

Research on the Development of Creative Agriculture in Qinhuangdao City: Integration Path of Strategic Innovation and Marketing Retail

Chen Ling¹, Jia Zhao¹*, Ce Wang¹, Xiaodan Ding²

¹Hebei University of Environmental Engineering, Qinhuangdao 066100, Hebei, China ²Hebei Danxing Technology Co., Ltd., Qinhuangdao 066100, Hebei, China

*Author to whom correspondence should be addressed.

Copyright: © 2025 Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), permitting distribution and reproduction in any medium, provided the original work is cited.

Abstract: This article first comprehensively analyzes the current development status of creative agriculture in Qinhuangdao City, pointing out that it has unique advantages in terms of resource endowments and cultural heritage. Although it has achieved certain results in recent years, it still faces challenges such as low brand awareness, single marketing channels, and insufficient innovation in retail models. In terms of marketing strategy innovation, this article proposes innovative ideas such as digital marketing, cultural IP marketing, and experiential marketing. Regarding retail model innovation, this article explores models such as online and offline integration, community group buying, and live streaming sales. This article presents an outlook for the future development of creative agriculture in Qinhuangdao City based on the research findings. It is believed that with technological advancements and consumption upgrades, creative agriculture has broad prospects.

Keywords: Qinhuangdao City; Creative agriculture; Marketing strategy innovation; Retail model innovation introduction

Online publication: April 28, 2025

1. Introduction

In the context of accelerated global agricultural modernization and increasingly diversified consumer demands, creative agriculture, as an emerging industry that deeply integrates agriculture with multiple fields such as culture, technology, and art, is gradually becoming an important force to promote agricultural transformation and upgrading and rural economic prosperity ^[1]. Qinhuangdao City, a city that integrates natural scenery and historical culture, not only possesses unique natural resources and rich cultural heritage but also has distinct advantages for developing creative agriculture.

In recent years, with the in-depth implementation of the national rural revitalization strategy ^[2], Qinhuangdao City has actively responded to the call, explored the development path of creative agriculture, and strived to transform traditional agriculture into a composite industry integrating production, ecology, and life through

innovation-driven approaches. However, faced with fierce market competition and constantly changing consumer demands, Qinhuangdao's creative agriculture also encounters numerous challenges in its development process, such as unclear strategic planning, single marketing means, and lagging retail models. Therefore, conducting in-depth research on the current development status of creative agriculture in Qinhuangdao City and exploring optimization paths for its strategic innovation, marketing strategies, and retail models is of great significance for promoting the high-quality development of agriculture in Qinhuangdao City.

2. Analysis of the current development status of creative agriculture in Qinhuangdao City

2.1. Development foundation and advantages

Qinhuangdao City has formed ten characteristic industrial clusters, including grain and oil, vegetables, edible fungi, chestnuts, fruits, Chinese medicinal materials, livestock and poultry, aquatic products, fur, and leisure agriculture, relying on the latitude advantage of "the golden latitude of agricultural production at 40 degrees north latitude," the resource advantages of "mountains, hills, plains, beaches, and oceans," the location advantage of "one-hour fresh agricultural products circulation in Beijing, Tianjin, and Qinhuangdao," the transportation advantage of "sea, land, and air intersection," and the talent advantage of gathering universities and research institutes ^[3]. For example, Lulong County has been rated as "the hometown of sweet potatoes in China," Qinglong chestnuts have become the first "Hema County" in China with chestnuts as the main supply product, Changli County is a national characteristic agricultural product advantage area, and the Jieshi Mountain production area has been known as "the East Bordeaux" ^[4]. These characteristic industries have laid a solid material foundation for the development of creative agriculture.

2.2. Initial success in industrial integration

Based on characteristic agriculture, Qinhuangdao City is actively exploring the development path of creative agriculture. On the one hand, by holding various agricultural festivals and activities, such as the Shanhaiguan Cherry Festival and the Qinglong Chestnut Industry Development Conference ^[5,6], agriculture is combined with cultural tourism, enhancing the cultural connotation and market influence of agricultural products. On the other hand, some agricultural enterprises have begun to focus on brand building and product innovation. For example, Hebei Liuqing Fungi Industry Co., Ltd. exports shiitake mushroom sticks to the ASEAN market, expanding international market space. In addition, Qinhuangdao City has also vigorously developed leisure agriculture, identifying 57 eco-leisure agriculture demonstration sites, and 28 seasonal leisure agriculture scenic routes have been promoted at the provincial level, promoting the deep integration of agriculture and tourism ^[7].

