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Agricultural Ecological Environment Protection and Construction Path in Daqing City

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Abstract: On the basis of absorbing previous research results, this study analyzes the current situation of agricultural ecological environment protection in Daqing City, and through field investigation and consulting data, it analyzes the basic conditions of ecological environment protection in Daqing City, such as land resources, water resources, grass resources, etc., and analyzes the necessity of agricultural ecological environment protection and construction in Daqing city, According to the actual situation of agricultural ecological environment protection in Daqing City, this paper finds out the problem dilemma of agricultural ecological environment protection in Daqing City, and puts forward the rationalization path of agricultural ecological environment protection in Daqing city from the aspects of administration, legal guarantee and technical support.

1. Preface

Good agricultural ecological environment is an important guarantee for the healthy development of agriculture. We should effectively protect the agricultural ecological environment, properly adjust the agricultural ecological structure, promote the sustainable green development of agriculture, and promote the high-quality development of agriculture.

Domestic and foreign scholars' research on agricultural ecological environment protection mainly involves agricultural environmental protection and agricultural sustainable development, agricultural ecological environment protection path, construction of agricultural ecological environment protection index system, existing problems and Countermeasures of agricultural ecological environment protection, and Research on the effectiveness of agricultural ecological environment protection, etc The construction model for reference. Agricultural environmental protection and agricultural sustainable development. Khanna, Madhu [1] discussed the factors that affect the self-regulation of enterprises and their impact on the economic and environmental performance of enterprises. The research shows that the way of environmental protection has changed from regulatory driven to enterprise led, and more and more agricultural and related products enterprises actively participate in environmental protection. Guo Yuelong [2] made a

strategic analysis on the ecological environment of agricultural sustainable development, and put forward strategies such as striving to enhance the awareness of agricultural ecological environment protection, increase the proportion of scientific and technological investment, improve the system of laws and regulations, develop ecological agriculture and promote the sustainable development of agricultural ecological environment. On the basis of summarizing historical experience and China's national conditions, Liu Sensen [3] briefly analyzed the current situation of China's agricultural ecological environment and put forward solutions. Agricultural ecological environment protection path research. WICHSINEE According to wibulpolprasert [4], environmental protection investment has a dual impact on the economy. On the one hand, environmental protection investment will increase the product cost of enterprises, leading to the decline of market competitiveness, while the emergence of substitutes will increase the capital coefficient of enterprises, which will reduce the enthusiasm of enterprises for environmental protection investment. On the other hand, environmental protection investment will take into account economic growth and environmental quality improvement within a certain range and social welfare optimization. Pu Hongyan [5] proposed that in order to do a good job in ecological environment protection, it is necessary to ensure the coordinated development of agriculture, resources and ecological environment. Gao Yanbo [6] proposed ways to achieve the goal of agricultural ecological environment protection and construction in Heilongjiang Province from the perspectives of improving public legal awareness, improving agricultural ecological environment legislation, and strengthening agricultural ecological environmental protection law enforcement. Agricultural ecological environment protection index system construction. Lu Lu and Hu Shengde [7] analyzed the four major factors affecting agricultural ecological environment: ecological resources, pollution and destruction, economic development and environmental protection, and established an evaluation index system of agricultural ecological environment protection with 19 indicators at three levels. The Enlightenment of agricultural environmental protection policies of other countries to China. Zhou Yuxin and Tang Luozhong [8] interviewed relevant departments of agricultural environmental governance in the United States, reviewed the operation of agricultural environmental protection projects, and analyzed the operation mechanism of relevant projects. Based on the experience of agricultural environmental governance in the United States, it is proposed that China should strengthen the legal system construction of agricultural resources and environmental protection, strengthen the construction of agricultural resources and environmental protection organizations, strengthen the investment of agricultural environmental protection funds, strengthen the construction of scientific research system for agricultural sustainable development, and strengthen the scientific management of agricultural projects. Countermeasures and suggestions on agricultural environmental governance.

