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Abstract. With the creation of resource-saving and environment-friendly social goals, the focus on agro-ecological environmental protection and sustainable agricultural development has also increased. Jilin Province belongs to China's agricultural province and has the advantage of agricultural resources. The creation of agricultural product brands has obvious resource advantages and environmental advantages. However, under the national three rural support policy, the brand competitiveness of agricultural products is still insufficient, lacking Internet thinking, and under the background of green development and ecological protection, the new business model of e-commerce has not been fully utilized to highlight Jilin Province. The resource advantages of agricultural brands and regional characteristics. To this end, the paper analyzes the intrinsic relationship between agro-ecological environmental protection and the sustainable development of agricultural products in Jilin Province under the background of agricultural green economy environment, and proposes development strategies and suggestions on how to strengthen the competitiveness of agricultural products e-commerce brand in Jilin Province. It can promote the agricultural products of Jilin Province to go abroad and go global, promote the sustainable development of agricultural production, and enhance the competitiveness of agricultural products and e-commerce brands in Jilin Province.

1. Introduction
With the advent of the information economy era, China's business model has entered the era of e-commerce. Beginning in 2015, the Chinese government has proposed innovative ways of circulation of agricultural products and promoted the development of agricultural products. E-commerce of agricultural products breaks through the boundaries between time and space of agricultural products trading, integrates traditional logistics and capital flow, reduces transaction costs through information symmetry, improves the efficiency of agricultural product supply chain, and provides great convenience for consumers. Then, in the No. 1 Document of the Central Committee in 2017, it was again proposed to develop a standardized production demonstration of characteristic agricultural products, build a
number of geographical indication agricultural products and origin protection bases. Promote the
construction of regional agricultural product public brands, and support local enterprises with
advantageous enterprises and industry associations. Relying on building regional characteristic brands,
introducing modern elements to upgrade traditional famous brands, adhering to quality and developing
agriculture, implementing agricultural standardization strategy, highlighting high quality, safety and
green orientation, improving agricultural product quality and food safety standard system. Supporting
new agricultural business entities to apply for 'three products a standard 'certification, promote the
registration of agricultural product trademarks, and strengthen brand protection [1]. In the 2017 Central
Document, it can be seen that brand agriculture has been attached great importance at the national level,
and development must follow the policy. To this end, under the national policy of supporting agriculture
and benefiting farmers, on the basis of protecting the ecological environment, it is of great significance
to strengthen the brand building of agricultural products and enhance the competitiveness of e-
commerce brands. In view of various reasons, the development of agricultural product e-commerce
branding in Jilin Province is still difficult, with low visibility, limited coverage, low recognition, and
low brand cohesion, which is not conducive to the spread of regional brand in Jilin Province. Therefore,
if we want to keep up with the pace of national policies to enhance the competitiveness of regional
brands in Jilin Province, we must make full use of the Internet e-commerce thinking, build the
agricultural product e-commerce brand in Jilin Province, and do a good job in regional brand
communication mode.

2. Current status of agricultural products industry and e-commerce brand development in Jilin
Province

2.1. Distribution and development of agricultural products industry in Jilin Province
Changbai Mountain in the eastern part of Jilin Province is known as the "treasure of natural three-
dimensional resources". The area is dominated by forestry, special products and minerals. The forest
special product production area and characteristic brand of Jilin Province are concentrated in the eastern
part of Jilin Province. Focusing on the resources of Changbai Mountain, the development of green
organic food such as ginseng, forest frog, mountain celery, fungus, monkey head, pine mushroom, enoki
mushroom and pine nut kernel is mainly developed. Jilin Province is also a major ginseng producing
area in the country and the world. For many years, Jilin Province has been the main supplier of ginseng
market in the country and the world. The output accounts for 85% and 70% of the national and global
respectively, and ginseng exports account for the world total. More than 60%. The western part of the
country is a farming-pastoral ecotone. The area focuses on the construction of water conservancy and
planting trees, and carries out agricultural infrastructure construction and ecological environment
construction. It is gradually built into an ecological and environmentally-friendly agricultural economic
region dominated by grain production, economic crops and animal husbandry. Western special
agricultural products such as oats, mung beans, and white oil sunflowers have obtained the use of
national geographical indication products. The Songliao Plain in the central part is one of the three major
black soil belts in the world. It is known as the "golden corn belt”. The industrial development direction
of the region is based on high-quality corn, rice and soybean-based food planting, animal husbandry and
agricultural product processing. The animal husbandry industry represented by deer breeding is a high
value-added industry, and its prospects are very broad. There are more than 100 manufacturers in Jilin
Province with antler production and deer products as raw materials, and nearly 100 varieties are
produced. Shuangyang District of Changchun City is the only "Hometown of Chinese Sika Deer" named
by the State Council. "Shuangyang Sika Deer" has been approved to be registered as a geographical
indication trademark. It is very important to build the "Hometown of Chinese Sika Deer" and accelerate
the integration of deer industry with the international market. The meaning. According to available data,
more than 800 famous brand agricultural products have been established in Jilin Province, 14 Chinese
famous brand agricultural products and 10 Chinese famous brands. While promoting the premise of its
own advantages, Jilin Province has continuously promoted the construction of various agricultural
production bases and agricultural standardization demonstration zones at all levels. The province has created 50 green and organic food bases and more than 400 pollution-free agricultural products. The standardization pattern of agricultural industrialization has established a good position and image of agricultural products in Jilin Province [2].