2.3. Challenges and problems faced

Although the development of creative agriculture in Qinhuangdao City has achieved certain results, it still faces many challenges. Firstly, the development of new agricultural business entities is lagging, and problems such as capital shortages, backward business philosophy, and narrow business areas restrict the large-scale and modern development of creative agriculture. Secondly, the added value of creative agricultural products is low, and there is a lack of brands and products with market competitiveness. Thirdly, the marketing methods are single, and traditional wholesale markets are still the main channel for agricultural products to enter the market, while modern circulation methods such as e-commerce and supermarket docking are insufficiently applied. Finally, the retail model is lagging, online and offline integration is not tight enough, and the consumer experience needs to be improved.

2.4. Policy environment and support

To promote the development of creative agriculture, Qinhuangdao City has introduced a series of policy measures. For example, in terms of attracting investment, the city signed 31 agricultural projects with a total investment of 13.776 billion yuan in 2024, undertaking nine projects transferred from Beijing and Tianjin with a signed investment of 3.95 billion yuan. In terms of brand building, Qinhuangdao City actively taps into local characteristic resources, strengthens brand planning and promotion, and seven products such as Changli cucumber and Qinglong chestnut have been selected into provincial characteristic agricultural product advantage areas, and ten products such as Changli fur and Shanhaiguan cherry have been rated as "regional public brands in Hebei Province" ^[8]. In addition, Qinhuangdao City also focuses on technological innovation and talent cultivation, cooperating with agriculture-related universities and research institutes to enhance the technological innovation capability of characteristic agricultural industries.

The development of creative agriculture in Qinhuangdao City has a certain foundation and advantages, but continuous innovation is still needed in industrial integration, brand building, marketing strategies, and retail models to promote the high-quality development of creative agriculture.

3. Designing of strategic innovation path for creative agriculture in Qinhuangdao City 3.1. Differentiated competition strategy

Creative agriculture in Qinhuangdao City should leverage local unique resources to develop distinctive agricultural products. For instance, by utilizing the advantage of being located at the "golden latitude of 40 degrees north for agricultural production," the city can focus on creating high-quality fruits, vegetables, and other specialty agricultural products. Taking Shanhaiguan cherries as an example, further segmentation of varieties can be carried out to introduce cherry varieties with different sweetness, acidity, and fruit texture based on the taste preferences of different consumer groups. Simultaneously, combining modern biotechnology, deep processing of agricultural products can be conducted to develop a series of products such as cherry jam, cherry juice, and cherry wine, extending the industrial chain and increasing product value-added. Additionally, the cultural connotations of agricultural products can be explored by integrating them with local historical culture and folk customs. For instance, agricultural product packaging featuring Gu Zhu culture and Great Wall culture can be introduced, making the products not only edible but also carriers of cultural inheritance ^[9].

In terms of services, creative agriculture in Qinhuangdao City can provide personalized agricultural experience services ^[10]. For example, farming culture experience activities can be organized to allow visitors to participate in crop planting, picking, processing, and other aspects, experiencing the charm of farming culture. Diversified experience projects can be designed for tourists of different age groups and consumption levels, such as agricultural science popularization classes for children to learn about agricultural knowledge through fun explanations and interactive games, and agricultural entrepreneurship experience projects for adults to realize their entrepreneurial dreams in the agricultural field. Furthermore, customized agricultural product delivery services can be provided to deliver fresh agricultural products to consumers' homes regularly based on their needs, satisfying consumers' demand for healthy and green food.

3.2. Sustainable development strategy

The development of creative agriculture in Qinhuangdao City should adhere to the principle of ecological priority and strengthen agricultural ecological environmental protection. Green prevention and control technologies should be promoted to reduce the use of chemical pesticides and fertilizers, adopting green prevention and control methods such as biological control and physical control to ensure the quality and safety of agricultural products.

