

Research on the Sustainable Development Path of Cooperatives under the Framework of the "Two Mountains" Theory

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Abstract

The theory that "lucid waters and lush mountains are invaluable assets", namely the "Two Mountains" Theory, has become the core guiding ideology for ecological civilization construction and rural revitalization in China. As an important carrier connecting farmers with the market and promoting the coordinated development of rural economy and ecology, cooperatives play a key role in advancing the green transformation of agriculture and realizing the value conversion of ecological resources. From the perspective of the "Two Mountains" Theory, this paper systematically analyzes the current situation and existing dilemmas of the green development of cooperatives, and further explores the specific paths of cooperatives in terms of ecological industry development, ecological protection, value realization of ecological products, scientific and technological innovation and policy support. The study holds that cooperatives should adhere to the concept of green development, promote the in-depth integration of ecology and economy, realize the organic unity of ecological, economic and social benefits, and facilitate the high-quality and sustainable development of rural economy.

Keywords

The "Two Mountains" Theory; Cooperatives; Sustainable Development; Ecological Industry; Green Transformation.

1. Introduction

In recent years, the construction of ecological civilization has become an important part of China's national strategy. As a key area for ecological and environmental protection, rural areas have attracted much attention regarding their green transformation. In 2013, General Secretary Xi Jinping put forward the important assertion that "lucid waters and lush mountains are invaluable assets", clarifying that ecological and environmental protection and economic development are complementary and inseparable. Since then, the "Two Mountains" Theory has served as a scientific guideline for advancing ecological agriculture and green development in China. Against this backdrop, as an intermediary organization connecting the government, farmers and the market, cooperatives have become increasingly prominent in promoting agricultural modernization, adjusting the rural economic structure and protecting the ecological environment.

Cooperatives can not only effectively integrate rural resources and improve the scale and efficiency of agricultural production, but also help promote the green transformation of rural areas and the construction of ecological civilization by popularizing green agricultural technologies, standardizing production and conducting ecological and environmental governance. However, in the process of promoting green development, cooperatives currently face such problems as inadequate implementation of ecological concepts, insufficient application of green technologies, and difficulty in realizing the value of ecological products. How to, under the guidance of the "Two Mountains" Theory, address these constraints and achieve the green transformation and sustainable development of cooperatives is a major issue

that needs to be resolved urgently. Some scholars point out that the "Two Mountains" Theory provides core guidance for the coordinated development of rural economy and ecology[1], and cooperatives are important carriers for practicing this theory. Based on the "Two Mountains" Theory, this paper systematically sorts out the connotation and current situation of the green development of cooperatives, analyzes the existing bottlenecks and challenges, and proposes practical and feasible sustainable development paths by drawing on typical cases. The study aims to provide theoretical support and policy recommendations for the green transformation of cooperatives.

2. Connotations of the "Two Mountains" Theory

2.1. Dialectical Unity of Ecology and Economy

The "Two Mountains" Theory emphasizes that the ecological environment is not only the foundation for human survival, but also a prerequisite and vital resource for economic and social development. In the past, economic development was largely achieved at the expense of the environment, leading to resource depletion and environmental pollution. In contrast, the "Two Mountains" Theory breaks the binary opposition inherent in the traditional development model, pointing out that ecological protection and economic development are not mutually exclusive, but can be dialectically unified. Through the scientific and rational utilization of ecological resources and the promotion of green industry development, we can both protect the natural ecology and achieve economic growth, thus forming a win-win situation. This theory profoundly reveals the economic and strategic value of the ecological environment, and drives the transformation of the economic development model from a high-consumption and high-emission pattern to a green, low-carbon and circular one. For rural areas and agriculture, which are endowed with abundant yet fragile ecological resources, it is imperative to respect the laws of nature, realize the organic integration of ecology and economy, ensure that agricultural development does not come at the cost of environmental damage, and promote the sustainable and healthy development of agriculture[2].

2.2. Multidimensional Manifestations of Ecological Value

The "Two Mountains" Theory thoroughly expounds the rich connotations and multidimensional manifestations of ecological value, which goes far beyond natural landscapes and pleasant environments themselves. Its core lies in emphasizing the indispensability of ecosystem service functions and the realizability of the market value of ecological products. Specifically, first, ecosystem services form the fundamental support of ecological value. Functions such as water conservation, climate regulation, soil conservation and biodiversity protection provide an important natural foundation and guarantee for agricultural production and even human survival. Second, ecological products serve as the key carriers for value realization, including organic agricultural products, green food, and eco-tourism experiences. Through quality certification, brand building and market promotion, their value can be effectively enhanced, generating significant market premiums. Third, ecological service activities represent the extended extension of value creation. Professional services such as environmental monitoring and ecological restoration directly contribute to ecological protection and the restoration and management of damaged ecosystems. The core essence of the "Two Mountains" Theory is to scientifically reveal and effectively stimulate these three categories of ecological value manifestations, promote the transformation of ecological resources from intangible environmental assets into measurable, tradable and appreciable tangible economic assets, and ultimately realize the preservation and appreciation of ecological capital.

