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Theoretical Analysis and Empirical Research on Sustainable Development of Animal Husbandry in Inner Mongolia from the Perspective of New Structural Economics(1)

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Abstract: With the implementation of China's national strategies such as "Rural Revitalization" and "ecological civilization construction", the promotion and sustainable development of modern animal husbandry not only comply with the international green cycle and low-carbon development trend, but also the objective needs of Rural Revitalization and the fundamental direction of realizing the modernization of animal husbandry. Inner Mongolia, as the largest animal husbandry base in China, has shown a comprehensive advantage in its development. However, from the perspective of modern ecological animal husbandry, at present, the development of animal husbandry in Inner Mongolia mainly depends on policies and resource factors, and the growth of animal husbandry depends too much on traditional management methods. These problems are the fundamental problems that must be solved to realize rapid, inclusive and sustainable development of Inner Mongolia's animal husbandry.

Solving its problems fundamentally requires not only exploring new ideas in theory, but also applying theories in practice. Therefore, this research is guided by the theory of new structural economics to explore and research new theories and practical paths for the sustainable development of Inner Mongolia's animal husbandry.

Keywords： Inner Mongolia's animal husbandry, Sustainable Development, New Structural Economics, Development Path

Ⅰ Introduction

With the implementation of my country’s national strategies such as “rural revitalization” and “ecological civilization construction”, the advancement of modern animal husbandry and its

sustainable development not only conform to the international green cycle and low-carbon development trend, but are also an objective need for rural revitalization and the fundamental direction of realizing the modernization of animal husbandry. Among them, Inner Mongolia as Chain's largest animal husbandry base, has demonstrated a comprehensive superiority in its development, which plays an indispensable role in promoting the realization of industrial transformation and upgrading, technological innovation, ecological innovation, resource innovation, environmental innovation, regional innovation, and cultural innovation in Inner Mongolia. Entering the transition period of animal husbandry, Inner Mongolia's animal husbandry has made historic achievements in scale production, scientific and technological equipment, quality assurance, and green brand development, achieving continuous increase in animal husbandry production and continuous increase in income of farmers and herders. However, from the perspective of modern ecological animal husbandry, the current development of Inner Mongolia's animal husbandry mainly relies on policies and resource factors. Objectively, there are relatively extensive production methods, imperfect industrial systems, high pressure on resources and the environment, weak ecological service functions, limited innovation drivers, the growth of the animal husbandry is overly dependent on traditional management methods and other issues, and these problems are also the fundamental problems that must be resolved in the rapid, inclusive, and sustainable development of Inner Mongolia's animal husbandry.

In summary, with the implementation of the strategies of " rural revitalization " and "ecological civilization construction", Inner Mongolia's animal husbandry urgently needs to solve the fundamental problems that hinder the realization of sustainable development. Solving its problems fundamentally requires not only exploring new ideas in theory but also applying theories in practice. This research is guided by the theory of new structural economics to explore and research new theories and practical paths for the sustainable development of animal husbandry in Inner Mongolia.

Ⅱ literature Review

At present, although domestic academic circles have carried out extensive theoretical research and practical exploration of animal husbandry, the research on the sustainable development of animal husbandry is not perfect. The research mainly focuses on the definition of the meaning of the sustainable development of animal husbandry, the analysis of factors affecting the sustainable development of animal husbandry, the study of sustainable animal husbandry development models, the study of indicators and evaluations of sustainable animal husbandry development,

and the study of ways to realize the sustainable development of animal husbandry 5 areas of development.

