

# Study on the Compensation Mechanism of Cultivated Land Protection in the Main Grain-producing Areas

## -- Based on the Survey of Farmers in Henan Province

Sijia Yang\*, Yutong Wang and Jianshu Ye

School of Finance and Public Management, Anhui University of Finance and Economics, Anhui, China

### Abstract

"Hong Fan's eight policies, food is the first." Solving the problem of food for more than one billion people has always been the top priority of our Party in power. Cultivated land is the most precious natural resource, which is related to China's food security, national economy and people's livelihood. Strengthening the protection of cultivated land in the main grain-producing areas is the main carrier of ensuring food security. At this stage, China's economic development has entered a new normal, the process of new industrialization and urbanization has accelerated, and the reserve resources of cultivated land have continued to decrease. The protection of cultivated land is facing multiple pressures. The Opinions of the Central Committee of the Communist Party of China and the State Council on Strengthening the Protection of Cultivated Land and Improving the Balance of Occupation and Compensation issued in January 2017 requires that the strictest farmland protection system be adhered to, and the establishment of farmland protection compensation mechanism is an important measure to implement the current farmland protection policy, and is the core content of establishing a long-term mechanism for farmland protection. At present, there are 28 provinces in China that have carried out compensation and incentive work for farmland protection at the provincial level. Due to the differences in social and economic development conditions, the focus and difficulties of farmland protection are also different. How to position the farmland protection compensation system? How to explore the multiple compensation mode of cultivated land protection? How to build a long-term compensation and incentive mechanism for farmland protection in major grain-producing areas? All the above questions deserve in-depth investigation and study. This project takes Henan Province, the main grain-producing region of China, as the research area and carries out field research, deeply investigates the implementation and development status of the grain protection compensation mechanism in Henan Province, analyzes the current practical problems and obstacles in the field promotion of the grain protection compensation mechanism in Henan Province, and combines the actual situation of Henan Province to explore a long-term farmland protection compensation incentive mechanism, with a view to improving the comprehensive grain production capacity To provide useful reference for ensuring national food security.

### Keywords

Farmland Protection; Farmland Protection Subsidies; Policy Recommendations.

## 1. Introduction

### 1.1. Research Background

#### 1.1.1. Research Meaning

The country is based on the people, and the people are based on food; The General Secretary attached great importance to food production and security, put forward a new strategy for national food security in the new era, and stressed the need to follow the path of food security with Chinese characteristics.

Food security is of great significance to China, mainly reflected in the following points: Ensuring food production is the top priority of ensuring food security; Agriculture is still a weak link in the national economy. To solve the problem of food production is to solve the problem of economic development; Adjust measures to local conditions and make full use of geographical advantages;

Since the reform and opening up, in order to build industrial cities, a large amount of cultivated land has been occupied, resulting in a decline in grain production year by year. Therefore, strengthening grain production and ensuring the effective supply of major agricultural products are of great significance to maintaining China's food security and building a happy China.

Cultivated land is the most precious resource in China, which concerns more than one billion people. It must be protected without loss. In recent years, according to the decision and deployment of the Party Central Committee and the State Council, relevant departments around the country have actively taken measures to strengthen the main responsibility, strictly implement the balance system of occupation and compensation, and strictly abide by the red line of cultivated land. The protection of cultivated land has achieved remarkable results. At present, China's economic development has entered a new normal, the construction of new industrialization and urbanization has been further promoted, the reserve resources of cultivated land have been continuously reduced, and it is increasingly difficult to achieve the balance between the occupation and compensation of cultivated land and the preferential compensation of cultivated land. The incentive and restraint mechanism is not perfect, and the protection of cultivated land is facing multiple pressures.

Adhere to the three bottom lines: the nature of public ownership of land remains unchanged, the red line of cultivated land does not break through, and the interests of farmers are not damaged. Adhere to the strictest cultivated land protection system and the strictest land conservation system, protect the cultivated land like the protection of giant pandas, focus on strengthening the "three in one" protection of the quantity, quality, and ecology of cultivated land, strengthen the protection of cultivated land through control, construction and incentives, and take more effective measures, We should strengthen the standardized management of the balance between the occupation and compensation of cultivated land in accordance with the law, implement the strategy of grain technology reserve, improve the comprehensive production capacity of grain, and ensure the national food security, so as to lay a solid resource foundation for the realization of the "two centenary" goals and the Chinese dream of the great rejuvenation of the Chinese nation.

