

A Study on the Impact of Agricultural Industrialization on rural residents' income under the new Urbanization in Hebei Province

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Abstract: With the rapid development of China's economy, urban infrastructure has been basically completed. In this historical context, China has begun to attach great importance to urban construction and economic reform in rural areas. From the perspective of the impact of agricultural industrialization and the adjustment of agricultural industrial structure on the income of farmers, this paper analyzes and collates the relevant literature, investigates the background and current status of the implementation of agricultural industrial policies in Hebei Province, and selects 10 agricultural data models from 2008 to 2017 by analyzing the impact mechanism of agricultural industrialization on the income of farmers. After carefully testing the data stability and data co integration of each panel model, this paper analyzes the impact of the overall agricultural industry development on the overall farmers' Income Fluctuation in Hebei Province by econometric principle and relevant empirical theory, and then obtains the following analysis results:

First, the depth effect of industrialization on income can be measured by the scale of industrialization. With the gradual and rapid expansion of industrialization, the agricultural industrial structure is constantly adjusted, and the income level of farmers is maintained. As a result, the level of agricultural income, as the main flow source of farmers' overall income, is significantly affected by the fluctuation of industrial economic scale. Second, the breadth effect of industrialization can be examined by the participation of the overall participation of farmers in the industrialization. In the end, the farmers can directly and actively obtain the fixed economic benefit income brought by the development of the agricultural industrialization. When China's agricultural economic development is relatively slow, its mode reform has attracted more and more rural farmers to participate in it, which directly drives the rapid development of China's rural economy and society. Third, through the data analysis, we can know that the driving effect of the participation degree of farmers' industrialization to promote the increase of farmers' income is higher than that of the scale expansion of farmers' industrialization, which means that the breadth effect of industrialization is higher than the depth effect.

Keywords: *Agricultural, industrialization, Income of rural residents, Depth effect, Breadth effect*

1 INTRODUCTION

A. Research background

Joseph Stiglitz, the final winner of the Chinese Nobel Prize in Economics in 2001, once said, "China's new urbanization will make it two important drivers for the rapid growth of the entire world economy in the next decade. One of the engines. "According to the British "Financial Times" data forecast, to

2030 The resident population of all cities in China will be at least of the world's urban population 1/8, it can be seen that the rapid development of China's new urbanization not only directly determines its own future, Moreover, the reshaping of the current world social and economic development pattern is also of far-reaching significance.

Different from the traditional rural urbanization in China, the new rural urbanization promotes the overall reform of the rural household registration system. In our country realize the flow of population across different regions, and make the rural population directly settle in the big city. New-type urbanization is not only a driving mode of regional economic and social development with rapid growth in connotation, but also a direct realization of The shift of the center of gravity of the differentiation of China's regional economic and industrial structure, the marketization of urban infrastructure and investment and financing channels, has greatly To a certain extent, it has promoted the overall and coordinated development of my country's regional economy. The rapid development of new urbanization should not only be effective of China's regional real economy should also be a powerful force to continuously improve the comprehensive competitiveness of Chinese cities. Policy guarantee. 2000 _ China's urbanization rate in January was only approx. 36.2%, China's urbanization rate in 2010 has been for the first time exceeding 50%, up to 2014 _ In January, China's per capita urbanization rate has reached 54.77%, these are all marks that the rapid development of China's national economy has officially entered a critical stage of rapid development of China's urbanization.

Officially released by the National Bureau of Statistics not long ago According to the 2019 National Statistical Work Bulletin, at the end of 2019, the total number of permanent residents with urban household registration in China accounts for the highest proportion of the total urban population. 60.60%, the permanent resident population is concentrated the highest rate of urbanization is 44.38%. This set of statistics shows the development level and quality of life of China's new urbanization this year. An important historical sign of steady and rapid improvement, it means that China will basically complete the "National New City" one year ahead of schedule this year. The Urbanization Plan (2014-2020) proposed in the plan that "the urbanization rate of the permanent resident population will reach 60% "five -year development slight target.

In essence, agricultural industrialization is an economic development oriented by the market and centered on the improvement of agricultural economic benefits. A form of modern industrial management organization. Its meaning refers to the impact of modern agriculture on the traditional Chinese agricultural management model. A brand-new modernization

technology transformation is carried out, which promotes the gradual modernization of China's agriculture today. The industrialization of modern agriculture not only means that it can effectively improve the productivity and comparative economic benefits of some agriculture benefits, reduce the cost of agricultural transactions and control the risks of agricultural markets, and it means that it can effectively increase the number of farmers. The non-agricultural production income means that more farmers can obtain and share the benefits of the land.

Hebei Province is a relatively important modern agricultural province located in eastern China, rich in agricultural and mineral resources. The rural employed population accounts for approximately About 60% of the industrial form still has a good advantage and foundation in promoting the formation, development and upgrading of agricultural industrialization. Through over the years of accumulation and development, the industrialization development of modern agriculture in Hebei Province has achieved remarkable results, driving a large active participation of batch enterprises and farmers has made agricultural production industrialization, field production and workshop industrialization, and promoted the industrialization of agricultural production. A large number of farmers' economic income has increased. While the production, processing and sales bases of agricultural products continue to expand, the way of linking the actual economic interests of enterprises and farmers has been further improved.

B. Research significance

1. Theoretical significance

Different from the traditional household joint production contract management responsibility system, where each household develops collective management independently, agricultural development of production. One of the basic goals and requirements of industrialization is the scale and marketization of agriculture, and one of its important goals is to limit the upgrading of China's modern agriculture to large-scale and intensive. In promoting the industrialization and management of modern agriculture. In the process of development, government departments through the transfer of rural and regional collective construction land and the integration of rural land resources. On the one hand, demolition and merging of courtyards are carried out, and the land used for rural and collective construction is transferred to the development of modern agriculture and enterprises. The other hand, through the transfer of collective cultivated land, the collective construction land can be transferred to large agricultural farmers and professional students. Production bases and agricultural companies are concentrated, which improves the utilization rate of land. However, agricultural production land investment is large and effective slow and low returns, especially in the past and for a long time to come, due to the price of China's imported agricultural products scissors difference ", poor investment environment for rural enterprises, and the country's strategic inclination towards agricultural development are common. Existing, the phenomenon of "ischemia "in agriculture and regional rural areas is serious, which has become a constraint on the development of industrialization in China's rural and regional areas economic "bottleneck ".

Therefore, to study the importance and impact of agricultural scale and industrialization in Hebei Province on the per capita income of rural residents, one can completely change the

agricultural development system model in Hebei Province, take the road of sustainable development of rural economy, improve industrialization in Hebei Province can be further understood and analyzed between the agricultural scale and industrialization of North Province and the per capita income of rural residents in Hebei Province makes them each other to form a virtuous cycle development mechanism of rural economy of "interaction between industry and city ".