Simultaneously, resource utilization of agricultural waste should be strengthened, such as fermenting crop straws to make organic fertilizers, turning agricultural waste into valuable resources. Additionally, clean energy sources like solar and wind power can be utilized to provide power for agricultural production, reducing energy consumption and environmental pollution ^[11].

Promoting the coordinated development of creative agriculture and related industries can form industrial cluster effects. Strengthening integration with the tourism industry, agricultural tourism routes can be developed by combining agricultural sightseeing, leisure vacations, and folklore experiences to create distinctive agricultural tourism brands. For example, an "agricultural tourism route of mountains, sea, and countryside" can be developed, incorporating Qinhuangdao's natural scenery and historical cultural relics, allowing tourists to experience the joy of agricultural production while admiring the natural beauty. Furthermore, cooperation with the cultural and creative industries can be enhanced to explore agricultural cultural connotations and develop agricultural cultural and creative products, such as agricultural-themed anime, games, film, and television works, expanding the development space of creative agriculture.

3.3. Technology-driven strategy

Increasing research and application efforts in digital agricultural technology can enhance the intelligent level of agricultural production. Utilizing technologies such as the Internet of Things, big data, and artificial intelligence, real-time monitoring and precise regulation of the agricultural production environment can be achieved. For example, sensors can be installed in farmland to collect real-time data on soil moisture, temperature, nutrient content, etc. Based on data analysis results, automatic control of irrigation, fertilization, and other equipment can be achieved for precision agriculture. Simultaneously, drones can be utilized for farmland patrols and pest monitoring, improving the efficiency and quality of agricultural production ^[12].

Strengthening the construction of agricultural science and technology innovation platforms, integrating scientific research resources, and enhancing agricultural science and technology innovation capabilities are crucial. Establishing platforms such as agricultural science and technology research and development centers and agricultural science and technology transformation centers, strengthening cooperation with universities and research institutes, and carrying out key agricultural technology research and scientific and technological achievements transformation are essential. For instance, collaborating with agriculture-related universities to conduct research on deep processing technologies for agricultural products, developing agricultural product processing technologies and equipment with independent intellectual property rights, and enhancing the added value and market competitiveness of agricultural products.

4. Marketing strategy innovations for creative agriculture in Qinhuangdao City 4.1. Digital marketing innovations

In the digital era, social media has become a crucial platform for information dissemination and marketing promotion. Creative agriculture in Qinhuangdao City can fully utilize social media platforms such as Weibo, WeChat, and Douyin (TikTok's Chinese version) to conduct agricultural product marketing activities. For instance, establishing official Weibo and WeChat accounts dedicated to agricultural products, regularly publishing information about the cultivation process, growth environment, and nutritional value of agricultural products, can enhance consumers' understanding and trust in these products. Meanwhile, creating lively and interesting short videos showcasing the unique features and advantages of agricultural products, and disseminating them through platforms like Douyin, can attract more consumer attention. Additionally, social media interaction activities such as agricultural product photography competitions and agricultural knowledge quizzes can increase consumer

engagement and brand loyalty

E-commerce platforms provide a broader market space for the sale of agricultural products. Creative agriculture in Qinhuangdao City should actively establish a presence on major e-commerce platforms such as Taobao, JD, and Pinduoduo, opening flagship stores to expand sales channels. In e-commerce platform marketing, emphasis should be placed on product display and page design, highlighting the unique features and advantages of agricultural products to enhance their attractiveness. Simultaneously, utilizing marketing tools such as Zhitongche and Zuanshan on e-commerce platforms can facilitate precise promotion, increasing product exposure and sales volume ^[13]. Furthermore, e-commerce live streaming activities can be conducted, inviting popular anchors or agricultural experts to recommend and explain products, answer consumers' questions in real-time, and promote product sales.

4.2. Cultural IP marketing innovations

Qinhuangdao City is rich in historical and cultural resources, including Gu Zhu culture, Great Wall culture, and ocean culture. Creative agriculture can deeply explore these regional cultural elements, combining them with agricultural products to create culturally enriched agricultural product brands. For example, developing a series of Great Wall-themed agricultural products such as Great Wall wine and Great Wall chestnuts, integrating Great Wall elements into product packaging and promotion, can highlight the regional characteristics and cultural heritage of the products. By creating cultural IPs, the brand value and market competitiveness of agricultural products can be enhanced.

