

Research on Farmland Water Conservancy Construction

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Abstract: With the continuous development of science and technology in China and the improvement of people's living standards, the government pays more and more attention to the development of rural economy. In all kinds of agricultural production activities, the importance of farmland water conservancy project construction is self-evident, which can not only effectively carry out flood control and disaster relief, but also distribute water resources timely and effectively, and ensure the normal progress of farmland irrigation. This is a favorable guarantee for farmers' bumper harvest. However, there are certain problems in the construction of farmland water conservancy projects. This paper mainly analyzes the construction and management of small-scale farmland water conservancy projects in the new period, and discusses the feasible countermeasures to promote the water conservancy construction and management level of small farmland.

Keywords: farmland water conservancy; importance; construction status and problems; development countermeasures

Through the active construction of farmland water conservancy projects, we can ensure the high yield of farmland. In the specific construction of water conservancy projects, it involves a lot of contents, such as soil improvement, land leveling, repairing field irrigation and drainage channels, building roads and so on. Its fundamental purpose is to achieve the improvement and adjustment of water conservancy conditions in farmland areas through these means, so as to ensure the normal development of agricultural production.

1.The importance of irrigation and water conservancy construction

After years of continuous development, agriculture has provided a lot of agricultural production resources for China, but its rapid development cannot be separated from the construction of irrigation and water conservancy projects. It can be said that irrigation and water conservancy projects are the lifeblood of agricultural development. Based on this theoretical analysis, the Chinese government and relevant functional departments should constantly strengthen the construction of irrigation and water conservancy projects, constantly improve and improve the level of agricultural production through their functions and functions, and then improve the living standard of Chinese farmers [1]. For agriculture, with the perfect water conservancy facilities, such as the water conservancy facilities in the area, people can expand the fields or level the land, improve the soil and repair the field irrigation and drainage system, which depend on the function of irrigation and water conservancy projects. Only in this way can we ensure the implementation of various advanced technologies and thus further improve the overall situation of farmland. Although its function is powerful, but irrigation and water conservancy construction is an infrastructure construction, daily need to invest a lot of funds. However, the actual effect is slow to work, so many leaders will ignore its importance [2]. In view of this situation, the relevant units should constantly strengthen the management in the daily work, in order to improve the understanding of the relevant leaders. China's irrigation and water conservancy projects are widely distributed, and there are many small irrigation and water conservancy projects, and their construction is closely related to all farmers, so a large number of labor force to participate.

2.Problems faced in the process of irrigation and water conservancy construction

2.1 The mechanism in the irrigation and water conservancy project is not perfect

In the new era, agriculture develops rapidly, and the development of agriculture requires China to have various external conditions such as agricultural machinery and equipment, agricultural technology, and irrigation and water conservancy,

among which irrigation and water conservancy is the most basic external condition. The construction of irrigation and water conservancy project is a project benefiting the people. This project is aimed at the benefit of the people and the people, but all these should be based on a sound construction mechanism. A sound mechanism is the premise of the work, is the guiding direction of the work, so, a sound mechanism is the foundation, each work should be established a sound mechanism. From the current situation, the construction of irrigation and water conservancy project still lacks a sound mechanism, which hinders the normal work of irrigation and water conservancy construction, hindering the realization of the original purpose of irrigation and water conservancy project construction [3]. Therefore, in order to realize the original purpose of China's water conservancy project construction work as soon as possible, we should first establish and improve the construction mechanism of irrigation and water conservancy project.

2.2 The work of irrigation and water conservancy staff cannot be fully implemented

In the process of irrigation water conservancy project construction, the most important is the staff of irrigation water conservancy. Departments of the staff constitute the whole farmland water conservancy institutions, but in farmland water conservancy institutions, most of the staff are the financial staff, because the financial staff salary fixed, wages is not high, so lead to most of the staff work enthusiasm is not high, and directly lead to the work cannot finish well, so that the farmland water conservancy work loopholes, and the destruction of farmland water conservancy work mechanism of a series of domino effect, will eventually make the farmland water conservancy project paralysis [4]. Therefore, in order to avoid the occurrence of this vicious circle, we must start from the staff, stimulate the enthusiasm of the staff, and implement the work of each staff to the actual, to achieve the ultimate goal of irrigation and water conservancy project construction.

2.3 Lack of science and technology in irrigation and water conservancy projects

Irrigation and water conservancy projects belong to the scientific and technological work in nature. For example, farmland irrigation includes drip irrigation, flood irrigation and other irrigation methods. In different seasons, different irrigation methods are implemented for the land in different regions. However, for the extremely hot and extremely cold special geological land, there is no suitable irrigation method, which requires vigorously developing science and technology, so that science and technology to solve these problems, so that the construction of irrigation and water conservancy can get considerable development.

