

Study on the Countermeasures of Agricultural and Rural Development in Heilongjiang Province since Reform and Opening-up

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Abstract: At the NPC and CPPCC annual sessions in 2019, General Secretary Xi Jinping warned everyone, don't get amnesia on the issue of eating---"For a big country like China with a population of nearly 1.4 billion, food security must be alarmed. The food has not already been safety." Since the Reform and Opening up, China's comprehensive strength has steadily increased, and agriculture has a fundamental impact on the national economy and people's livelihood at any time. Heilongjiang Province, as China's major food province, has a major responsibility in safeguarding national food production, quality and safety. The rural area has long been a short-term development of our country's economic development. It is of great significance to the economy of Heilongjiang Province to benchmark the task of building a well-off society in an all-round way and promote comprehensive rural revitalization.

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1 Introduction

Before the reform and opening up, Heilongjiang Province's overall economic strength was strong, and it showed a good development trend, and it was in a leading position in the national economic system. After the reform and opening up, the economy of Heilongjiang Province still focused on heavy industry. As a result, the strength of agriculture and service industry was very poor. Although agriculture has a natural advantage in the development of the Northeast, it is relatively simple to limit the development of agriculture and rural areas. The industrial chain is incomplete, and as a result, the industrial structure has been in an unreasonable state for a long time. With the in-depth development of reform and opening up, China's economy has achieved remarkable achievements. After the 2008 economic crisis, China has put forward new requirements for economic development. In order to improve the economic situation in the Northeast, the CPC Central Committee and the State Council have issued various policies to help the Northeast economy revitalize. Therefore, Heilongjiang Province has many opportunities to achieve economic revitalization under this opportunity.

Agriculture in Heilongjiang Province has unique advantages in resources and science and technology. It should give full play to the leading role of the market in the process of resource allocation, ensure high-quality farmland area, and strive for comprehensive grain production capacity, agricultural quality benefits, agricultural ecological construction,

agricultural technology and Equipment, moderate scale operation and other aspects in the national station, as a good grain safety and quality and safety of the "ballast stone", in order to become a new era of all-round, high-quality, connotation of agricultural modernization construction leader, deep implementation The rural revitalization strategy will deepen the structural reform of the supply side of agriculture.

2 Advantages of agricultural and rural Development in Heilongjiang Province

2.1 Rich in agricultural resources

Table 1 shows the specific values and composition of agriculture, forestry, animal husbandry and fisheries in Heilongjiang Province from 2011 to 2017. It also includes the total output value of agriculture, forestry, animal husbandry and fishery in Heilongjiang Province and the proportion of agriculture, forestry, animal husbandry and fishery production in Heilongjiang Province. Heilongjiang Province has its own unique advantages in agricultural development. The province has the Songnen Plain, the Sanjiang Plain and the Northeast Plain. The vast plains in the area account for about 37% of the vast plains and are widely distributed as fertile black soil. It has Heilongjiang and Wusuli River. Many rivers, including the Songhua River, have relatively abundant water sources; they are temperate continental climates with stable precipitation and a natural advantage in developing agriculture. The province is not only rich in planting, but also an important commodity grain

base in China and a strategic food reserve base in China. It also has mountains such as the Xing'an Mountains. Most of them are perennial natural forests. The area, reserves and quality of forests are the highest in the country. Forestry is also relatively developed. Due to the good pasture and good environment, the animal husbandry has developed very well. In 2017, the total amount of agriculture, forestry, animal husbandry and fishery reached 558.863 billion yuan, of which the agricultural population was 347.126 billion yuan, accounting for 62.14%, which is the largest proportion of the first industry in Heilongjiang Province. Overall, it has been on the rise in the past decade; forestry is 17.523

billion yuan. Accounted for 3.1%, showing a downward trend in recent years; animal husbandry is 170.17 billion yuan, accounting for 30.5%, and is also an important part of the primary industry; fishery income of 9.8 billion yuan, accounting for 1.8%, slightly lower than the previous period but the total is still relatively low, and there are big differences with the special climatic conditions in Heilongjiang Province. Rainfall is much lower than in the south. Rivers and river networks are not as dense as the South. It is not conducive to long-term icing in winter. Therefore, the development of fisheries is relatively low.

