesia have the largest number of ethnic groups, with more than 135 and 300 ethnic groups recorded respectively, and the number of ethnic groups in other ASEAN countries such as Thailand and Vietnam is as high as dozens. It's just that Brunei and Singapore have a small number of ethnic groups, Brunei is predominantly Malay, while Singapore's main body is Chinese. The characteristics of many nationalities and languages are a great challenge for enterprises to enter the market of ASEAN countries

3.2.4. Local backward technical factors

For local enterprises in ASEAN countries, it is difficult for them to meet the huge demand of the national dairy market, mainly limited to their hot weather and backward agricultural technology,

resulting in the weakness of local enterprises. In other words, this is a great opportunity for Chinese dairy companies, but at the same time we will still face competition from other dairy powers.

3.3. E-commerce environment in ASEAN countries

From the perspective of the live streaming e-commerce business layout platform, there are many live streaming e-commerce platforms in China, forming a diversified competition system. Taobao Live is a traditional e-commerce platform in China and one of the main representatives of the overseas layout of live streaming e-commerce business. As shown in Table 2 the first country to develop e-commerce live broadcasting, China has very rich experience in live streaming with goods. Therefore, Chinese dairy products are an entry point to open up the online market through live streaming on ASEAN e-commerce platforms.

4. Conclusion

This case study summarizes the global market for dairy products from the aspects of world production, consumption, and imports by comparing the relevant dairy products. The fifth China Import Expo(CIIE) shows many examples of dairy export exhibits with different characteristics, and it is also an excellent reference case for Chinese dairy enterprises to optimize the layout of the industrial chain to support we find out the way to overseas markets in RECP trading partner. ASEAN member countries do have a good e-commerce environment, by familiarizing with international trade and New Media investment rules, and enhancing enterprises' transnational operating capabilities, which is particularly suitable for Chinese dairy enterprises to expand their market and build the Chinese dairy brand through a combination of online live streaming and offline operations.

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