Han Chengfu (2016) believes that the sustainable development of animal husbandry in the pastoral areas of Inner Mongolia requires the production of high-quality raw materials with regional characteristics, vigorously develop the processing industry, extend the industrial chain, and increase added value[1]. Sadowen (2019) and others analyzed the impact of climate change in the Ordos on the local grass and animal husbandry and put forward specific measures to deal with climate change[2]. Tana (2019) and others believe that to realize the sustainable development of the grassland ecological economy, the supply structure should be continuously optimized and adjusted from the perspective of the supply side, and the cultivation and formation of new agricultural and animal husbandry business entities should be accelerated[3]. Liu Lizhen (2018) believes that the prerequisite for the sustainable economic development of grassland animal husbandry in Inner Mongolia must be guaranteed by law[4]. Kong Deshuai et al. (2016) pointed out that the per capita grassland area of the family, the quality of the grassland, the family population, and the number of family animal husbandry employees all have a significant positive impact on the willingness of herders to pass on grassland animal husbandry operations between generations[5]. Terigle (2018) and others divided Inner Mongolia's animal husbandry resources into high abundance areas, medium abundance areas, and low abundance areas, thus providing a basis for the sustainable development of animal husbandry[6]. Zhang Zhao (2015) and others conducted a dynamic equilibrium analysis on the relationship between the grassland ecosystem in Inner Mongolia and the animal husbandry economic system by establishing a coupling degree model[7]. Li Dayong (2014) and others established a sustainable development model of grassland ecological animal husbandry based on the principle of giving priority to ecological benefits and the unity of ecological, social, and economic "three effects"[8].Han Mandula (2019) started from the overall structure of the temperate grassland animal husbandry in the Inner Mongolia Plateau and studied the sustainable development level of the animal husbandry in the region by calculating the weights of various indicators and the sustainability index[9]. Zhou Liguang (2014) and others used a vulnerability assessment model to calculate the vulnerability index of grassland animal husbandry in Xilin Gol, Inner Mongolia, to proposed that drought is the most severe and widespread climatic event affecting grassland animal husbandry[10]. Yu Qian et al. (2018) analyzed the causes of greenhouse gas emissions from animal husbandry in Inner Mongolia and pointed out that factors such as the continuous increase in livestock and poultry breeding, the low level of intensification, the low level of low-carbon breeding technology, and unscientific feeding methods have led to Serious environmental pollution and greenhouse gas emissions[11].

Chang Qian (2016) and others pointed out that strengthening the vertical collaboration between the main bodies of animal husbandry is an important way to improve the degree of industrial organization and promote the sustainable development of animal husbandry[12].

In summary, combined with the current research status at home and abroad, it can be concluded that the current researches related to the sustainable development of Inner Mongolia's animal husbandry have the following characteristics: First, there are abundant research results on grassland animal husbandry in Inner Mongolia, but there are few studies on animal husbandry in Inner Mongolia from the perspective of regional integration, among which there are few studies on the sustainable development of animal husbandry in Inner Mongolia, and the research on the sustainable development of animal husbandry in Inner Mongolia is mainly about external factors such as policies and strategies, However, there are few studies on seeking sustainable development with the internal factors of animal husbandry in Inner Mongolia as the core; Second, the existing research lacks theoretical innovation and system construction. The existing theoretical research on the sustainable development of animal husbandry in Inner Mongolia mainly uses the general theory to analyze the specific characteristics and problems of animal husbandry in different regions of Inner Mongolia and lacks the theoretical innovation of keeping pace with the times and the in-depth and systematic construction of the theoretical system of the sustainable development of animal husbandry in Inner Mongolia.

In view of this, under the theoretical guidance of new structural economics, this research explores and studies the new theory and practical path of sustainable development of animal husbandry in Inner Mongolia.

Ⅲ Theoretical Basis of Research on Sustainable Development of Animal Husbandry in Inner Mongolia

At present, from the perspective of the legal system and policy provisions, there is no systematic definition of the legal concept of sustainable development of animal husbandry in China. At present, animal husbandry farming in Inner Mongolia is mainly small and medium-sized farms, and most of them are low input and low output, high pressure on resources and environment, weak ecological service function, and limited innovation drive, these characteristics are the fundamental problems restricting the sustainable development of animal husbandry. Since the implementation of the village Revitalization Strategy with the supply-side structural reform of agriculture as the mainline in recent years, both the central and local governments have successively issued policy documents on the high-quality development of animal husbandry,

clearly proposing to promote the development of animal husbandry in the direction of scale, standardization, branding, and greening, extend and expand the industrial chain and increase the supply of green and high-quality products, Continuously improve the quality, efficiency and competitiveness, so as to promote the sustainable development of animal husbandry.

