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Transformation and Upgrading Path of Animal Husbandry Industry Based on Dynamic Shift Share Model

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Abstract: China is a big country of traditional animal husbandry, but it is also a weak country. This is mainly due to the backward production technology and unreasonable industrial structure. Industrial transformation and upgrading of animal husbandry are one of the important national policies in China, which is directly related to the overall situation of China's economic development. At present, the dynamic shift share model is often used to analyze the industrial transformation and upgrading in the world, but the research on the transformation and upgrading of animal husbandry in China is almost blank. In view of this situation, this paper puts forward the research on the transformation and upgrading path of animal husbandry industry based on dynamic shift share model. The research of this paper is mainly divided into three parts. The first part is the research of basic theory and core concepts. This part of the animal husbandry and industrial transformation and upgrading of in-depth theoretical analysis, through the analysis of this paper, although China's animal husbandry is lack of modern production management technology, but it has profound practical experience, which has a natural advantage for the transformation and upgrading of animal husbandry in China. The second part is the establishment method of animal husbandry transformation and upgrading analysis model based on dynamic shift share. This part gives the optimization and transformation steps of the model in detail, and explains its principle. The third part is the practical test part. In order to verify the practical effectiveness of the method, this paper uses the new balhu Right Banner as the experimental sample. Through detailed guidance and construction, and continuous follow-up survey, through the analysis of data, the method in this paper has played a key role in guiding the transformation and upgrading of animal husbandry in new balhu Right Banner, and its production scale and number of sheds have been significantly improved.

1. Introduction

Animal husbandry is an important part of agricultural development. Modern animal husbandry is an important part of modern agriculture. The development level of modern animal husbandry is an important symbol to measure the level of economic and social development of a country. Throughout the developed countries in the world, the proportion of animal husbandry economy in agriculture has exceeded 55%, and some even reach 65-75%. The 17th National Congress of the Communist Party of China (CPC) pointed out that to solve the agricultural problems, rural areas and farmers are related to the overall interests of building a well-off society in an all-round way, and must be the top priority of the party's work. With the comprehensive construction of a well-off society and the deepening of modern agriculture, animal husbandry has basically realized the transformation from family sideline pillar industry, from production dependent to consumption oriented, from extensive operation of small-scale peasant economy to large-scale intensive management, and has put forward some basic characteristics of modern animal husbandry. However, on the whole, China's animal husbandry production mode is still relatively backward, with less and unstable large-scale breeding, the ability to deal with market risks is weak, the production capacity and level is low, the low level of organization and industrialization, and some hidden safety risks of animal husbandry products. At present, the development of agriculture and rural economy has entered a new historical stage. Speeding up the transformation of traditional animal husbandry and vigorously developing modern animal husbandry are not only the important contents of building modern agriculture, but also the strategic measures of implementing the scientific outlook on development, building a new socialist countryside and building a harmonious society.

Although the transformation of industrial structure is proposed in recent years, it has a long history. On the one hand, the current world economic development mainly presents the development characteristics of industrial structure transformation. Since the 19th century, the development of the world economy has experienced the era of steam engine. Each economic development has lasted for 40 to 50 years for a long time. The change of industrial structure is mainly in the replacement of leading industries every time, leading to the transformation and upgrading of the economy. On the other hand, the transformation and upgrading of industrial structure is also a common requirement in the process of urban economic development. The key to the transformation and upgrading of urban economy lies in the transformation ability of industrial structure. In addition, the transformation and upgrading of industrial structure is also the requirement of industrial development itself.

Based on its strong dynamic analysis and comprehensive analysis, dynamic shift share analysis has become a very effective analysis method for regional industrial structure change, urban sector structure change and determine the future development direction. Using dynamic shift share analysis method to adjust the industrial structure of animal husbandry can be more scientific and reasonable understanding of the current development of animal husbandry in economic growth and industrial structure. However, the domestic research on this aspect is almost blank. Therefore, this paper puts forward the path analysis of animal husbandry industry transformation and upgrading based on dynamic shift share model.

First of all, this paper studies the basic theory and core concepts of animal husbandry and industrial transformation and upgrading. Through the theoretical research, this paper thinks that China as a traditional animal husbandry country, but the overall animal husbandry industry has been in a low level for a long time. The unreasonable industrial structure and backward production technology have seriously restricted China's economic development. Then, in view of this situation, this paper introduces the concept of dynamic shift share model and explains it theoretically. By establishing the corresponding dynamic shift share analysis model, the transformation and

upgrading path analysis of China's animal husbandry industry was optimized. Combined with the characteristics of animal husbandry industry in China, the improved analysis model optimizes the traditional dynamic shift share analysis algorithm to make it closer to the actual needs of animal husbandry analysis. In addition to the structural optimization of the analysis model, this paper also proposed the market environment construction needed in the transformation and upgrading of animal husbandry. Based on the objective conditions, this paper gives five practical suggestions, which cover the responsibilities of the government and the standardization of the market. Finally, in order to verify the effectiveness of this method, this paper takes xinbalhu Right Banner as the test sample, and carries out a continuous follow-up survey for five years after adopting the method in this paper. The survey results show that through the analysis method of this paper and the improvement measures in this paper, we can effectively improve the regional animal husbandry production capacity, optimize the industrial structure, and achieve the purpose of transformation and upgrading [1-3].

