

Current situation and development trend of wine industry in china

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Abstract. China's modern wine industry began in 1892 when Changyu Wine Company was founded. After more than 130 years of development, China has formed 11 major wine regions with their own characteristics. The wine grape varieties of China are divided into three categories: international mainstream varieties, Chinese indigenous varieties, and varieties that can be used for both winemaking and table grape purposes. There are various types of wine produced in China, including sparkling wine, dry white, dry red, rose, ice wine, aromatized wine, and fortified wine. There are more than 1,680 wineries in China, whose production modes are categorized as "Chateau & Chateau wines" mode and "winery & brand wines" mode. The number of Chateau enterprises accounts for 80% of the total, and is developing fast. China's wine industry management organizations mainly include Ministry (departments, bureaus) of Agriculture, and the Ministry (departments, bureaus) of Industry and Information Technology. And the industry service organizations mainly include the China Alcoholic Drinks Association (Wine Branch), China National Food Industry Association (Wine Branch), and Grape and Wine Association or Wine Industry Development Service Center established by provinces and cities. Up to now, 12 sub-wine regions in China have obtained the certification of geographical indication protection. Chinese wine consuming markets are divided into five groups, with huge consumption potential, and the activity of consumer market remains the top of Asia. China's wine industry integrates the three industries of grape growing, wine making and wine consumption, tourism, and cultural promotion. Such growth is in accordance with the advancement of agriculture, rural areas, and ecological protection, exhibiting sustainable development with vigor and vitality.

1 Introduction

In 1892, Yantai Changyu Wine Company (Yantai China), the first Chinese company of industrialized wine production, was founded. In 1987, due to the outstanding contribution of the Yantai region to the Chinese and global wine industries, Mr. Robert Tinlot, the then president of OIV, awarded the emblem and certificate to Yantai as Asia's only "International vine and wine city". At that time, Yantai was also the only "City-level observer" of OIV in Asia.

In the past 20 years, Chinese wine has shown a trend of fast development, fluctuation, and decline, but the product type, quality, and industry structure have undergone tremendous changes.

2 Distribution of wine regions in China

China has a typical continental monsoon climate. The wine-producing regions include arid, semi-arid, sub-humid based on humidity, and cool, moderate temperature, warm temperature, warm and hot regions based on temperatures, distributed in the vast area of 24° ~ 47° N and 76° ~ 132° E. The sub-climate types are complex and diverse, and have the potential to meet the demands for producing various types of fine wines.

After more than 130 years of development, China has formed 11 major wine regions with their own characteristics, including regions of Xinjiang, Gansu, Ningxia-inner Mongolia, Shaanxi-Shanxi, Beijing-Tianjin, Hebei, Shandong(Yantai), Northeast China, Old

Yellow River, Southwest China, and other special production areas. Within each wine region, several small production areas with their own characteristics are formed.

3 Wine grape varieties and wine types in China

In China, wine grapes varieties are divided into three categories:

The first category includes the international mainstream wine grape varieties. The earliest grape introduction to China can be traced back to 1894 ~ 1915, when 124 wine grape varieties was introduced from Europe by Changyu. After more than 100 years of selection, optimization and re-introduction, there are more than 50 grape varieties currently active in China, including Cabernet Sauvignon, Cabernet Gernischt, Cabernet Franc, Merlot, Syrah, Marselan, Petit Verdot, Pinot Noir, Alicante Bouschet, Chardonnay, Italian Riesling, Gewurztraminer, Sauvignon Blanc, and Riesling.

The second category comprises Chinese indigenous grape varieties such as *Vitis heyneana*, *Vitis davidii*, *Vitis amurensis*, *Vitis romanetii*, *Vitis flexuosa*, and their hybrids, including Beichun, Niagara, Beibinghong, Beimei, Beihong, Shuangyou, Yan-73, etc.

The third category refers to the grapes of both winemaking and edible purposes, such as Muscat and Longyan.

The total area of China's wine grape growing regions is 2.1 million Mu (140,000 hectares), mainly distributed in Xinjiang, Ningxia, Shandong, Hebei, Gansu and other regions, accounting for more than 85% of the total planting area.