2. Practical significance

Hebei Province has always been regarded as a traditional urbanized agricultural province in China, and the problem of agricultural development has always been a close one. It is the primary issue related to the economic development and social stability of Hebei Province. In the comprehensive deepening of reform and comprehensive integration into the present the strategic critical period of modernizing a well-off society and vigorously promoting the industrialization of modern agriculture, Hebei Province is based on the accord with China. It is an inevitable choice based on the specific and realistic national conditions of the country at the current stage and in line with the actual situation of rural and economic and social stable development. This article aims to of empirical analysis and research, and the agricultural industrialization form of Hebei Province is summarized through quantitative analysis. The history, status quo and characteristics of its development and development, using traditional econometric analysis models to analyze the current situation of Hebei Province 10 years in the city quantitative analysis of the coordination relationship between the development and industrialization of urbanization agriculture and the increase in the per capita income of rural residents, for the future provides the necessary theoretical basis for the research, formulation and implementation of policies related to new urbanization and agricultural development planning in Hebei Province. At the same time, it provides reasonable suggestions for improving farmers' income by vigorously promoting the industrialization of modern agriculture.

Based on the above historical background, this paper studies and analyzes the direct impact of agricultural industrialization on the disposable income of rural residents. For actively promoting the transformation of agriculture in Hebei Province from traditionalization to agricultural modernization and industrialization, and for improving Hebei The level of per capita disposable production income of rural residents in the province is of great significance and role.

C. Research ideas

This paper firstly investigates the background of the implementation of new urbanization and agricultural industrialization in Hebei Province, from the perspective of agricultural industrialization and from the perspective of the relationship between the adjustment of agricultural industry structure and farmers' income, the relevant literature was analyzed and sorted out. This paper analyzes the current situation of agricultural industrial policy implementation in Hebei Province, and analyzes the impact mechanism of agricultural industrialization on farmers' income. Take Hebei Province 2008 to ten years in 2017 10 control variables for agricultural data models, related data to the "Hebei Economic Yearbook" and "Hebei Rural Statistical Yearbook ", after sorting out the data, for Hebei. The impact of provincial agricultural industry development on farmers' income has been

quantitatively analyzed and related empirical theoretical research has been carried out. Based on the analysis of the results, some policy recommendations are put forward.

II. LITERATURE REVIEW

A. The connotation of agricultural industrialization

There have been many views on the importance and meaning of China's agricultural industrialization. The first is to think that from Harvard Roy A. Goldberg and John M. Davis Concept first proposed - agriculture Agribusiness, Chinese translation is "agricultural complex"[1]. It refers to a new type of agricultural management mechanism, which The center of this mechanism is to improve the income efficiency of agriculture, through a series of new The layout and R&D and production of the company achieve the development goal of promoting the income increase of farmers at home and abroad [2]. In addition, in the current domestic about it 11 In this definition, experts widely accepted the views of Niu Ruofeng (1998) and Chen Jiyuan (1996), who rejected the expression that was considered to be irregular, and emphasized the use of the concept of "agricultural industrialization management"[3].

Another thought is that the so-called industrialization of agriculture is an overall form of production and management, which is directly connected to integrates all aspects of agricultural production, and makes the production, processing and sales of agricultural products organically combined and linked. head First, in terms of organizational form, the industrialization of agriculture combines various key links of agricultural production through interconnected ties. into a complete economic system [4] ; secondly, in terms of business content and business methods, the The business model required by the farm, that is, the integration of trade, industry and agricultural products, the coordination of production, supply and marketing, and the addition of planting and breeding; finally, in agricultural production In terms of production goals, on the one hand, it pays great attention to the overall quality of industrialization participants, improves management capabilities, and increases production capacity. power and farmers' profit creation ability, form a virtuous circle of coordinated development of agriculture as a whole, and promote the realization of increasing land The ultimate goal of output and farmers' income [5].

From the above analysis of relevant literature, it can be concluded that for the basic definition of agricultural industrialization, although experts' Opinions vary, but in general a common understanding can be reached, that is, modern agriculture can be industrialized The basic development direction is defined as promoting the professional development of the agricultural production process and promoting the transformation of agricultural products into the market. Commodities on the market, differentiate the agricultural industry layout in each region, change the operation and management mode, and enhance the integration and enterpriseization Management and rational distribution of agricultural business interests. The reason for the different views is that experts from various fields have The research focuses on different directions, resulting in different perspectives of knowledge and understanding.

B. About the current situation of China's agricultural industry structure

Adjust the precise industrial structure of modern rural areas, develop high-quality, high-yield and profitable modern agriculture, and expand the economic scale Accelerating the development of the modern rural collective economy and increasing the income of farmers in poverty-stricken areas are all necessary to do a solid job in modern agriculture, Important tasks and priorities of poverty alleviation work in rural precision industries.

Regarding the significance and necessity of promoting the adjustment of the rural economy and industrial structure at present, Zhang Luyuan, in "On Agricultural Production In the article "Investigation and Reflection on Industrial Structural Adjustment", it clearly pointed out that promoting the development of the organizational structure of the rural collective economy and the The upgrading process itself is to promote the continuous optimization and adjustment of the organizational structure of the agricultural industry and the optimization, transformation and upgrading of the industrial structure. An important process, promoting the adjustment and optimization of the agricultural industry organizational structure is to promote agriculture to adapt to the needs of the international market, improve the It is an effective way to improve the economic benefits of modern agriculture and increase farmers' income [6]. Similarly, Wang Hongwei compared the situation of the development of agricultural industry in China and developed countries and regions, pointing out the current organizational structure of China's agricultural industry Adjustment and optimization are inevitable for rural economic and social development, and the development of agricultural industrialization, intensification and commercialization is the general trend. trend [7].

Regarding the development trend of the organizational structure of agricultural industry, Wu Wanxia and Cao Zhengyong in the "Sichuan Province Agricultural Industrial Structure Adjustment In the article "Analysis of the Overall Effectiveness", a comprehensive and multi-level in-depth analysis of the development of agricultural industry organizations in Sichuan Province at various stages is carried out.

The experience and results obtained in the structural adjustment work reveal that the organizational structure of the agricultural industry has changed from a purely productive one in the past. The adjustment of the quantity distribution ratio of the organizational structure has transformed the organizational structure of agricultural production, the organizational structure of the industry, the variety of products The new development trend of qualitative organizational structure, regional organizational layout, and comprehensive adjustment of agricultural production organization [8].