2. Related Theoretical Basis and Core Concepts

2.1. Animal Husbandry and Animal Husbandry

Animal husbandry refers to that plants can be transformed into animals by feeding livestock and poultry, domesticated animals or other wild animals through physiological and natural artificial propagation, breeding, forage and feed. Such as meat, eggs, milk, wool, cashmere, leather, silk, herbal medicine and other animal products production process, in short, animal husbandry is an important link in the material exchange between man and nature [4-5]. Animal husbandry refers to the production department that obtains animal products by raising livestock and poultry, or draught animals through grazing, captivity or combination of the two. The animal husbandry involved in this study includes not only grazing, but also captive breeding, as well as the combination of the two, including grassland (grassland) animal husbandry represented by Gannan Tibetan area and Longnan mountain area, and captive (livestock) animal husbandry represented by agricultural areas such as Hexi and Longdong [6-7].

2.2. Development Status of Domestic Herbivorous Animal Husbandry

China's pastoral areas are mainly distributed in the northern part of the Qinghai Tibet Plateau, northwest arid, semi-arid and southwest regions, usually called Inner Mongolia, Xinjiang, Tibet, Qinghai and Gansu as the five major pastoral areas. In addition, Ningxia and Western Sichuan have a long history of animal husbandry, and are also important pastoral areas. These areas have always been important producing areas of wool, leather and other livestock products in China. However, in recent years, overgrazing has intensified, grassland degradation, grassland desertification, desertification, alkalization and soil erosion are serious. Due to various reasons, grassland production capacity in China has generally declined. According to statistics, in China, the degraded grassland area accounts for 84.3% of the total grassland area, the desertification area accounts for 36.2%, the potential desertification area accounts for 4.35%, the alkalization area accounts for 5.8%, the wind erosion and water erosion area account for 11%, the rodent damage area accounts for 48-59%, and the insect pest area accounts for 83%. In addition, compared with foreign countries, the scale of artificial grassland construction in China is also small. The artificial grassland area in the United States accounts for 16% of the natural grassland, while that of Russia is 13%, and that of the Netherlands, Denmark, Britain, Germany, New Zealand and other countries is 65-72%. However, the artificial grassland area in China is less than 2.5% of the natural grassland area.

In recent years, China's relevant departments have increased management efforts. With the

introduction of various control measures, the degradation of natural grassland has been restrained to a certain extent. In 2015, the fresh grass output of natural grassland was 1.132 billion tons, an increase of 0.63% over the previous year [8]. The hay equivalent was about 328 million tons, and the livestock carrying capacity was about 274 million sheep units, both increased by 0.85% over the previous year. In 2015, the national forage production was 181.25 million tons (hay), lower than in previous years, of which the output of artificial grass was 141.36 million tons, a year-on-year decrease of 3.21%. In 2015, the average livestock overloading rate of key natural grasslands in China was 14.1%, 1.8% lower than that of the previous year. The average overloading rate of livestock in pastoral areas was 17.5%.

At present, although the proportion of the output of livestock products to the total output in the northwest pastoral areas has decreased, to some extent, there is still a huge potential for the development of herbivorous animal husbandry, and the grassland provided by livestock products still has a unique position. In 2015, there were 120 million herbivorous livestock in China, including 104.572 million cattle, 5.856 million horses, 5.368 million donkeys, 2.086 million mules and 324000 camels. There are 350 million sheep in the world, including 162 million goats and 174 million sheep. China has 7.52 million tons of beef, 4.63 million tons of mutton, 37.524 million tons of milk and 486 thousand tons of wool. The output of livestock products in 109 pastoral areas and counties has reached 535000 tons, 568000 tons, 2626000 tons and 86000 tons respectively. Since the beginning of the new century, the development speed of China's pig industry and poultry industry has slowed down, and the development of cattle, sheep and another herbivorous animal husbandry has steadily increased [9-10].

2.3. Restriction of Traditional Production Mode of Animal Husbandry

The characteristics of traditional production mode are very obvious. First, the traditional nomadic production mode has not been fundamentally changed. Animal husbandry in pastoral areas is mainly nomadic life. Spring meadow transition time is on February 21 and March 5, summer pasture transfer time is July 5, 11 and 10, autumn meadow migration time is October 5, 11, 10, winter meadow migration time is December 5, 11, 10. Second, the industrial structure is unreasonable, the scientific and technological content of animal husbandry development is not high, the overall development of livestock is low, the breeding and management level is backward, the basic grassland animal husbandry and veterinary science and technology service mechanism is not perfect, the quality of personnel will not be able to meet the needs of the development of modern animal husbandry and production practice, and the degree of ideological emancipation is not high, For a long time, the formation of the thinking mode of planned economy and other factors have affected the modernization process of grassland animal husbandry. Third, the industrialization level of animal husbandry is still relatively low. Industrialization is an important symbol of modernization of agriculture and animal husbandry. The marketization degree of local economy in China is not high, and the marketization degree of animal husbandry lags behind that of the whole economy. Most of them are still in the state of optimal combination of labor force and capital. Due to the backward mode of production, destruction of means of production, and rapid population growth, the incidence of poverty in pastoral areas is generally very high, which makes people in pastoral areas unable to invest in infrastructure construction. They can only adhere to the traditional production and life style, and inevitably enter the cycle of poverty, ecological destruction and further poverty [11-12].