Table 1 2011-2017 Heilongjiang agriculture, forestry, animal husbandry and fishery output value and its composition

Time	Heilongjiang total output value	Agriculture (100 million yuan)	Forestry (100 million yuan)	Animal husbandry (100 million yuan)	Fishery (100 million yuan)	National gross output value (100 million yuan)	Heilongjiang accounts for the national proportion (%)
2011	3223.5	1801.8	110.2	1189.9	58.9	81303.92	3.96
2012	3952.3	2315.6	134.5	1350.7	77.9	89453.05	4.42
2013	4633.3	2856.3	180.63	1430.1	82.5	96995.27	4.78
2014	4894.8	3015.6	195.71	1486.2	102.74	97822.51	4.79
2015	5044.93	2900.9	204.22	704.8	117.56	101893.52	4.71
2016	5197.75	2873.86	219.87	1854.75	129.19	106478.73	4.88
2017	5586.63	3471.26	175.23	1701.70	98	109331.72	5.11

Source: China National Bureau of Statistics, Heilongjiang Province Annual Data

2.2 Food production of stable and progressing

Table 2 shows that the province's grain output has been increasing from 2010 to 2017 in Heilongjiang Province. The grain output has reached 41.034 million tons in 2017 from 50.128 million tons in 2010, accounting for 9.71 percent of the country's total grain output. % increased to 11.2%, which is in line with Heilongjiang's status as a national granary.

From 2010 to 2017, the planting area of grain crops in Heilongjiang Province increased from 1,1454.7 thousand hectares to 1,415,22,000 hectares, and the proportion of planted area of food crops in the country increased from 10.26% to 12%. This is the prerequisite for ensuring grain production, thanks to Heilongjiang. The province's efforts to protect cultivated land.

Table 2 Heilongjiang Province and national grain sown area and grain yield

Time	Sown area of food crops in the province (thousand hectares)	National food crop planting area (thousand hectares)	The province's grain planting area accounts for the national proportion (%)	Province's grain output (10,000 tons)	National grain output (10,000 tons)	Production accounted for the national proportion (%)
2010	11454.7	111695.4	10.26	5012.8	54647.71	9.17
2011	11502.9	112980.4	10.18	5570.6	57120.85	9.75
2012	11519.5	114368.1	10.07	5761.5	58957.97	9.77
2013	11564.4	115907.6	9.98	6004.1	60193.84	9.97
2014	11696.4	117455.2	9.96	6242.2	60702.61	10.28
2015	11765.2	118962.8	9.89	6324.0	62143.92	10.18
2016	11804.7	119230.1	9.90	6058.5	66043.52	9.17
2017	14154.2	117989.1	12.00	7410.34	66160.72	11.20

Source: China National Bureau of Statistics, Heilongjiang Province Annual Data

3 Problems in the development of agriculture and rural areas in Heilongjiang Province

3.1 The weakening of agricultural resources

Table 3 shows the specific situation of the agricultural disaster area and the disaster area in Heilongjiang Province and the whole country from 2008 to 2015. It can be seen from the chart that the

area affected by the disaster in Heilongjiang Province fluctuated greatly from 2008 to 2015, and the actual affected area fluctuated greatly. However, the proportion of disaster-stricken areas in the country at the same time accounted for less than 55% of the affected area, while the proportion of disasters in Heilongjiang Province was relatively high, reaching

71.83% in 2015, indicating that agricultural development in Heilongjiang Province is greatly

affected by natural conditions such as weather and weather. The ability of natural disasters is poor.

