

Research on Agricultural Modernization of Agricultural Reclamation under the Background of Rural Revitalization

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Abstract

Agricultural reclamation, founded in the 1950s, has always been an important economic and social system in my country and an important part of China's rural economic development. It has always been the top priority of my country's agricultural economic development. Therefore, the development of reclamation areas has always been a social Hot spots of attention. Agriculture, rural areas and farmers have always been major issues related to the national economy and people's livelihood. The rural revitalization strategy is an effective strategy for this fundamental problem. Conscientiously implement the spirit of the 19th National Congress of the Communist Party of China, implement the rural revitalization strategy, speed up the process of agricultural modernization in agricultural reclamation areas, adjust and optimize agricultural production methods, and promote the deep integration of modern industries in the agricultural reclamation area. The premise of rural revitalization is industrial revitalization, and agricultural modernization is the foundation of industrial revitalization. Industrial revitalization is conducive to the accumulation of a large number of talents, materials and other elements in the reclamation area. my country's agricultural reclamation areas are the focus of my country's agricultural economic development, and also an important force on the road of my country's agricultural modernization. The rural revitalization strategy puts forward new requirements for the development of agricultural modernization. Therefore, this paper explores the agricultural modernization construction in agricultural reclamation areas from the perspective of rural revitalization.

Keywords

Rural Revitalization; Agricultural Modernization; Industrial Revitalization; Agricultural Reclamation.

1. Introduction

The 19th National Congress of the Communist Party of China (CPC) proposed the implementation of rural revitalization strategy for the first time, and established the 20-word general policy of "thriving industry, livable ecology, civilized rural customs, effective governance and rich life" [1]. It guided the work of "agriculture, rural areas and farmers" with Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era. My country's agricultural reclamation is an important part of my country's agricultural development, and it is also an important force for my country's agricultural modernization. Since the establishment of the agricultural reclamation, several generations of agricultural reclamation people have adhered to the spirit of "hard work and courage to open up", and have made unremitting efforts and made great achievements on the road of agricultural modernization in the reclamation area. The agricultural reclamation area is an important supply area for the country's grain, and it is committed to solving the problem of the country's grain supply.

2. New Requirements for Agricultural Modernization of Agricultural Reclamation under the Background of Rural Revitalization Strategy

A widely cited concept of agricultural modernization is "arming agriculture with modern science and technology, developing agriculture with advanced scientific means, operating agriculture with scientific management means and methods, and realizing the process of transforming from traditional agriculture to modern agriculture." Agricultural modernization is a process of comprehensively using various means, rationally allocating various resources, continuously improving agricultural production efficiency, and continuously improving production output and quality. The author believes that the process of agricultural modernization is a process of lengthening the industrial chain, a process of integrating the agricultural production of the primary industry with the processing of agricultural products in the secondary industry and the sale and service of agricultural products in the tertiary industry.

2.1. A New Type of Industry with Integrated Development of Primary, Secondary and Tertiary Industries

Agricultural development shows the penetration and integration of science and technology into agricultural production, and new types of agriculture such as tourism agriculture, circular agriculture, biological agriculture, and information agriculture are widely infiltrated in western developed countries. Agricultural modernization is a process of comprehensively utilizing various production factors, accelerating the transformation of industrial structure and continuously optimizing industrial functions. This process requires the coordinated development of agriculture, industry and service industry, so that the agricultural industry develops in a high-end direction, thereby promoting the optimization and upgrading of the agricultural industry. In the process of agricultural modernization, in addition to agriculture, the elements of the secondary and tertiary industries continue to enter agricultural production, especially the entry of science and technology and changes in production means have a great impact on the development of agricultural modernization.

In the context of the rural revitalization strategy, the integrated development of primary, secondary and tertiary industries is an important way to promote industrial revitalization in reclamation areas. Industrial revitalization requires the integration of agriculture, industry and service industries, such as multi-industry integrated development forms such as tourism agriculture with characteristics of reclamation areas, circular agriculture, and deep processing of agricultural products, which prolongs the industrial chain of agricultural products and continuously increases farmers' income. With the help of big data and new technologies, we will promote the integrated development of the primary, secondary and tertiary industries in the reclamation area, expand the business entities, and innovate agricultural production methods. Build a bridge between agriculture and secondary and tertiary industries, develop innovative agriculture, extend the agricultural industry chain and increase the value of the agricultural industry.