1.The Definition of the Concept and Theory of the Subject Research

1.1 Definition of Sustainable Development of Animal Husbandry

Although many researchers have done a lot of research on the sustainable development of animal husbandry from the perspective of sustainable development theory, due to the fact that the sustainable development theory of animal husbandry has not formed a relatively complete and mature theoretical system, the definition of the concept of sustainable development of animal husbandry in the academic community is not clear, and a unified understanding has not been reached. Based on the fact that animal husbandry production is the second product based on the first plant production, according to the special geographical location of Inner Mongolia, the sustainable development of animal husbandry is defined as the sustainable development of forage and feed resources and animal husbandry productivity. The sustainable development of forage and feed resources is the basis of the sustainable development of animal husbandry, and the sustainable development of animal husbandry productivity is the fundamental guarantee of the sustainable development of animal husbandry. It is characterized by economic sustainability, ecological sustainability, intensive growth mode, and organic unity of economic benefits, social benefits, and ecological benefits. As a representative characteristic industry of the national economy in Inner Mongolia, animal husbandry is not only the guarantee of regional food safety and the prosperity of the regional economy, but also the main source of increasing the income of farmers and herdsmen.

1.2 New Structural Economics Theory

New structural economics is based on the theoretical framework of Lin Yifu's "China's Miracle: development strategy and economic reform" and Marshall's lecture in June 2009, at an internal Seminar on the first anniversary of becoming senior vice president and chief economist of the world bank, he reflected on the theoretical process of development economics and the successful experience of economic development and transformation of developing countries..New structural economics proposes four factors which are factor endowment structure, comparative advantage, market, and government, that determine a country's economic structure. Among them, an effective market and a promising government are indispensable. They should play a synergistic role in the process of economic development of developing countries. The former plays a basic role in resource allocation, while the latter plays a role in guiding the situation, improving soft

and hard infrastructure, and solving external problems[13].

As the third wave of the new theoretical trend of development economics put forward after traditional structuralism and neoliberalism, new structural economics has not established a complete and mature theoretical system, but its theoretical content has strong theoretical value and practical guiding significance because it is a theoretical innovation and leaps summarized from the success or failure experience of developing countries (especially China), and an action guide for guiding the transformation and development of developing and underdeveloped countries and realizing regional development .

In view of this, Inner Mongolia animal husbandry, as a representative characteristic industry of the national economy in the underdeveloped areas of Western China, can better meet the theoretical viewpoints and guiding ideology of new structural economics in terms of its own structure and content characteristics. Therefore, guided by the core content of the theoretical system of new structural economics, this study explores and studies the new theory and practical path of sustainable development of animal husbandry in Inner Mongolia.

1.2.1 Factor Endowment Structure

According to new structural economics, factor endowment refers to the amount of capital, labor, and natural resources an economy has at a certain point in time, that is, the amount of various production factors an economy has at a certain point in time[14]. The factor endowment structure is the relative share of the stock of natural resources, labor, and capital in an economy, that is, the relative abundance and relative scarcity of different factor endowments owned by a country or region[15]. In this study, factor endowment refers to the number of main primes that must be possessed and act together in animal husbandry production activities in Inner Mongolia. Factor endowment structure is the relative abundance and relative scarcity of different production factor endowments of animal husbandry in Inner Mongolia.

1.2.2 Comparative Advantage

Comparative advantage refers to the fact that the production costs of factors such as wages and capital in an economy are at the lowest level in international comparison[16]. At a certain time point, because the comparative advantage is determined by the factor endowment structure of the economy at that time point, once the factor endowment structure of the economy changes, its comparative advantage will also change[17]. Capital accumulation is the core factor in the dynamic change of factor endowment structure and comparative advantage[18]. Therefore, new structural economics believes that comparative advantage is a favorable condition caused by the cost difference of various factors of production. In this study, comparative advantage refers to the relatively favorable conditions of animal husbandry in Inner Mongolia due to the relative

price difference caused by the abundance or scarcity of animal husbandry production factors.