2. Analysis on the Current Situation of Agricultural Ecological Protection in Daqing city

2.1. Current Situation of Land Resources

There are 450000 hectares of cultivated land in Daqing city. The total output of grain, beans and potatoes reaches 2.237 billion kg, and the total output of vegetables is 1.229 billion kg. The Red Sorghum in Zhaoyuan County of Daqing city is famous for a long time. Its grains are full and its color is bright red. It provides high-quality raw materials for wine making industry. Among the top 10 famous wine manufacturers in China, 8 selected Red Sorghum from Zhaoyuan as the main raw material for liquor making. Xiaomi in Zhaoyuan County was a tribute to the imperial court as early as Qianlong of the Qing Dynasty. Zhaozhou county is rich in corn, sorghum and soybean, and durbert county is determined as the provincial peanut seed production base.

In 2019, the total output value of agriculture, forestry, animal husbandry and fishery in Daqing will reach 44.83 billion yuan, with a year-on-year increase of 3.4%. In 2019, the total grain output was 4.533 million tons, an increase of 5.5% over the previous year; the oil production was 60000 tons, an increase of 26.8%; the vegetable output was 860000 tons, an increase of 84.2%.The afforestation output value will be increased by RMB 203 million in 2019. The output value of fishery reached 2.1 billion yuan, an increase of 3.1%; the output of aquatic products was 125000 tons, an increase of 6.8%.

2.2. Current Situation of Water Resources

Daqing city is rich in water resources and has a large number of lakes. It has the reputation of "city of hundreds of lakes". At present, some water surfaces have been developed and utilized to develop fishery, and the annual output of aquatic products reaches 55000 tons. However, most of the water surface is not used, so the development prospect is broad.

There are 292700 hectares of natural water surface in Daqing city. The water source comes from Nenjiang River, Songhua River and natural precipitation. The Nenjiang River flows 260.9 kilometers in length, has an annual runoff of more than 30 billion cubic meters, and irrigates an area of 249800 hectares. The Songhua River flows 128.6 kilometers in length and has an annual flow of 27.28 billion cubic meters. There are 284 lakes with an area of more than 100 mu, with a total area of nearly 3000 square kilometers.

2.3. Current Situation of Forage Resources

Daqing grassland resources, known as the "second largest resource", is famous for its high-quality forage. As of 2019, the grassland area of Daqing city has reached 840000 hectares, accounting for about 40% of the land area of Daqing city. These grasslands have created a good habitat for wild animals. There are 23 species of mammals in 5 orders, 8 families and more than 140 species of birds in the grassland area. Grassland is rich in natural forage resources, mainly including Leymus chinensis, Yegu grass, Lujia grass, Xingxingcao, Pennisetum, etc. These natural forages provide good conditions for the development of animal husbandry. The forage industry has a variety of functions, from ecological protection to plant production, then to animal production, and even to product processing and circulation. It is one of the industries with the longest industrial chain, the most scientific and technological means and the largest number of employees. Therefore, it has broad prospects for development.

2.4. Status of Wetland Resources

Daqing has the largest wetland resources in China, covering an area of about 1.2 million hectares. The total area of wetlands accounts for about one twentieth of the known wetland resources in China and about 60% of the total land area of Daqing city. The wetland type is very complete, the environmental foundation is superior, it has all the standards of Wetland - special animals and plants, there are a large number of waterfowl inhabited wetlands with representative and unique significance. Wetland landscape types are rich. In addition to a large number of lakes and marshes, there are also meadow, natural secondary forest, natural shrub, artificial forest, sandy land and so on, which together form a series of magnificent landscapes on land. With the development of economy and the improvement of people's material and cultural life, the demand for the social benefits of wetlands will increase day by day, and the prospect of reasonable development and utilization of wetlands is broad.

3. Analysis on the necessity of environmental protection of agricultural ecological resources in Daqing city

In recent years, the agricultural ecological environment of Daqing city has been destroyed, and the ecological imbalance and deterioration trend have seriously restricted the economic development and social stability. The protection of agricultural ecological environment is the demand of all human beings. Human beings are using and transforming the natural process

It leads to serious damage and pollution of the natural environment, and brings various adverse effects to human survival. Agriculture is the basic industry of building ecological civilization. Therefore, strengthening the protection of agricultural ecological environment, strengthening the sustainable development of agriculture and constructing modern agricultural production system are the important ways to speed up the construction of "resource-saving and environment-friendly" society.