2.2. Development status of agricultural products e-commerce
In 2017, with the help of the rural e-commerce precision poverty alleviation project, the Ministry of Commerce allocated 18.5 million yuan to vigorously promote the "Jilin Province Rural E-Commerce Demonstration County" process. At present, the Jilin Province Rural Comprehensive Information Service Station has spread throughout the province. 60 counties (cities, districts) have basically achieved comprehensive coverage of more than 9,000 administrative villages [3]. Counties (cities, districts) in Jilin Province are competing with Alibaba, Jingdong and other comprehensive e-commerce platforms to form various forms of e-commerce cooperation organizations; Kaili Network, Afanti Shopping Mall, Qihe Farmers Mall, the regional e-commerce platform and mobile phone client of Jilin Province Agricultural Products Trading Center have grown rapidly, and the development of agricultural products e-commerce in Jilin Province has taken shape.

![Figure 1. Agricultural product e-commerce platform to shape product brand image](image)

3. The impact of agricultural ecological environment requirements on the brand of agricultural products in Jilin Province

3.1. Eco-environmental management promotes the optimization of agricultural product cultivation and further expands the brand influence
Due to the implementation of the policy of returning farmland to forests issued by the state, the agricultural planting area has been reduced, and even some industries need to find another way out. For example, Changbai Mountain ginseng used to grow in the original mountain forest of Changbai Mountain. The ginseng planting farmers need to cut down the mountain forests in order to grow ginseng. However, after the relevant national departments issued the forest protection law, the ginseng plantation was cut off, which caused some ginseng farmers to give up. The industry has found another way to reduce the annual output of Changbai Mountain and affect the brand propaganda. After technical improvement and variety upgrading, Jilin Province established 108 ginseng breeding, non-forest ginseng, and "Changbai Mountain Ginseng" brand raw material production base, and carried out work such as soil testing, ginseng product quality monitoring, brand product certification, etc. Registered and promoted 28 ginseng pesticides, established Changbai Mountain ginseng planting alliance, developed Changbai Mountain ginseng full industrial chain service platform, controlled product quality from the source, and realized ginseng products traceable. The "Changbai Mountain Ginseng" brand has released a brand-new LOGO, product packaging design, brand positioning language, and re-planned the
"Changbai Mountain Ginseng" brand strategic framework to enhance the brand image and accelerate brand building. At present, 116 enterprises in 33 enterprises in Jilin Province have been allowed to enter the "Changbai Mountain Ginseng" brand. The annual conversion of raw materials ginseng is more than 4,200 tons, with a total output value of 3.1 billion-yuan, accounting for 6.74% of the province's total ginseng output value. Jilin Province will let the society understand ginseng, consumer ginseng and promote the development of ginseng industry through the brand-new creation of "Changbai Mountain Ginseng" brand.

3.2. The development of ecological agriculture promoted the birth of green pollution-free e-commerce brand image

The improvement of agricultural subsidies in Jilin Province needs to be carried out around the optimization of the structure, and gradually reduce the implementation of the "yellow box" policy and increase the support for the "green box" policy, so as to give the agricultural subsidy "green" attribute as much as possible. Guiding farmers to apply environmentally friendly production technologies through agricultural subsidies will also provide strong support for agro-ecological environmental protection. This goal can be achieved by gradually reducing pesticide use subsidies, subsidies for fertilizer use, and increasing subsidies for ecological and organic fertilizers. The reduction of agricultural non-point source pollution can naturally provide sufficient support for agro-ecological environmental protection. In 2017, Jilin Province launched the "Zero Fertilizer Use Zero Growth Reduction Action", which promoted the brand title of “Golden Corn Belt” in Jilin Province, making quality Corn, rice, and soybean-based food crops are known to the public [4].

