DOI: 10.6981/FEM.202009 1(9).0017

Optimizing Agricultural Structure and Deepening the Structural Reform of Agricultural Supply Side in Anyang City

Xueping Wang, Mengqi Kou and Yuexin Mao

School of Economics, Anyang Normal University, Anyang 455000, China.

Abstract

As a "granary in northern Henan", Anyang has always attached great importance to the work of agriculture, rural areas and farmers, and has made great achievements in both grain production and rural construction. However, there are still some problems in the adjustment and optimization of agricultural structure in Anyang. In view of these problems, this paper puts forward concrete and effective measures to optimize, so as to further promote the structural reform of agricultural supply side in Anyang and promote the further development of agriculture.

Keywords

Agricultural structure; Structural reform of agricultural supply side; Status quo; Problems; Countermeasures.

1. Introduction

The agricultural production structure refers to the composition and relationship among various production departments within agriculture within a certain geographical scope. The agricultural production structure can be explained by the proportion of each industry in the total agricultural production value (or net value), and can also be expressed by the proportion of capital or labor used by agriculture, forestry, animal husbandry and fishery industries from the aspect of input. Among them, planting industry is the largest and most important department in agricultural production. The production structure of planting industry refers to the proportional relationship of various crops, mainly refers to the proportional relationship between food crops and cash crops. Its expression method is generally expressed by the proportion of the sown area of various crops to the total sown area of crops.

2. Present Situation of Agriculture and Rural Economy in Anyang City

By continuously adjusting the agricultural structure and deepening the structural reform of the supply side of agriculture, the agricultural structure of Anyang City has been continuously optimized, the income of farmers has increased significantly, and the rural economy has developed rapidly, which is embodied in:

2.1. Agricultural production capacity is basically stable

In 2018, the grain planting area of Anyang City was 8.948 million mu, the total grain output was 3.752 million tons, an increase of 1.1%, and the grain yield per mu was 419.3 kg, an increase of 1.1%. By the end of 2017, the total output value of the primary industry has reached 1936122, accounting for 8.6% of the total output value of Anyang City, which is about 3.8% lower than that of 2016. In 2018, the added value of primary production was 19.51 billion yuan, an increase of 3.2%. In 2017, the total output value of agriculture, forestry, animal husbandry and fishery in Anyang City was 24,345.62 million yuan, and the added value of agriculture, forestry, animal husbandry and fishery was 13,959.02 million yuan, both of which decreased compared with 2016. The tertiary industry structure has been optimized, and the proportion of the tertiary

DOI: 10.6981/FEM.202009 1(9).0017

industry has been adjusted from 12.7:60.1:27.2 in 2009 to 8.9: 48.6: 42.5 in 2017 and 8.1:46.2:45.7 in 2018.

2.2. The agricultural planting structure has been optimized to some extent

According to the statistics of the agricultural department, Anyang can flexibly adjust the planting structure of agriculture according to the market demand of agricultural products. In recent years, the sown area of corn has been continuously reduced, including 286,000 mu of corn in the autumn of 2018 alone, and the planting area of sweet potatoes, soybeans, millet, peanuts, cotton, vegetables, melons and fruits has been continuously increased. And strive to improve the quality of agricultural products, and vigorously develop high-quality strong gluten wheat, high-quality peanuts, etc. For example, in 2017, the area of high-quality strong gluten wheat in Anyang City accounted for 1/5 of the total wheat area. The agricultural planting structure has been further optimized.

2.3. Rapid development of agricultural industrialization management

Since 2009, Anyang City has started to vigorously develop agricultural industrialization, and has held Anyang Agricultural Project Promotion Fair for many years in succession, and set up a docking platform for bank agriculture, enterprise agriculture and science and technology agriculture. Through policy announcements and project promotion, more capital will be invested in agriculture, more people will join in agriculture, mutual benefit and win-win cooperation will promote the healthy and rapid development of agriculture and rural economy in Anyang. Up to now, there are as many as 408 leading enterprises in agricultural industrialization above designated size in the city, with total fixed assets exceeding 7.1 billion yuan and sales income reaching 14.5 billion, including 150 municipal key leading enterprises and 28 provincial leading enterprises in agricultural industrialization.