2.4. Necessity of Transformation and Upgrading of Animal Husbandry

With the acceleration of globalization, the development of animal husbandry will face more open

market environment and more fierce market competition. From the perspective of market environment, a large number of foreign capital and products have entered China's animal husbandry market. Relying on their own technical and capital advantages, they have continuously occupied the commanding heights and markets of animal husbandry germplasm resources and animal products sales. For example, research and development of livestock and poultry seed industry is almost completely controlled by developed countries. From the perspective of market competition, the standards and monitoring procedures of livestock products in the international markets such as Europe, America, Japan and South Korea are becoming more and more complex. At the same time, the animal husbandry of Southeast Asian countries is developing rapidly, and they are constantly competing with China for the export market share of livestock products. In addition, China's advantage of low labor cost is weakening, and the original advantages of human cost and breeding cost in the development of China's animal husbandry are weakening. Therefore, it is necessary to adapt to the new situation and new requirements, strive to change the mode, adjust the structure, improve the quality and promote the transformation, so as to ensure the healthy development of China's animal husbandry for a long time and adapt to the current fierce market competition.

The practice of many developed countries has proved that the faster the economic development, the higher the level of urbanization and industrialization, the faster the pace of transformation and upgrading of animal husbandry, in order to continuously consolidate the basic position of animal husbandry. At present, the output value of animal husbandry in developed countries accounts for more than 55% of the agricultural output value, even more than 75%. The industrial chain of animal husbandry is relatively long and the development prospect is broad. The former is the planting industry, the latter is the processing industry, involving transportation, catering, trade and other industries, closely related to the overall development of urban and rural areas and labor force transformation. The development of China's animal husbandry must follow the requirements of total balance, structural optimization, stable efficiency, quality and safety, resource conservation and ecological friendliness, and take the road of transformation and upgrading and sustainable development. The transformation and upgrading of animal husbandry are also an important and urgent task facing China at present and in the future [13-14].

3. Analysis Model of Animal Husbandry Industry Transformation and Upgrading Based on Dynamic Shift Share

3.1. Adjustment and Optimization Principle of Animal Husbandry Structure

In order to adjust the regional industrial structure and realize the optimization and upgrading, we must first analyze and evaluate the existing industrial structure

(1) The standard of resource sharing. Regional industrial structure and resource structure should be coordinated with each other. The obvious feature of more reasonable industrial structure is that in the regional economic development, the factor resources with comparative advantages are fully and effectively utilized, and the corresponding industries and products are given priority and repeated development. On the contrary, if the comparative advantages of production factors are not fully developed and utilized, the proportion of related industries is not large, the development is not the main one, and there is also mutual dislocation between the industrial structure and the resource structure, which is unreasonable and needs to be adjusted.

(2) Regional division standard. There are both division of labor and cooperation between different regions, which is a subsystem of a large system. Therefore, in the industrial structure, the leading industry should have the task division of professional departments, and the development and scale should be appropriate. Not only can we accomplish a wide range of tasks, but we also realize that the division of labor between regions and the export products of cooperation are more

suitable.

(3) Industry related standards. Industry association refers to the relationship between industries in a region, including the relationship between upstream and downstream industries, the relationship between main industries and non-main industries. Generally speaking, the higher the degree of inter-regional industrial correlation, the higher the positive external economic benefits that can be provided by industries, which can reduce costs, improve efficiency and enhance competitiveness. The stronger the regional economic cohesion, the more economic benefits can be obtained in the region with reasonable industrial layout.

(4) Industry flexibility standard. Industrial elasticity refers to the ability of industrial structure transformation and adaptation to industrial structure changes. The greater the elasticity, the stronger the adaptability and transformation ability. Industries can take advantage of favorable opportunities to optimize and upgrade the structure at any time. On the contrary, the more rigid the industry is, the worse the adaptability will be, the weaker the transformation ability will be, the slower the response to objective changes will be, and the adjustment and upgrading cannot be realized in time.

(5) Industrial structure efficiency standard. If the economic benefit of a region is good and is brought by its industrial structure, then the industrial structure of the region is reasonable. On the contrary, due to the industrial structure, it is unreasonable for enterprises to decline in efficiency. Generally speaking, the higher the level of regional industrial structure, the better the structural efficiency. All countries (regions) are striving for structural upgrading and advancement.

The analysis of regional industrial structure can be divided into qualitative analysis and quantitative analysis. Qualitative analysis mainly analyzes the structure of regional gross social output value, regional tertiary industry structure, agricultural light output value, animal husbandry industrial structure, industrial structure and production factor density structure. The quantitative analysis mainly analyzes the comparative advantage, the proportion of industrial structure, the degree of industrial specialization, the location quotient, the change rate of industrial structure and the benefit of industrial structure.

There are two ways of regional industrial structure adjustment: spontaneous adjustment and artificial active adjustment, both of which will lead to the continuous optimization of industrial structure and the continuous improvement of the level. Among them, the speed of automatic regulation is slow and the cost is high; however, whatever form it takes, it must conform to the objective law and reflect the regional characteristics. Therefore, the following principles should be followed, namely, the principle of market orientation, the principle of scientific and technological progress, the principle of giving full play to advantages and the principle of highlighting benefits.

3.2. Panel Data Selection

Panel data is the data that tracks the same group of "individuals" for a period of time.

$$y_{it} = \alpha_i + x_{it}\beta + u_{it} \tag{1}$$

Where, $i = 1,2,3\mathrm{K}\ N$, is the section mark; $t = 1,2,\mathrm{K}\ T$ is the section mark. x_{it} is the explanatory variable of $k \times 1$ and β is the vector of $k \times 1$ series. Panel data model has two dimensions of time and section, so panel data can provide more information about individual behavior. Compared with time series data and cross section and one word, due to panel data model to control, and individual heterogeneity, reduce multicollinearity between variables, increase degrees of freedom, and provide more information as well as the advantages of dynamic analysis and micro individual analysis. Therefore, in recent years, more researchers have focused on theory and application. At the same time, the panel data model can control individual differences (non observation effect) by setting virtual variables. The panel data model is also repeated observation of the same unit set, which can

make full use of individual variables and time variables, so as to better study the dynamics of economic behavior changes. Therefore, compared with time series and section data model, panel data model can improve the estimation effect of the model. To sum up, the panel data model is suitable for analyzing the influencing factors of industrial transformation in different evolution stages of animal husbandry.