Combining creative agriculture with cultural tourism can create distinctive cultural tourism brands ^[14]. For instance, organizing agricultural culture festivals, agricultural product picking festivals, and other activities can attract tourists to experience agricultural production and rural culture. During event planning, emphasis should be placed on integrating cultural elements, such as conducting folk performances, handicraft production, and other activities, allowing tourists to experience the local cultural charm while participating in the activities. Simultaneously, developing cultural tourism souvenirs such as agricultural product models and cultural handicrafts can extend the tourism industry chain and increase tourism income.

4.3. Experiential marketing innovations

Constructing agricultural experience parks that integrate agricultural production, sightseeing, experience, and leisure can provide consumers with opportunities to personally participate in agricultural production ^[15]. Within these parks, functional areas such as planting zones, picking zones, and breeding zones can be established, enabling consumers to engage in activities like crop planting, picking, and breeding, thereby experiencing the joy of agricultural production. Additionally, professional agricultural technicians can be equipped to provide technical guidance and training to consumers, enhancing their participation experience.

Diversified thematic experience activities can be carried out according to different seasons and consumer demands. For example, during spring, activities like "Flower Appreciation and Picking Experience" can be organized, allowing tourists to enjoy the beautiful flower fields while experiencing the joy of fruit picking. In autumn, "Harvest Festival and Agricultural Product Processing Experience" activities can be arranged, enabling tourists to participate in the processing and production of agricultural products and understand their production processes. Through thematic experience activities, the interaction and emotional connection between consumers and agricultural products can be strengthened, increasing consumers' willingness to purchase.

5. Innovation in retail models for creative agriculture in Qinhuangdao City

5.1. Online and offline integrated retail model innovations

Creative agriculture in Qinhuangdao City should actively establish online sales platforms, such as building official websites and joining renowned e-commerce platforms ^[16]. The official website can serve as a window to showcase agricultural product information, brand image, and corporate culture, providing detailed product introductions, cultivation process demonstrations, user evaluations, and other content to enhance consumers' trust in agricultural products. Simultaneously, utilizing the large traffic advantages of e-commerce platforms can expand the sales scope of agricultural products. In terms of platform operation, emphasis should be placed on user experience, optimizing page design, and improving website loading speed and ease of use. For instance, setting up a clear navigation bar can facilitate consumers to quickly find the desired products, and providing multiple payment methods can meet the payment needs of different consumers. Additionally, utilizing big data analysis technology to understand consumers' purchasing behaviors and preferences can enable precision marketing, pushing personalized product recommendations and promotional information.

Offline experience stores serve as an important bridge connecting online and offline channels ^[17]. Qinhuangdao City can open agricultural product experience stores in city centers, commercial districts, tourist attractions, and other locations, allowing consumers to personally experience the quality and characteristics of agricultural products. These experience stores can be equipped with functional areas such as product display zones, tasting zones, and interactive experience zones. In the product display zone, various agricultural products can be exhibited in an exquisite manner, highlighting their appearance and quality. The tasting zone can offer fresh agricultural products for consumers to sample, enabling them to intuitively experience the taste and flavor of the products. The interactive experience zone can host activities such as agricultural product processing and agricultural knowledge popularization, increasing consumer interaction and engagement with agricultural products. By establishing offline experience stores, consumers can be attracted to experience the products in-store, thereby promoting online sales.

5.2. Community group purchase retail model

Community group purchase is a new retail model that has emerged in recent years, offering advantages such as low cost, high efficiency, and fast dissemination ^[18]. Creative agriculture in Qinhuangdao City can actively recruit community leaders, who can be residents within the community, convenience store owners, etc. Provide professional training to the recruited community leaders, covering agricultural product knowledge, marketing skills, customer service, and other aspects. Through training, enhance the business capabilities and service levels of community leaders, enabling them to better promote and sell agricultural products.