2.2. Modern Agriculture with a High Level of Innovation

In this era of rapid development of information technology, China's traditional agriculture is also moving toward modernization using modern science, technology, and industry to improve agricultural production [2]. Modern agriculture needs technological innovation, and the foundation of technological innovation is technological innovation. Since the 19th National Congress of the Communist Party of China, the rural revitalization strategy has integrated the concept of scientific and technological innovation into the development of agriculture and rural areas. Under the background of rural revitalization, the development of agricultural industry has higher requirements for agricultural modernization. Agricultural science and technology focus on the development of the Internet in the context of biotechnology and big data. The

technical conditions of agricultural technological innovation have a positive impact on the development of agricultural economy.

My country is a big agricultural country, and the rapid development of agriculture plays a key role in the country's comprehensive strength. Agricultural technological innovation is the source of strength for agricultural economic development. The level of agricultural innovation promotes the transition from traditional agriculture to modern agriculture. An important source of agricultural economic growth is the use of agricultural technological innovation and related factor inputs to improve agricultural productivity. Accelerating the investment in agricultural science and technology and improving the level of agricultural science and technology will help my country to quickly realize the building of a moderately prosperous society in an all-round way. Agricultural science and technology innovation is of great significance to agricultural modernization and the sustainable and healthy development of agricultural industry. Develop high-tech agricultural technology and optimize the agricultural industrial structure to increase the sustainable growth capacity of the agricultural economy and the long-term profitability of agriculture. Agriculture is the foundation of the national economy, and the level of agricultural economic development directly affects a country's international competitiveness. Therefore, it is extremely important to improve the level of agricultural innovation and enhance the international competitiveness of my country's agriculture.

2.3. Modern Agriculture with New Management Entities

With the continuous development of my country's agricultural technology and agricultural economy, some new types of agricultural management entities have emerged in recent years, including: farmers' cooperatives, family farms, large professional households and a new type of agricultural management entities based on agricultural enterprises. Compared with my country's small-scale farmers' management mode, today's new agricultural entities have obvious advantages in terms of agricultural management scale, agricultural production efficiency, and agricultural management capabilities. my country's new agricultural business entities have been proposed in recent years. They are formed based on land transfer and are directly engaged in the production and operation of the primary industry. Agricultural economic organizations mainly include large professional households, agricultural enterprises, family farms and farmers' cooperatives. Accelerate the development of various forms of operation, expand the scale of operation, cultivate new types of agricultural management entities, and build a new type of agricultural management mechanism that combines family-run, enterprise and collective management. Develop various forms of business entities, and strive to achieve the organic integration of farmers and modern agriculture.

The basis for the development of my country's agricultural modernization is to cultivate new agricultural management entities. Agricultural modernization has various characteristics such as scale, marketization, intensification, and informatization. Compared with traditional small farmers, large-scale agricultural business entities such as farmers' cooperative organizations, family farms, large professional households and agricultural enterprises are more in line with my country's requirements for the development of modern agriculture. The new-type agricultural management entities are more likely to accept modern agricultural science and technology and new-type agricultural production methods, thereby more effectively improving the efficiency of agricultural production in my country. Compared with the traditional small farmers' production and management methods, the new agricultural management entities can better cope with the cluster changes in the market, improve farmers' ability to resist agricultural management risks, and improve farmers' market competitiveness. Accelerate the cultivation of new agricultural business entities, and improve the specialization of agricultural production and the efficiency of agricultural production.

3. Basic Situation of Agricultural Modernization of Farm Reclamation

The agricultural reclamation area has fully seized the opportunity, and the reclamation area has been conscientiously implementing the party's policies and guidelines in agriculture and rural areas, and has continuously promoted agricultural modernization and achieved remarkable results under the guiding ideology of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era. The reclamation area is a large-scale agricultural enterprise and an important commercial grain planting base in my country. The objective requirement of my country's agricultural modernization development is to realize the agricultural modernization development of the reclamation area, which is also the inevitable trend of the agricultural development of the reclamation area.