3.3. Animal Husbandry Industry Transformation and Development Model

The traditional dynamic deviation analysis model is mainly used to study industrial competitiveness, industrial structure or economic development level, rarely involving industrial transformation and upgrading. Under the existing research background, some scholars regard the definition of shift share model and industrial transformation as a major innovation, but the research is still limited to the traditional analysis method, which only considers the change of industrial competitiveness or industry growth rate in a region to measure the industrial transformation, and only uses the quantitative method to evaluate qualitatively whether the industry is transformed to measure the number of industrial transformation [15-16].

Therefore, this paper will combine the share model based on industrial transformation and upgrading, expand the traditional dynamic shift share model, and quantitatively measure the industrial transformation of a single region in the whole region. From the perspective of the development of animal husbandry in a country, the growth of regions and industries is different due to the deviation of national industrial development policies. Therefore, the national policy encourages and restricts the rapid development of regional and industrial development. Therefore, we define the development speed of an industry in a region where the growth rate of the industry is faster than the national average, indicating that the industry in the region enters the region, and the industry develops at a slower speed than the national average. The traditional dynamic shift share analysis model only considers the changes in a single region, which cannot explain the industrial transformation between regions. We expand the traditional dynamic shift share analysis model to consider the angle increment of industrial change between regions, as follows:

$$\begin{aligned}&\sum_{j=1}^{R}\left(X'_{ij}-X_{ij}\right)=\left[X_{i1}r+X_{i1}\left(r_i-r\right)+X_{i1}\left(r_{i1}-r_i\right)\right]+\left[X_{i2}r+X_{i2}\left(r_i-r\right)+X_{i2}\left(r_{i2}-r_i\right)\right]\\&+\Lambda\ +\left[X_{iR}r+X_{iR}\left(r_i-r\right)+X_{iR}\left(r_{iR}-r_i\right)\right]\\&\sum_{j=1}^{R}\left(X'_{ij}-X_{ij}\right)=\sum_{j=1}^{R}\Delta X_{ij}=\sum_{j=1}^{R}X_{ij}r\left(r_i-r\right)+\sum_{j=1}^{R}X_{ij}\left(r_{ij}-r_i\right)\end{aligned}\tag{2}$$

Among them:

$$r=\frac{\sum_{i=1}^{S}\sum_{j=1}^{R}\left(X'_{ij}-X_{ij}\right)}{\sum_{i=1}^{S}\sum_{j=1}^{R}X_{ij}}\tag{3}$$

$$r_i=\frac{\sum_{j=1}^{R}\left(X'_{ij}-X_{ij}\right)}{\sum_{j=1}^{R}X_{ij}}\tag{4}$$

$$r_{ij} = \frac{X'_{ij} - X_{ij}}{X_{ij}} \left(i = 1,2,\Lambda\ R;\ j = 1,2,\Lambda\ ,S\right) \tag{5}$$

Therefore, compared with formula (2), the development of industries in our region can be divided into three parts: (1) the component of national growth, the amount of regional increase representing the industry is based on the national economic growth rate, that is, the amount of increase in each region is based on the national economic growth rate. (2) The component of sector structure represents the industrial increment of a region due to its sector advantage, that is, the industrial increment of a region due to its sector advantage. (3) The industrial transformation component indicates that due to the difference between the development speed of the region and the national average level, the number of growth (decrease) or transfer to a (increment), that is, the amount of the transformation component should be 0 due to the difference between its own development speed and the national average growth rate. The sum of transformation elements is 0, which indicates that except for national and structural factors, other elements exist in the form of industrial transformation in various regions of the country. From the above decomposition model, we can see that the third sub item is the calculation formula of industrial transformation that we will discuss. Let QIT denote the number of inter-regional industrial transformation;

$$\begin{aligned} QIT &= \sum_{j=1}^{R} X_{ij}\left(r_{ij} - r_i\right) \\ &= \left[X_{i1}\left(r_{i1} - r_i\right)\right] + \left[X_{i2}\left(r_{i2} - r\right)\right] + \Lambda\ + \left[X_{iR}\left(r_{iR} - r_i\right)\right] \end{aligned} \tag{6}$$

According to the definition of the above formula, its application scope can be further expanded, such as pollution transfer and energy consumption transfer in the process of industrial transfer.

3.4. Calculation Process and Result Analysis

(1) Define time range and reference area

Before the application of the shift share method, it is necessary to determine when the regional economy will be considered, that is, to determine the value of T. Generally speaking, the T value is 5 or 10 years, that is to say, the change of the region has been in the last 5 to 10 years. At the same time, it is necessary to analyze the background and regional structure of regional changes. In general, it is necessary to investigate the scale and current situation of the research area, and select the background area accordingly. If the research area occupies an important position in the large area of this level, the larger area of the level is selected as the background area. The selected background areas can be provincial level, economic cooperation zone (region) or national level.