3. Problems and Obstacles in Agricultural Structure Adjustment and Optimization in Anyang City

3.1. The educational level of agricultural employees is low

The development of agriculture can not be separated from the high-quality rural labor force. However, the current labor force engaged in agricultural production in Anyang is mainly the elderly and women, and the male and strong labor force mainly goes out to work all the year round, and occasionally goes home to help in the autumn harvest and summer harvest. Most of the elderly are engaged in agricultural production according to the traditional methods, and their ability to accept new agricultural technologies and new things is very low, and they are not sensitive enough to grasp the changes in the market demand of agricultural products, which is not conducive to the development of agriculture.

The education level of rural laborers in Anyang is generally low. According to Anyang Statistical Yearbook, the average cultural status of every 100 laborers in Anyang in 2017 is: 2.88% had never attended school, 23.44% had primary school education, 60.48% had junior high school diploma, 9.04% had high school diploma, 3.38% had college degree, 0.70% had college degree and 0.10% had graduate degree. It can be seen that the educational background of rural labor force in Anyang is mainly primary school and junior high school, accounting for 83.92%. The low cultural level of farmers in Anyang will seriously restrict the popularization and application of agricultural technology, which is not conducive to the adjustment of agricultural structure.

3.2. The agricultural infrastructure is weak, and the level of agricultural machinery and agricultural technology is low

In recent years, Anyang City has invested some financial funds to increase the construction of agricultural infrastructure, and achieved some results. On the whole, however, the agricultural

DOI: 10.6981/FEM.202009 1(9).0017

infrastructure construction in Anyang is still relatively backward. In recent years, the water conservancy construction has been basically stable without much improvement. For example, the number of reservoirs remained around 158, the number of ponds and dams remained stable at 1,006, and there was not much breakthrough in the construction of electromechanical wells.

In addition, the level of agricultural mechanization is not high, and the agricultural technical force is weak. According to the statistical yearbook of Henan Province over the years, the total power of agricultural machinery in Anyang has maintained a steady growth trend from 2010 to 2015. However, the total power of agricultural machinery in Anyang suddenly decreased in 2016, which was 16.8% lower than that in 2015. In 2017, it started to rise slightly, reaching 5.553 million kilowatts, but it was still lower than the level before 2016. Among agricultural machinery, except for large and medium-sized agricultural tractors, supporting farm implements and combine harvesters, the number of water-saving irrigation machinery has remained basically unchanged at 0.05-0.06 million sets in recent years, while agricultural irrigation and drainage power machinery, agricultural products primary processing machinery and agricultural water pumps have shown a decreasing trend as a whole. The technical support for agricultural development in Anyang City is insufficient, the number of agricultural research institutions is few, and agricultural technicians are scarce, which can give farmers limited technical guidance and help, which is not conducive to the promotion of agricultural technology and the adjustment of agricultural structure.

3.3. The variety of agricultural products is single, and the length of agricultural industrial chain is not enough

In 2017, the total sown area of crops in Anyang City was 499.39 thousand hectares, of which the sown area of grain crops was 380.12 thousand hectares, accounting for 76.12% of the total sown area; The sown area of cash crops is only 30.63 thousand hectares, accounting for 6.13% of the total sown area; The sown area of other cash crops (vegetables and melons) is 88.64 thousand hectares, accounting for 17.75% of the total sown area. The agricultural products produced in Anyang are mainly grain, fruit, oilseeds and cotton, among which the grain output in 2016 was 2.195 million tons, fruit 546,000 tons, oilseeds 138,700 tons and cotton 06,100 tons. It can be seen that the agricultural production in Anyang is mainly based on grain, and the structure of agricultural products is single and the variety is not diversified enough.

Anyang is rich in agricultural resources and an important production base of high-quality wheat, oilseeds and cotton. Famous and special agricultural products such as peanuts and red dates from Neihuang, walnuts and chestnuts from Linzhou and organic food from Tangyin have a certain popularity in the whole province and even the whole country. However, due to extensive agricultural production mode and low-level agricultural product processing capacity in Anyang City, the industrial chain of agricultural products is short and the added value is low. Although Anyang's agricultural industrialization has also been developed to a certain extent, there are a certain number of agricultural products processing enterprises, but the number and processing grade of these agricultural products processing enterprises are far from meeting the needs of agricultural products output and maximum value-added, resulting in agricultural production increase can not give full play to the needs of farmers' income increase. Farmers' income from farming is getting lower and lower in rural household income. Farmers generally think that "farming is better than working to earn money", and their enthusiasm for farming is seriously frustrated.