The establishment of farmland protection compensation mechanism is an important measure to implement the farmland protection policy at present, and is the core content of establishing a long-term mechanism for farmland protection. It is one of China's basic national policies. With the continuous development of China's economy and society, many new situations, new problems and new challenges have emerged in the current policy mechanism.

The 2015 Central Rural Work Conference clearly pointed out that ensuring national food security is the basic bottom line of agricultural reform. It is necessary to maintain grain rations

such as rice and wheat, cultivated land and production capacity, food production in main production areas, especially in core production areas, and ensure basic self-sufficiency and absolute safety of grain rations.

The current research on farmland protection compensation in China mainly focuses on such core issues as "why to compensate", "how much to compensate", "who will compensate", and "how to compensate".

"Why compensation" is to clarify the theoretical basis of farmland protection compensation. At present, the theoretical basis of farmland protection compensation mainly includes externality theory and land development right theory. Based on the cultivated land externality theory, the cultivated land protection compensation is a process of internalization of externality, that is, taking a part of the externality value enjoyed by other social members to compensate for the loss of income of the cultivated land protection subject. The cultivated land externality theory is usually used as the theoretical basis for the cultivated land ecological protection compensation. Since the early 1950s, the right to land development has become an important land property right set up successively in Britain, the United States, France and other countries, and the value of the right to land development has been taken as the standard of economic compensation for farmland protection.

"How much" is how to determine the compensation standard for farmland protection. At present, there are two main views on the calculation of compensation standard for cultivated land protection in academic circles. One view is to calculate the compensation standard of cultivated land protection based on the comprehensive value of cultivated land (economic, ecological and social value), and its essence is to measure the positive externality value of cultivated land. Another view is to calculate the compensation standard of cultivated land protection based on the opportunity cost loss of cultivated land protection. Its essence is to measure the value of cultivated land development right, that is, the highest income of cultivated land abandoned for other purposes in order to protect cultivated land. In addition, the conditional value assessment method is also used to measure the willingness to pay for farmland protection compensation.

"Who will compensate" refers to how to determine the payment subject of farmland protection compensation. At present, according to the principle of "who benefits, who compensates", the surplus and deficit of cultivated land is calculated based on the perspective of food security, and then the payment and compensation areas of cultivated land protection are divided, or according to the ecological functions of cultivated land, the payment/compensation areas of ecological compensation for cultivated land protection are divided through the virtual cultivated land flow pattern.

"How to compensate" means how to build the fund operation mechanism of farmland protection compensation. With regard to the operation mechanism of compensation funds for cultivated land protection, scholars all believe that the compensation mechanism combining vertical and horizontal compensation is an effective way to effectively stimulate the enthusiasm of cultivated land protection subjects and coordinate the interests of cultivated land protection among regions.

### **1.1.2. Research Status and Development Trends Abroad**

The relevant practices of economic compensation for cultivated land protection in foreign countries mainly include the following three forms:

Purchase or transfer of land development rights

The right to non-agricultural development of land is separated from the "property bundle" of cultivated land and is purchased by the government. The owner of cultivated land shall obtain corresponding compensation. The cultivated land must be used for agriculture. Other land ownership other than land development rights can be traded. Non-agricultural development

can only be carried out when the owner of cultivated land repurchases the development right, but the repurchase conditions are very strict.

Admittedly, this method has a remarkable effect, but the government has paid a high fee for it. The high cost has spawned another method: the developer purchases the land development right in the agricultural land reserve and obtains the permission to build higher or more intensive buildings in the land development zone. The government basically does not interfere in the land development right transaction process conducted according to the market mechanism.

#### Tax preference or reduction

The methods of tax reduction on agricultural land in the United States include: the "preferential tax value" of agricultural land, that is, unconditional pure tax reduction; Differential taxation, that is, different proportion of taxes are levied according to the time of agricultural land development; The restrictive agreement is that the holder of agricultural land agrees to retain the agricultural land within the specified period to obtain tax relief, otherwise the tax relief will be returned. Canada imposes a lower asset tax on farmland transactions between farmers. The United Kingdom, Australia, Germany, Sweden and the Netherlands are exempt from property taxes on all cultivated land, and agricultural construction in the United Kingdom is also exempt from taxes.

#### Agricultural subsidies

First, direct subsidies are used to improve the quality of agricultural land and agricultural environment. For example, in the cultivated land protection plan of the United States, the government provides incentives, subsidies or cost-sharing for the protection and utilization of agricultural land that is conducive to environmental protection.

When the EU's environmentally sensitive area project is based on the minimum level of good agricultural practice determined by each member country, the first phase of government subsidies, including price support and agricultural subsidies, will be implemented. If farmers make unremitting efforts to exceed the benchmark level, they can receive more subsidies accordingly.