(2) Division of department structure and construction of shift share analysis table

According to the nature and depth requirements of the problems studied, considering the possibility of statistical data, the regional economy is divided into several complete sectors according to a certain classification system. Then, the data are collected and the deviation share analysis table (or analysis matrix) is constructed

Initial data: $b_{ij.t}$, $b_{ij.o}$, $B_{i.o}$

Intermediate result: R_i, b_{ij}, b_{ij-t}, B_{i-t}, r_{ij}

The final result is:

$$G_{ij},\ N_{ij},\ P_{ij},\ D_{ij} \text{ where: } PD_{ij} = P_{ij} + D_{ij} \tag{7}$$

3.5. Construction of Market Environment

(1) Adhere to the government's advocacy, enterprise follow-up, to create a comprehensive development environment and rapid development for enterprises. To speed up the development of animal husbandry and promote the long-term goal and significance of the strategic development of animal husbandry industry should be widely publicized throughout the country, so that farmers can understand and master the dialectical relationship between the relationship, promote the development of animal husbandry industry and local economy, and effectively guide the investment of social resources strategic animal husbandry industry. We will actively implement various policies and continue to consolidate their effects.

(2) We should improve the development environment, strengthen enterprise cultivation, market awareness and product promotion, and improve the linkage mechanism of macro-control and micro-control. We should establish a special fund system for scientific research, encourage scientific research institutions to innovate, and continuously improve the overall development level of animal husbandry through product revolution and technological revolution.

(3) According to the characteristics of local economic development and resource advantages, scientific layout and reasonable arrangement shall be made to ensure the capital and resource investment required for the R & D and production of key industrial projects, products and technologies.

(4) We should encourage and guide financial enterprises to take a long-term view, grasp industrial policies, increase the proportion of funds in strategic emerging industries, and help enterprises solve financial problems such as financing bottlenecks.

(5) It is an important policy for the state to support the development of animal husbandry, such as innovating the use mechanism of subsidy funds, optimizing the structure of subsidies, and subsidies for breeding livestock and improved varieties, which play an important role in promoting the large-scale development of animal husbandry and stabilizing the market price. At present, subsidies are mainly distributed widely and cover the whole country, lacking flexibility and pertinence, and the effect is limited [17-18].

4. Sample Test and Result Analysis

Xinbalhu Right Banner, which borders Mongolia in the southwest and north of Xilin Gol League of Inner Mongolia Autonomous Region, is taken as the sample. The total area of the banner is 25194km, of which the grassland area is 421.72 million mu, accounting for 95.3% of the total area. The available grassland area is 436.82 million mu, accounting for 90.42% of the total grassland area and 90.13% of the total land area. The total number of animals is 2.2185 million, ranking the second in the region. The city's total output value of industry, agriculture and animal husbandry was 358.74 million yuan, of which 189.63 million yuan was accounted for 52.86% of the total output value of industry, agriculture and animal husbandry. It is a poverty banner in the border minority areas of Xilin Gol League and one of the main animal husbandry banners in Xilin Gol League.

4.1. Water Conservancy Construction

Since the implementation of this strategy in 2010, new balhu Right Banner has made great progress in water conservancy construction. The development of water conservancy has played a positive role in solving the problem of drinking water for human and livestock, building high-yield forage grass base, building ecological environment water, opening up water shortage pasture, storing grass and raising livestock.

As can be seen from Figure 1, the number of effective wells in this area increased from 143 in

2010 to 460 in 2015, an increase of 221.6%. In 2010 and 2015 alone, the number of effective plastic pipe wells has never increased to 242. The effective irrigation area increased from 17500 mu in 2010 to 435800 mu in 2015, and the water-saving irrigation area increased from zero to 16,93 mu in 2015, accounting for 38.84% of the total irrigation area. This also fully shows that since the implementation of this strategy, the intensity of water conservancy construction has been significantly enhanced.