3.4. Dislocation of supply and demand information in agricultural production

In 2018, the urbanization rate of Anyang has reached 51.8%. With the improvement of urbanization level, more and more rural people will move to cities, which will put forward

DOI: 10.6981/FEM.202009 1(9).0017

higher requirements for the demand, consumption structure and grade of agricultural products. However, because the current agricultural production in Anyang mainly depends on scattered and small farmers' self-management, the agricultural socialization service system is not perfect, and the government does not give much help to farmers. All these reasons have caused farmers to rely only on their own experience or the sales situation of related agricultural products in previous years when deciding what to produce and how much to produce, thus leading to the deviation between the supply of agricultural products and the market demand. Either supply exceeds demand, or supply exceeds demand, or even both situations coexist at the same time, which will restrict the adjustment of agricultural structure in Anyang City.

In addition, when the county-level and township leaders in some places give guidance to local agricultural production, they do not conduct sufficient and complete market research, and they lack an accurate grasp of local resource endowment, ecological environment and market demand, which will lead to the mistake of intervening in agricultural production.

4. Countermeasures for Optimizing Agricultural Structure and Deepening the Structural Reform of Agricultural Supply Side in Anyang City

Under the background of China's supply-side structural reform, the adjustment of agricultural structure in Anyang must be based on the local actual situation, market-oriented, make the production of agricultural products more meet the demand, strengthen the support of agricultural science and technology, implement industrialization and large-scale management, and change from pursuing output to paying attention to efficiency and quality.

4.1. Improve the comprehensive quality of agricultural operators

Agricultural operators are the main body of agricultural structure adjustment. However, the overall educational level of agricultural operators in Anyang City is low, mainly in primary and junior high schools, and most of them are engaged in agricultural production now, including the elderly and women. This situation is not conducive to the adjustment of agricultural structure and the long-term development of agriculture. Various measures must be taken to improve the comprehensive quality of agricultural operators, solve the shortage of talents and give full play to the role of human capital.

First of all, it is necessary to fundamentally improve farmers' knowledge and culture level, improve farmers' emphasis on education, and make them realize the importance of knowledge, culture and technology, so that they should not only strengthen their own learning, but also pay more attention to the cultivation of future generations; Secondly, use agricultural technology stations, village collectives and other places to teach and train farmers in agricultural technology, or use communities and leading agricultural enterprises to train farmers in specific agricultural projects, so that farmers can master more practical agricultural technologies; Thirdly, by giving full play to the government's role in training rural human capital, increasing financial input in this area, standardizing educational institutions for training farmers, integrating educational resources, developing on-the-spot training and online training, and cultivating new farmers, we can focus on training large agricultural business entities such as large breeding households and family farms, and comprehensively improve their production, transportation and marketing knowledge and theoretical and practical ability.

4.2. Strengthen the construction of agricultural infrastructure and fill in technical shortcomings

It is necessary to strengthen the construction of agricultural infrastructure, strengthen the construction of transportation facilities in Anyang City, especially the construction of rural roads, and reduce the production and transportation costs of agricultural products; Further improve the farmland water conservancy facilities in Anyang city, improve the technology and

DOI: 10.6981/FEM.202009 1(9).0017

equipment of water-saving irrigation, and expand the effective irrigation area; Focus on strengthening the infrastructure construction of characteristic agricultural projects such as urban agriculture, high-efficiency agriculture and modern agricultural parks, and strengthen the protection of basic farmland; Carry out a new round of power grid transformation and upgrading in rural areas, and upgrade the safe drinking water project in rural areas.