In addition, Yu Ranlai pointed out in his research that it is necessary to speed up the increase of farmers' income through further increase and improvement. rapidly develop the new rural collective economy, the key path is to further accelerate the integration and structural adjustment of the agricultural industry. Propulsion speed. But at the same time, it also clearly pointed out the current difficulties in promoting the integration and structural adjustment of the agricultural industry in my country. More, government departments should also continue to strengthen the adjustment of macro policies, and must better ensure that the grass-roots level The leading role played by the

people's government is to guide the direction and pace of development of the industrial structure to speed up the adjustment, and make every effort to study how to Constructing an efficient and reasonable rural industrial development system is conducive to the growth and development of the agricultural collective economy. transformation and is conducive to the healthy and sustainable development of the rural collective economy [9]. In addition, before Yu Ranlai's research point of view, Su Jihua also clearly believes that the grass-roots people's government is particularly In particular, some township-level party organizations and government departments should play a better role in adjusting the rural industrial structure. It is necessary to make full use of the experience and methods of advanced countries and regions to study how to guide the agricultural industry. Structural adjustment [10]. What the two theories and researches have in common is that they must take the norms of the behavior of government departments as The basis and leading driving factor for accelerating the adjustment of the rural industrial structure have become the sustainable development of the rural collective economy. Kang develops a strong external force.

C. The impact of agricultural industrialization on farmers' income

At present, the income gap between urban and rural residents is widening. In order to solve this problem, Many experts and scholars have invested in research to explore what impact agricultural industrialization has on farmers' income, and how influence mechanism. In some research literatures currently available, there are already many experts from the perspective of agricultural economic theory. From the perspective of degree, explain some basic functions of agricultural industrialization. It is mainly manifested in the transformation between labors, which can better guide more agricultural laborers to transform into the market, This can promote the improvement of overall economic benefits, thereby increasing farmers' income [11] ; at the same time, Zhou Jiantao also believes that industrialization It is very effective for transferring rural labor. He also proposed a new model, the industrialization connection model. The formula can effectively extend the industrial development chain; Professor Chang Yumiao believes that there are four main paths for industrialization to increase farmers' income Articles, through the development of agriculture through science and technology, the extension of the industrial development chain, the driving development of large leading enterprises, and the These four industrial development paths play a complex role in driving the intermediary organization to the market [12] ; Xia Chunyu analyzed and deduced Different connection business models of industrialization, it is found that among the two existing models, compared with "leading enterprises + farmers" In other words, "leading enterprises + cooperative organizations + farmers" has higher economic efficiency, which makes leading enterprises and cooperative organizations united, played a greater role and created more profits [13].

The question of how much the agricultural industrialization has affected the increase of local farmers' income has also been affected by many people. The attention and attention of several experts and researchers. Zhu Hugen [14] and Tian Xiangyu [15] calculated the data from the perspective of financial investment. According to the analysis, it is concluded that the financial investment during the local industrialization period can significantly stimulate economic growth, Directly promote the

increase of local farmers' income; Guo Jianyu used specific data to investigate and research farmers in Shanxi Province, This paper analyzes the direct influence of agricultural industrialization to increase farmers' income on economic benefits and other factors [16] ; The perspective analysis of the case of leading enterprises in the economy, using the rural data of Yangzhou City, Jiangsu Province, China, studies the agricultural industry The benefits and actual income created by the process of transformation [17].

To sum up, the theoretical and qualitative analysis of the increase of agricultural industrialization in Hebei Province to promote the increase of farmers' income It has been relatively complete, but there are not many theoretical studies on quantitative analysis, and there are only some analyses from the government side. These studies cannot be directly applied to Hebei Province, and There is no specific indication of the degree of influence of each factor; for specific research, although a few experts Start with leading enterprises or intermediary organizations to analyze the effect of industrialization on increasing income. However, because these studies did not Extensive analysis of large amounts of data, so their conclusions can only be limited to a small range, not representative of the majority. It is for these reasons that this paper will analyze a large number of industrialization-related data to deeply explore the agricultural industry in Hebei Province. of industrialization on farmers' income is expected to further promote the industrialization of agricultural technology in Hebei Province in the future. Provide reasonable suggestions for development and increase of farmers' income.

III. SITUATION ANALYSIS

A. Analysis of the current situation of new urbanization development in Hebei Province

The process of urbanization is a historical process in which China's population is rapidly and continuously agglomerating to cities and towns. It is an important historical development stage that will inevitably occur and experience in the process of industrialization. At present, Hebei Province is due to the It is located in a unique geographical location around Beijing-Tianjin and along the Bohai Sea. Under the strategic background of the coordinated development of the Beijing-Tianjin-Hebei region, accelerate the development of social The process of socialist urbanization has completely become an important factor in promoting the coordinated development of Hebei and even the Beijing-Tianjin-Hebei economic region. Support and impetus. Hebei Province 's "Twelfth Five-Year "planning and development outline also further clearly proposes to increase the transformation of traditional The model of urban development, the development of traditional industries to urban clusters, the aggregation of population to towns, the optimization of the layout of large, medium and small cities, Promote the modernization and high-level integrated development of large, medium and small cities and the coordination between large, medium and small cities and other small and medium towns. Adjust the development, and walk out a new socialist urbanization development path that is in line with the reality of contemporary Hebei Province.

In recent years, with the in-depth implementation of China's new urbanization development strategy, Hebei Province's efforts to promote urban community construction the continuous increase in the degree of urbanization, the

comprehensive strength of urban communities has also been continuously enhanced and improved. The environment has also been greatly improved, the appearance of urban communities has undergone tremendous changes, and the level of urbanization has been gradually developed. improvement and acceleration. as of At the end of 2018, the average urbanization rate of the resident population in Hebei Province was 56.43%, than 1978 _ 12.2% of the urbanization level has increased significantly 44.23%, but compared to the national population urbanization level average 59.58% is still lower, especially important with the central city Beijing 86.5% and Tianjin's There is a big gap between the 83.15% level, which will seriously restrict the promotion and development of Beijing-Tianjin-Hebei economic integration.

B. Analysis of the Status Quo of Agricultural Industrialization in Hebei Province

1. The characteristic agricultural industry gradually grows

In 2016, the scale of industrialized production and operation in Hebei Province increased on the basis of the previous year. 544 billion, reaching 747.9 billion yuan, growing More than 7.8% ; the scale operation rate of agricultural and grain industrialization in Hebei Province has reached 66.7%, continuing Faster and healthy development. In recent years, the characteristic and advantageous agricultural industry in Hebei Province has gradually developed and expanded. animal husbandry, vegetables, and forest and fruit have formed five major industries of grain, dairy, meat, fruit, vegetables, grain and oil. The development pattern of grain advantageous industries dominated and focused on the development of major agricultural product processing industries. 2017 Hebei Province entered Further strengthen the integrated construction of the core area of grain and production technology, implement the “Bohai granary “and the demonstration of scientific and technological innovation in Hebei Province. Fan base construction project, developed water-saving and early-cropping characteristic agriculture, and the total grain output reached 672 billion kilograms. animal husbandry, The scale of the three major grain industries of vegetables and fruits has been further expanded, and the total output of meat, eggs and dairy products has reached 4.8 million tons, 3.9 million tons, 6.3 million tons. Benefiting from the natural geological resources and environmental endowments and the advantages of geographical location, Hebei Province has further developed and established a number of characteristic industries of technological innovation, including the almond processing industry in Chengde material processing industry, vegetable processing industry in different seasons, chestnut processing industry in Qianxi in Tangshan, Chinese cabbage processing industry in Yutian, Organic and pollution-free vegetable processing industry in Zhangjiakou, Chinese herbal medicine processing industry, vegetable processing industry in Baoding, stone processing industry The huanghuali product processing industry and flour processing industry in Jiazhuang have basically formed a pollution-free vegetable processing food. product industry cluster, fruit processing food and beverage, canned food manufacturing and processing industry cluster, edible fungus product processing industry, food Manufacturing and processing industrial clusters, animal husbandry production livestock breeding clusters and meat and its product processing industrial clusters, cattle breeding, Dairy product processing industry cluster, leather, fur and its products processing industry cluster produced by poultry and livestock breeding, oilseeds