2.3. Practical Requirements for Green Development

The core practical path of the "Two Mountains" Theory lies in green development, which requires the complete abandonment of the traditional extensive growth model and the shift to a resource-saving and environment-friendly production mode. Specifically in the agricultural sector, this transformation is reflected in four key measures: first, promoting the innovation of green planting technologies. The core is to extensively popularize the application of organic fertilizers, significantly reduce the reliance on chemical pesticides, and actively adopt biological control technologies, thereby cutting agricultural non-point source pollution from the source. Second, constructing an efficient circular agricultural system. The focus is on the resource utilization and recycling of agricultural wastes such as crop straw and livestock manure. Third, strictly implementing ecological protection measures. We must firmly safeguard the red line of cultivated land quality, effectively prevent and control soil erosion and desertification through scientific means, and consolidate the foundation of agricultural production. Fourth, actively introducing modern information technology to empower development. We should vigorously advance the development of precision agriculture and smart agriculture[3], realize the precise application of inputs such as water, fertilizers and pesticides through intelligent management, significantly improve resource utilization efficiency, and reduce unnecessary waste.

3. Development Status of Cooperatives Under the Framework of the "Two Mountains" Theory

3.1. Initial Achievements in Ecological Industry Development

In recent years, a growing number of cooperatives have actively responded to the national call for ecological civilization construction and explored the development of ecological agriculture and green industries. Examples include the promotion of diversified green industry models such as organic cultivation, ecological breeding, under-forest economy, and rural tourism. Characteristic agricultural products such as ecological tea, organic vegetables, and green fruits in some regions have gradually achieved large-scale production and branding. A number of cooperatives have established sound production standards and quality traceability systems, significantly enhancing the market competitiveness of their products. Taking Anji County of Zhejiang Province as a case in point, local cooperatives have developed ecological white tea combined with eco-tourism, realizing the integration of ecological industries. While boosting farmers' income, they have also protected the ecological environment. These practices have proven that the development of ecological industries by cooperatives can effectively achieve the dual goals of increasing farmers' income and improving the ecological environment[4].

3.2. Increased Awareness of Ecological Protection

With the continuous advancement of environmental protection policies and the in-depth popularization of the concept that "lucid waters and lush mountains are invaluable assets", the awareness of ecological protection among cooperatives and their members has been significantly raised. Currently, numerous cooperatives are actively practicing green production technologies: they have reduced the application of chemical fertilizers and pesticides in actual operation, vigorously implemented soil improvement and water resource protection measures, and enthusiastically participated in ecological restoration and environmental governance projects. More importantly, a cultural atmosphere that values ecological environmental protection has gradually taken shape within cooperatives, and members have shown greater consciousness in green production practices and the harmless disposal of waste. Meanwhile, government departments have played an active role in guiding cooperatives to establish the concept of green development through organizing professional training and conducting extensive publicity campaigns.

3.3. Challenges and Problems Faced

Despite certain progress made in green development, cooperatives are still confronted with numerous bottlenecks. First, some cooperatives have not thoroughly implemented the green development concept; they overemphasize economic benefits while neglecting ecological protection, with green development remaining superficial and lacking a long-term strategic vision. In terms of technology, the promotion of green production technologies faces obstacles, as many cooperatives are insufficient in the application and innovation of green technologies. In addition, the market for ecological products is not yet mature, with inadequate certification and brand building, resulting in low market recognition and premium capacity, which makes it difficult to generate stable returns. Cooperatives also face the problems of insufficient capital and policy support. Green transformation requires substantial capital investment, but financing channels are limited and policy support lacks systematicness, which has weakened the motivation of cooperatives for transformation. Finally, the governance mechanism of cooperatives needs further improvement: internal management and the responsibility system for ecological protection are not sound, and there is a lack of effective incentive and restraint mechanisms for green development. These problems have seriously restricted the depth and breadth of the green development of cooperatives, and need to be addressed through systematic measures.