4.3. Develop agricultural products processing industry and promote the integration and development of industries

First of all, we should vigorously develop the processing industry of agricultural products, enhance the processing capacity of agricultural products, and take it as an effective way to adjust the agricultural structure and improve the quality and efficiency of agricultural products. Various effective measures should be taken to improve the processing, packaging, preservation and storage level of agricultural products. In addition to increasing preferential treatment and support for leading enterprises in agricultural products processing in terms of policies, funds and technological innovation, we should also vigorously develop individual and private agricultural products processing enterprises as a new growth point for increasing farmers' income and increasing agricultural efficiency. In addition, we should open up new ways to process agricultural products. For example, Neihuang, Linzhou, Tangyin and other places in Anyang have their own superior agricultural products. We can set up industrial clusters of food processing industry in these producing areas to upgrade staple food processing. Establish the mode of "origin+kitchen+catering", meet the requirements of current food consumption upgrade, greatly increase high-quality green agricultural products and functional agricultural products, reduce the low-end supply of agricultural products, and increase the high-end supply. Secondly, promote the integration and development of industries. Taking ecological agriculture, creative agriculture and circular agriculture as platforms, and combining all the links of agricultural production before, during and after production, especially in the fields of postproduction storage, transportation, processing and sales, we can realize the all-round integrated development of agricultural production, processing, storage, transportation and sales. Each county and district can combine the advantages and characteristics of local resources with the requirements of green, ecology, service and experience of current consumption, and dig deep into the functions of agriculture in Anyang City to realize the integration and development of industries. For example, Linzhou can rely on the local production of Chinese herbal medicines, develop Chinese herbal medicine science knowledge park and Chinese herbal medicine viewing park according to local conditions, which not only gives full play to the resource advantages, but also highlights the local customs, thus creating a unique agricultural leisure tourism area.

4.4. Determine the supply of agricultural products according to market demand

The adjustment of agricultural structure must be market-oriented. Because only the produced agricultural products meet the changes and demands of the market, can we successfully occupy the market. In recent years, with the improvement of income level, people's consumption structure has also changed. The demand for agricultural products has gradually changed from primary agricultural products to deeply processed agricultural products, and from pursuing consumption quantity to pursuing consumption grade and quality. These changes in the market demand of agricultural products require agricultural production to be adjusted accordingly, from pursuing the output of agricultural products to pursuing the quality and efficiency of agricultural products. Therefore, when Anyang adjusts its agricultural structure, it must closely contact the market demand of agricultural products at home and abroad with the advantages of local industries and resources, and produce agricultural products that are urgently needed by the market, with high quality characteristics and high efficiency, so as to achieve the goal of

DOI: 10.6981/FEM.202009 1(9).0017

"everyone does not have what he has, everyone has what he has, and people are superior and cheap".

In order to adjust agricultural structure with market demand as the guide, it is particularly important for agricultural operators to grasp market information accurately and quickly. First, we should give full play to the government's role of regulation, service and guidance. Relevant government departments should strengthen the observation and forecast of agricultural product market information, collect, collate and publish the production information, supply and demand information, price information and technical information of agricultural products, and strengthen the construction of agricultural and rural information system, not only to improve the rural economic information service system at the municipal and county levels, but also to create conditions to extend to villages and towns. Communicate agricultural information to agricultural producers at all levels in a timely and accurate manner. Second, we should vigorously develop rural communication infrastructure, promote the development of rural ecommerce, use "internet plus" to develop agriculture, adjust agricultural structure, realize the connection between farmers and markets, realize the effective connection between farmers' decentralized production and large markets, and thus build an information "highway" for agricultural operators.

Acknowledgments

This paper is a project of Innovation Fund for College Students in Anyang normal University: Promote the research on the "Three Chain Isomorphism" of grain industry chain, value chain and supply chain (Project No: ASCX/2020-Z186), and the general project of humanities and social sciences research of Henan Education Department in 2020: Research on the improvement of rural human settlement environment in Henan Province under the rural revitalization strategy (Project No.: 2020-ZDJH-010), and the phased achievements of the 2019 soft science research project of Henan Province: Research on the coordinated development of agricultural modernization and new urbanization in Henan Province (Project No.: 192400410252).

References

- [1] Anyang agricultural and rural bureau. http://www.anyang.gov.cn/viewCmsSite.do?gwcsCode = avsnvi.
- [2] Anyang bureau of statistics. http://tjj.anyang.gov.cn/
- [3] Huo Guijuan. Countermeasures and Suggestions on Agricultural Structure Adjustment in Anyang City [J], Henan Agriculture .2012 (3): 7+19.
- [4] Zhou Rongrong et al. Optimize agricultural structure and improve supply quality [J], Jiangsu Rural Economy .2018,12: 44-45.
- [5] Zhang Ying, Li Bo. Present situation and thinking of promoting structural reform of agricultural supply side in Anyang City [J]. Henan agriculture. 2019(2):55-56.