Supply-side structural reforms promote the modernization of agriculture in reclamation areas. Closely focus on the relationship between market supply and demand, firmly grasp the structural reform of the agricultural supply side, and take improving agricultural labor productivity and agricultural competitiveness as the main task of developing modern agriculture in reclamation areas. Strengthen the innovation of agricultural production methods, rationally allocate various agricultural resources, and accelerate the improvement of the competitiveness and influence of agricultural modernization in agricultural reclamation areas.

3.1. Adjust and Optimize Product Industry Structure

In order to meet the market demand of agricultural products, vigorously develop green, safe and High-quality agricultural products, and improve the quality of agricultural products is the basis for optimizing the industrial structure of agricultural products. Combined with the local characteristic culture of the agricultural reclamation area, we should develop advantageous and characteristic industries, develop High-quality characteristic agricultural products, and improve the modernization level of agricultural reclamation. Create brand characteristics of agricultural products, develop new modern industries that combine agriculture with industry and service industries, optimize the structure of agricultural industries, develop agricultural product markets with brands, drive agriculture with secondary and tertiary industries, and achieve breakthroughs in the industrialization of agricultural reclamation areas. Driven by the Internet media, online and offline linkage activities were launched with agricultural products in the reclamation area as the leading factor.

3.2. Vigorously Develop Agricultural Service Industry

A series of effective models with service innovation as the core can promote the development of modern agriculture [3]. Combined with the actual situation in the agricultural market, vigorously develop the agricultural service industry, set up an agricultural service company in the reclamation area, and carry out a unified specialization, systematization, and large-scale strategy. Focusing on capital, materials and technology, enriching the business model of the agricultural service industry. The establishment and promotion of the agricultural product brand with its own characteristics in the reclamation area has achieved the goal of agricultural production in colleges and universities, and gradually shifted to the direction of agricultural industrialization. The reclamation area has accelerated the transformation of agricultural production methods, introduced advanced agricultural production technology and equipment, and improved agricultural mechanization. Drive the development of agricultural product processing industry and agricultural product sales service staff, and form a one-stop characteristic industry in the reclamation area. The reclamation area is committed to developing green, safe and pollution-free agricultural product bases and developing deep processing of agricultural and sideline products. Relying on local natural resources for many years, the reclamation area has vigorously developed the deep processing industry of agricultural and sideline products, and vigorously developed the deep processing of

agricultural products through the support of policies, funds and technologies in accordance with the idea of "leading leaders, industrial support, optimized structure, and cluster development".

3.3. Steady Implementation of the "Going out" Strategy

Give full play to the unique advantages of the reclamation area, seize the opportunity, adhere to the implementation of the "going out" agricultural development strategy, and open space for agricultural development. Actively carry out an opening-up model based on cooperation and joint ventures. Develop domestic and international exchanges and cooperation in the characteristic agricultural products industry in the reclamation area. Cross-regional development of agricultural geographical environment, comprehensive utilization of local agricultural resources, give full play to the comparative advantages of local agriculture. Strengthen international agricultural exchanges and cooperation, introduce agricultural science and technology from advanced countries, and continuously improve my country's agricultural management level and technical equipment. Grasp the development strategy of the reclamation area, increase investment promotion, consolidate new agricultural production methods, and increase agricultural development growth points.

4. Analysis of the Problems and Causes in Promoting the Modernization of Agriculture and Reclamation

The agricultural reclamation areas are at the forefront of the country in many aspects such as agricultural economic development and agricultural production and operation, and have made important contributions to the development of my country's agricultural modernization. With the rapid economic development, agricultural reclamation has also encountered many difficulties in the process of operation and promotion. At present, most of China's places are still intensive farming mode, small agricultural products, unreasonable structure, most agricultural production is still in the low-level stage, limited investment in science and technology, low productivity, poor product quality, and imperfect rural agricultural development [4]. This is mainly manifested in four aspects: first, the agricultural infrastructure is not perfect; second, the level of agricultural industrialization is not high; third, the agricultural development lacks stamina; fourth, the risk of agricultural reclamation management is intensified.

