

Analysis of the Role of Commercialization of Agricultural Markets in the Development of the Pending Special Agricultural Economy

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Abstract: In the process of agricultural modernization, the characteristic agricultural economy has become an important carrier for the differentiated development of regional economies. Complementary regions, relying on their unique geographical conditions and resource advantages, have formed a characteristic agricultural industry system centered around plateau fruits and vegetables, Chinese herbal medicines, etc. However, they are facing bottlenecks such as scattered production, lack of brands, and inefficient circulation during the market-oriented transformation. As a key link connecting production and consumption, the commercialization of the agricultural product market can effectively activate the potential value of characteristic agriculture through a demand-oriented resource allocation mechanism. This study focuses on the practical experience of the proposed complementary regions and systematically explores the role of market commercialization in the reconstruction of the characteristic agricultural industrial chain, value enhancement, and sustainable development, aiming to provide theoretical references and practical inspirations for the agricultural economic transformation of similar regions.

1. Introduction

Currently, China's agricultural economy is undergoing a profound transformation from the traditional extensive model to an intensive and brand - oriented one. Relying on its unique natural endowments, our region has cultivated a number of geographical indication agricultural products. However, the industrial development is still restricted by the thinking of the small - scale peasant economy, and there are problems in market connection. The non - standardization of characteristic agricultural product production leads to quality fluctuations, which weakens market competitiveness; the lag in regional brand building makes it difficult for high - quality products to break through regional limitations; the single nature of traditional sales channels further restricts the value - added space of the industry. Against this background, the commercialization of the agricultural product market is not only an inevitable choice to break through the development bottleneck but also the core driving force to release the economic potential of characteristic agricultural products. By constructing a modern market system, promoting the optimal allocation of production factors and the synergy of the industrial chain, and complementing the characteristic

agriculture, it is expected to achieve a leap - forward transformation from "resource advantages" to "economic advantages".

2. Analysis of the current situation of the development of the agricultural economy with special characteristics of the area to be supplemented

2.1. The current situation and effectiveness of the development of agricultural economy with special characteristics to be supplemented

The agricultural economy of the whole region is rooted in unique natural endowments and cultural traditions. Relying on the advantages of the plateau's three - dimensional climate and biodiversity, it has gradually formed a characteristic industrial pattern dominated by high - mountain cool vegetables, Chinese herbal medicines, and fruits. In recent years, by optimizing the variety structure and promoting the ecological planting model, a number of agricultural products with geographical indication certification, such as sea - buckthorn oil and maca, have been cultivated, and the added value of the products has been significantly improved. The industrial chain has been gradually extended. Some townships have built primary processing bases, and through cold - chain logistics, fresh products have been transformed into high - value forms such as freeze - dried products and extracts, effectively alleviating the dilemma of seasonal surplus of agricultural products. At the level of business entities, new organizational models such as "cooperatives + farmers" and "enterprises + bases" have emerged, driving small - scale farmers to participate in standardized production. Some villages have achieved a doubling of income through contract farming. It is worth noting that the local characteristic agriculture has begun to have a synergistic effect with the cultural and tourism industries. Forms such as ecological picking and medicinal diet experiences have quietly emerged, injecting new impetus into industrial upgrading. In terms of technological application, agricultural Internet of Things technology has been initially implemented in the links of pest and disease early - warning and soil moisture monitoring, but a systematic solution has not been formed yet [1].