Regularly plan community group purchase activities, introducing special agricultural product group purchase packages based on different seasons and consumer demands. For example, launch a fruit gift box group purchase activity during the fruit harvest season, and introduce a combined agricultural product package group purchase activity during holidays. In the process of implementing the activities, ensure the quality and stable supply of agricultural products, and promptly handle consumer orders and after-sales issues. Simultaneously, utilize social media, community bulletin boards, and other channels for activity promotion, increasing the visibility and participation of the activities.

5.3. Live streaming retail model

Establish a professional live streaming team consisting of anchors, operational staff, and customer service personnel. Anchors should have good communication skills and product knowledge, capable of vividly introducing the characteristics and advantages of agricultural products. Provide regular training to the live streaming team,

learning live streaming skills, marketing strategies, interaction methods, etc., to improve the effectiveness of live streaming sales.

Carefully plan live streaming content, combining the cultivation process, growth environment, nutritional value, and other aspects of agricultural products to create interesting and informative live streaming content ^[19]. For example, conduct agricultural product traceability live streams, allowing consumers to intuitively understand the production process of agricultural products, and invite agricultural experts to provide live explanations, offering professional agricultural knowledge and purchase suggestions to consumers. Simultaneously, utilize multiple channels for live streaming promotion, such as social media, short video platforms, and e-commerce platforms, to attract more viewers into the live streaming room.

6. Countermeasures and suggestions for the development of creative agriculture in Qinhuangdao City

To promote the sustainable development of creative agriculture in Qinhuangdao City, this article proposes the following countermeasures and suggestions: In terms of policy support, the government should formulate specific support policies for the development of creative agriculture, including financial subsidies, tax incentives, and land use support. For example, a certain percentage of investment subsidies can be provided for creative agriculture projects, or related taxes and fees can be reduced or exempted to lower the entrepreneurial costs for operators.

Talent cultivation is key to the development of creative agriculture. Qinhuangdao City should strengthen the cultivation and introduction of professional talents in creative agriculture and establish a cooperation mechanism between industry, academia, and research. For instance, it can collaborate with local universities like Hebei Normal University of Science and Technology to offer creative agriculture-related courses and cultivate compound talents, while introducing advanced creative agriculture management experience and marketing concepts.

Infrastructure construction cannot be ignored. Qinhuangdao City should improve the transportation, communication, water and electricity infrastructure of the creative agriculture park, and enhance its reception capacity. For example, it can improve road conditions leading to major creative agriculture parks and add a tourism signage system; improve WiFi coverage in the park to facilitate visitors' sharing of experiences.

A quality supervision system needs to be established and improved. Qinhuangdao City should formulate quality standards for creative agricultural products, strengthen quality supervision and brand protection. For example, a "Qinhuangdao Creative Agriculture" certification system can be established, and certification marks can be awarded to products that meet the standards to enhance the market recognition of the products.

7. Conclusion and future prospects

Qinhuangdao's creative agriculture possesses unique advantages in terms of resource endowment and cultural heritage. Despite achieving certain development results in recent years, it still faces many challenges, such as low brand awareness, a single marketing channel, and insufficient innovation in retail models. In terms of marketing strategy innovation, digital marketing, cultural IP marketing, and experiential marketing provide new development ideas for creative agriculture in Qinhuangdao City, helping to enhance the market competitiveness and brand influence of agricultural products. Regarding retail model innovation, online and offline integration, community group purchases, and live streaming sales have opened up broader spaces for agricultural product sales, better meeting the diverse shopping needs of consumers.

The development prospects of creative agriculture in Qinhuangdao City are broad. With continuous technological advancements and upgrading consumer demands, creative agriculture will usher in more

development opportunities. In terms of marketing strategies, the application of digital marketing should be further deepened, utilizing technologies such as big data and artificial intelligence to achieve precision marketing. Simultaneously, the deep exploration and creation of cultural IPs should be strengthened to form a brand image with stronger recognition and attractiveness. Regarding retail models, continuously optimize the online and offline integration model, improve the service quality and user experience of community group purchases and live streaming sales, and explore more innovative retail models. Furthermore, the government, enterprises, and all sectors of society should form a joint effort to promote the development of creative agriculture in Qinhuangdao City. The government continues to increase policy support and improve industrial supporting facilities; enterprises strengthen their own innovation capabilities and improve product quality and service levels; all sectors of society actively participate to create a good development atmosphere. It is believed that with the joint efforts of all parties, creative agriculture in Qinhuangdao City will achieve high-quality development, becoming an important force driving local economic growth and rural revitalization [²⁰].