3 development countermeasure

3.1 We will make scientific planning and accelerate the construction of irrigation and water conservancy projects with high standards

Reasonable planning, the construction of high-standard drainage and irrigation stations. Perfect waterlogging control and irrigation facilities can effectively improve the ability to prevent flood and drought disasters, and is the basis for ensuring the development of agricultural production and food security. Vigorously carry out the construction of farmland water channels, achieve high specifications, good quality, at the same time, combined with field regulation, reasonable planning, promote drainage and irrigation conducive to farmland water system smooth [5]. In combination with the construction of drainage and irrigation stations and drainage channels, full efforts will be made to promote the reinforcement of dikes and build high-standard drainage stations, so as to form information management and ensure the safety of people's lives and property. Increase the dredging of river channels and ponds, ensure the smooth water collection area and river flow, as well as ensure irrigation water intake and flood discharge, and make the rural water environment and ecology in a good state.

3.2 Expand financing channels, increase investment in irrigation and water conservancy construction

In the process of building a socialist market economy in an all-round way, the government has limited financial resources, and it must rely on the strength of the vast number of farmers and give full play to their enthusiasm and subjective initiative. The government should actively establish a good institutional incentive mechanism, and attract more farmers, enterprises or associations to participate in the construction of water conservancy facilities through interest guidance to [6]. Earnestly implement the "who investment, who construction, who management, who benefit" policy principle, formulate corresponding laws and regulations, policies, guarantee the rural collective will be a certain proportion of accumulated funds for irrigation and water conservancy construction, stimulate their investment work-relief in the enthusiasm of the construction, guide the farmers and the social from all walks of life to increase investment in irrigation and water conservancy, widely encourage, absorb social capital for water conservancy, efforts to promote investment subject diversification, ensure sustained, rapid and healthy development of water conservancy.

3.3 Popularize water-saving irrigation technology, and combine farmland water conservancy with water-saving project construction

Dry field irrigation adopts pipeline sprinkler irrigation, which has the advantages of less investment, convenient use, low water pressure requirements and easy management. We will actively develop drip irrigation and micro-irrigation in greenhouses to realize drip irrigation under greenhouse film. Do a good job in the channel, river slurry prevention and control project, further improve the utilization rate of water resources [7]. At the same time, economic compensation policies and management systems and implementation plans for planned and saved water-saving irrigation should be studied and formulated as soon as possible, so as to strengthen the awareness of water-saving of water users and improve the enthusiasm of farmers for water-saving water.

3.4 We will accelerate the reform of the water pipe system and form a complete set of reasonable management and protection mechanisms

Establish a long-term management and protection mechanism for irrigation and water conservancy project facilities to ensure the normal operation of the project and give full play to its due benefits. Built of farmland water conservancy project should approval registration, timely ownership of small water conservancy projects, use authority card, ownership and the specific management principal sign the responsibility of the management, clear engineering management responsibility, management scope, the provisions of the owner and the management subject of the rights, obligations and liability for breach of contract [8], water conservancy project daily management system, the formation of water conservancy construction property rights clear, rolling the development of the new mechanism.

4 epilogue; peroration

In short, agriculture is the foundation of economic development and social development, and irrigation and water conservancy is the lifeblood of agriculture. The development of irrigation and water conservancy is not only a cause in line with China's national conditions, but also irrigation and water conservancy is related to China's social stability. China's irrigation and water conservancy infrastructure is still in disrepair, functional degradation, and governments at all levels do not pay attention to the phenomenon. In this case, we should increase the investment of farmland water conservancy, establish and improve the specific management and protection system and implementation rules, regular, step by step to the management personnel training and further study, at the same time to pay attention to the scientific research of irrigation and water conservancy. Look at the overall situation, long-term, to build a new socialist countryside.

reference documentation

- [1] Hu Xueliang, Li Yanni. Management and construction status and countermeasures of small irrigation and water conservancy projects in Hunan Province [J]. China Rural Water Conservancy and Hydropower, 2008 (10): 58-60.
- [2] Chen Zhiguo. Exploration of the construction and management of small

irrigation and water conservancy projects [J]. Flood control and Drought relief in China, 2011 (01): 70-72.

[3] Cao Pengyu. Discussion on promoting the construction of small irrigation and water conservancy facilities in the new period of rural reform: Take Henan Province as an example [J]. Agricultural economic problems, 2009 (9): 87-92.

[4] China Association for Science and Technology for the Elderly. Problems and suggestions existing in irrigation and water conservancy construction in China [J]. China Water Conservancy, 2009 (11): 21-22.

[5] Lu Ang, Li Yufang. Considering the current dilemma of rural public goods supply from the investment of irrigation and water conservancy construction: Analysis and thinking on the current situation of irrigation and water conservancy investment in Guangdong Province [J]. Rural Economy, 2007 (11): 22-25.

[6] Wen Liping. Discussion on the public welfare of small irrigation and water conservancy projects: an analysis of the cases of irrigation and water conservancy projects built by private funds [J]. China rural Water conservancy and Hydropower, 2007 (6): 53-54.

[7] Problems and countermeasures existing in irrigation and water conservancy construction. Modern Agricultural Science and Technology, 2015 (21). [8] Problems and countermeasures existing in the irrigation and water conservancy construction in Hebei Province. Rural Economy and Science and Technology, 2014 (06).