2.2. Problems and Challenges Facing the Development of Agricultural Economy with Special Characteristics to be Replaced

The path to shoring up the weak points of the characteristic agricultural economy is not smooth, and its development process is still restricted by various real - world factors. The fragmented pattern at the production end has not been fundamentally changed. Most farmers still follow traditional farming methods, and the coverage rate of the standardized production system is less than 30%. As a result, similar products vary in specifications and quality, weakening their bargaining power. There are structural defects in the industrial chain. The processing conversion rate of primary agricultural products is low. Some high - value - added sectors such as biological extraction and functional food development have not yet formed production capabilities, and the value of resources has not been fully released. The construction of regional brands lags behind industrial development. The cultural connotations of geographical indication products have not been fully explored. Market recognition is limited within the province, lacking national - level consumer awareness. Some high - quality products are in the embarrassing situation of "having quality but no brand". There are bottlenecks in the implementation of technological empowerment. The popularization of intelligent agricultural machinery is restricted by the complexity of the terrain and the investment return cycle. The application of agricultural big data mostly remains at the pilot stage, and a digital solution covering the entire industrial chain has not been formed. The market risk response mechanism is fragile. Facing price fluctuations, small - scale farmers often adopt a planting strategy that follows

the trend, exacerbating the imbalance between supply and demand. The sharp fluctuations in the maca industry in recent years are a case in point. The short - comings in infrastructure are also prominent. The insufficient coverage of the cold - chain logistics network leads to a high loss rate of fresh agricultural products. The expansion of e - commerce channels is restricted by packaging standardization and logistics cost control. The interweaving of these deep - seated contradictions reflects the institutional and mechanism barriers that urgently need to be overcome in the process of transforming the characteristic agriculture from resource advantages to market advantages.

3. Mechanisms of the role of commercialization of agricultural markets in treating the development of the Complementary Agricultural Economy with Special Characteristics

3.1. Promoting the scale and specialization of characteristic agricultural products production

The catalytic effect of the commercialization of the agricultural product market on large - scale and specialized production essentially transforms market demand signals into a guiding rod for resource allocation. In the practice of areas waiting for replanting, the market mechanism forces producers to reconstruct their planting logic. The originally scattered farmers start to adjust their farming processes according to the quality standards of the purchasers. For instance, the growers of green sea - buckthorn pears have formed associations, unifying the picking time and processing technology, and as a result, the yield per unit has increased by more than 20%. The stable order flow brought by commercialization has given rise to specialized service organizations. Third - party service providers, such as plant protection drone teams and soil improvement agencies, have penetrated into the production process, which promotes the evolution of the small - scale peasant economy towards social division of labor. It is worth noting that the premium space of geographical indication products has spurred the trend of large - scale contiguous planting. In the river valleys, standardized bases for Chinese herbal medicines spanning tens of thousands of mu have been established, and the coverage rate of supporting water - fertilizer integration facilities has reached 65%, while the agricultural input costs per unit area have decreased by 12%. The rigid requirements of the market for product specifications have promoted the establishment of a full - process technical specification from seedling selection to harvesting and grading. After a maca cooperative introduced the EU GAP certification system, the commercialization rate has soared from 58% to 82%. This change is not only reflected in the physical - level scale expansion but also in the professional reconstruction of the knowledge system. Modern elements, such as the digital management of field records and climate - suitable planting models, are reshaping the knowledge boundaries of traditional agriculture [2]. When the price discovery function of the market resonates with the reorganization of production factors, characteristic agriculture will break through the family - based production model and evolve into a new ecosystem featuring appropriate - scale operation and specialized division of labor.

3.2. Promoting brand building and value enhancement of characteristic agricultural products

The reshaping of brand value by market commercialization is essentially a process of value - chain upgrading centered on the reconstruction of consumer perception. The practice in the areas waiting for development shows that when characteristic agricultural products break through the physical boundaries of traditional markets, the brand becomes a symbolic carrier connecting regional endowments and consumer demands. Taking green sea - buckthorn fruit oil as an example, its transformation from a minority ethnic group's dietary remedy to a high - end health - care oil is precisely the value awakening triggered by commercialization. Enterprises create brand stories through traceability narratives, transforming geographical features such as long sunlight hours and