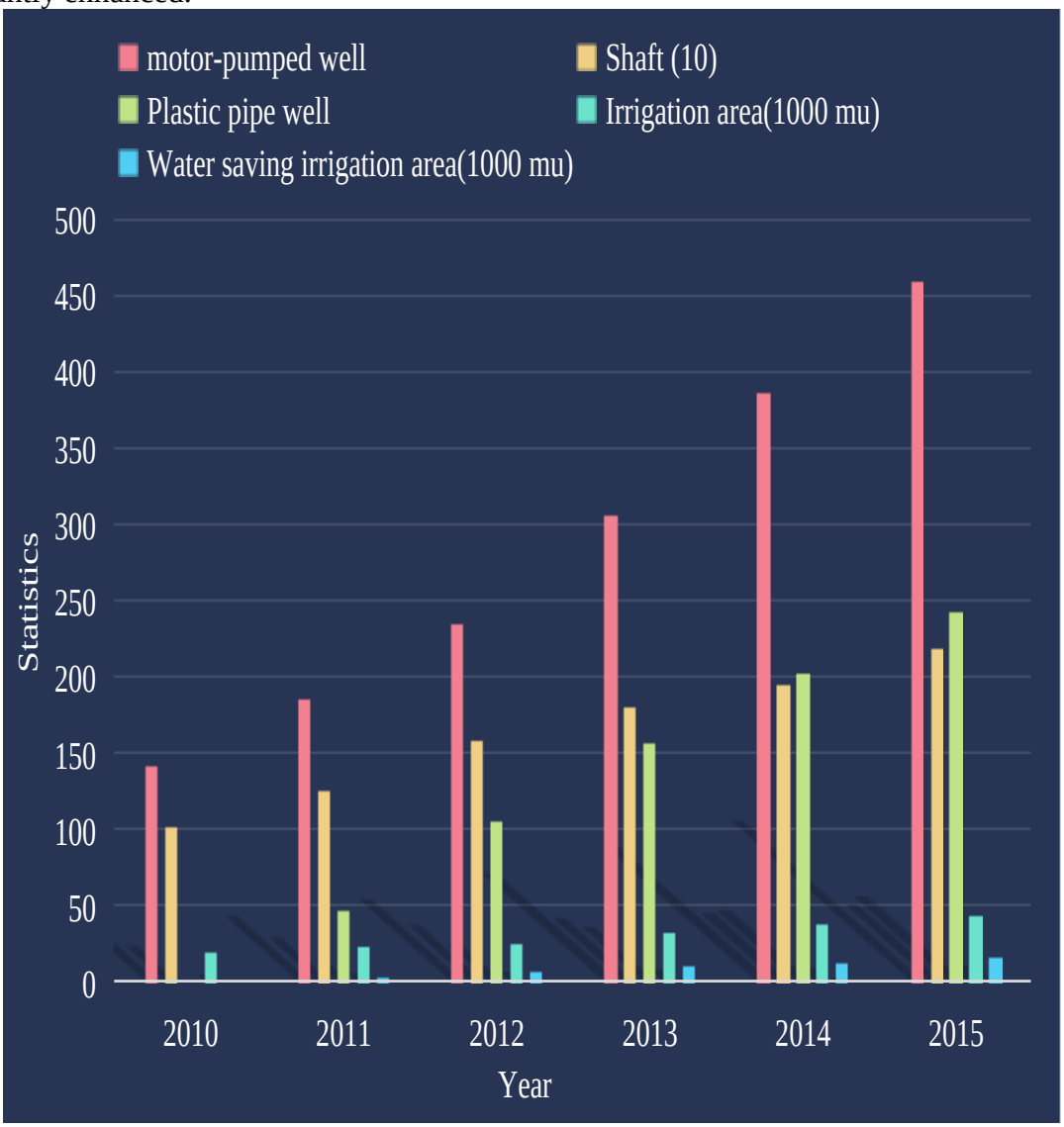

Figure 1. Statistical analysis of water conservancy construction from 2010 to 2015

4.2. Shed Construction

As can be seen from Figure 2, the livestock shed in the whole banner increased from 24500 square meters in 2010 to 287600 square meters in 2015, an increase of 10.74 times. The livestock shed area of each sheep unit increased from 0.03 square meters in 2010 to 0.31 square meters in 2015. The area of livestock pens increased from 188700 square meters in 2010 to 85200 square meters in 2015, increasing by 3.66 times and 3.6 times respectively. The livestock area per sheep unit increased from 0.19 square meters in 2010 to 0.85 square meters in 2015. The importance of scaffolding construction in disaster prevention and reduction and stable development of animal

husbandry should be enhanced, and the investment in human, material and financial resources should be further increased. These constructions have played an important role in preventing and controlling disasters, raising livestock in captivity, changing the extensive mode of production and management, and even promoting the stable development of animal husbandry economy.