Funding

Research on the Development of Creative Agriculture in Qinhuangdao City (202401A213)

Disclosure statement

The authors declare no conflict of interest.

References

- Lin C, 2015, Analysis of the Development Path of Creative Agriculture: Taking Chengdu as an Example. Rural Economy, (9): 51–54.
- [2] Lin B, Lu Q, 2023, Practical Value, Realistic Dilemmas, and Development Ideas of Creative Agriculture in China. China Circulation Economy, 37(04): 17–25.
- [3] Zhang Y, 2020, Research on the Development of Rural Tourism in Qinhuangdao City, dissertation, Hebei Normal University of Science and Technology.
- [4] Zhao Y, 2022, Research on the Marketing Model of Agricultural Products in Qinhuangdao City, dissertation, Hebei Normal University of Science and Technology.
- [5] Chen A, Cui L, 2025, Research on Visual Packaging Design of Agricultural Product Brands Taking Shanhaiguan Cherries as an Example. Green Packaging, (02): 180–183.
- [6] Wang H, 2024, Jumping onto Baifeng to Smell the Fragrance of Chestnuts, Qinhuangdao Daily, October 28, 2024, (007).
- [7] Qinhuangdao City, 2021, Qinhuangdao City: Expanding New Functions and Formats of Agriculture. Hebei Agriculture, (06): 26–27.
- [8] Gao W, Cheng S, Zhang J, et al., 2024, Research on Teaching Practice of Promoting the Construction of Regional Public Brands in Hebei Province Through New Media Marketing from the Perspective of Industry-Education Integration. Modern Vocational Education, (32): 97–100.
- [9] Wu X, Peng Y, Jin Y, 2025, Current Situation and Development Path of Intangible Cultural Heritage Inheritance Along the Great Wall in Hebei Province. Journal of Hebei University of Science and Technology (Social Science Edition), 25(01): 104–110.
- [10] Wang Y, Hu C, 2025, Experiential Agriculture Helps Green Rural Revitalization: Based on the Perspective of Urban-

rural Integration. Farm Economic Management, (03): 22–26.

- [11] Yao K, 2024, Development Status, Problems, and Countermeasures of Agricultural Waste Resource Utilization. New Farmer, (34): 25–27.
- [12] Pan Q, Cui Y, Xia L, 2025, Risks and Standardized Management Countermeasures of Agricultural Drone Technology Application. Shanghai Agricultural Science and Technology, (01): 46–47 + 98.
- [13] Han J, 2023, Research on the Path of E-Commerce Assisting Agricultural Industry Revitalization in the Context of Rural Revitalization. China Collective Economy, (27): 9–12.
- [14] Zhang L, 2024, Brightening the Brand in Promoting the Deep Integration of Cultural Tourism, Anhui Daily, November 22, 2024, (002).
- [15] Feng X, 2024, Application of Experience Design in Agricultural Park Landscape Planning and Design. Shoe Technology and Design, 4(04): 123–125.
- [16] Zhang H, 2020, Research on the Optimization of Online Marketing Models for Agricultural Products in the Context of "Internet+," Master's thesis, Tibet University.
- [17] Zhang M, Shi Y, Ren S, 2025, Exploring a New "Online + Offline" Shared Agricultural Machinery Model. Modernized Agriculture, (03): 73–75.
- [18] Yang J, Tang Y, Wang X, 2025, Optimization of Community Group-Buying Fresh Agricultural Product Delivery Systems from the Perspective of Customer Satisfaction. Journal of Hubei University of Science and Technology, 45(02): 17–25.
- [19] Wang L, 2024, Evaluation of the Marketing Effectiveness of Xinjiang Agricultural Products Through Live Streaming in the Context of "Internet + Agriculture," Shanxi Science and Technology Newspaper, April 29, 2024, (A07).
- [20] Wei Chang, 2021, Research on Rural Governance in Qinhuangdao City, dissertation, Hebei Normal University of Science and Technology.

Publisher's note

Bio-Byword Scientific Publishing remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.