3.1. Serious Environmental Pollution in Rural Areas

In recent years, the quality of cultivated land in Daqing city has declined, especially in black land. Chemical fertilizer is an important material for agricultural production, which can effectively ensure the increase of grain yield. However, if excessive application of fertilizer, the quality of crops will decline, the agricultural ecological environment will deteriorate, and the organic matter content of cultivated land will be reduced. The second soil survey report of Heilongjiang Province shows that the cultivated land with organic matter content greater than 4% in Daqing city has decreased by nearly 40%, and the organic matter content has decreased from 8% to 2%, and the trend of continuous decline has been shown.

There are some problems in Daqing City, such as large amount of straw, slow returning technology and high cost of leaving the field. Therefore, the way to deal with straw is to throw it in the field or burn it at will, which will cause serious land pollution and air pollution. Therefore, we should use advanced technology to improve the level of agricultural transportation of straw, the level of specialized collection, storage and transportation, and the level of market-oriented utilization To promote the establishment of the comprehensive utilization level of corn straw in Northeast China, release the ten major modes of agricultural transportation of straw, and accelerate the popularization and application of technical mode.

3.2. Serious Land "Three Modernizations"

Daqing city has strong northwest wind and windy sandy soil, accounting for 27% of the total area of soil types, and the land is easy to be desertified; the sandy land area of Daqing city is large, and the agricultural ecological environment is extremely fragile, with about 390000 hectares of land desertification area, which is one of the 90 complete sand regions and counties in China, which greatly limits agricultural production and vegetation growth.

In recent years, with the development of Daqing oil field, the unreasonable reclamation and overgrazing of grassland, a part of the area has been destroyed, resulting in a sharp decrease in grassland area. About 80% of the cultivated land in the city has experienced wind erosion in varying degrees. The "three modernizations" phenomenon is extremely serious, the soil is hardened, and the heterogeneity of grassland landscape is enhanced. More than 300 wind erosion pits of different sizes have been gradually formed. Under the influence of wind erosion, the crops sown by farmers in spring are greatly affected, which leads to the decrease of crop production and the sharp decrease of agriculture and farmers' income. At the same time, due to the degradation of grassland and the

decrease of grass yield, the carrying capacity of grassland livestock decreased, so the production cost of grassland animal husbandry increased significantly.

3.3. Increasing Pollution

Before oil exploitation, Daqing city will set up corresponding mining facilities, occupying a large number of grassland, arable land and other areas. In the process of oil exploitation, the discharged crude oil, waste water and waste residue pollute the vegetation, water resources and grassland around the oil wells, resulting in desertification of the land and serious damage to grassland resources. At the same time, with the increase of industrial "three wastes" emissions, sewage, industrial waste and domestic garbage spread to agricultural areas. The agricultural non-point source pollution areas are more serious. Each year, the water areas in Daqing are polluted to varying degrees. Agricultural Sewage and livestock manure are directly discharged into the agricultural environment, which seriously pollutes water resources and atmospheric environment. Agricultural film is an important means of agricultural production, which has made a great contribution to agricultural production and farmers' income. However, the use of a large number of plastic film, not only brings environmental risks, but also causes white pollution, which affects the agricultural production and destroys the agricultural cultivated land resources.

4. The Construction Path of Agricultural Ecological Protection in Daqing city

4.1. Government Led

4.1.1. Strengthen the Relevant Functions of the Government

The government has always played a leading role in the protection and construction of agricultural ecological environment. Daqing municipal government should strengthen the guidance of agricultural market main body's operation behavior, encourage agricultural main body to protect agricultural ecological environment, supervise agricultural ecological environment pollution detection, formulate rules and regulations of agricultural ecological environment protection in Daqing City, improve agricultural ecological environment protection management organization, and strengthen agricultural resources The destruction of administrative law enforcement and administrative relief will develop Daqing's agricultural construction into facility agriculture, horticulture agriculture, sightseeing agriculture, environmental protection agriculture, information agriculture, etc., improve the agricultural development plan, control the pollution of Agricultural Sewage and livestock manure from the source, effectively solve the agricultural ecological environment problems such as waste of water resources and excessive use of pesticides in real time, and maintain the agricultural ecology with practical actions The social and public interests carried by the environment. Efforts should be made to build government guidance, enterprises and agriculture related departments to jointly promote the reduction and efficiency increase of chemical fertilizers and pesticides.