China's grape-growing regions are vast in territory, rich in climate types and diverse in wine types. They can produce not only sparkling wine (Ningxia region), but also high-quality dry white wine (Yantai, Gansu, Xinjiang, and Ningxia regions). In addition, there are also many fresh and aged dry red wines as major wine styles, as well as charming rosé, sweet and pleasant ice wine (northeast China, and Gansu regions), aromatized wine (Changyu Vermouth, for more than 100 years of production), and fortified wines (Port style) for niche market.

4 The production modes of Chinese wine

There are 1,680 wine production companies in China (companies that have obtained production licenses by the end of 2022), of which 119 are above designated size (main business income is more than 20 million RMB), and the production modes are divided into the following two types:

4.1 Chateau and Chateau wines

The concept of Chateau is originally from Bordeaux, France, and is a traditional mode for wine production. The original meaning refers to as a territory, normally

owned by the land owner. The whole winemaking process including vine growing, winemaking and storage, bottling, occurs within the Chateau.

"Chateau wines" refer to as the wines produced within the Chateau. The name of the Chateau typically is the brand name. Dating back to the early foundation of Changyu wine company, the company began to establish its own vineyards of over 133 hectares in Xishan, Dongshan, and Xishawang, all located near the Zhifu production site (No. 56, Damalu Rd). The grapes are processed for winemaking and bottling onsite in Zhifu production site. Such mode can be the earliest "Chateau wine" in China. In 2002, the concept of "Chateau" as well as its production mode was firstly brought by Changyu into China, and established the first professional Chateau "Chateau Changyu-Castel" in Yantai, Shandong. This has initiated the history of China's modern Chateau wine production, and pioneered the transformation and upgrade of Chinese wine. Since then, various styles of Chateaus were built in many provinces including Shandong, Hebei, Ningxia and Xinjiang. After more than 20 years of development, the Chateau has also expanded its function, from the basic production to multi-purposes, including vine growing, wine production, tourism and catering, leisure and vacation experience, cultural promotion. At present, Chateau has become an important way of wine production in China [1].

4.2 Winery and brand wines

The second mode is the production of "brand wines". "Brand wines" is the reflection of scale production and best-selling products [1]. They are the batch products with relatively stable production volume and consistent quality that highlight the brand characteristics, and adapt to the needs of different consumers. And therefore, grapes may come from different regions, and the varieties are diversified.

Brand wines are produced in the form of a brand, which can be a blend of wines from different varieties and origins. On the basis of meeting product quality standards with certain characteristics, brand wine pays more attention to product stability, consistency, and drinkability. Globally, most wines are produced this way.

China's wine production has been declining for many years and is currently undergoing a period of industry-wide deep adjustment. In 2022, China's wine production volume was 420,000 tons [2], ranking 12th in the world. The annual consumption volume was 880,000 tons [2], ranking 8th globally.

5 The wine industry management and service organization of China

On a government-level, China's wine industry management organizations mainly include the Ministry of Agriculture and the Ministry of Industry and Information Technology, and the provincial departments of agriculture, and industry and information technology. From the city level, there are agricultural bureaus, and industry and information bureaus, and some counties and districts have special management agencies. Besides, the

main service organizations of China's wine industry are introduced as follows:

5.1 China alcoholic drinks association (wine branch)

China Alcoholic Drinks Association (CADA), formerly known as the China Alcohol Brewing Industry Association, was established on June 22, 1992. It is a national industry organization voluntarily formed by winemaking enterprises, as well as relevant departments and units that serve them. In 2009, it was renamed as China Alcoholic Drinks Association (CADA). It serves as the communication bridge between the government and the industry. There is a wine branch within the association, whose main functions include investigating and drafting the development plan and direction of the industry; conducting industry surveys, gathering industry statistics, conducting information analysis, publishing and conducting other consulting services; participating in the drafting and revision of standards related to wine products; reviewing production license for enterprises and reviewing geographical indication qualifications; participating in or organizing the evaluation of industrial R&D achievements; organizing industrial technical training, professional education, and conducting vocational skill appraisal; coordinating and communicating horizontally between the industry and various regional governments, various industries, and enterprises; and promoting the development of wine industry and related industries.

5.2 China National Food Industry Association (CNFIA)

China National Food Industry Association (CNFIA), established in 1981, is a self-governed industry management organization for the national food industry. The major functions include: strategic planning, coordination, guidance and service. It serves as conducting the strategic planning and coordination in the field of food industry, and providing guidance and services to food industry enterprises. It aims at promoting communication and collaboration, endorsing industry standardization, encouraging the development and application of science and technology, and finally promoting the sustainable and healthy development of China's food industry.