4. Sustainable Development Paths of Cooperatives under the "Two Mountains" Theory

4.1. Develop Ecological Industries to Achieve Positive Interaction between Ecology and Economy

The core path for cooperatives to achieve sustainable development lies in relying on local ecological resource advantages, vigorously developing diversified green industries, promoting the efficient conversion of ecological resources into economic resources, and building a positive cycle where ecology and economy mutually reinforce and advance together. First, consolidate the industrial foundation. By establishing ecological agriculture bases and vigorously promoting environment-friendly production methods such as organic cultivation and green breeding[5], the quality and market competitiveness of agricultural products can be effectively improved. Second, extend the industrial chain. Actively develop intensive processing of agricultural products, brand building and professional sales services to significantly increase product added value. Third, innovate integration models. Explore new paths for the integrated development of industries such as "ecology + tourism" and "ecology + culture", and create a diversified and composite industrial system. Fourth, improve the interest linkage mechanism. Construct a multi-stakeholder participation mechanism involving farmers, cooperatives and enterprises, featuring risk sharing and benefit sharing, so as to effectively protect farmers' enthusiasm for participating in green production. Through these measures, ecological industries will not only become an important engine for the economic growth of cooperatives, but also create considerable benefits while protecting the ecological environment, ultimately achieving a "win-win" situation of economic and ecological benefits and laying a solid foundation for the sustainable development of cooperatives.

4.2. Strengthen Ecological Protection to Consolidate the Foundation for Sustainable Development

Ecological protection constitutes a solid foundation for green development, which is particularly critical for cooperatives. To effectively strengthen ecological protection, cooperatives need to formulate and strictly implement an ecological protection system, and standardize green production processes. Actively promoting green farming technologies,

reducing the application of chemical fertilizers and pesticides, and implementing soil protection measures can effectively maintain the healthy fertility of land. At the same time, establish an ecological protection responsibility system, clarify ecological protection responsibilities at all levels, and implement supporting reward and punishment mechanisms to fully mobilize members' enthusiasm for ecological protection. In addition, cooperatives should take the initiative to participate in land transfer and ecological restoration projects to help improve the ecological environment. Water resource protection cannot be ignored either; it is necessary to ensure the safety of agricultural production water by scientifically managing irrigation water and preventing water pollution. Sound ecological protection not only lays a solid foundation for green production, but also serves as a key guarantee for cooperatives to achieve sustainable development, helping them advance steadily on the path of coordinated progress between ecological protection and economic development.

4.3. Promote the Value Realization of Ecological Products to Improve Cooperative Economic Benefits

Promoting the efficient value realization of ecological products is an important link to activate the transformation between "lucid waters and lush mountains" and "gold and silver mountains", and drive the green development of cooperatives[6]. To this end, cooperatives must strive to build a multi-agent collaborative value realization mechanism. The core is to open up the market channel of "high quality for high price": the primary task is to actively lead or participate in the establishment of a strict green product certification system, promote more agricultural products to obtain authoritative certifications such as organic, green food and geographical indication certifications, and enhance consumer trust and market recognition through credible endorsements. On this basis, it is imperative to strengthen brand empowerment and standardization construction. By creating a unified brand image with regional characteristics and ecological connotations and formulating strict quality standards, the product influence and market competitive premium capacity can be significantly improved. Meanwhile, vigorously expand multi-dimensional sales channels, and make full use of diversified methods such as e-commerce platforms, community-supported agriculture, cooperative-owned stores and docking with high-end supermarkets to effectively expand the market coverage and sales penetration depth of green products.

4.4. Intensify Scientific and Technological Innovation to Enhance Cooperative Development Capabilities

Scientific and technological innovation is the core engine driving cooperatives to achieve green transformation and capacity upgrading under the guidance of the "Two Mountains" Theory. Building this capability system requires multiple measures: vigorously introduce and accurately promote the application of key ecological agriculture technologies, such as precision fertilization, green pest control and intelligent irrigation systems, to reduce resource consumption and environmental impact and lay the foundation for green and efficient production. It is crucial to establish a full-staff and long-term technical training mechanism, aiming to improve the scientific and technological decision-making vision of managers and the application skills of green production technologies of members. Actively embrace the digital wave, deeply integrate agricultural Internet of Things, big data analysis and intelligent equipment into the production process, develop smart agriculture models, and achieve precise control and efficiency improvement of core resources such as water, fertilizers and pesticides. At the same time, strive to build an open collaborative innovation bridge, promote close cooperation with research institutes and universities, and carry out joint R&D and achievement transformation based on the development needs of regional characteristic ecological agriculture.