Table 3 Heilongjiang Province and the national agricultural disaster area

	Time	Affected area (thousand hectares)	Disaster area (thousand hectares)	Proportion of disasters (%)
Heilongjiang province	2008	2367.1	1344.5	56.80
	2009	7393.7	3130.1	42.33
	2010	1432.2	973.5	67.97
	2011	1536.8	682.5	44.41
	2012	2429.4	828.9	34.12
	2013	2734	1896	69.35
	2014	810	458	56.54
	2015	1175	844	71.83
National	2008	39990	22284	55.72
	2009	47214	21234	44.97
	2010	37426	18538	49.53
	2011	32471	12441	38.31
	2012	24962	11475	45.97
	2013	31350	14303	45.62
	2014	24891	12678	50.93
	2015	21770	12380	56.87

Source: China National Bureau of Statistics, Heilongjiang Province Annual Data

3.2 Rural population employment structure is irrational

Table 4 shows the composition of the population in Heilongjiang and the country between 2010 and 2015. Overall, from 2010 to 2015, the population of Heilongjiang Province showed a decreasing trend. The proportion of rural population in the total

population of the province dropped from 44.4% in 2010 to 41.19% in 2015, and it was slightly lower than the national total in 2015. The level is 43.9% nationwide, which reflects the optimization trend of Heilongjiang's population structure but the proportion of rural population in developed countries is still relatively high.

Table 4 Heilongjiang Province and the national population

	Time	Total population (10,000 people)	Rural population (10,000 people)	percentage
Heilongjiang province	2010	3833	1700	0.444
	2011	3834	1668	0.435
	2012	3834	1652	0.431
	2013	3835	1634	0.426
	2014	3833	1609	0.420
	2015	3812	1570	0.412
	National	2010	134091	67113
2011		134735	65656	0.487
2012		135404	64222	0.474
2013		136072	62961	0.463
2014		136782	61866	0.452
2015		137462	60346	0.439

Source: China National Bureau of Statistics, Heilongjiang Province Annual Data

Table 5 Composition of rural employees in Heilongjiang Province

Time	2005	2006	2007	2008	2009	2010	2011	2012
Rural employees (10,000 people)	948.9	944.3	949.4	966.3	978.2	989.5	989.2	988.5
Agriculture, forestry, animal husbandry and fishery personnel (10,000 people)	696.7	689.6	675.2	678.0	684.1	677.5	677.7	667.3
percentage	0.734	0.730	0.711	0.702	0.699	0.685	0.685	0.675

Source: China National Bureau of Statistics, Heilongjiang Province Annual Data

Table 5 shows the composition of rural employees in Heilongjiang Province from 2005 to 2012 in Heilongjiang Province. From the chart, we can see that the traditional agriculture, forestry, animal husbandry and fishery industry is still the main industry in the rural sector and has remained above 60%. In 2005, it accounted for 73.42%, the proportion in 2012 dropped to 67.51%. From 2005 to 2012, the proportion of agriculture, forestry, animal husbandry and fishery has been continuously decreasing but still high. The number of people engaged in services related to the primary industry is relatively small, which also reflects agricultural development. Behind.

3.3 Low added value of agricultural products

The grain output of Heilongjiang Province reached 621.439 million tons in 2015 from 430.695 million tons in 2003, and the proportion of grain output in the country also increased from 5.83% to 10.18%, which fully reflects the status of Heilongjiang agriculture in the country. However, the degree of development of the deep processing of agricultural products is still relatively low. Compared with 80% of the processing level in developed countries, only 20% of Heilongjiang agricultural products have been further processed. Heilongjiang's agricultural output is large but its income is not high. At the same time, due to the relatively northerly location of Heilongjiang and the financial and other industries are not well developed, and did not give full play to the status of Heilongjiang commodity grain distribution center, the agricultural product market is still not perfect, and the trading mechanism is still unscientific, so there is a comparison of agricultural product market development. In the backward situation, the channel construction of product circulation is still not perfect.

4 The countermeasures for the development of agricultural and rural areas in Heilongjiang Province

4.1 Coordinating agricultural development

Natural disasters pose a greater threat to the primary industry in Heilongjiang Province, and the rate of disasters is large. This aspect is determined by the climate and weather of Heilongjiang Province. On the other hand, due to the large agricultural planting area in Heilongjiang Province, it is affected by severe natural disasters. It will cause a large area of agriculture to be affected. Therefore, the construction of infrastructure should be further strengthened; the development of rural service industry should be strengthened, especially the popularization and expansion of insurance, and the development of the primary industry should be escorted. Create a

comprehensive rural market system, coordinate the province's primary industry, give play to the advantages of each city, promote specialized production, and play the cluster effect of the primary industry.