The other is indirect subsidies, which can reduce agricultural production costs and improve competitiveness through public investment in agricultural land development, infrastructure construction and providing technology or information services to farmers. The United States, Canada, the United Kingdom, South Korea and other countries all have this practice.

## 1.2. Research Objectives and Contents

The main grain-producing areas are the main carriers of achieving food security, which are related to the national economy, people's livelihood and social stability of China. At this stage, China's economic development has entered a new normal, the construction of new industrialization and urbanization has been further promoted, the reserve resources of cultivated land have been continuously reduced, and the protection of cultivated land is facing multiple pressures. The establishment of farmland protection compensation mechanism is an important measure to implement the farmland protection policy, and is the core content of establishing a long-term mechanism for farmland protection.

Due to the great differences in economic and social development conditions, different provinces face different priorities and difficulties in farmland protection. How to position the current protection compensation system? How to fully mobilize the enthusiasm of protection? How to truly adapt to local conditions, take multiple measures at the same time, and explore multiple protection and compensation models? What social problems will be caused by the continuous promotion of farmland protection compensation mechanism? These problems are worth our in-depth analysis and study.

Based on the requirements and advocacy of the state for the protection of cultivated land, taking Henan Province, one of the main grain producing areas in China, as an example, a field survey was conducted in Kaifeng City, Henan Province, to investigate the implementation and development status of the grain protection compensation mechanism in Henan Province. Through the questionnaire survey and interview of farmers, the practical problems in the field promotion of the grain protection compensation mechanism in Henan Province were analyzed. It is expected to provide a useful reference for China's food protection by adhering to the three bottom lines of maintaining the nature of public ownership of land, not breaking the red line of cultivated land, and not damaging the interests of farmers, strengthening the "trinity" protection of the quantity, quality, and ecology of cultivated land, strengthening the management of the balance between the occupation and compensation of cultivated land, improving the comprehensive production capacity of grain, and ensuring national food security.

### 1.3. Literature Review

At present, China has also made a preliminary exploration of the land use compensation model. Typical compensation models include externality compensation model, regional compensation model, regional scissors difference compensation model, and optimal farmland compensation policy model. The research object is mainly at the provincial level, while the compensation model literature at the county level is less. In addition, there are still many gaps or immature areas in the regional salary model, path, specific links and other issues, and relevant conclusions and recommendations are also lack of effective data support or case analysis; At the same time, there is no consensus on the economic compensation principle, compensation object, compensation standard, compensation mode and other key links of farmland protection, and these areas still need to be deepened. The core issue of economic compensation for cultivated land protection is to determine the compensation standard, which is an important prerequisite for achieving compensation. The accounting of compensation standards for cultivated land protection in foreign countries mainly focuses on the property rights of cultivated land, the development rights of cultivated land and non-market value. The premise of its realization is to establish a perfect value accounting system. However, China lacks a sound accounting system, especially the ecological value, social value and non-use value of cultivated land. However, in recent years, some scholars have done some research on the compensation standard of the economic compensation mechanism for cultivated land protection:

Cai Yinying and others, starting from the willingness of residents to pay for the protection of cultivated land, explored the economic compensation standards for the protection of cultivated land from the perspective of farmers as the executive subject of the protection of cultivated land and the need for government compensation for their participation in the protection of cultivated land; Wu Zebin et al. put forward the technical idea of conversion of farmland profit and loss based on regional food security, and calculated the compensation (payment amount) of farmland protection according to the opportunity cost loss of farmland protection.

On the basis of theoretical analysis of land value and calculation of cultivated land value, Zhang Xiaojun and others discussed the determination of value standard in the regional compensation mechanism for cultivated land protection.

Niu Haipeng and others calculated the compensation standard range of cultivated land protection in the study area based on the compensation of cultivated land externalities (cultivated land ecosystem value).

## 2. Organization of the Text

### 2.1. Section Headings defects in the Current Farmland Protection Compensation Mechanism

At present, the compensation mechanism for farmland protection in Henan Province has three characteristics: fairness, government-leading, and extensive participation, and adheres to the eight principles of fairness, food security, incentive compatibility, income symmetry, social welfare Pareto optimization, and sustainable development. However, there are still shortcomings:

#### 2.1.1. The Main Body of Cultivated Land Protection is Absent

Under the current agricultural land system, the subject of property rights is not clear, and the land rights are incomplete or incomplete, resulting in the lack of internal motivation of the cultivated land protection departments at all levels, the absence of the subject of agricultural land protection, and the lack of a clear definition of "public land tragedy" and public interests. Public welfare and for-profit undertakings, including the establishment of enterprises and industrial parks, can obtain public interests free of charge, leading to serious abuse of land by local governments.