4.1. Poor Agricultural Infrastructure

Due to the historical problems left over by poverty in the agricultural reclamation area, the rural agricultural infrastructure in the reclamation area is incomplete, and the relatively backward infrastructure of farmland water conservancy construction is common, and the technical equipment is low. The rural transportation, water conservancy, electric power and agricultural machinery facilities in the reclamation area are not complete. The system functions of mechanical facilities, in-store equipment, basic information and e-commerce services serving new agricultural production are not strong. The agricultural supporting infrastructure is not perfect, which makes it difficult to improve the comprehensive agricultural development capacity of the reclamation area.

The premise of agricultural modernization is the improvement of agricultural infrastructure. Without complete and advanced infrastructure as the support for agricultural development, it is difficult to realize agricultural modernization. For a long time, our country ignored the importance of agricultural infrastructure. For example, the problems of outdated and aging farmland water conservancy facilities in the reclamation area are serious, the introduction of advanced agricultural technologies is not in place, and the degree of agricultural mechanization is low. The agricultural infrastructure and material and technical conditions in the reclamation

area are poor, the investment in agricultural infrastructure is insufficient, and the basic implementation equipment is obviously unreasonable, so that the construction and structure of agricultural infrastructure are inconsistent, which seriously affects the sustainable development of agriculture.

4.2. The Level of Agricultural Industrialization is not High

4.2.1. The Scientific and Cultural Quality of the Agricultural Labor Force is not High

Due to the unbalanced distribution of educational resources, the rural educational concepts and teaching facilities in the reclamation areas are seriously backward, the high dropout rate in rural areas and the lack of rural teacher resources are extremely serious. Due to the backward education, it is difficult to promote the agricultural blood deficiency technology in agricultural production. Such a series of problems have led to the low income of farmers, medical care, pension and other issues cannot be guaranteed. Along with problems such as excessive births, the rural areas have fallen into new poverty.

4.2.2. Weak Awareness of Sustainable Development

The Central Document No. 1 has repeatedly emphasized that the development of agriculture should take the road of sustainable development and carry out agricultural production activities based on protecting the ecological environment. Agriculture is the foundation of my country's national economy, and it is difficult to get rid of the long-term backward traditional agricultural production mode, coupled with the current situation of agricultural development with more people and less land, it is difficult to develop a sustainable development strategy. Some agricultural producers only seek immediate interests and demand a large amount of land resources, ignoring the importance of protecting agricultural resources. For a long time, agricultural production has unilaterally pursued yield and ignored quality. In order to increase the multiple cropping index, chemical fertilizers and pesticides are abused, resulting in a serious ecological imbalance. In addition, there are many wastes in the process of agricultural product processing, which leads to the emergence of problems such as large consumption of agricultural resources and low resource utilization. Therefore, it is the general trend to change the mode of agricultural production and take the sustainable development path of large-scale and intensive production.

4.2.3. Lack of Capital Investment

The investment of capital is very important in the development of agricultural production and agricultural science and technology innovation. The investment of agricultural funds is the cornerstone of agricultural development in reclamation areas and the key to improving the overall level of agricultural industrialization. Without sufficient funds, it is impossible to meet the expenses required for agricultural mechanization production. As far as the current agricultural production situation in the reclamation area is concerned, the government has increased its capital investment in agriculture, but the investment intensity and the total amount of capital account for a small proportion. In some areas, the financial lending service system is not perfect, and even financial institutions are unwilling to lend money to farmers. Due to the scattered farmers, most of them are agricultural production methods produced by small farmers, the amount of farmers' loans is small, and the loan procedures are cumbersome, etc., it is difficult for small farmers to get loans from banks. Lack of financial policy support, financial drumming is difficult to support the production of farmers in the reclamation area.