5.3 Bureau of wine industry development or service center of wine industry development

Among the eleven production regions in China, regions with longer history or faster development are established with provincial or municipal bureaus of wine industry development or service centers of wine industry development. Such organizations are entitled to exercise industry-wide strategic planning, coordinating, guiding and servicing. Those with greater influences include: Hebei Changli Wine Bureau (founded in 2000, the first wine industry bureau in China); Yantai Vine and Wine

Bureau (founded in 2010, renamed as "Yantai Grape and Wine Industry Development Service Center"); Grape Industry Development Bureau of Ningxia Hui Autonomous Region (formerly known as Ningxia Grape and Flower Industry Development Bureau of Ningxia Hui Autonomous Region, established in 2012 and renamed in 2015); Gansu Wine Industry Association (founded in 2011); Liaoning Huanren Manchu Autonomous County Wine Industry Development Bureau of Benxi City (founded in 2011); Wine Industry Development Bureau of Turpan City, Xinjiang (founded in 2016), etc.

6 Protection of products with regions of origin of wines in China

On July 30, 1999, the State Bureau of Quality and Technical Supervision of China passed the "Regulations on the Protection of Products with Regions of Origin". On March 1, 2000, the national standard GB17924-1999 "General Requirements for Products with Regions of Origin" was officially implemented. On July 15, 2005, the "Regulations on the Protection of Geographical Indication Products" issued by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China came into effect.

Since 2002, 19 domestic and foreign wine producing areas in China have successively obtained the approval of geographical indication protection products, including Changli Wine (2002-08-06), Yantai Wine (2002-08-28), Shacheng Wine (2002-12-09), East foothill of Helan Mountain Wine (2003-04-11), Tonghua Wine (2005-12-28), Huanren Icewine (2006-12-31), French Cognac (2009-12-26), Hexi Corridor Wine (2012-07-31), Napa Valley Wine (2012-09-24), Champagne (2013-04-11), Du'an Wine (2013-12-10), Rongzi Chateau Wine (2013-12-23), Yanjing Wine (2014-12-11), Bordeaux wine (2015-06-19), Turpan Wine (2015-12-04), Pegatron Wine (2015-12-04), Wines of 45 Regions affiliated with Bordeaux (2016-05-17), Fangshan Wine (2017), North foothill of Tianshan Wine (2022-2-20).

7 Wine consumer market in China

At present, wine has become a popular alcoholic beverage among Chinese consumers. Based on the consumption levels of the consumer market, wine products of different brands, packages and prices enable consumers to express themselves via identity reflection, and social status and lifestyle interpretation.

According to the purchase motivation, the Chinese wine consumer markets can be categorized into 5 groups: 1) health-oriented; 2) lifestyle-oriented; 3) enthusiasm-oriented; 4) gift giving-oriented; 5) random choice-oriented.

The wine sales channels include supermarkets, group buying, specialty stores, e-commerce, etc. And the drinking scenes include business, dinner parties, banquets, and families (ratio 4:2:3:1).

8 Prospects of China's wine industry

In 2022, China's wine production volume was 420,000 tons, ranking 12th in the world. The consumption volume was 880,000 tons, ranking 8th in the world [2]. As of 2023, China's urban population will be 900 million, with the middle-class population reaching about 600 million. As of cities, there are a total of 347 cities in China, 18 and 81 cities of which hold a population of more than 10 million, and 5 ~ 10 million, respectively. Besides, there are 98 cities with a population of 3 ~ 5 million. While the per capita wine consumption is still at a relatively low level. With the rapid development of China's economy, there is a huge wine consumption potential in China, and the consumption market activity remains the top in Asia.

Wine is a globally popular alcoholic beverage, and it is also a product with worldwide common standards and international recognition. China's wine industry integrates the three industries of grape growing, wine making and wine consumption, tourism, and cultural promotion. It is an efficient and ecological industry that

best reflects the industrialization of agriculture, and it is also a best carrier to promote the integrated development of the primary, secondary, and tertiary industries in rural areas.

The development of grape and wine industry is in accordance with the advancement of agriculture, rural areas, and ecological protection, with the path following the concept of pursuing organic, and low-carbon production. It is one of the best industries for building ecological civilization, rural revitalization, and a beautiful China, and it sure will continuously exhibit sustainable development with vigor and vitality.

References

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