Industrial clusters with technological innovation characteristics such as processing production clusters and vegetable oil product processing industrial clusters. 2015 _ June, _ Hebei Agricultural Science and Technology Innovation Alliance was formally established, and since then it has further promoted the current agricultural biological breeding, The development of agricultural science and technology innovation characteristic industrial clusters such as ecological farming, characteristic fruits, green vegetables, and food production and processing.

2. Rapid expansion of industrialization

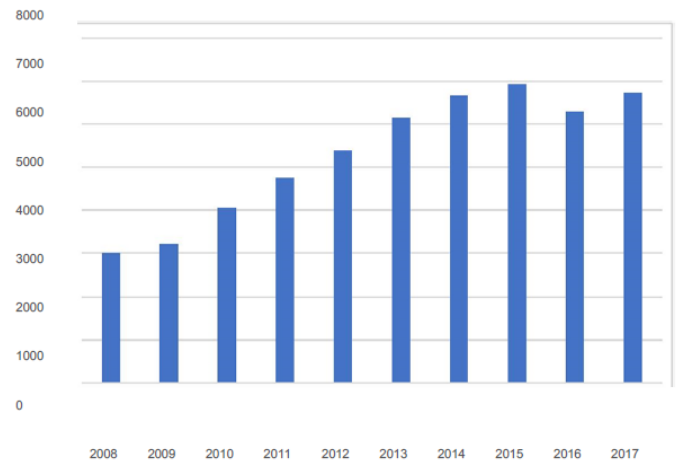


Figure 1 Scale of agricultural industrialization in Hebei Province from 2008 to 2017

It can be clearly seen that from 2008 to In 2017, the scale of industrialization in Hebei Province expanded rapidly. In 2008, the total operating output value had not yet reached 300 billion yuan, but by 2013 it had doubled. Twice as much, exceeding 600 billion yuan for the first time, with an average annual growth of 21%. In just ten years, the total has risen sharply broken 4 100 billion yuan: 2009 In 2018, the total output value of industrialized scale operation in Hebei Province broke through for the first time 3000 billion mark, followed by the second year 2010 year breakthrough 400 billion yuan mark, 2012 year breakthrough 5000 the billion-dollar mark, then again in the next year 2013 year and quickly broke for the first time 6000 billion mark, to 2015 year is approaching 7000 billion. from 2016 From the beginning of the year, it can be seen from the figure that the growth rate has begun to slow down significantly.

3. Various social organizations are growing rapidly and the number continues to increase

As table 1 As shown in the figure, the number of various leading operating organizations in Hebei Province has continued to increase and the scale has expanded rapidly. 2008 year 2017, the total number of various leading operating organizations in Hebei Province increased from 1,230 to 2,575, an increase of 1.1 times ; The scale and sales of leading operating organizations increased rapidly from 156.28 billion yuan to 406.33 billion yuan, an increase of 1.6 times. Among them, the number of organizations engaged in industrialization has increased year by year, and only in There was a small decline in 2012, but There is no direct impact on the continuous increase in the total number and sales of leading enterprises. Industrialized leading enterprises (groups) from 1016 quickly expanded to 2303, sales are also insufficient from the beginning 1500 billion yuan jumped to more than 3600 billion, only in nearly 10 years of growth 1.5 times. also in In 2012, although the number of

Table 1: Development of various agricultural industrialization organizations in Hebei Province from 2008 to 2017

years	Leading operating organization		Leading Enterprise (Group)		intermediary service organization		Professional wholesale market		Production (processing) base	
	quantity	sales	quantity	sales	quantity	sales	quantity	sales	quantity	sales
	(individual)	(100 million yuan)	(individual)	(100 million yuan)	(individual)	(100 million yuan)	(individual)	(100 million yuan)	(individual)	(100 million yuan)
2008	1230	1562.8	1016	1460.7	87	11	127	91.1	505	1417.8
2009	1252	1614.2	1030	1497.2	102	11.6	120	105.4	500	1582.1
2010	1465	2122.5	1218	1963.6	118	18	129	140.9	556	1927.1
2011	1845	2424	1576	2235.5	140	21.5	129	167	590	2313.1
2012	1662	2719.1	1388	2496.5	147	23.1	127	199.5	633	2675.2
2013	1837	3108.9	1555	2861.9	156	24.3	126	222.7	667	3038.9
2014	1974	3448	1703	3158.4	160	23.9	111	265.6	688	3218.1
2015	2181	3638	1899	3296.7	169	26.8	113	314.3	699	3297
2016	2529	4019.7	2212	3633.8	204	28.9	113	357	724	3459.4
2017	2575	4063.3	2303	3622	166	30.4	106	410.9	742	2680.2

leading enterprises decreased slightly decreased, but quickly returned to the original level in the second year and continued to increase thereafter, while Sales are steady steady development and continuous increase. arrive 2017 In 2018, the agricultural industrialization intermediary professional agricultural product wholesale market in Hebei Province was established by 2008 _ 127 rapid reductions were added to 106, the reduction in the number means that the size of the market gradually changes. large, sales from The increase of 9.11 billion yuan was reduced to 41.09 billion yuan, compared to In 1997, a substantial increase 3.5 times as much. At the same time, the industrialized intermediary and service management organizations have also gradually achieved new and substantial development. quantity from 2008 _ 87 rapidly increase and decrease to 2016 _ 204, then in Appropriate increase in 2017 number decreased, the number of operating organizations increased, and the total sales amounted to 1.1 billion increased to 3.04 billion yuan, a year-on-year increase nearly three times. During the same period, the production (processing) bases of agricultural products in Hebei Province have also developed by leaps and bounds. from 505 increased to 742, the sales output value is from 141.78 billion yuan rapidly increased to 2680.2 billion yuan.

In addition, the national green food management leading enterprise in Hebei Province has developed registered trademarks, pollution-free green edible fungi and agricultural The research and formulation and quality certification of various quality standards for products, green food and organic food have been obtained. Certain outstanding achievements, the brand effect will be further highlighted. Originally from Mashan Agricultural Products City, Baoding District, Hebei Province For example, Baoding area currently has Baiyangdian Mashan duck eggs, Lixian Ma yam, Green asparagus in Rongcheng County, Tangshan jujube in Tang County, hemp walnut in Laishui County, and Xiantao in Shunping County are national key natural products of geographical indication protected varieties have 3 "China Famous Trademarks ", 39 "Hebei Famous Trademarks ", and "Hebei Famous Trademarks ". Provincial Famous Brand Products "43.