4.2.4. The Industrial Structure of the Reclamation Area is Unreasonable

Agricultural industry the agricultural industry structure is unreasonable, and the development of characteristic agriculture in the reclamation area is not prominent enough. Constrained by the traditional agricultural production mode, the overall process of my country's agricultural industrial structure adjustment is restricted. Under the condition of traditional agricultural

technology and equipment, the possibility of improving the agricultural production efficiency per unit area is getting smaller and smaller. In view of the unreasonable problems in the agricultural industrial structure of the reclamation area, corresponding improvement measures are put forward, such as changing the agricultural industrial management concept, strengthening the agricultural market mechanism, improving the agricultural management system, improving the propaganda platform, and improving the level of agricultural science and technology innovation.

4.3. Agricultural Development is Weak

First, there is a serious shortage of rural talents. With the continuous acceleration of agricultural modernization, urbanization, a large number of rural laborers have been transferred to cities, and the problem of farmers' non-agriculturization has become more serious. The number of migrant workers in rural areas continues to increase, and the quality of agricultural labor force is generally low, which directly affects the application of science and technology in the agricultural field. Second, the reform of agriculture and rural areas is insufficient. Agricultural incentive policies and agricultural infrastructure are not perfect, and agricultural investment in reclamation areas is insufficient. The implementation of land transfer policy is not in place, and the quality of land transfer is not high. The degree of rural reform is not high, and the credit and financial system is not sound. The confirmation and registration of land rights is not strong enough, and the enthusiasm of farmers is not high. Third, the construction of rural cooperative organizations, service organizations, and management organizations needs to be improved.

4.4. The Aggravation of Agricultural Reclamation Management Risks

On the one hand, the advancement of the urbanization process has intensified the risks of agricultural management, and on the other hand, it has increased the social burden of agricultural reclamation. In the process of urbanization in agricultural reclamation areas, problems such as farm urbanization and farmers' non-agriculturization are prone to occur. Some farmers have completely moved to cities and towns to engage in non-agricultural industries, resulting in a reduction in the labor force for agricultural production. There are still some farmers who stay in the countryside and engage in non-agricultural industries to varying degrees while engaged in agricultural production. The farmers will be attracted by the high income of the secondary and tertiary industries, which will lead to the distraction of their energy in agricultural production. Farmers pay too much attention to the production and operation activities of the secondary and tertiary industries, which will lead to many negative phenomena such as stagnation of agricultural development, low agricultural production efficiency, and waste of land resources.

5. Path Selection for Promoting Agricultural Modernization of Farm Reclamation under the Background of Rural Revitalization Strategy

Since the reform and opening, my country's national economy has developed rapidly, people's living standards have improved rapidly, and comprehensive national strength has been continuously enhanced. The overall living standard of the people has reached a moderately prosperous level, and by 2020 a moderately prosperous society will be fully realized. The "Three Rural Issues" has always been a major issue related to our country's people's livelihood, and it is the primary issue restricting our country's modernization. The key to national modernization is to solve the agricultural modernization. Agricultural modernization is not only the improvement of agricultural production efficiency, but also the improvement of agricultural production quality. The starting point of choosing the implementation path of agricultural modernization is agricultural mechanization, scale and benefit.

5.1. Comprehensively Deepen Rural Reforms and Promote Innovation in Agricultural Systems and Mechanisms

Comprehensively deepen the reform of the agricultural system innovation mechanism in the reclamation area, and steadily advance the reform of the basic rural management mechanism. The premise of realizing agricultural modernization is to speed up the transfer of surplus agricultural labor to non-agricultural industries and realize full employment of farmers. The transfer of my country's labor force mainly depends on the absorption of agricultural labor by township enterprises, which requires enterprises to adjust industrial structure, adjust regional structure, and improve agricultural technology. Attract full employment of labor force and deep processing of agricultural products, adjust the development strategies of pre-production, production and post-production of agriculture, and formulate the direction of reform, improve the competitiveness of agricultural products in the reclamation area, and improve the operating efficiency of agricultural enterprises. At the same time, it is necessary to adjust the regional layout of township enterprises to help local laborers find employment and improve farmers' employability. Reasonable opportunities to transfer surplus rural labor to cities and transform agricultural industrial structure. Reduce agricultural labor productivity, expand the use area of agricultural machinery, improve labor productivity, reduce agricultural labor costs, expand the scale of agricultural production and improve the quality of agricultural products.