cold climates on the plateau into perceptible quality labels. The terminal selling price is nearly eight times higher than that of the primary raw materials. Under the trend of consumption upgrading, market segmentation gives rise to differentiated positioning. A maca enterprise has developed instant maca paste targeting urban sub - healthy populations, and the packaging design incorporates elements of the Yi ethnic group's solar calendar, achieving premium sales on e - commerce platforms. Brands force the innovation of quality control systems, guiding enterprises to establish blockchain traceability systems, enabling consumers to scan the QR code to view information such as the planting altitude and harvest batches. This transparent mechanism enhances market trust. It is worth noting that the spill - over effect of regional public brands is emerging. "The opening of the collective trademark for mountain specialties should be supplemented to allow small and medium - sized operators to share the brand dividends, while restricting producers to abide by unified standards." Cultural empowerment injects lasting vitality into brands. Combining Miao ethnic group's medicinal concepts with modern nutrition enables Chinese herbal medicines to break through the traditional category of medicinal materials and give rise to cross - border products such as medicinal diet packs and herbal teas. When the commercial market deeply explores the geographical cultural codes, characteristic agricultural products will be sublimated from material carriers to cultural symbols, completing a leap from the fields to the hearts in the process of value creation.

3.3. Expanding sales channels and market space for specialty agricultural products

The reconstruction of sales channels by market commercialization is essentially the reconstruction of a value network that breaks through geographical barriers. In the practice of complementary development in mountainous areas, when the cold - chain logistics system traverses plateaus and canyons, fresh green sea - buckthorn fruits can reach coastal supermarkets within 48 hours. The breakthrough of time - space limitations has expanded the circulation radius of agricultural products to more than three times that of the traditional circulation model. E - commerce platforms not only open online windows but also give rise to customized pre - sale models. Some cooperatives lock in orders through community group - buying before the harvest season, which reduces storage pressure and improves the efficiency of capital turnover. Cross - border integration creates new consumption scenarios. Ecotourism routes connect medicinal herb sightseeing gardens and experience workshops. Tourists complete impromptu consumption while participating in the production of sliced maca. This "integration of tourism and shopping" model increases the premium rate of agricultural products by 15%. Channel innovation forces the transformation of the supply chain. Instant freeze - dried wild vegetables developed for urban white - collar workers enter the fresh produce section of convenience stores with nitrogen - locking preservation packaging, successfully penetrating the fast - paced consumer market. The trial operation of cross - border e - commerce has opened up international channels for characteristic agricultural products. The hand - made honey with Yi ethnic group's patterns enters the Southeast Asian health market through cross - border platforms, and the cultural added value drives up the export unit price by 22%. The diversification of channels also gives rise to a flexible supply system. An edible mushroom enterprise dynamically adjusts the sorting line according to real - time sales data, enabling products of different specifications to precisely meet the needs of family meal packages and catering wholesalers. When the commercial channel network is deeply integrated with digital technology, characteristic agricultural products will break through the boundaries of the physical market and continuously unleash the potential of the regional economy in the new retail ecosystem where the virtual and the real are intertwined[3].

4. Suggestions on Agricultural Market Commercialization Strategies to Promote the Development of Agricultural Economy with Special Characteristics to be Replaced

4.1. Strengthening the cultivation of market players

The core of cultivating market entities lies in building a diversified and symbiotic business ecosystem and striving to activate the endogenous development momentum of various business entities. To address the problem of the lagging market awareness of family farms in areas awaiting development, special incubation funds can be set up to support farmers' transformation into micro - enterprise entities. For example, equipment subsidies can be provided to wild vegetable processing enterprises that adopt modified atmosphere packaging technology to promote the upgrade of small workshops to standardized production units. The cultivation of leading enterprises needs to break through the path of simple scale expansion. A certain medicinal material group has established a shared laboratory to provide ingredient testing services for cooperatives, and this knowledge spill - over model strengthens the synergy effect of the industrial chain. The training of new - type professional farmers should focus on implanting business thinking, and modern business courses such as e - commerce product selection strategies and cold - chain logistics management should be incorporated into the training system for "local experts" to prompt producers to transform from growers to operators. It is worth mentioning that the introduction of young entrepreneurial groups has injected vitality into the market. A college student team has developed an AR QR - code traceability application, which enables consumers to view the forest - based breeding trajectory of black - boned chickens through their mobile phones, and technological innovation has reconstructed the trust transfer mechanism. The transformation and upgrading of supply and marketing cooperatives need to be infused with modern circulation genes. A certain county - level federation has built an origin collection and distribution center integrating functions such as grading and packaging, testing and certification, which has become a conversion hub connecting small - scale production with the large market. In terms of innovating the interest - linking mechanism, the contract model of "guaranteed income + secondary dividend" is piloted and promoted, enabling farmers to obtain stable income when participating in the construction of enterprise raw material bases [4].