4. Industrialization drives the increasing participation of farmers

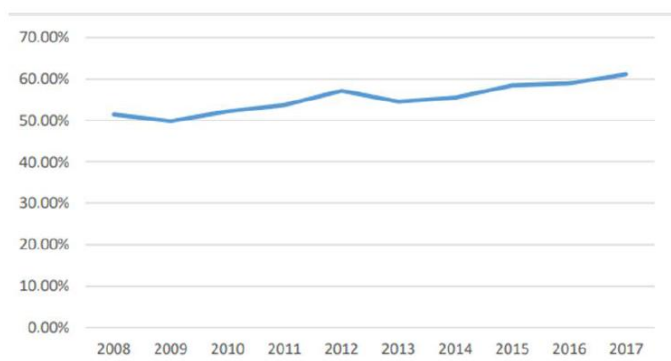


Figure 2: Farmers' participation in industrialization in Hebei Province from 2008 to 2017

From the analysis of the development of the radiation driving ability of farmers from industrialization in recent years, more and more farmers have Extremely participated in the ranks of leading operations in promoting agricultural industrialization. In recent years, farmers' participation in industrialization are occasional fluctuations every year, and the overall industrialization trend is steadily rising. In 2008, the participation rate of farmers participating in industrialization only 51.4% (see figure 2), to 2017 Years have been more than 60% of farmers have participated in the industrialization dragon head-operated system. future Farmer participation has increased on average every year over 10 years 2 percentage points. It also says It is clear that the social organizations engaged in leading industrialized management in Hebei Province have a strong enough ability to radiate and drive farmers. In 2012, the leading agricultural production enterprises in Hebei Province led nearly 8.9 million farmers have participated in the industrialization process. camp, compared to 2008 _ 6.5 million farmers raised 37%.

5. Problems existing in the development of agricultural industrialization

(1) The economic benefits of the main products in the process of industrialization development are relatively low

By analyzing the results of various previous studies, it can be concluded that one of the main influencing factors that can affect the economic benefits of agricultural products. One is the comprehensive benefit value-added rate of the agricultural products of the enterprise project. At present, only a very small number of large-scale enterprises in the province have agricultural products. The value-added rate can exceed 200.0%, such as Chengde Lulu, Lulong sweet potato, etc.; insufficient 100%, even some small businesses can barely reach 30.0%. The low value-added rate has a negative impact on farmers. Yes, if the value-added rate of an agricultural product is relatively low, it means that the production of this agricultural product may get less benefits, rate of return is lower, it will discourage them from participating in agricultural production.

(2) Agricultural producers lack scientific and technological quality, and the level of agricultural mechanization production is low

The current level of cultural quality of agricultural practitioners is low, which can only be applied to small-scale agricultural production and primary work. When the cultural quality of farmers is low, complex equipment and processing machines cannot be controlled, and the natural agricultural mechanization level is lower. However, agricultural products only stay at the primary processing level and cannot be developed into high-end products. However, it has been affected, which has damaged the enthusiasm of farmers and accelerated the loss of agricultural labor.

(3) Leading enterprises are small in scale and cannot drive all farmers

The province has developed a number of industrialized management projects, and leading enterprises also have a relatively large scale. The profits obtained by industrialized farmers in the production process are still insufficient, and the number of leading enterprises cannot fully meet the needs of farmers. The scale of industrial production cannot fully and effectively promote the development of the rural economy. In addition, the overall development of agriculture is poor, and farmers Low income levels dampen the enthusiasm of farmers everywhere. The main reason is that the scale development of leading enterprises is not enough, but However, enterprises all over the world have serious consumption and waste of human resources.

C. Analysis of the Status Quo of Farmers' Income in Hebei Province

The per capita disposable income of rural residents is a comprehensive indicator, which directly reflects the actual situation of rural households in Hebei Province income level. The current income status has the following development characteristics.

1. The income level of farmers continued to rise slowly

With the development in recent years, the economy of Hebei Province has maintained a steady growth, but the overall development Ping is still at a lower level.

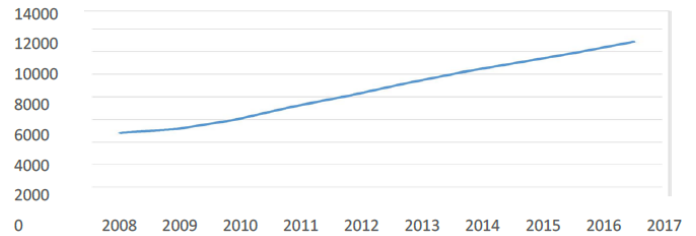


Figure 3: Per capita disposable income of rural residents from 2008 to 2017

Since the country began to vigorously develop new rural construction, the income level of farmers has been Fully improved and steadily improved. Since 2006, the state and the government have begun to increase investment in agriculture, Various policies have been adopted, and agricultural taxes have been completely abolished. These measures have greatly promoted the increase of farmers' income, making the The per capita income of farmers in Hebei Province is only Breakthrough in 2014 10,000 yuan, in addition, due to the new rural soil With the implementation of land reform, the basic income of farmers has been guaranteed, and this reform has also promoted the growth of farmers to a certain extent. receive. However, in recent years, due to the sluggish agricultural market, the development of modern agriculture has also been restricted, and farmers' income has increased. The speed began to slow down, and some areas even began to stagnate. At the same time, the phenomenon of rural poverty in certain departments was still serious. Not optimistic.

2. The income gap between urban and rural areas is still widening

In recent years, both urban and rural areas in Hebei Province, the per capita income level has continued to increase, but according to the figure 4 It can be seen that the income growth rate of urban residents is significantly faster than that of rural areas, so the gap gradually increases. Year of Urban and Rural Residents The difference in the total per capita disposable income is determined by 2008 Year 8645.63 Yuan increased to 2017 Year 17666.82 Yuan. At the same time, the annual per capita disposable economic income of urban residents in Hebei Province is compared with the annual per capita disposable net income of urban areas. also by 2.37:1 expanded to 2.80:1. Because the economic benefits of agricultural production are relatively low at present, the agricultural The income of the people is growing slowly in total, and the gap is widening.