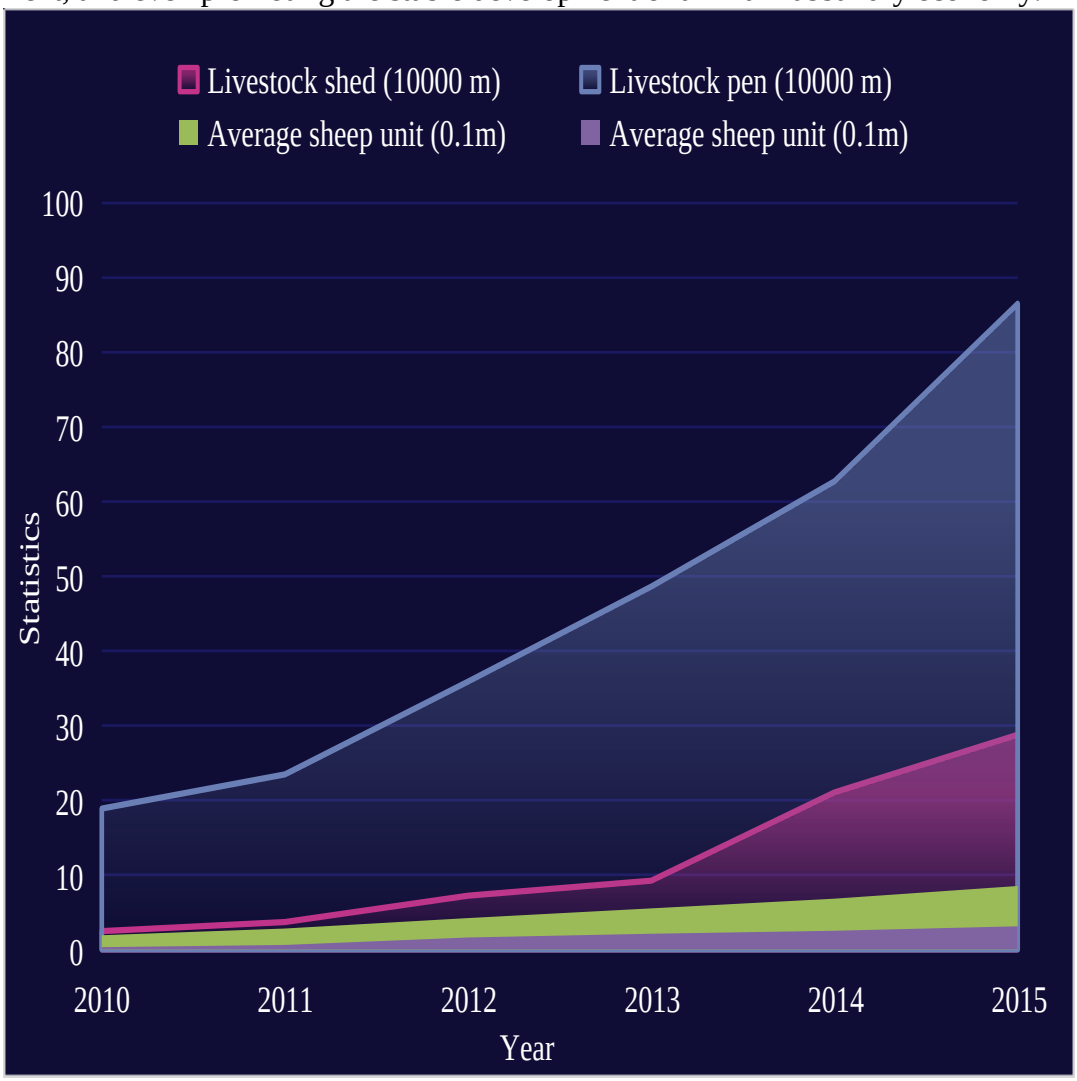

Figure 2. Statistical analysis of shed construction from 2010 to 2015

4.3. Grassland Construction

According to the analysis results in Figure 3, from 2010 to 2015, the area of artificial grassland increased from 28000 Mu to 13500 mu, an increase of 3.82 times, and the area of improved grassland increased from 0200 Mu to 138000 mu, an increase of 673 times. The enclosure area increased from 1087200 Mu to 1086200 mu, an increase of 9.05 times, and the planting area of high yield forage grass increased from 5400 Mu to 23200 mu, an increase of 3.3 times. The grass storage increased from 2395500 kg to 4928800 kg, an increase of 1.06 times. The supporting grass Coulomb area increased from 810000 mu in 2010 to 39600 mu in 2015, an increase of 3.88 times. According to the objective reality, frequent natural disasters, bad ecological environment and prominent contradictions of development. In order to improve these problems, the region vigorously carried out the construction of animal husbandry infrastructure, and developed high-yield feed base

and breeding center around ecology through various forms such as grassland water conservancy construction.

