

## Research on Non-Grainization of Cultivated Land in Grain-producing County in Henan Province under New Situation

Manghuan Li<sup>1, a</sup>

<sup>1</sup> School of Economics, Henan University of Science and Technology, Luoyang, Henan, China, 471023

**Keywords:** Henan Province; Grain-Producing Counties; Land Transfer; Non-Grainization

**Abstract.** Non-food refers to the arable land from the cultivation of food farming to cultivation of non-food farming in the circulation, moderate non-grain can improve the economic conditions and living standards of farmers, but non-grain must be controlled within a specific range, otherwise it will have a negative impact on Chinese food security. Based on this, this paper analyzes the non-grain phenomenon of cultivated land in grain-producing counties of Henan Province under the new situation, and points out the results, including the increase of income and the impact on grain production. Finally, the author puts forward some suggestions on how to deal with non-grain, such as stabilizing the proportion of grain, refined farmland type, improve grain subsidies and promote science and technology.

### Introduction

Since the reform and opening up, Chinese economic construction has been developed by leaps and bounds. The level of industrialization and urbanization has been continuously improved. The situation of land use has also undergone great changes. A large number of cultivated lands have been occupied by non-agricultural construction. In infrastructure construction and national economic development at the same time, but also to Chinese food security has brought great hidden dangers. Since the Third Plenary Session of the 17th Party clearly pointed out that "allowing farmers to subcontract, lease, swap, transfer, share cooperation in the form of land transfer management rights", Chinese land transfer phenomenon continues, by the end of 2015, the national family contract The area of cultivated land is 4.47 million mu, accounting for 1/3 of the total area of the contracted household business, and there is still room for improvement. Land circulation in the optimization of agricultural structure, promote the development of agricultural industrialization and help farmers to increase income, but also brought a lot of problems, the most typical is the phenomenon of non-grain serious. Circulation of land is mostly used as a unit to increase the efficiency of the economic crop cultivation, which in the agricultural province of Henan performance is more obvious. Based on this, this paper discusses the non - grain problem of cultivated land in Henan province's grain - producing county, such as Huaxian and Gushi county.

### Analysis on Non - grain Phenomenon of Cultivated Land in Grain - producing County in Henan Province under New Situation

Henan Province as a traditional agricultural province, is also one of Chinese major grain producing areas, 2015 Henan grain production 60.671 million tons, accounting for about 10% of the total output, second only to Heilongjiang, ranking second in the country. In the country's 200 grain production advanced units (grain-producing counties), Henan has 20 counties among them, Huaxian County, Gushi County, Tanghe County, Yongcheng City, Taikang County, Henan is the famous grain county. Since the gradual opening of land in the 1990s, there has been a situation of land circulation in Henan Province. In recent years, the land transfer in Henan has been developed by leaps and bounds. According to the monitoring results from 2008 to 2011, the annual turnover of land transfer in Henan rate up to 25%. At present, the total area of land transfer in Henan has more than 3400 mu, accounting for about 35% of the total contracted area, slightly higher than the national level, as part of the county, such as Yanjin, the total area of land has reached the total contracted area More than

40%.

At present, the average price per acre of land transfer in Henan has more than 1,000 RMB, individual regions or even higher, the farmers income, agricultural development, rural construction has a very prominent role. Of course, there are some problems in Henan land circulation, such as non-agricultural, non-grain, etc., especially in the non-grain phenomenon is more prominent. According to the statistics of the Henan Provincial Department of Agriculture in 2015, 65.4% of the province's land is still used for grain production and that is 34.6% of the land transfer non-grain, Henan non-grain area of the province's cultivated land area of 15% more than twice as much. In other words, in the land transfer, the contractor is more inclined to non-grain, and the survey data show that the larger the contract size, the lower the proportion of grain. The proportion of non-grain in large land-operated enterprises has risen rapidly from 43.7% in 2010 to 60% at present, and there is almost no one that is used to grain after individual land transfer to large ones.

Huaxian County, Gushi County, Tanghe County, Henan Province for the production of grain county, but also the phenomenon of non-grain farming is more prominent counties. In the study, the author conducted a sample survey on the land circulation situation of Huaxian County, Gushi County and Tanghe County, from Jiangtun Township, Banpo Township, Kushen Township, Tanghe Town, the town of Cangtai Township, Qi Yixiang sampling selected 2624 households as the object of investigation, involving the family contracted land 9446 acres of land, which involved in the land circulation of farmers have 788, accounting for 30% of the survey, 3733 acres of land transfer, accounting for 39.44% of the proportion of land survey, and Henan Province, the average level close to the province. In the 3733 acres of land, non-grain land accounted for 1644 acres, accounting for 44.04% of the land transfer, higher than the provincial average, mainly due to the current land transfer in the phenomenon of large-scale, and large-scale flow an important characterization is the non-grain phenomenon is more prominent.