#### 2.1.2. The Externality of Cultivated Land Protection has not been Well Solved

The total value of cultivated land resources is not equal to the economic value. As a part of the whole society, its economic value and social value are almost all borne by the externality of cultivated land resources. Therefore, we must rebuild the value of cultivated land resources and realize these values through agricultural subsidies, so as to improve farmers' income.

#### 2.1.3. The Current Farmland Protection Subsidies and Compensation Standards for Land Requisition Areas are Still Low

### 2.2. Problems to be Paid Attention to in the Further Improvement of the Current Mechanism

#### 2.2.1. The Positioning of Current Farmland Protection Compensation Mechanism

According to the analysis of China's financial resources and development stage, the pursuit of complete property right compensation for the current farmland protection is not in line with the current national conditions and does not match the current development stage of China. At the current stage of development, the realization of farmers' right to development and the protection of cultivated land should be defined as the same starting point, two levels and different realization stages of protection and compensation. At present, the purpose of farmland protection compensation in China is to achieve farmland protection.

#### 2.2.2. In the Face of the Dilemma of "Less Compensation Does Not Work, More Compensation has no Source", The Relationship between Protection Compensation and the Enthusiasm of Farmland Protection

In economically developed areas and the rural-urban fringe, driven by economic interests, a large number of high-quality cultivated land has been occupied, and limited cultivated land resources have become the focus of protection. It is inevitable to mobilize the enthusiasm of farmers, village collectives and grass-roots governments to protect cultivated land through compensation for cultivated land protection. However, in this region, the income difference between different uses of the same plot is large. Through limited protection and compensation, the huge income gap and the enthusiasm of farmers cannot be compensated.

Farmers, village collectives and grass-roots governments at all levels are not active in protecting cultivated land. We should not deny the current practice of cultivated land protection compensation itself. We should firmly adhere to the principle of cultivated land

protection compensation, take advantage of the current opportunity to carry out the pilot project of cultivated land protection compensation, explore the multiple protection compensation model, and explore the sources of compensation funds, compensation standards, compensation objects and compensation forms such as "compensation with awards" to adapt to local conditions and advance in sequence, Continuously improve the current farmland protection compensation mechanism, and effectively promote the enthusiasm of farmland protection.

### **2.2.3. Farmland Protection Compensation Involves the Vital Interests of Farmers, and the Social Problems That May be Caused by Farmland Protection Compensation**

First, in the protection and compensation, some places compensate for the basic farmland protection areas. At present, the basic farmland in China is demarcated by the government departments, and the compensation standards are also formulated by the government. The different compensation standards for the adjacent plots are difficult for the masses to accept. Second, for farmers who move to cities or go out to work and do business, they perform the responsibility of farmland protection, and with the flow of land use rights, they are transferred to the new large-scale planting households. The protection and compensation objects need to be considered. Third, China has implemented the policy of rural collective land contract for 30 years. With the increase of the new born population of farmers and the passage of time, there is a serious imbalance in the per capita cultivated land in rural areas. Different cultivated land quantities and different compensation standards lead to a large gap in compensation, which is difficult for the masses to accept.

### **2.2.4. Low Grain Yield Affects Farmers' Enthusiasm for Grain Planting**

In 2019, farmers' income from asset transfer was less than 50%, and the proportion of agricultural income also decreased by about 1%. There is little benefit to increase output and income from advanced technology and management. Therefore, most farmers chase the wage income of migrant workers, which affects their enthusiasm to grow grain. Although the production efficiency of large growers who rely on land circulation has improved, it has increased the cost of land rent, and the production efficiency is low. The grain incentive subsidy has nothing to do with the grain transfer, which affects the enthusiasm of grain planting in the main grain-producing areas. At present, various food incentive and subsidy policies do not distinguish between incentives and subsidies based on the quantity of food allocation and self-sufficiency, nor do they take into account the incentives and subsidies of land output rate, resource utilization rate, labor productivity and other indicators; The grain beneficiary areas also do not assume any responsibility for rewards and subsidies; In addition, it is difficult to bring financial effects to the grain-producing areas due to the standard of incentives and subsidies and the use restrictions, thus affecting the enthusiasm of the grain-producing areas to grow food, and further affecting the protection of cultivated land.