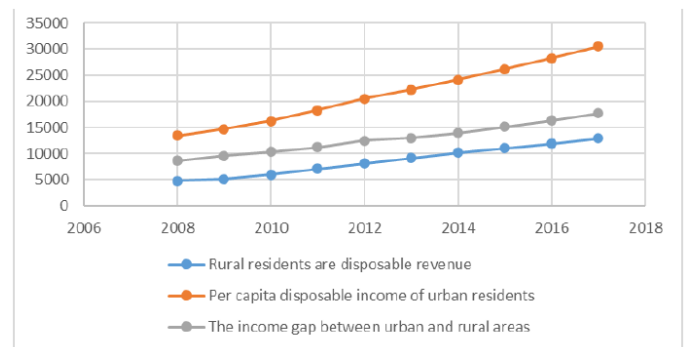


Figure 4 Income gap between urban and rural residents in Hebei Province from 2008 to 2017

IV. EMPIRICAL ANALYSIS OF THE IMPACT OF AGRICULTURAL INDUSTRIALIZATION ON FARMERS' PRODUCTION INCOME

A. The basic principle of the effect of agricultural industrialization on farmers' income

At present, more than half of the farmers in Hebei Province have participated in the industrialized management system, and the average can be obtained from industrialization 8,000 yuan of industrialized income, as an important income and composition of industrialized farmers part, the industrialized business income of participating households will inevitably have a significant effect on the average income level of all farmers. In addition, industrialization may also have spillover effects, and non-industrialized participants may also learn from a single industrialized Access to information and other resources during business operations. These two factors mean that it is necessary to examine the impact of industrialization on the overall income of farmers. It can provide more comprehensive data and information for local government decision-making and industrialization. Industrialization through the The income generation of households promotes the improvement of the overall income level of farmers' industrialization. The mechanism of this promotion can also be called as It is the depth effect of industrialization. On another level, on the premise that the depth effect of industrialization remains unchanged, farmers participate in The higher the degree of industrialization, the stronger the promotion effect of industrialization on the overall income of farmers. The mechanism used can also be called the breadth effect of industrialization.

B. Empirical Model Construction

To measure the agricultural industrialization in Hebei Province on the increase of farmers' income, this paper mainly focuses on the to adopt A quantitative analysis was carried out on the panel data of Hebei Province from 2008 to 2017. In this chapter, combined with the previous in-depth research on modern agricultural industrialization, some data are selected as the core to explain the variables. Quantitative and dependent variables, using traditional panel estimation method to construct empirical models and analyze the influence of various empirical model results. Analysis was done.

1. Variable selection

The relevant data analysis above shows that the scale of agricultural industrialization and the agricultural participating households are directly obtained from the industrialization. Paper uses the scale of industrialization as an indicator to measure the depth effect of industrialization, so that the the breadth effect of industrialization is examined by using farmers' participation in industrialization. In addition to the need to analyze these industrializations related factors, but also to control the effects of other factors that affect farmers' income. which table 2 and table 3 listed separately. All basic variables and their descriptive statistics, all indicators and data variables are derived from 2008 to 2017 "River" North Economic Yearbook and Hebei Rural Statistical Yearbook.

This paper also introduces the number of agricultural labor force per household, the proportion of non-agricultural labor force, labor force education level, farming effective irrigation rate, agricultural disaster rate, per capita arable land, proportion of cash crops sown area, agricultural production per household The main variables of fixed assets are used as control variables.

The scale of industrialization plays a positive role in promoting and promoting the income increase of rural residents. Mainly by generating income for a single farmer, it promotes the growth and improvement of the overall farmer's income level, so the expected The sign is positive ; on the other hand, the higher the degree of farmers' participation in industrialization, the greater the effect of industrialization on the overall income of farmers. is stronger, so the expected sign is also positive.

Table 2: Empirical Analysis Indicator Selection

variable	variable name	Variable Definition and Description	expected symbol
Farmer's income (yuan)	Income	per capita net income of farmers	-
Industrialization scale (100 million)	Indust	Total industrialized operation	+
Farmer participation (%)	Partic	The proportion of farmers participating in industrialization in all farmers	+
Workforce size	Labor	labor force per household	+
Labor non-agricultural ratio (%)	Nonagric	Proportion of non-agricultural labor force to labor force	+
Land management scale (m2)	Land	per capita arable land	+
Effective irrigation rate (%)	Irri	Proportion of effective irrigated area to cultivated land area	+
Agricultural disaster rate (%)	Disast	The proportion of agricultural disaster-affected area in crop sown area	-
Education level of labor force (%)	Education	Proportion of labor force with high school education or above	+
Agricultural fixed assets per household (yuan)	Capital	The proportion of agricultural fixed assets and farmers	+
Size of cash crops (%)	Casherop	The sown area of cash crops as a percentage of the sown area of crops	+

The scale of the labor force is the average number of laborers in each household. The labor force in the family directly creates income, so the number of labor force The greater the amount, the stronger the ability to generate income, and the expected sign is positive;

At present, in the income structure of farmers, the proportion of income from agricultural production and operation is declining, while the income from wages is declining. proportion of income has further increased, and has become the main source of farmers' income. As a result, the income structure gradually tends to Under the current situation of development towards diversification, the degree of non-agricultural labor income is closely related to the income of farmers, and the expected number is positive;

The area of arable land is closely related to the income of a family engaged in agriculture, which directly determines the amount of work a family can engage in. and the largest scale of agricultural production activities in operation. The amount of arable land per capita is important to the current national economy and societyof agricultural economic production has an important influence on the improvement and improvement of people's living conditions. tillage The larger the land area, the larger the scale of agricultural production, the higher the output, and the higher the income from agricultural operations. The expected symbol is just;

The effective irrigation rate refers to the proportion of the effective irrigation area to the cultivated land area. This indicator reflects the irrigation conditions of farmers. The better the irrigation conditions, the better the agricultural production conditions, and the correspondingly higher agricultural output may be, and the higher the income will be. period sign is positive;

China is a big country developing agriculture. The agricultural meteorological disasters in history are the major obstacles to production. The agricultural disaster rate means the proportion

of the agricultural disaster area in the total crop output and sown area. Agricultural disasters have greatly reduced agricultural output and reduced farmers' agricultural production and business income. This expected sign is negative; to the mechanization and industrialization of modern agricultural development. Therefore, the higher the development level of labor culture, the higher the relative income level of farmers, and the expected sign is positive;

Agricultural productive fixed assets mainly reflect the actual investment status of agricultural capital. The higher the labor output efficiency, the higher the income, and the expected sign is positive;

Cash crops mainly refer to crops with a certain economic value, and the main purpose is to earn money for farmers profit, rather than the goal of producing food. Cash crops are relatively intensive due to the management methods of agricultural production.

The importance of commercialization and production is relatively high, and the comprehensive utilization of agricultural economic benefits has great potential, requiring its early investment. Higher agricultural production cost manpower, material resources and greater production financial resources. Therefore, the greater the proportion of cash crops, The income level of farmers may also be higher, and the expected sign is positive.

Of course, in addition to the above factors, there must be other indicators that can affect the income level. However, by Considering that their influence is small, these indicators have all been included in the residual term.