The reclamation area should strictly implement the scientific concept of development in the agricultural process, take the reclamation area as a new agricultural modernization as the goal of agricultural production, speed up the transformation of agricultural production methods, and improve the competitiveness of agricultural reclamation products as the standard, to promote the sustainable development of agricultural reclamation and increase the income of farmers. In the process of developing agricultural modernization, through the leadership of "big enterprises" and the model promoted by agricultural grass-roots cooperative organizations, a group of agricultural operating companies can be established to integrate industries that are suitable for centralized management. You can try agricultural grass-roots cooperative organizations and collectively undertake Mechanism of agricultural management risk. Realize agricultural specialization, intensification, mechanization and large-scale production in the reclamation area through large-scale operation and collective cooperation.

5.2. Enhance Agricultural Production Capacity and Promote High-quality Agricultural Development

The foundation of promoting agricultural modernization is to consolidate agricultural infrastructure, which is the support of agricultural modernization. Improve the small-scale water conservancy projects and farmland infrastructure in the reclamation area, and improve the agricultural farming environment on the basis. Increase agricultural productive machinery and equipment, and improve the construction of agricultural supply system. It is necessary to increase investment in agricultural production, accelerate the pace of construction, strive to improve the comprehensive capacity of agricultural production, to change the situation of imperfect agricultural infrastructure as soon as possible.

Accelerate the construction of a modern agricultural production system and enhance agricultural production capacity. Providing the agricultural status of the reclamation area, comprehensively improving the agricultural production capacity of the reclamation area, and rapidly promoting the agricultural modernization are all inseparable from the construction of the modern agricultural industry system. Modern agricultural cooperation is to realize the coordinated development of all aspects of agriculture through the connection of interests in the process of agricultural production, processing and sales. To build a modernized agricultural industry with characteristics of the reclamation area, one is to stabilize grain production, and the other is to build modern High-quality agricultural products. Improve the quality of

agricultural products and enhance the agricultural production capacity through the construction of a modernized system.

5.3. Give Full Play to the Role of Policy Funding

The agricultural modernization of agricultural reclamation is a very serious task and faces many problems. The government needs to give full play to the leading role in the process of agricultural modernization in the reclamation area to coordinate various forces and allocate various resources to promote agricultural modernization. Since the reform and opening, the government has accelerated agricultural development, and has taken active measures in the reform of the rural land system and rural infrastructure, effectively promoting the process of agricultural modernization. Faced with the background of the new era, the government should actively adjust and give full play to its leading role.

In the context of rural revitalization, the government has proposed many policies and promoted many effective policies to realize agricultural modernization. The government improves agricultural laws and regulations to provide institutional guarantees for agricultural development. The "Strategic Plan for Rural Revitalization (2018-2022)" details the rural agricultural management system, agricultural operation mechanism, and agricultural support and protection system. Return to play the government's "visible" hand and the market's "invisible" hand to make strong regulation and control of agricultural economic development. The government should also increase agricultural investment, expand the inclination of agricultural development funds in reclamation areas, and make up for the shortcomings of agricultural funds in reclamation areas. On the one hand, it is necessary to increase investment in the implementation of agricultural reclamation and agricultural infrastructure, and on the other hand, increase investment in agricultural technology and agricultural machinery and equipment. The basis for improving the level of agricultural science and technology is the popularization of agricultural mechanization. The government has increased subsidies for farmers to purchase large-scale agricultural machinery and equipment to increase farmers' purchasing desire and purchasing power, to improve the mechanization level of agricultural production.

5.4. Accelerate Agricultural Transformation and Upgrading

Agricultural marketization is the only way for agricultural modernization, and adhere to the role of the market mechanism in the rational allocation of agricultural resources. Improving the competitiveness of agricultural products in reclamation areas requires not only government support, but also the transformation of enterprises themselves, so that enterprises can promote the modernization of agricultural reclamation. It is mainly reflected in the introduction of a large number of agricultural talents and the acceleration of agricultural transformation. Provide agricultural technology and talent support.

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