Heilongjiang Province has fertile black land. The province has a large area of jurisdiction and many arable land. In addition to its long-standing status as a national granary, Heilongjiang Province's agriculture and agricultural products have a good reputation throughout the country. The agricultural household management did mobilize the enthusiasm of the farmers in the early stage of the reform, but now it is necessary to strengthen the development of agricultural professional cooperatives, carry out scientific management, let the professional service and management team guide, innovate production and marketing channels, strengthen rural and first-class Business cooperation. The government should provide policy and financial support for the development of the primary industry and give full play to the enthusiasm of science and technology and capital. Gradually establish a unified agricultural market across the province, realize agricultural informationization and industrialization, and allow farmers to be included in higher-standard and more scientific cooperative production cooperatives to increase production efficiency and increase farmers' income.

4.2 Promoting the process of beautiful rural construction

Rural revitalization is an all-round revitalization of industrial revitalization, talent revitalization, cultural revitalization, ecological revitalization, and organizational revitalization – an important instruction of General Secretary Xi Jinping, pointing out the direction for advancing the rural revitalization strategy. From grasping the heavy responsibility of characteristic industries to attracting talents from all walks of life to the countryside, from complementing rural infrastructure and public service shortcomings to inheriting the rural style and solidifying the foundation of rural governance, Heilongjiang implemented the “eight major actions” to promote rural revitalization. Because most of the farmers in Heilongjiang Province are not highly educated, they mostly engage in the traditional productive work in the primary industry when they choose their careers. Therefore, the education of the farmers should be strengthened first, as free education and training as possible. Larger funds, and the limited educational support that enterprises can provide, should therefore play the role of the government, provide educational resources to farmers who have the ability and time to learn higher skills, and gradually improve the peasant

culture. Farmers with a higher level of education will have a more advanced production and management philosophy, and can better integrate into the process of urbanization. The urbanization process cannot simply transfer farmers from rural areas to urban areas, improve their living and employment environment, improve their income and quality of life, learn from the successful development of southern township enterprises, and adapt local conditions to support the training of township enterprises in line with local realities. Rural transformation and progress.

Implement science and technology to promote agriculture and strong farmers. It is important to promote technological synergy and innovation and build a collaborative innovation system for modern agricultural industries. Consolidate and improve the construction level of the "Internet +" high standard base. Strengthen the construction of agricultural and rural big data platforms, and build and improve application systems for animal husbandry, veterinary, agricultural Internet of things, agricultural machinery command and dispatch, and agricultural product quality and safety trace-ability. Implement industrial poverty alleviation actions. We will implement a special recruitment plan for agricultural technology extension services in poverty-stricken areas, support agricultural enterprises, cooperatives, and all kinds of capable people in poverty-stricken areas, provide convenient and efficient agricultural socialization services to poor households, and effectively bring poor households with weak operational capabilities. Implement the construction of livable homes and solidly promote the renovation of rural human settlements. Give full play to the role of demonstration and lead, do a good job in rural toilet reform, garbage control, sewage treatment, village cleaning, village planning, village greening and other tasks, and promote the renovation of human settlements from the typical demonstration to the surface.

4.3 Strengthening the development of agricultural industrialization

Although the output of agriculture in Heilongjiang Province is large, the actual income generated is not high, mainly because agricultural income is mainly based on the sale of primary agricultural products. Heilongjiang Province shoulders the burden of ensuring the national food security supply. Therefore, on the basis of ensuring food security, it promotes the deep processing of agricultural products and provides diversified agricultural products. Implement industrial integration development actions. Focus on cultivating leading industries and comprehensively improve the comprehensive strength and competitiveness of the county economy. Vigorously develop the agricultural

product processing industry and promote the extension of grain from primary processing to food industry and fine chemical industry. Aggregate farmers' entrepreneurial efforts, raise the level of entrepreneurship, and create an upgraded version of farmers' "double innovation". The ecological environment protection of the province should always be strengthened. A good ecology is the foundation of agricultural development. It is necessary to co-ordinate the management of the province's land resources and plan to develop green agriculture. The agricultural structure should be adjusted, regionalized specialized production of agricultural products should be carried out according to the regional advantages of agriculture, reduce the planting area of corn, increase the planting area of other agricultural products, develop animal husbandry in areas with mountainous areas in the north, and provide high-quality meat and eggs. And the supply of dairy products and the development of other cash crops.