2. Descriptive statistics of data variables

Table 3: Variable Descriptive Statistics

variable	mean	dard devia	minimum	maximum
Farmer's income (yuan)	8632.89	2720.66	4795.46	12880.94
Industrialization scale (100 million yuan)	5439.5	1529.53	2996	7479
Farmer participation (%)	55.26	3.431	49.8	61.1
Workforce size (units)	2.594	0.182	2.39	2.83
Labor non-agricultural ratio (%)	53.001	2.254	48.94	55.75
Land management scale (m2)	895.35	18.936	866.9	932.8
Effective irrigation rate (%)	68.22	2.115	63.5	72
Agricultural disaster rate (%)	9.03	3.369	4.55	15.73
Education level of labor force (%)	21.927	3.661	15.94	27.17
Agricultural fixed assets per household (yuan)	6118.131	826.427	5226.31	7640.99
Size of cash crops (%)	21.69	1.57	19.79	25.2

Table 3 shows the descriptive statistics of each variable in the model. From 2008 to 2017, the average income of farmers in Hebei Province was 8632.89 yuan, which has a relatively large degree of dispersion; and the variables with the largest standard deviation are the scale of industrialization and agricultural solids per household. fixed assets; indicators such as the scale of

labor force and the scale of cash crops are relatively concentrated.

C. Empirical Analysis

The panel data model requires that the data of each panel variable must be stationary or first-order single integral, otherwise it can lead to false regression phenomenon, so the unit root test of panel variables should be performed before establishing the panel data model.

1. Test the stationarity of panel data (unit root test)

LLC is used to test the stationarity of panel data. Testing method.

Table 4: Unit root test

variable	p value	flat stable sex
Income	0.0061	flat stable
Indust	0.034	flat stable
Partic	0.0439	flat stable
Labor	0.02	flat stable
Nonagric	0.0001	flat stable
Land	0.0845	flat stable
Irri	0.1311	flat stable
Disast	0.0006	flat stable
Education	0.13	flat stable
Capital	0.0007	flat stable
Casherop	0.704	flat stable

2. Cointegration Test

Cointegration test is a method used to examine the long-term equilibrium relationship between variables, which is analyzed by the results of the unit root test.

It can be obtained that the explanatory variables are first-order single integration, and the cointegration test can be carried out. The null hypothesis of the cointegration test is that it does not exist In the co-integration relationship, according to the test results, we can see that P=0<5%, so the null hypothesis is rejected, and the explanatory variable and the explanatory variable are There is a cointegration relationship between the quantities.

3. Model determination and empirical results

The model used in this paper is as follows:

$$Income_{it} = \alpha_i + \beta_1 Indus_{it} + \beta_2 Partic_{it} + \beta_3 Labor_{it} + \beta_4 Nonagric_{it} + \beta_5 Land_{it} + \beta_6 Irri_{it} + \beta_7 Disast_{it} + \beta_8 Educarion_{it} + \beta_9 Capital_{it} + \beta_{10} Cashcrop_{it} + \epsilon_{it}$$

Panel data models have different estimation methods due to specific regions and forms. Panel data usually require the use of a fixed-effects estimation model. In order to effectively control the estimated sample data, there may be The serial correlation and cross-sectional heteroscedasticity problems of the Estimation model Generalized Feasible Least Squares (FGLS) model is used for parameter estimation, and the estimated results are shown in the table 5.

Table 5: FGLS estimation results

variable	coefficient	standard error	p -value
Income	3.070***	0.276	0.0061
Indust	9.12**	122.92	0.034
Partic	3146.46**	0.811	0.0439
Labor	934.77**	313.85	0.02
Nonagric	130.65***	16.78	0.0001
Land	221.04*	150.16	0.0845
Irri	-126.85*	116.19	0.0911
Disast	634.91***	106.92	0.0006
Education	0.79**	0.53	0.0300
Capital	1589.26***	279.22	0.0007
Casherop	913.35	1297.53	0.704

Note: Since generalized least squares regression R^2 cannot be used, we report the observed and predicted explanatory variables. The correlation coefficient of the value, i.e. $r=0.92$; ***, **, * represent in 1%, 5% and 10% level statistically significant at the 10% level stickiness.

D. Analysis of regression results of the impact of agricultural industrialization on farmers' income

Table 4, it can be seen that the correlation coefficient The higher value of $r=0.92$ indicates that the model fitting degree is better; The signs of the explanatory variable coefficient estimates are consistent with our model expected estimates; all variable coefficient estimates. The values also have obvious statistical significance (except for the constant term).

From the empirical results, this paper focuses on the analysis of the scale of industrialized operation and the degree of participation of farmers in industrialization. stay away 1% and It is significant at the 5% level, and has a great positive impact on the increase of farmers' income. All farmers can For farmers who participate in agricultural industrialization and farmers who do not participate, the participating farmers can directly obtain the agricultural industrialization belt. economic income. In the early stage of industrialization, the development of agriculture was relatively slow, and the industrialization reform attracted more and more More peasant households participated, which in turn led to the development of the entire rural society and economy. It can be seen that the expansion of industrialization scale and the degree of farmers' participation in industrialization are conducive to promoting the improvement of farmers' overall income, and the expansion of the scale of industrialization. The benefits brought to farmers' income are lower than the driving benefits of farmers' industrialization participation to increase farmers' income, which means It means that the breadth effect of industrialization is higher than its depth effect.

Regarding the labor factor, we found that the size of the labor force, the non-agricultural ratio of the labor force, and the education level of the labor force have a significant impact on the labor force. The impact on farmers' income is very significant. Labor resource is an important factor of social production, making full use of these labor Human resources can effectively promote the development of modern agriculture faster. With the further development of the national economy, rural residents undergo great changes. It has become a part of the labor force to go out to work, and the main income of farmers has also become wage income, so the ratio of

non-agricultural labor is The increase can affect the income level of some farmers. The impact of labor's education level on farmers' income is stronger than expected The reason may be that the education level of the labor force is related to the scientific degree of engaging in agricultural labor, which directly affects the The level of mechanization and industrialization engaged in agricultural labor, and mechanization can improve the conditions of modern agricultural production and management. Improving the level of agricultural production technology, economic benefits, and ecological benefits has obvious effects, which in turn has a significant impact on farmers' income. influence.

In contrast, in terms of the utilization of agricultural facilities, the effective irrigation rate and agricultural disaster rate are in 10% level Significantly, their direct impact on the economic income of growers and farmers is not as large as other factors. China's agricultural development enter Since the 1990s, the state has paid more attention to the effective irrigation of agriculture, and the investment has increased significantly. Demonstration sites have been established, the lack of effective irrigation has been greatly improved, and the degree of effective irrigation of the land can be improved. In order to be guaranteed, so the economic impact is small. Obviously, the disaster rate of agriculture is negatively correlated with farmers' income, while The reason why the impact on farmers' income is small is also likely to be due to the green environmental protection currently vigorously developed in Hebei Province. The biopesticide has made great achievements and progress in the world, and at the same time attaches great importance to green environmental protection agricultural engineering Research, development and application of biotechnology, for example, using tissue culture to carry out various fruit trees, flowers, vegetables, The cultivation and propagation of virus-free seedlings of potato and other plants, China's genetically modified insect-resistant cotton has achieved world-class success. achievement. in the near 30 For many years, China has not experienced large-scale crop diseases and insect pests, which to a certain extent has ensured food To a certain extent, the agricultural disaster rate is less affected.

