

# The Practical Path of Comprehensive Land Consolidation in Supporting Rural Revitalization

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## Abstract

The article summarizes the origin and iterative upgrading of comprehensive land consolidation, explores its internal logic in promoting rural revitalization, and based on the practical experience of cross township comprehensive land consolidation in Dongyang City, Zhejiang Province, proposes a high starting point comprehensive planning, high-level scheme formulation, high standard consolidation design, and efficient governance implementation path for rural revitalization.

## Keywords

**Rural Revitalization Comprehensive Land Consolidation Across The Entire Region; Cross Township.**

## 1. Introduction

Rural revitalization is an important strategy to promote Chinese path to modernization, which needs to focus on key points, complement weak points and strengthen weak points. As an important means to solve the problems of fragmented farmland, disordered space, low-end industry, and ecological function degradation in rural areas, comprehensive land consolidation is an important platform to activate rural development vitality and coordinate urban-rural development, which is closely related to the strategic goal of rural revitalization.

## 2. The Origin and Iterative Upgrading of Comprehensive Land Consolidation in the Whole Region

Since the first elevation of land management to the legal level in 1998, China's land consolidation has gone through four stages: exploration and initial stage (before 1998), development and growth stage (1999-2008), comprehensive development stage (2009-2015), and comprehensive consolidation stage (since 2016). The work content of land consolidation at different stages conforms to the requirements of economic and social development in different periods. The development process of comprehensive land consolidation in the whole area also conforms to this law and shoulders an important mission of the times. In May 2015, the Central Committee of the Communist Party of China and the State Council issued the "Opinions on Accelerating the Construction of Ecological Civilization", proposing to "accelerate the comprehensive improvement of national land", which for the first time identified the comprehensive improvement of national land as an important means to promote the construction of ecological civilization. Subsequently, the National Land Consolidation Plan (2016-2020), National Land Planning Outline (2016-2030), and Rural Revitalization Strategic

Plan (2018-2022) all made specific arrangements for promoting comprehensive land consolidation. In 2018, based on inheriting and developing the achievements of Xi Jinping's "Thousand Village Demonstration and Ten Thousand Village Rectification" work, Zhejiang Province took the lead in proposing to promote the implementation of comprehensive land consolidation in the whole area and promote the implementation of the rural revitalization strategy; In 2019, the Ministry of Natural Resources of China issued a notice on carrying out pilot work for comprehensive land consolidation in all areas, proposing to carry out comprehensive land consolidation in townships as the basic implementation unit, and deployed 356 pilot projects nationwide. In 2020 and 2021, the "Key Points for the Implementation of the Pilot Program for Comprehensive Land Consolidation in the Whole Area (Trial)" and the "Outline for the Preparation of the Pilot Program for Comprehensive Land Consolidation in the Whole Area (Trial)" were successively issued, and the requirements and content of comprehensive land consolidation in the whole area were continuously improved. Due to the limited scope of resource flow, unclear optimization of spatial patterns, and insufficient coordination of urban-rural integration, the implementation of comprehensive land consolidation in townships faces many obstacles. The comprehensive land consolidation of the entire region has achieved improvements in four aspects: connotation enhancement, scope expansion, policy upgrading, and governance upgrading. It has further broken regional restrictions, enriched the consolidation connotation, and better achieved high-quality allocation of land and spatial resources across the entire region and all factors. It has created a new model of comprehensive land consolidation and expanded a broader space for rural revitalization.

### **3. The Internal Logic of Promoting Rural Revitalization Through Comprehensive Land Consolidation Across the Entire Region**