4. How to strengthen the competitiveness of agricultural products brand in the eco-agriculture environment

4.1. Establish a unified e-commerce brand and enhance market trust

In Jilin Province, the agricultural product industry is low, and most of the rural e-commerce business models are self-produced and sold by individual online stores, which are small and scattered. In recent years, along with the emergence of e-commerce, Jilin Province's small and micro-agricultural brands have emerged one after another, but the brand is messy, the quality is not high, and many brands often have disordered and vicious competition, in terms of technical level and quality standards. Far from meeting the requirements of the market and lacking market trust, the agricultural products are difficult to navigate during the brand building process. To this end, it is necessary to establish a unified e-commerce brand and enhance market trust. It is necessary to increase the integration of scattered brands, do a good job in positioning products, move from individual decentralized operations to cooperative operations, and achieve a certain scale; give play to the leading role of local leading enterprises, maintain local specialty agricultural products brands, and enhance regional market competition. Force. At the same time, the demonstration role of each standardization base will be exerted to ensure the quality of agricultural products, and the entire supply chain of agricultural products production and management will be managed in a unified manner to accelerate the standardization of agricultural products.

4.2. Strengthen brand promotion and get out of geographical limitations

Today, e-commerce development is in full swing, and propaganda plays a vital role in brand building. Although the Jilin provincial government and enterprises pay more attention to the promotion of agricultural product brands, the publicity effect is still unsatisfactory. Some agricultural products are "hidden in the mountains and are not known", and there is no high popularity and large market demand. Most enterprises the influence is still limited to the geographical scope. To this end, we need to fully recognize the important role of new media in today's society, and use various online media network platforms, offline agricultural fairs, agricultural product e-commerce promotion conferences, trade fairs, and famous e-commerce selection activities. Create vivid, distinctive appearances, names and logos that will make consumers remember and listen. Encourage and support qualified e-commerce to place
advertisements on various types of television, newspapers, radio, outdoor billboards, LED and Internet, etc., expand the scope of brand promotion, strengthen the brand characteristics of agricultural products, and carry out all-round publicity to build a good enterprise. The brand image will deepen the consumer's perception of the brand image of agricultural products and products [5].

4.3. Adopting agricultural product trademarks to protect intellectual property rights to strengthen the competitiveness of e-commerce brands

After China's accession to the WTO, a large number of agricultural and sideline products should be protected by laws using registered trademarks and geographical indications. At the same time, most areas in China have begun the intellectual property rights incentives for the registration of agricultural products, which means that the state encourages the protection of intellectual property rights of agricultural products to enhance the competitiveness of regional product brands. In particular, agricultural products e-commerce should go abroad and use the international agreement on trademark protection that China has already joined to register their own brands abroad, so that the brand can become a passport for Jilin enterprises to enter the international market. At present, China's agricultural product trade deficit is close to 700 million US dollars, and the lack of brand competitiveness of agricultural products is an important reason. At present, Jilin Province should strengthen the registration and protection of GI products, support agricultural products processing and export enterprises to apply for domestic and international standards certification, brand registration, and support agricultural products export enterprises to conduct business inspections abroad and explore international market activities.

4.4. Strengthening the scientific and technological input of agricultural products in Jilin Province

It is necessary to improve the construction of communication networks, computer networks, broadband networks, telephones, etc., to increase the contribution rate of agricultural informatization to agricultural development, enhance the competitiveness of agricultural product brands, strengthen the proportion of agricultural production technology investment, strengthen the supporting technology of agricultural production, and strengthen agricultural technology. Innovation can better serve the development of agro-ecological environmental protection. General Secretary Xi Jinping has repeatedly stressed that "the key to agricultural modernization is technological progress and innovation", and to some extent explains the value of science and technology investment in agriculture. In the exploration of increasing investment in science and technology in agriculture, the promotion activities of "fertilizer and pesticides for fertilizers and pesticides" carried out in Erdao District, Changchun City, Jilin Province are also typical. The activity follows the development of "quality of agriculture, green agriculture" The concept is better suited to the agro-ecological environmental protection and the pursuit of sustainable agricultural development. The "soil testing formula fertilization mobile phone information service" involved in the activity also has high learning value.
5. Conclusion

Agricultural and rural development is in an important period of historical opportunity, and it is also a crucial period for the accelerated transformation of traditional agriculture to modern agriculture. Jilin Province has also reached the stage of urban and rural planning and integration development. At the same time, in response to a number of relatively mature eco-agriculture models, Jilin Province is fully organizing its efforts to form key technical standards in line with its experiments, summarization and research, and apply them to production practices to enable ecological agriculture in Jilin Province. In the process of development and construction, there are rules and rules to follow, to achieve a true "integration, coordination, recycling, regeneration" and the realization of the "social benefits, economic benefits and ecological benefits", so that ecological agriculture technology can be achieved nationwide Promote to enhance the competitiveness of agricultural products e-commerce brand in Jilin Province and expand the brand awareness of agricultural products in Jilin Province.

Acknowledgments

This work was financially supported by School-level scientific research projects of Jilin Engineering Normal University, Project number: XYB201830; Supported by scientific research projects of Jilin Provincial Department of Education, Project number: JJKH20190777SK

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