In the process of land use, the impact of the scale of land management and the scale of cash crops is analyzed, and it can be clearly seen It can be seen that the influence of these two factors is very significant. In the past few years, the agricultural development scale of Hebei Province was relatively small, and farmers Income can only be obtained from land cultivation, and the scale of land management directly affects the output of the land and the income of agricultural operations. enter. Compared with traditional bulk crops, cash crops have high added value, and their operating income accounts for the proportion of farmers' income larger.

Another more important factor is the agricultural fixed assets per household, which also has a certain positive effect on the increase of farmers' income. influence. Agricultural fixed assets are an important material basis for agricultural production, occupying a large proportion of agricultural production units. The proportion is necessary for the comprehensive development of rural economy, and it is also an important guarantee for farmers' living and welfare. Agriculture fixed The amount of assets determines the degree of agricultural development, which should also have a more significant positive impact on farmers' income reason.

V. POLICY SUGGESTION

A. Further develop, expand and improve rural cooperative economic intermediary organizations

The economic intermediary organizations is a powerful guarantee for promoting the industrialization of modern agricultural development. The development of intermediary organizations has set up a bridge of communication between farmers and enterprises, farmers and the market, and ensured the safety of both parties. and legitimate interests. Governments at all levels should encourage and actively support rural individuals, collectives, units and other socialist economies Group organizations to establish various types of rural enterprise intermediary organizations to explore multi-channel, multi-regional, multi-level Cooperation, give full play to its communication with the government on agricultural information, coordinate agricultural production, regulate quality and price, and protect enterprises and farmers' interests, the decisive role of protecting modern agricultural production safety, and further improve the industrialization market regulations and industrialization supervision system, in order to effectively ensure the orderly and healthy operation of the industrialized market economic system, effectively Promote the development and expansion of the market scale of my country's modern agricultural development industrialization.

B. Adjust and improve the planting scale structure of characteristic crops in the province

Reduce the total output of grain crops on the basis of fully guaranteeing the comprehensive grain production capacity of the whole province. The amount and planting coverage area will increase, and the scale of economic crops will be increased. Actively adapt to the development of agricultural product markets and demand, gradually expand the scale of agricultural products such as green vegetables, Chinese herbal medicines, fruits, edible fungi and so on. Develop The province's high-end characteristic agricultural products, cultivate a group of strategic agricultural production enterprises with the province's advantages and characteristics and the province's special A well-known brand of color agriculture. Adjust measures to local conditions and give full play to the advantages of each region to adjust the crop planting structure.

C. Vigorously cultivate high-quality relevant agricultural technical personnel

In the process of accelerating the development of industrialized scale management of modern agriculture in China, it is necessary to learn to apply the latest It is necessary to vigorously train a group of high-quality agricultural technicians. Therefore to create and improve vocational schools of higher education as the core and leader, vocational and technical higher education research institutes as the core and main body, A modern agricultural science and technology education and cultural system coordinated and developed by various types of higher education at all levels, vigorously improve farmers' science and technology knowledge and cultural qualities. This is the realization of the scientific and technological progress of our country's agriculture and the transformation of the current growth mode of agricultural science and technology and culture. an important key point. Because high-quality agricultural technology ultimately needs to rely on farmers themselves to learn, master and promote is widely used and developed into a realistic agricultural productivity in agriculture.

D. Actively encourage and support the improvement of the economic market system

Encourage the adoption of the farmer's shareholding cooperative system to improve the level of economic organization for farmers ; Break the boundaries of administrative divisions, ownership, and industries, and develop farmers' cross-regional and cross-industry development of various forms of farmers Economic cooperation and alliance, guide agriculture-related enterprises or entity organizations to adopt the operation mode of farmers' shareholding cooperative system, and cooperate with Other peasant or non-peasant economic or entity organizations form an integrated economic cooperative organization ; actively encourage and guide Support the development of various forms of farmers' expertise to participate in the development of cooperative economies or entity organizations, continue and expand cooperative Scope of production pilot.

E. Promote the transformation of agricultural population into secondary and tertiary industries

At present, Hebei Province has more people and less land, and the labor resources are relatively more. The land resources are not matched, and the per capita land area is small, and the land output rate is not high. Only through vigorous development Characteristic non-agricultural industries, the full transfer of rural surplus labor to the land in it, can the remaining land be To concentrate and rationally utilize and develop land, and expand the utilization and output rate of rural land. Can not be transferred in the process of labor By means of coercion, farmers can be voluntarily transferred through relevant propaganda and explanations.

CONCLUSION

In recent years, Hebei Province has intensified its efforts in rural agricultural reform and began to develop a brand-new path, that is, from traditional agricultural The industrial transformation has been transformed into modern agriculture, and the structure of the agricultural industry has been gradually changed to meet the needs of modern agricultural development. beg. All the changes in the development model and structure are ultimately aimed at increasing farmers' income. Therefore, Hebei Province All relevant departments in China should take effective measures to actively carry out agricultural reform, and make full use of the different characteristics of each region, Form a development model with its own characteristics, give play to different advantages, and promote the increase of farmers' income.

In the past ten years, the agricultural industrialization in Hebei Province has developed rapidly, the business output value has increased rapidly, and various related organizations have also has been fully developed. In this paper, descriptive statistics of economic indicators and measurement combined with survey data are used. Analytical method, comprehensively analyzes the effect of agricultural industrialization on increasing farmers' income. Through the above quantitative analysis results It can be seen that the industrialization of agriculture has a relatively obvious impetus and promotion effect on the income growth of farmers. And the income obtained by rural residents increases with the expansion of industrialization scale. Industrialization on Farmers' Income Growth The influence of the industry is mainly manifested in the depth effect and the breadth effect, so it is promoted through the development policy of

industrialization. The growth of farmers' income should be focused on two perspectives: one is to speed up the expansion and development of the scale of agricultural industrialization ; Second, the government guides and supports farmers and enterprises to actively participate in industrialization. At present, the growth of industrialized income of rural residents has been It depends on the rapid expansion of its industrialization market scale, and it means that the industrialization income of agriculture is closely related to the income of farmers. The status of the organization is becoming more and more important, which further fully demonstrates the importance of rural residents to expand the scale of their industrialization market. sex. On the other hand, farmers' participation in industrialization is also an important factor that determines the breadth effect of farmers' income increase. And the analysis of the research results in this paper shows that the influence of the breadth effect is greater than that of the depth effect, which means that in addition to further expansion, expand the scale of industrialization, it is more important to further strengthen efforts to guide farmers to actively participate in innovative farming. industrialization of the industry, introduce policies and measures to encourage farmers to actively participate in industrialization, and remove various obstacles for farmers to participate in industrialization. hinder.

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