4.5. Strengthen Policy Support to Optimize the Cooperative Development Environment

The policy support system is the institutional basis for ensuring cooperatives to achieve green transformation and sustainable development, and its improvement is directly related to the smoothness of the ecological value transformation path. At the legal and policy level, efforts should be made to improve the legal and regulatory system related to green agriculture and formulate special support policies to provide clear guidelines and legal guarantees for the green development of cooperatives. In terms of financial support, it is necessary to innovate green financing mechanisms, systematically establish green industry development funds, and design differentiated credit products tailored to the needs of cooperatives, so as to effectively reduce their financing constraints and financial costs in participating in ecological industrialization. The construction of economic incentive mechanisms is also indispensable. It is necessary to effectively implement green production subsidy policies and improve the ecological compensation system, ensuring that cooperatives practicing environment-friendly production methods can obtain reasonable economic returns and form a positive incentive for sustainable investment. The supervision and assessment system needs to strengthen the institutional constraints on the ecological responsibilities of cooperatives, and guide them to balance the goals of economic benefits and the responsibilities of ecological environmental protection by clarifying assessment indicators and supervision processes.

5. Anji County Huangdu Village White Tea Cooperative in Zhejiang Province: A Vivid Practice of Transforming "Lucid Waters and Lush Mountains" into "Gold and Silver Mountains"

The development course of the White Tea Cooperative in Huangdu Village, Anji County, Zhejiang Province, can be regarded as a typical example of the grassroots practice of the "Two Mountains" Theory. Responding actively to ecological governance policies, the village established a specialized white tea cooperative, which effectively integrated the scattered resources of tea farmers to form a large-scale tea plantation system, thus successfully transforming from a resource-consuming industry to an eco-friendly one. The core of this transformation lies in the construction of a mechanism for converting ecological resources into economic value: by building high-standard organic-certified tea garden bases, the cooperative innovatively developed a tea-solar complementary spatial utilization model. Meanwhile, it carried out in-depth development of tea-tourism integration projects and constructed a series of tea garden cultural experience facilities, which significantly increased the proportion of the tertiary industry in its income structure and formed a multi-format integrated industrial chain system.

In terms of ecological protection, the cooperative built a full-domain green pest control system, comprehensively promoted physical pest control equipment, and greatly reduced the use of chemical agricultural inputs. It established a soil and water conservation demonstration zone through terrace renovation and the construction of ecological buffer zones, and its ecological governance achievements have been recognized as a national-level demonstration base. In institutional innovation, the implemented "ecological point system" links the environmental protection behaviors of cooperative members to the distribution of collective benefits. In the dimension of value realization, the cooperative has successfully created a national geographical indication brand, built a product traceability system using blockchain technology, and pioneered the exploration of a tea garden carbon sink trading model, opening up a new path for the transformation of ecological rights and interests.

In the field of scientific and technological innovation, the cooperative introduced an intelligent pest and disease monitoring system and applied precision irrigation technology to achieve

efficient utilization of water resources. It also collaborated with research institutions to break through technical bottlenecks in tea deep processing and developed high-value-added derivative products. On the policy front, the cooperative has received strong support: county-level governments issued special support policies and implemented ecological compensation measures; financial institutions innovatively developed carbon sink financial products; and national pilot policies have effectively guided social capital to invest in industrial upgrading.

The practice of Huangdu Village has fully verified the scientific core of the "Two Mountains" Theory: ecological restoration of mining areas has driven the upgrading of industrial value, confirming the inherent unity of ecological protection and economic development; the multi-dimensional value realization through brand premium, experiential services, and environmental rights and interests has demonstrated the diversity of paths for converting ecological resources; and the collaborative empowerment of policy and technology has built a sustainable circular mechanism of "ecological improvement-value conversion-fund feedback". This closed-loop ecological capital operation model provides an important reference for the transformation and development of similar regions.

6. Conclusion

This research on the sustainable development paths of cooperatives under the "Two Mountains" Theory has fully verified the dialectical unity of ecological protection and economic development. At present, although cooperatives have initially achieved results in ecological industries and raised environmental awareness in the course of green development, they still need to systematically address such key bottlenecks as the inadequate implementation of ecological concepts, insufficient application of green technologies, weak market mechanisms, lack of capital and policy support, and lagging governance systems.

To this end, it is necessary to construct a five-in-one coordinated promotion system: first, rely on the advantages of ecological resources to develop diversified green industries; second, strengthen ecological protection systems and technological innovation to consolidate the environmental foundation; third, open up the value realization path of ecological products through brand building and diversified channels; fourth, empower the upgrading of green productivity with digital technologies; fifth, optimize institutional guarantees by virtue of policy coordination.

Ultimately, a closed-loop mechanism of "ecological resources-industrial value increment-profit feedback" should be formed, so as to achieve the triple goals of preserving and increasing the value of ecological capital, sustaining the growth of economic benefits, and enhancing rural well-being in tandem. This will contribute a replicable solution to global sustainable development.

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