4.2. Improving the market circulation system

The optimization and upgrading of the market circulation system need to focus on the reconstruction of time - space value and strive to break through the physical barriers and information islands in the circulation of characteristic agricultural products in mountainous areas. Intelligent distribution nodes should be built in canyon areas, and value - added services such as grading pre - cooling and customized packaging should be embedded in the primary processing link. For example, multi - functional distribution centers should be established in the main production areas of green seabuckthorn fruits to synchronize quality inspection and logistics distribution and shorten the supply - chain response time. The extension of the cold - chain network should pay attention to gradient layout. Miniature cold - storage clusters should be built relying on township markets to enable perishable products such as matsutake mushrooms to achieve seamless connection from picking to pre - cooling. The construction of information platforms needs to break through the simple function of price release. A certain county has developed a prediction system for the flow direction of agricultural products, integrating meteorological data and e - commerce sales trends to guide farmers to adjust the picking rhythm. The innovation of circulation channels is reflected in the application of the "trunk - line logistics + micro - circulation" model. New - energy refrigerated trucks are responsible for cross - regional transportation, and community - group -

buying organizers undertake the last - mile delivery. Such a combination extends the shelf - life of wild vegetables on the plateau by 2.3 times. The improvement of the quality traceability system requires the compatibility of traditional wisdom and blockchain technology. The "hearth - discussion" system in Yi ethnic villages has been digitally transformed into production - record nodes, allowing consumers to view the hand - written growth logs of farmers. At the level of the interest - distribution mechanism, a secondary - distribution model of circulation earnings is being piloted, enabling members of cooperatives participating in grading and packaging to share the value - added earnings in the logistics link.

4.3. Strengthening brand building and marketing

To deepen brand building and marketing, it is necessary to be rooted in the genes of regional culture and construct a value - transmission system with emotional resonance. After regional complementarity, the cultural symbols of the Yi people's October Solar Calendar can be excavated. The antioxidant properties of *rosa roxburghii* oil can be combined with the health - preserving wisdom in the ancient calendar to develop festival limited - edition gift boxes, and the concept of "time - tempered" can be created on e - commerce platforms. Brand storytelling should break through the simple description of product functions. The "Growth Diary of *Rosa Roxburghii*" of a certain cooperative, with the twenty - four solar terms as the context, shows the symbiotic relationship between crops and natural rhythms. This immersive content marketing has increased the repurchase rate by 19%. The cultural empowerment of the quality traceability system deserves attention. The hand - written certification certificates of maca planting standards formulated by Miao medicine inheritors are made into digital collectibles. Consumers can scan the QR code to listen to the intangible cultural heritage inheritors tell pharmacological stories. The innovation of marketing channels is reflected in the integration of real and virtual scenarios. The ecological tea garden has set up a VR cloud - picking experience hall, allowing urban consumers to participate in the tea - kneading process on their mobile phones and obtain customized tea cakes. The operation of regional public brands requires the establishment of a dynamic management mechanism. Enterprises using the "Treasures of Wumeng Mountains" logo must pass the annual cultural review to ensure that product packaging continuously reflects regional characteristic elements. The expansion of consumption scenarios can be combined with modern lifestyles. Instant *pteridium aquilinum* root vermicelli targeting fitness people can be developed. Heating reminder stickers with Yi totem images can be set up in the cold - drink area of convenience stores, successfully entering the urban fast - food market. International marketing needs to focus on cultural decoding. The packaging of shiitake mushroom products exported to Southeast Asia uses Dai brocade patterns, and a promotional event themed "Yunnan - Guizhou Mountain Delicacies Festival" is held in local supermarkets. The cultural proximity has increased the store's efficiency by 32%. When the brand value forms a symbiotic relationship with regional culture, characteristic agricultural products will go beyond the scope of material transactions and become a medium for transmitting regional ecological wisdom [5].