In 2017, Heilongjiang Province completely banned the cultivation of genetically modified food, which guaranteed the safety of agricultural products in Heilongjiang Province from the source, and was conducive to the deep processing of agricultural products to extend the industrial chain. With the development of China's economy and the improvement of residents' living standards, Chinese residents will have more and more demand for green food. This creates a good market environment for the growth of the province's enterprises. Therefore, we should seize the opportunity to cultivate a group of core technologies. The first industry processing enterprises are based on safe and non-polluting raw materials, with high technology as the core of the products, through market operations, establish a good brand, enhance the competitiveness of enterprises, and make Longjiang products out of the province and go to the national and global markets. At the same time, agricultural certification and supervision systems should be strengthened to ensure food and food safety.

Implement infrastructure upgrades. Accelerate the construction of high-standard farmland, focus on strengthening the construction of irrigation and drainage projects, upgrading the quality of cultivated land, and building roads in the field. We will speed up the construction of large-scale agricultural machinery, give policy inclinations on agricultural machinery purchase subsidies, purchase a number of advanced agricultural machinery that can improve production standards in rural areas, and improve the quality of agricultural machinery. The province's comprehensive agricultural mechanization rate is stable at over 97%. Implement institutional mechanisms for innovative actions. We will comprehensively promote the reform of the rural collective property rights system. On the

basis of fully completing the collective assets clearance and production of nuclear assets, we will strive to complete the reform of the rural collective property rights system in 2019. We will deepen the reform of the rural land system and promote the transformation of land-confirmation results.

5 Conclusion

Through the analysis of the current situation of agricultural and rural development in Heilongjiang Province, we fully recognize the advantages and disadvantages of agricultural and rural development in Heilongjiang Province, adapt to the existing economic environment in China, and link the development of the province with the overall development of China. The task of a well-off society has solidly promoted poverty alleviation and rural revitalization. Further reduce the rural poor, accurately implement poverty alleviation and continue to implement the current standards, focus on deep poverty areas and special poverty groups, increase the intensity of tackling the difficulties, improve the quality of poverty alleviation, ensure that the goal of poverty alleviation is achieved as scheduled, and the peasant life reaches a comprehensive well-off level.

Reference:

1. Chen Feng. Research on Agricultural Modernization in Heilongjiang Reclamation Area [D] Harbin: Northeast Agricultural University, 2004: 9-11.
2. Cao Xiuli, Zhang Biyan. Establishing a new concept of urban construction and building a new agricultural and ecological city--A survey of the construction of small towns in the Sanjiang branch of Heilongjiang Province [J]. *Agricultural Economic Management*, 2009(2): 26-28.
3. Li Liming, Yuan Lan. China's Agricultural Modernization Evaluation Index System [J]. *Journal of South China Agricultural University*, 2004(3): 21-24.
4. Pan Zejiang, Huang Xia. Research on the financial policy of supporting agriculture under the background of agricultural supply side reform [J]. *Zhejiang Agricultural Sciences*, 2018(12): 2312-2315.
5. Li Shaomin. Research on supporting the financial policy of the main body of new agricultural management [J]. *Local Finance Research*, 2014 (10): 28-32.
6. Sun Baoling, Chu Fengrong. Opportunities and Challenges Facing the Economy of Heilongjiang Province under the New Normal [J]. *Regional Economy*, 2016(4): 88-89.
7. Marta Chmielewska, Marius otto. The impact of revitalization on the evolution of urban space on former iron and steel works areas in Ruhr region (Germany) [J]. *Environmental & Socioeconomic studies*, 2013(1): 31-37.
8. Monika bischoff, Alpan cete, Ralf fritschen, Thomas meier. Coal mining induced seismically in the Ruhr area, Germany [J]. *Pure and applied geophysics*, 2010: 63-75.

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