Analysis of Influence Factors of Land Consolidation Project Construction and Discussion on Countermeasures

Peng Wang^{1,2,3,4,*}, Yingtian Xiao^{1,2,3,4}

¹ Shaanxi Provincial Land Engineering Construction Group Co., Ltd., China

² Institute of Land Engineering and Technology, Shaanxi Provincial Land Engineering Construction Group Co., Ltd., China

³ Key Laboratory of Degraded and Unused Land Consolidation Engineering, the Ministry of Natural Resources, China

⁴ Shaanxi Provincial Land Consolidation Engineering Technology Research Center, China *694298560@qq.com

Abstract

Since my country's reform and opening up, my country has achieved certain construction results in land consolidation work. Although my country is still vigorously promoting land remediation work, with the rapid economic development, people in all aspects of production activities have caused damage and pollution to the ecological environment, which makes my country face many problems in the construction of the ecological environment. This paper analyzes the main factors affecting the construction of land consolidation projects, and expects to play a relevant guiding role in actual projects.

Keywords

Land Consolidation; Engineering Construction; Main Factors.

1. Introduction

Specifically, land consolidation refers to the comprehensive consolidation of fields, water, roads, forests and villages, scientific management of land resources, and promotion of efficient land resources through the comprehensive application of engineering and biological management measures in accordance with relevant laws and regulations. The goal of utilization is achieved. The effect of land consolidation management will have a direct impact on people's production and living environment, which needs to be paid enough attention.

2. The Role of Comprehensive Land Consolidation

Comprehensive land consolidation can effectively solve the problem of insufficient construction land, and promote the construction and development of urbanization and industrialization. If the construction land is insufficient, the development of the overall economy will be hindered. The implementation of comprehensive land consolidation can increase the area of construction land by demolishing the old and building new ones, and using the remaining indicators for urbanization and industrialization. In specific practice, the policy of linking the increase and decrease of construction land is implemented, so that the stock construction land in various regions can resume operation and generate benefits, solve the problem of insufficient construction land, and adjust the surplus indicators for urban construction to promote the coordinated development of urban and rural areas.

3. Main Factors Affecting the Construction of Land Consolidation Projects

Determine the land ownership issue and create a good construction environment for the project. Land remediation involves village groups, villagers and the land contracting relationship between them, so there will inevitably be land ownership issues. Dealing with the land ownership issues in the remediation area is the key to the project, prerequisite for a successful development. The determination and adjustment of land ownership is directly related to the vital interests, fundamental interests and long-term interests of the local farmers. If the land ownership adjustment is controversial or improperly adjusted, it will have a huge impact on the construction of the project. Identify land tenure issues. In order to achieve the purpose of land consolidation and meet the final requirements of land consolidation, it is necessary to carry out unified planning for ditches, canals, fields, roads, forests and villages in the project area. The "Land Contract Law" clearly stipulates that the household contract responsibility system will remain unchanged for 30 years, and the land contracted by farmers will generally not be adjusted. Especially since 2004, the central government has issued a series of policies to support and benefit agriculture, greatly improving support for farmers and cultivated land, and increasing agricultural economic benefits. Therefore, farmers pay more attention to cultivated land and increase their enthusiasm. Under such a policy background, farmers all hope to allocate better arable land when the ownership is adjusted, or to solve the problem that individual farmers have more land and less land. There are many unpredictable difficulties in the adjustment and rezoning of land ownership and contract management rights. The factors of social instability are not conducive to the construction of the current harmonious society. At present, the local village government's methods for land ownership adjustment and identification are too simple, and most of them simply deal with the current contradictions, and the procedures are not in place, leaving potential contradictions for later land management. Therefore, in order to solve the problem of local interference and create a good construction environment for the project, it is necessary to clearly determine the ownership in the early stage of construction, carefully handle the relationship between the construction unit and the local people, and the relationship between the construction unit and the relevant local administrative departments at all levels.

4. Perfect Countermeasures for Land Remediation Project Management

4.1. Improve Project Management Mechanism

Through the improvement of the management mechanism, the management of land consolidation projects can be implemented in a more efficient and orderly manner. In specific practice, the decision-making mechanism should be scientifically constructed first, and the purpose and management principles of land consolidation should be considered comprehensively, and scientific decision-making should be made to ensure that it can effectively promote the smooth implementation of the project. At the same time, it is necessary to build a system of land remediation management institutions, covering all aspects of project decision-making, project implementation, etc., and carry out project management activities in a standardized and orderly manner. Secondly, the relevant departments should speed up the legislation in the field of land consolidation, rely on legal supervision and restrain the management process of land consolidation projects, and avoid illegal behaviors such as violations of laws and regulations.