As a systematic and comprehensive means of land use and management, comprehensive land consolidation provides high-quality adaptive space support for the implementation of rural revitalization strategy by readjusting the relationship between rural people and land and the "three life" space. It directly serves the five major goals of rural revitalization strategy, and the prosperity of industries is the foundation and key to rural revitalization. Through agricultural land consolidation and construction land consolidation, it promotes the optimization of land resource allocation, optimizes land spatial layout, creates conditions for agricultural industrialization and large-scale operation, provides land guarantee for the development of emerging industries such as rural tourism and ecological agriculture, and comprehensively consolidates the foundation of rural industry prosperity. Rural cultural civilization is the strategic soul and cultural support of rural revitalization. In depth research and excavation of rural regional characteristic culture, protection and utilization of historical and cultural resources in the implementation of rectification, promotion of the inheritance and development of rural culture, enhancement of rural cultural connotation, enhancement of villagers' sense of belonging and happiness, and comprehensive promotion of the trend of rural cultural civilization. Ecological livability is an inherent requirement and environmental foundation for rural revitalization. We attach great importance to ecological protection and restoration, restore and improve the quality of the ecological environment, improve rural public facilities, create a livable living environment, and comprehensively build the cornerstone of rural ecological livability. Effective governance is the institutional guarantee and fundamental management of rural revitalization. The rectification process requires the joint participation of the government, village collectives, and farmers, the establishment of a long-term management mechanism, the formation of a multi-party collaborative rural governance model, the improvement of rural governance level and effectiveness, and the comprehensive enhancement

of the capacity for effective rural governance. Wealthy living is an important standard and ultimate goal of the rural revitalization strategy. By optimizing the allocation of land resources and improving land use efficiency, farmers' income can be increased, and by providing equal public services for urban and rural residents, the quality of life for farmers can be improved, comprehensively promoting the realization of rural living prosperity.

#### **4. Case Study of Comprehensive Land Consolidation Promoting Rural Revitalization**

Zhejiang Province, as a pioneer in the comprehensive land consolidation work, has approved and implemented nearly 700 pilot projects since 2018, accumulating rich practical experience. The article selects the case of cross township pilot projects in Dongyang City, Zhejiang Province, and deeply analyzes the specific methods of pilot projects to promote rural revitalization. This pilot project involves 55 administrative villages in 3 streets (towns) with a total area of 69.12 km<sup>2</sup>. It is the first batch of cross township rectification pilot projects in Zhejiang Province. There are multiple highways, national and provincial roads passing through the project area, and it is only about 3.5km away from the high-speed railway station, with obvious transportation location advantages; The foundation of industrial development is good, with traditional planting as the main industry in the primary sector, small and diverse industries in the secondary sector, and strong development momentum in the tertiary sector. Agricultural culture experience, rural tourism, student study, film and television culture, and other industries have begun to take shape. There are also problems in the pilot areas, such as high degree of fragmentation of arable land, low land turnover rate, scattered industrial layout, low and small scale, lack of systematic governance of water systems, need for improvement of ecological environment quality, and lack of overall planning for the development of industries in various towns and streets.

##### **4.1. High Starting Point Global Planning: Strengthening Planning Guidance and Overall Planning**

Guided by the national spatial planning and guided by the requirements of the rural revitalization strategy, we will coordinate the overall rectification work from a higher perspective and guide the entire implementation process. 1) Clearly define the rectification goals and identify the direction of rectification. Based on the actual situation of the region, combined with the background of resources and environment, the foundation of industrial development, and the needs of economic and social development, clarify the rectification goals and find the correct direction. The pilot areas will take the construction of shared rural areas and the construction of a trillion yuan industrial platform covering tens of thousands of acres as an opportunity, with a focus on agricultural land improvement, village improvement, ecological protection and restoration, and characteristic improvement, to optimize the spatial pattern of "three lives". 2) Designate rectification units and guide rectification by classification. The pilot areas have fully considered factors such as natural conditions, land use, remediation potential, ecological environment, agricultural development, and characteristic industry development, and have designated 13 remediation units in 5 categories. The remediation directions and priorities have been proposed for each unit, providing guidance for the implementation and management of future projects. 3) Coordinate spatial integration and promote overall optimization. According to the development demands of villages, spatial resources are optimized and allocated from a higher dimension and a wider range of spaces. Through the consolidation of scattered farmland across townships, the consolidation of homesteads and low to small industrial land, and precise guarantee of various land demands, a centralized, well-equipped, and ecologically sound spatial pattern is created.