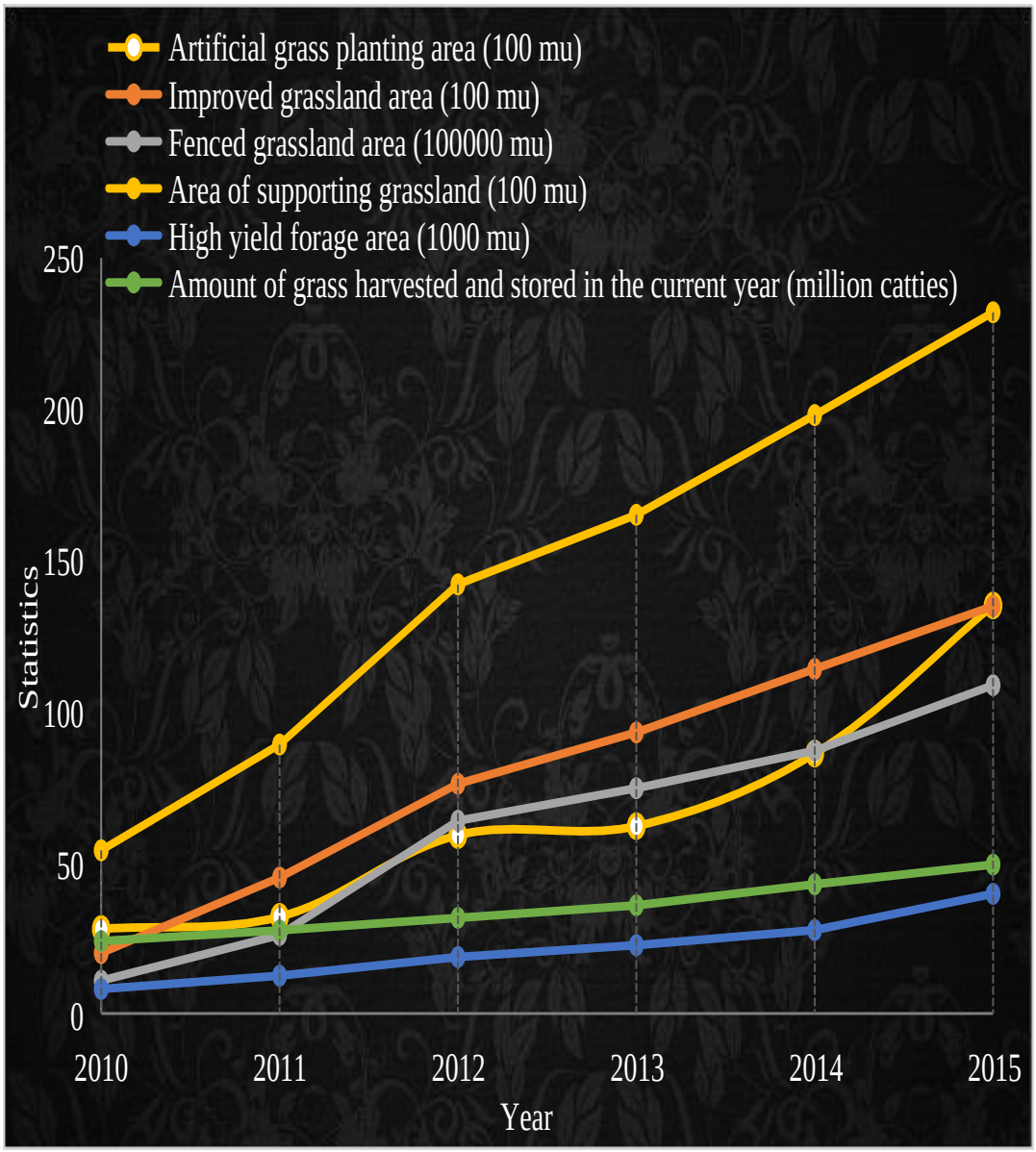

Figure 3. Statistical analysis of grassland construction from 2010 to 2015

4.4. Production Scale of Animal Husbandry

As can be seen from Figure 4, the number of livestock on hand in xinbalhu Right Banner in 2010 was 617000, ranking the fifth in the whole region. The livestock inventory increased by 2.45 times from 2010 to 2015. Among them, the highest livestock reserve was in 2015, reaching 2.2185 million heads. The increase in the number of livestock laid a solid foundation for the development of livestock production. The increase of livestock stock, on the one hand, reflects the achievements of animal husbandry production, on the other hand, it also reflects the continuous expansion of animal husbandry production scale and the continuous enhancement of reproductive capacity, which shows that the analysis method in this paper has achieved remarkable results.

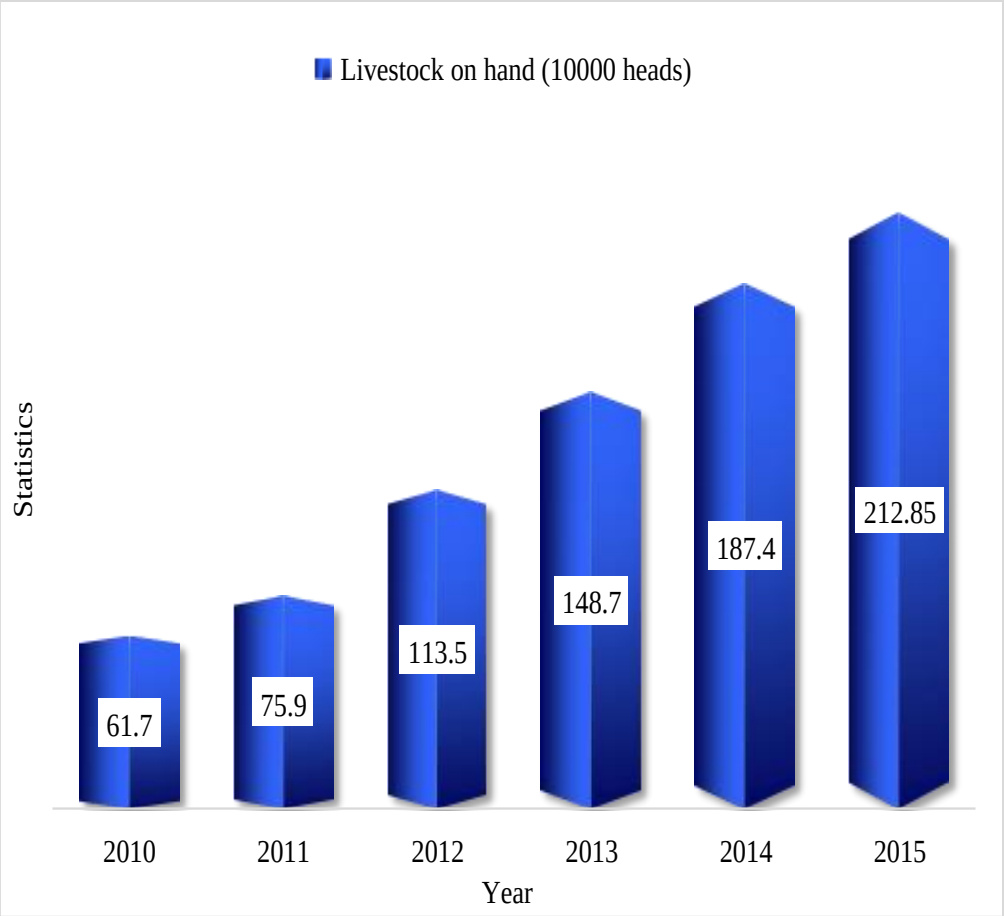

Figure 4. Analysis of scale expansion of animal husbandry production from 2010 to 2015

5. Conclusion

The development of animal husbandry in China has great potential, but it also faces great challenges. There are some problems such as government policy orientation and related technology. But even so, animal husbandry is still an important part of China's overall economic structure. It is of great significance for China's economic development to upgrade the core competitiveness of animal husbandry and breeding industry. In this paper, based on the dynamic shift share model of animal husbandry industry transformation and upgrading path analysis method, is the innovative introduction of international advanced analysis method, the transformation and upgrading of animal husbandry scientific analysis. In the third chapter, the construction method of the analysis model is given in detail, and the specific steps and principles are introduced in detail. In order to make the dynamic shift share analysis more suitable for animal husbandry in China, the structural transformation was carried out, the calculation method was optimized and the calculation accuracy was improved. The modified dynamic shift share analysis model is more suitable for China's animal husbandry industry transformation analysis. In order to verify the practical effectiveness of this method, in the last part of the experimental analysis, the new balhu Right Banner was used as the sample of this experiment, and a number of experiments were carried out including the production scale of animal husbandry, grassland construction, shed construction, etc. Through data analysis, this paper believes that since the new balhu Right Banner adopted this method, its regional animal husbandry has been well developed, its industrial scale has been turned over, and the number of shed constructions has also made a big breakthrough. This study has achieved ideal results and

made a contribution to the transformation and upgrading of animal husbandry in China.

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Data Availability

Data sharing is not applicable to this article as no new data were created or analysed in this study.

Conflict of Interest

The author states that this article has no conflict of interest.

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