4.2. Optimize Project Process Management Content.

First, strictly manage the bidding process. Through the scientific introduction of the bidding mechanism, the relationship between project construction resources and cost and quality can be efficiently coordinated. In order to effectively improve the bidding management level of land

remediation projects, it is necessary to scientifically apply the bidding quotation scoring system, comprehensively investigate and consider the quotations, design plans, creditworthiness and other aspects of the bidding units, and select the best bidders. At the same time, it is necessary to strictly supervise and manage the bid evaluation process, implement the principles of fairness and impartiality, and prohibit bid-rigging, bid-rigging and other undesirable phenomena. Second, guide the masses to participate deeply. By introducing the power of the masses, the smooth implementation of the land consolidation project can be promoted and the management level of the land consolidation project can be improved. On the one hand, relevant departments need to vigorously publicize the policies and regulations on land consolidation, help the general public realize the value of land consolidation work and stimulate their desire to participate; on the other hand, during the implementation of land consolidation projects, relevant units need to construct A smooth communication mechanism, extensive collection and adoption of suggestions from the masses, and after systematic sorting out, the content of the planning and design scheme is adjusted to enhance the scientificity and applicability of the scheme. Finally, do a good job of follow-up unified management. After the land remediation project is successfully handed over, it is necessary to build a post-management and maintenance mechanism. On the one hand, relevant departments need to give full play to their functional roles, scientifically form a professional management team, and scientifically protect land resources according to institutional requirements; The smooth implementation of various management and maintenance work.

4.3. Popularize New Materials and Technologies for Land Consolidation Work.

In the current process of land remediation in my country, the most critical thing is the development and promotion of ecological technology. The good development and promotion of ecological technology is of great significance to the construction of ecological civilization. On the one hand, when promoting ecological technology, it is necessary to ensure the scientific rationality of planning analysis and integration, to be able to effectively control the engineering measures and technologies for ecological construction problems that may arise in the process of land consolidation, and to minimize the cost of land consolidation. adverse effects on the ecological environment. At the same time, it is necessary to introduce advanced ecological technologies (such as shelter forest technology) into the process of land consolidation, use these advanced ecological technologies to ensure the effectiveness of land consolidation, and strengthen the operability of ecological construction in land consolidation at the technical level sex. On the other hand, in the process of land remediation, professionals and staff of relevant departments must constantly enrich themselves, continue to learn relevant knowledge, and ensure their own professionalism, so as to realize the promotion of ecological technology and the overall planning of land remediation and In-depth links to special planning.

4.4. Strengthen the Awareness of Ecological Management.

Land remediation work will have an impact on the surrounding natural environment, which may change the soil, air quality and water sources in the remediation area, resulting in a disruption of the natural balance. Therefore, in order to reduce the adverse impact of land consolidation work on the ecological environment, when carrying out land consolidation, it is necessary to formulate sound, scientific and reasonable land consolidation based on the concept of harmonious development of the ecological environment and human beings, combined with the actual situation of the consolidation area. options and consider issues from the perspective of the integrity of the entire ecosystem. For example, by building a national natural environment protection platform, we can first plan through its macro natural environment, and then remediate it according to different requirements. If it belongs to an urban area, then we can ensure that urban planning is reasonable according to the characteristics of the city. , to maximize the diversity of landscapes to build a good ecological

space; first, play the role of centralized land management, strengthen the large-scale production capacity of the land, and then optimize the function of the ecological environment, so as to realize the specific operation of land management and improve land management. targeted.

5. Summary

The fundamental guarantee of national food security lies in arable land, which is the foundation of human survival and the most precious resource. At present, China's economy has entered a period of rapid development. However, the management and protection of the quantity and quality of arable land is still in its infancy. As the construction of new urbanization and industrialization increases year by year, the reserve resources of arable land continue to decrease, the contradiction between man and land is prominent, and the situation of arable land protection is severe. At the same time, due to the improper development and utilization of human beings in the construction process, the land pollution is becoming more and more serious, and the ecological destruction phenomenon occurs frequently, which seriously threatens the social and economic benefits and people's environmental safety. However, land consolidation is an important means to supplement cultivated land, and it has a long-term impact and affects the overall situation. It is a major measure that benefits the country and the people.

References

- [1] Arvo Vitikainen. An Overview of Land Consolidation in Europe[J]. Nordic Journal of Surveying & Real Estate Research, 2004, 1(1).
- [2] Li Tian and Xu Guo and Wei Yin. From urban sprawl to land consolidation in suburban Shanghai under the backdrop of increasing versus decreasing balance policy: A perspective of property rights transfer[J]. Urban Studies, 2017, 54(4): 878-896.
- [3] Zhengfeng Zhang and Jing Liu and Xiaokun Gu. Reduction of industrial land beyond Urban Development Boundary in Shanghai: Differences in policy responses and impact on towns and villages[J]. Land Use Policy, 2019, 82: 620-630.
- [4] Li Guangyu, Zhang Maoxin, Wu Cifang Agricultural land consolidation impacted edaphic microbial community dynamics and assembly in China a case study from Zhejiang Province[J] Catena, 2021, 205.