#### **4.2. High Level Scheme Formulation: Reflecting the Thinking of Comprehensive and All Factor Rectification in the Whole Domain**

Guided by problems and goals, we adhere to the concept of comprehensive and all factor rectification, and develop a high-level implementation plan centered around "gathering farmland to enrich agricultural production, optimizing space to enhance functions, building ecologically beautiful villages, and integrating industries to increase value". 1) Gather farmland to enrich agricultural production and outline the path for improving agricultural functions. Taking agricultural land consolidation as the starting point, in accordance with the requirements of high standard farmland construction, we will coordinate land development, dry land to water conversion, and farmland function restoration, comprehensively increase farmland area, improve farmland quality, achieve "gathering farmland" to achieve "abundant agricultural production", and enhance agricultural production efficiency. 2) Optimize spatial functionality and propose strategies for efficient resource allocation. Carry out "one village, one sorting" to comprehensively understand the potential and development demands of village renovation, identify 20 suburban integration types, 3 agglomeration construction types, 24 renovation and improvement types, 4 characteristic protection types, 2 relocation and merger types, and 2 other types of villages, and formulate differentiated village renovation strategies, implementing relocation and agglomeration, reducing linkage, optimizing protection, and integrating and improving. 3) Build an ecologically beautiful village and practice the action of "polishing" the ecological background. Coordinate and promote the comprehensive management of watershed water systems, enhance ecological functions such as flood control, drainage, irrigation, and water supply; Taking the creation of the "Top Ten Beautiful Villages" as the standard, guided by the four modernizations (cleanliness, greening, orderliness, and beautification) and the four beauties (village entrance beauty, courtyard beauty, landscape beauty, and rural style beauty), we aim to build a beautiful and prosperous countryside. 4) Integrating industries to add value and outlining a blueprint for common prosperity between urban and rural areas. Through the "land consolidation+shared rural model", integrating characteristic resources such as agriculture, ecology, film and television, and tourism, vigorously developing emerging industries such as agricultural culture experience, rural tourism, leisure and health, sports and fitness, student study, and film and television culture; through the "land consolidation+industrial platform" model, strengthening the transformation and upgrading of inefficient industries, and guiding small-scale and low-energy manufacturing industries to gather on the main platform; By adopting the "land consolidation+ecological product model," we will systematically plan for integrated watershed management, enhance ecosystem service functions, smooth the "two mountain transformation" channel, and promote the realization of regional ecological value.

#### **4.3. High Standard Rectification Design: Clear and Precise Implementation Action Guidelines**

Based on the implementation plan, further carry out refined and high standard land consolidation project design, accurately guide project construction, and ensure project implementation. Adhere to problem oriented approach and carry out refined engineering design. Targeting the objective problems existing in the pilot areas, targeted remediation engineering design will be carried out to make up for the shortcomings that hinder efficient land use to the greatest extent possible. For example, in response to the problem of "non grainization" of arable land, engineering measures such as crop removal, soil backfilling, soil remediation, field planning, and infrastructure construction will be formulated. 2) Introduce the concept of ecological landscape and carry out ecological renovation design. Combining land consolidation with rural landscape shaping with the aim of adapting to local conditions and enhancing the multifunctional and ecological landscape service value of land. The concept of

landscape ecology is introduced into the design of agricultural land consolidation, comprehensive watershed management, and improvement of living environment, with the goal of landscape and parkification, to achieve the integration of ecological agriculture, rural tourism, and agricultural experience.

## 5. Summary of the Practice Path of Comprehensive Land Consolidation for Rural Revitalization

The iterative upgrading of comprehensive land consolidation in the whole area has constructed a relatively complete work system from the aspects of conceptual connotation and implementation path. The article summarizes the practical experience of Dongyang City, Zhejiang Province, and proposes that the comprehensive land consolidation practice path for rural revitalization should be a "1+1+X+N" practice plan led by strategic forward-looking planning and coordination, centered on the comprehensive and all element consolidation plan, supported by ecological refinement engineering design, and guaranteed by innovative landing governance measures. That is, a practical system should be constructed with one planning and planning leading one pilot implementation plan as the core, X multi field sub project designs supporting N sets of implementation measures guarantee.

This practical plan follows the logic of "planning, implementation, overall design, and comprehensive governance", adheres to the concept of "mountain, water, forest, field, lake, grass, town, and village" system renovation and restoration, is guided by solving rural development problems and integrating rural revitalization goals, is guided by national spatial planning to coordinate and rectify the overall pattern, is guided by the thinking of the whole domain and all elements to formulate implementation plans, is guided by refined and precise engineering design to guide project construction, and is promoted by innovative governance throughout the entire cycle, process, and cross departmental collaboration to facilitate the implementation and promote the comprehensive revitalization of rural areas.

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