### **A Study on the Result of Non - Grainization of Cultivated Land in Henan Province**

**The Increase Effect of Non-Grain Farming.** People eat food for the day, food is not only related to the daily life of ordinary people, and the country's economic and social security also has a very close relationship. Since the reform and opening up, Chinese social economy has made great progress, grain production in the household contract responsibility system under the stimulation also received a significant increase. However, with the continuous improvement of the level of industrialization and the gradual increase of urbanization rate, the rural economic reform has encountered great difficulties, urban and rural dual economic structure has become increasingly prominent and the three rural issues become a bottleneck restricting Chinese economic development. In the three rural issues, the peasant problem is the core, how to increase the income of farmers is the core of the core, the traditional agricultural cultivation is difficult to achieve this goal. To Henan, for example, in 2015 the highest grain and grain production in Henan Province, five cities were Zhoukou, Zhumadian, Xinyang, Nanyang, Shangqiu, at the same time, they are all Henan economic development is lagging behind, per capita GDP just for the province countdown to the top five. Land transfer and non-grain can effectively help farmers increase their income, to Tanghe Town, Qi Yixiang, for example, farmers in the circulation before the operation, the net income per acre of land is less than 400 RMB, the land transfer to the enterprise After planting flowers and trees, not only per acre per year can receive 950 RMB of turnover costs, but also the time to save farmers to go out to work, serve two purposes. According to Qi Yixiang farmers reflect the flow of business before, only by the income of grain, not only the child's education into a problem, and even family to eat, see a doctor is not a small problem, and the current land transfer to rural enterprises to grow economic crops, obviously a lot of good enough on hand. This increase in income will stimulate more farmers to transfer the land out for non-grain cultivation.

**The Impact of Non-Grain Farming on Grain Production.** In the short term, the advantage of non-grain farming is very significant, it can help farmers increase income, but also to achieve the profits of rural enterprises, but also can help local governments to increase taxes, serve multiple purposes. But the non-grainification of arable land must be controlled within a certain range,

otherwise it will not only have a greater impact on Chinese food prices, food security also has no small negative impact. At present, China has more than 1/3 of the cultivated land to participate in the circulation of operations, and the flow of non-grainification of the phenomenon of more and more prominent, which is bound to lead to lower food production. According to the National Bureau of Statistics published on December 8, 2010 data show that the national grain sown area of 169542.3 million mu, down 47.21 million mu over the previous year, a decrease of 0.3%, the national total grain output of 1232.48 billion jin, down 10.4 billion jin last year, A decrease of 0.8%, we can see that the flow of non-grain in the operation of the phenomenon has affected the total domestic food production. This is the same in the agricultural province of Henan, the total grain output in 2016 was 118.932 billion kilograms, down 2.41 billion jin from the previous year, the output rate of 2.0%, lower than the national high. In the survey of the farmers in this group, the 2014 non-grain land is not 1277 acres, 2014 1433 acres, 1522 acres in 2015, was increasing year by year trend, in the foreseeable period, the sample farmers family The number of non-grain land in the contracted land will continue to increase, which fundamentally has a huge impact on the grain production in Henan. There is two ways to increase the area of grain production and increase the unit yield. Yield improvement is a step-by-step process. Therefore, the increase in arable land naturally become a necessary requirement for food security, the current non-grain phenomenon has seriously affected the food security.

### **Study on the Countermeasures of Non - grainization of Cultivated Land in Henan Province**

**Stable Grain Proportion and Optimize the Layout of Cultivated Land.** It is advantageous for peasants, rural areas and agriculture to benefit from the non-grainification of the current situation of the circulation of land in Henan's current household contracted land. However, it is necessary to control the degree of non-grainification. At present, Chinese agricultural market has been very open, by the blindness of the market economy, the impact of lag, once the non-grain than the critical value, not only will bring huge losses to the contractor, but also affect the overall food production in Henan, and even threat Chinese food security. Therefore, the Henan rural land circulation business, on the one hand to encourage farmers to participate in various forms of circulation to operate, on the other hand should also plan a grain of cultivated land red line and optimize the layout of arable land. Henan ranks the world among the large number of large grain production counties, accounting for the country's two hundred grain production advanced units of about 1/10, and Henan region is vast, different regions such as northern Henan, and so have a more obvious regional differences, the county in the food planting opportunities and comparative advantages are not the same, the Henan agricultural sector according to the grain-producing counties of the terrain, climate hydrology and economic development conditions, rational planning of the regional food cultivation area, and the proportion of grain acreage to the total area of the cultivated land, so as to avoid the flow of land contractors rush to non-grain instead of food cultivation, to ensure food production.