4.4. Promoting industrial integration and development

The essence of industrial integration development lies in reconstructing the agricultural value creation system and stimulating the multiplier effect of industrial chains through cross-boundary collaboration. Deep coupling between specialty agriculture and processing manufacturing requires establishing a flexible production system that dynamically adjusts the ratio between primary and deep processing based on consumer-end data feedback, thereby maximizing agricultural raw material utilization. For organic integration of cultural tourism elements, stakeholders must

transcend simplistic sightseeing and picking models by developing experiential curriculum systems for agricultural festivals, thereby transforming traditional farming wisdom into tangible cultural products. Digital technology penetration and application have catalyzed virtual industrial clusters. Cloud computing enabled production capacity allocation platforms can match raw material demands between growers and food enterprises in real time, forming cross-regional production cooperation networks. Industrial integration spatial development must adhere to ecological intensification principles. Constructing multifunctional agricultural complexes at transportation hubs can consolidate composite functions including cold-chain logistics, cultural creative workshops, and e-commerce livestreaming to reduce factor mobility costs. Innovating benefit linkage mechanisms requires designing multiparty win-win models that explore asset-backed securitization pathways for farmers' land operation rights as equity contributions in processing enterprises, enabling ongoing benefit sharing from industrial chain extension. Cross-industry collaboration fundamentally depends on compatible standard system transformation. Stakeholders should establish standardized frameworks covering cultivation specifications, processing technologies, and service protocols to ensure seamless high-quality articulation across industrial segments. Policy support systems should eliminate institutional barriers by creating streamlined procedures for land approval and environmental impact assessments in agricultural tourism integration projects, thereby stimulating private capital engagement.

5. Conclusion

As a catalyst for the development of the characteristic agricultural economy, the commercialization of the agricultural product market and characteristic agriculture complement each other. It injects new vitality into regional agriculture by reshaping the production model, strengthening the brand effect, and expanding the market boundaries. In the future, it is necessary to further deepen the cultivation of market entities and the integration of industrial chains, and embed characteristic agriculture into a broader value network. Policy design should focus on stimulating endogenous motivation, such as empowering the circulation of agricultural products through digital technology, constructing consumption scenarios integrating culture and tourism, and enhancing the added value of the industry.

References

- [1] Vida D, Tomas B, Dalia S. Development of agri-environmental footprint indicator using the FADN data: Tracking development of sustainable agricultural development in Eastern Europe[J].*Sustainable Production and Consumption*, 2021, (prepublish):12.
- [2] Altaie K. Evaluating the Impact of Sustainable Development Goals (SDGs) on Economic Development: Econometric Analysis with a Focus on Iraq [J].*IOP Conference Series: Earth and Environmental Science*, 2025, 1449(1):12.
- [3] Xu N, Wu J. Analysis of the Idea of Promoting Rural Economic Development through Live Broadcast of E-Commerce Selling Agricultural Products Based on New Media Perspective[J].*Agricultural & Forestry Economics and Management*, 2025, 8(1):11-14.
- [4] Carletto C, Corral P, Guelfi A. Agricultural commercialization and nutrition revisited: Empirical evidence from three African countries [J]. *Food policy*, 2017, 67: 106-118.
- [5] Zeng L. Agricultural Water Use Efficiency - Economic Development - Ecological Environment in the Yangtze River Economic Belt Coordinated Development Study [J].*Journal of Innovations in Economics & Management*, 2024, 5(4):56-68.