4.1.2. Relying on Agricultural High Technology, the Government Builds Agricultural Science and Technology Innovation Demonstration Area

The construction of agricultural science and technology innovation demonstration area is the only way to give full play to agricultural resources and promote the high-quality development of agricultural and rural areas with scientific and technological innovation. Daqing municipal government should rely on agricultural high-tech, give full play to the advantages of resource

endowment, and build agricultural science and technology innovation demonstration area, which can not only improve agricultural labor productivity and agricultural green development level, but also meet people's demand for safe, green and high-quality agricultural products; Daqing municipal government should actively integrate scientific and technological resources of local enterprises and universities, deepen the cooperation between cities and universities, and encourage and support Bayi agriculture in Heilongjiang Province Keng University, Daqing branch of Provincial Academy of Agricultural Sciences and other colleges and universities have carried out technical research and development and industrial practice in the aspects of agricultural products deep processing, facility agriculture construction, field big data collection and monitoring, establishment of intelligent fertilizer distribution and sprinkler irrigation system, research and development of biological prevention and control technology, and agricultural geological survey, etc.

4.2. System Guarantee

We will improve the guarantee mechanism for the construction of agricultural ecological environment. At present, there are no laws and regulations on Ecological Agriculture in China. The legal basis for the development of ecological agriculture is mainly based on the relevant laws, regulations and policies in the field of national agricultural sustainable development and the provisions of the national constitution on ecological environmental protection and ecological damage.

In 2019, Daqing City formulated the "rectification plan for Daqing city to implement the central environmental protection supervision's" look back "and the special supervision feedback on agricultural and rural pollution problems, which effectively improved the ecological environment protection ability and ecological civilization construction level of Daqing city. In the future, we should focus on the simultaneous planning, implementation and development of economic construction, urban and rural construction and environmental construction, do a good job in environmental planning of rural villages and towns, enhance the awareness of environmental protection in rural areas, combine environmental education with compulsory justice, solve the problems of rural wastewater, waste gas, noise and fixed waste pollution, and gradually improve the relevant laws and regulations on agricultural environmental protection To implement the agricultural support policy by means of legalization, and to implement the administrative leadership responsibility system of environmental quality.

4.3. Technical Support

The key to solve the problem of environmental pollution is to rely on the agricultural technology innovation of agricultural enterprises, and to solve the problem of environmental protection. Promote the organic connection between the modern agricultural industrial technology system and the key tasks of agricultural ecological environment protection, and effectively solve the problems of industry and environmental science and technology. The main body of agricultural environmental protection should increase investment in science and technology, plan and rectify ecological environment problems by scientific and technological means. Daqing municipal government should allocate special funds for agricultural ecological environment protection, establish research institutions for agricultural sustainable development, create a new agricultural technology extension system in China, and encourage agricultural enterprises to carry out scientific and technological innovation. We should increase the investment in agricultural infrastructure, improve the content of agricultural science and technology, strengthen the protection of agricultural ecological environment, pay attention to the cultivation of talents for agricultural ecological environment

construction, implement the integration of agricultural science and education, create an agricultural science and technology extension system closely combined with scientific research and teaching, promote the transformation and improvement of agricultural scientific research achievements, and put the protection of agricultural ecological environment into the key areas of agricultural science and technology development Advanced scientific and technological forces have improved the detection of agricultural ecological environment and organically combined scientific and technological innovation, research and development of agricultural scientific and technological achievements, and ecological and environmental protection.

5. Conclusion

Based on the ecological principle and economic theory, combined with the actual situation of agricultural ecological environment protection in Daqing City, this paper analyzes and summarizes the necessity of agricultural ecological environment protection and construction in Daqing City, objectively analyzes the existing problems of agricultural ecological environment protection in Daqing City, and puts forward the realization of agricultural ecological environment protection and construction in Daqing city from multiple angles according to the existing objective problems In order to protect the agricultural ecological environment of Daqing City, promote the sustainable development of agriculture and economic development of Daqing City, and provide a solid guarantee for social stability.

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