## **2.3. Policy Suggestion**

### **2.3.1. Establish a National Food Security Fund with the Main Input from the State and Supplemented by the Input from the Main Grain Sales Areas**

According to the principle of "who benefits, who compensates", on the basis of determining the average income standard of grain per mu in the main production areas, the payment standard of national finance and compensation for grain in the main sales areas should be clarified, and the national food security fund should be established. The compensation amount of the main sales areas is determined by the province, that is, the international food security standard of 400 kg per capita is taken as the bottom line, and the progressive collection coefficient is determined according to the degree of deviation from the bottom line. The larger the deviation

is, the larger the collection proportion coefficient is to prevent the self-sufficiency rate of grain in the main sales areas from falling.

### **2.3.2. Establish a Financial Reward and Subsidy System to Ensure the Enthusiasm of Grain Planting in the Main Production Areas**

We will establish a special financial compensation system for grain and strengthen transfer payments to major grain-producing areas. According to the net outflow of grain and the consumption of grain production resources, based on the national per capita GDP level and the per capita disposable income of farmers, the transfer payment scale of major provinces and counties in grain production should be scientifically calculated to ensure that the financial income of major grain production areas reaches the national average level.

### **2.3.3. Strengthen Subsidies for the Construction of Comprehensive Production Capacity in Major Grain-Producing Areas**

We will increase subsidies for construction projects such as high-standard farmland, farmland water conservancy, land consolidation, and agricultural comprehensive development. We will plan and use project funds as a whole, avoid fragmentation, and ensure the implementation of agricultural infrastructure projects with high standards and quality. We will improve the stable growth mechanism of grain production incentives and ensure that the annual growth rate of grain production incentives and transfer payments is not lower than the annual growth rate of fiscal revenue.

### **2.3.4. Vigorously Promote Constructive Compensation with the Help of Land Improvement Platform**

Constructive compensation is the main body of cultivated land protection compensation, and land remediation is an important means of constructive compensation and an effective way of cultivated land protection. It not only supplements the quantity of cultivated land, but also improves the quality of cultivated land. During the "12th Five-Year Plan" period, constructive compensation should be vigorously promoted with the help of the land improvement platform.

### **2.3.5. We will Strengthen the Basic Work of the Delimitation of Basic Farmland and the Confirmation and Registration of Rural Collective Land Rights, and Steadily Promote the Incentive Compensation for Farmland Protection**

At present, the implementation of incentive compensation for farmland protection, whether the compensation funds can be distributed to farmers in a fair and efficient manner, is based on a clear property right relationship, and the implementation of farmland or basic farmland plots to households and people is the key. The basic farmland can be mapped, warehoused, landed and transferred to households to ensure the clarity of rural land property rights. Therefore, the current incentive compensation for cultivated land protection must be coordinated by multiple departments to firmly promote the delimitation of basic farmland and the confirmation and registration of rural collective land rights, and consolidate the incentive compensation foundation.

### **2.3.6. Concentrate Compensation Funds, Explore and Increase Regional Compensation**

Under the distribution of new fees according to the basic farmland area, the number of supplementary farmland and other factors, further increase the overall planning of funds, and expand the scope of pilot projects. In developed areas and places with less farmland, more and less new fees will be paid, and more and less will be paid in places with heavy farmland protection tasks, which fully reflects the intention of regional compensation for farmland protection.



### 2.3.7. Explore Multiple Protection and Compensation Models by Taking Measures in Line with Local Conditions

We should adjust measures to local conditions and actively explore multiple compensation or combination of multiple modes. For example, according to different compensation areas and economic development conditions, the contribution of local finance to farmers' direct economic compensation can be determined, or farmers can be encouraged to increase their investment in farmland infrastructure construction by replacing compensation with awards and investment with subsidies; According to whether it is suitable to carry out large-scale basic farmland consolidation, select constructive compensation investment, etc.

## 3. Conclusion

To sum up, farmland protection is of great significance to China's national food security. The establishment of farmland protection compensation mechanism is an important measure to implement the farmland protection policy at present, and is the core content of establishing a long-term mechanism for farmland protection. However, as far as Henan, the main grain-producing area, is concerned, the improvement of the compensation mechanism for cultivated land protection is still facing challenges. The absence of the main body of cultivated land protection, the externalities of cultivated land protection, and the low compensation standards for cultivated land protection subsidies and land acquisition areas seriously restrict the further improvement of the compensation mechanism for cultivated land protection. Based on the actual situation of Henan Province, this paper explores the long-term compensation and incentive mechanism for farmland protection and puts forward policy suggestions, in order to provide useful reference for improving the comprehensive production capacity of grain and ensuring national food security.

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