**Refinement of Farmland Type, Clear the Land Use.** In Chinese industrialization and urbanization process, a large number of agricultural lands are converted into construction lands and agricultural production had a certain negative impact. In recent years, in the country to vigorously protect the red line of agricultural production under the premise of agricultural land free conversion of non-agricultural land is greatly reduced, but there are some structural problems in the agricultural land. Chinese current agricultural land is not the specific use of further subdivision, such as heavy grain land, economic crop land, etc., which led to the phenomenon is that the phenomenon of non-agricultural land has been effectively controlled, but the non-grain farming the phenomenon is unusually grim. In fact, in this survey, many non-grainized contractors are very recognized about their business model because they have not changed the original attributes of agricultural land, whether it is corn, wheat and other food crops, or planting flowers, Ginkgo trees and so did not change the nature of the land. In other words, in the current does not change the nature of the premise of agricultural land, farmland farming is increasingly weak. In this regard, the government needs to refine the types of agricultural land, clearly specify the types of land for grain, land for economic crops and other agricultural projects, and give a corresponding proportion, strictly

prohibit the invasion of fertile land to cultivate flowers, fruit trees and the basic amount of grain to ensure food production.

**Improve the Grain Subsidies and Increase Support Efforts.** In a market economy environment, everyone is an economic person, contract business is no exception. There is a very large correlation between non-grain and non-grainized economic output in the current land transfer in Henan. Grain output, including corn, wheat, etc., the unit price is low, often there will be no increase in the phenomenon of increasing production, the most typical is the total price of corn in 2015 lower, or even a five-year low, the corn planted in Henan farmers Huge losses, many farmers hard one year, increase production but lose money, which led to the phenomenon is 2016 Henan corn planting scale significantly reduced, the flow of non-grainification of the operation of the phenomenon more obvious. In order to change this situation, the government must increase the grain subsidies. Chinese grain subsidies compared to Japan, Germany and other capitalist countries, the proportion is very low, only 3% of farmers' income and the basic fertilizer prices are offset by agricultural prices. In this regard, the government needs to further increase the kind of grain subsidies, and improve the form of grain subsidies, in the current Pratt & Whitney grain subsidies on the basis of those contracted farmers land for large-scale grain farmers, enterprises to be greater Subsidies, encourage more farmers, enterprises to participate in the grain which, to alleviate the phenomenon of non-grain grain on Chinese enormous pressure brought about by food production.

**Promote Science and Technology to Improve Yield Potential.** For the county of grain production in Henan, the way to ensure the total amount of food is nothing more than two, the first guarantee that the number of cultivated land is not reduced, and second, to ensure that grain yields increased. At present, Chinese grain yield has made great achievements, but in some areas of food crops and the world level is still a big gap to corn, for example, the US yield of about 600 kilograms, and China only 400 kg or so, a difference of 200 kg. In order to better protect the grain production of grain-producing counties, Henan Province needs to take the appropriate measures from the following points. First, optimize the breed. Regardless of what kind of food crops in the cultivation, as far as possible to choose high-quality and high yield and adaptability of the seed, from the source to protect the grain crop grain production; Secondly, strengthen the construction of water conservancy facilities. Henan grain production counties, such as Huaxian and other needs to speed up the basic construction of farmland water conservancy, basically able to row irrigation, enhance the ability of crops to resist natural risks, to ensure food production; Finally, increase production management. Specific production management techniques include conservation tillage, harmless pest control, etc., these technologies for the production of grain in Henan Province unit yield has a rare role. All in all, the production of large counties in Henan Province need to promote science and technology, improve the level of agricultural cultivation and standardization.

## Conclusion

Non-grain problem is the important issue in Henan land transfer contract management, which is particularly evident in the large contractor. Nearly 90% of the contracted operations are non-grain crops, and if this is not controlled, it will have a huge negative impact on the grain production in Henan. In this regard, Henan needs to operate from the non-grainification of the reasons for the occurrence of the reasons to take a good response to the corresponding measures.

## Acknowledgements

Fund Project: 2016 Henan Provincial Government Decision-Making Research Tender Project: Research on Non-Grainization of Cultivated Land in Grain-producing County in Henan Province under New Situation. The research issue number is: 2016B176

## References

- [1] Wang Shuxiao, Yang Zisheng. Effects of non-agricultural land on grain production and food security[J]. Modern Agricultural Science and Technology, 2012 (02): 395-398
- (2) Bai Xushen. Study on non-grain tendency and countermeasures of farmland circulation - based on investigation of Xinyang city in Henan Province[J]. Agriculture and Technology, 2014, 34 (04): 174-176
- [3] Liu Qingkai. Vigilance in Henan Province land transfer serious "non-grain" [J]. Small and medium-sized enterprise management and science and technology, 2014 (10): 154
- [4] Wang Yong, Chen Yinjun, Yi Xiaoyan, Xiao Biling. "Non-grain" Problems in Farmland Circulation and Suggestions[J]. Journal of Agricultural Resources and Regional Planning, 2011, 32 (04): 13-15
- [5] Wang Wenming. Study on the countermeasures of promoting economic development in grain-producing counties - Taking Henan as an example[J]. Learning Forum, 2012, 28 (02): 39-41