1.2.3 Development Strategy

According to the theory of new structural economics, the economic development strategy of developing countries is divided into development strategy following comparative advantage and development strategy violating comparative advantage. The characteristic of the former is that in the process of economic development, the government helps companies choose industries and technologies that the country has comparative advantages, while the character of the latter is that the government stimulates companies to choose industries and technologies that the country does not have comparative advantages[19]. Countries that follow the development strategy of comparative advantage should give better play to the role of the government on the premise of ensuring that the market plays a decisive role. That is, should adhere to adjusting measures to local conditions, pay attention to making good use of the situation and promote economic development. In this study, the development strategy means that the Inner Mongolia government pays attention to guiding the situation and promoting the development of the animal husbandry economy on the premise of ensuring that the market plays a decisive role.

1.2.4 Viability

Regarding viability, new structural economics believes that in a free competitive market, if an enterprise can earn socially acceptable normal profits through normal operation and management, then the enterprise is viable; otherwise, the enterprise has no viability[20]. In other words, in a freely competitive market, the viability of an enterprise is the ability of an enterprise to survive and develop by its own ability. Therefore, the viability of an enterprise has become an important indicator of whether the enterprise has a normal profit level to maintain normal operations.

In this study, the viability of animal husbandry is the ability of Inner Mongolia's animal husbandry to survive and develop without the support or protection of the government or other external forces.

1.2.5 Efficient Market and Promising Government

According to the theory of new structural economics, efficient market refers to the market mechanism that can achieve Pareto efficient allocation through price signal[21]. In other words, the relative prices of various factors of production can fully reflect their relative scarcity only in the effective market. Therefore, an efficient market is an institutional prerequisite for identifying the relative prices of production factors and developing the economy by comparative advantages. New structural economics points out that promising government is neither inaction nor disorderly government[22]. It is a government that can adjust measures to local conditions, time,

and structure at different stages of economic development. It is a government that effectively cultivates and supplements the market, corrects market failure, promotes social equity, and improves the long-term welfare level of all sectors of society in the process of economic development. That is, not to give more play to the role of the government, but to solve the problems that the market can't manage or can't manage well on the premise of ensuring that the market plays a decisive role.

Since this study is a study on the sustainable development of animal husbandry in Inner Mongolia, in this study, effective market refers to the animal husbandry market mechanism that can achieve the effective allocation of Pareto resources through price signal; Promising government refers to the government that can effectively cultivate the animal husbandry market mechanism according to local conditions, time and structure at different development stages of the economy and promotes the sustainable development of animal husbandry in Inner Mongolia.

Ⅳ The Theoretical Value of New Structural Economics to the Sustainable Development of Inner Mongolia's Animal Husbandry

Based on the above-mentioned concepts and theoretical viewpoints of new structural economics, as the third wave of development economics theory, new structural economics expands the neoclassical research paradigm, constructs an economic growth theory that includes structural changes, and advances the economic research perspective structure The turn of the industry has provided important theoretical guidance for developing countries to formulate competitive industrial policies and has strong practical significance[23]. Its theoretical guidance, especially the sustainable development path of industries in underdeveloped regions, has important enlightenment and reference significance for this research.

In view of this, this study is guided by the relevant theories of new structural economics, discusses the theoretical value of new structural economics to realize the sustainable development of animal husbandry in Inner Mongolia from five aspects, which are the factor endowment structure of animal husbandry in Inner Mongolia, the comparative advantage of animal husbandry in Inner Mongolia, the strategic choice of comparative advantage of animal husbandry in Inner Mongolia, the viability of animal husbandry in Inner Mongolia, and the mechanism of organic cooperation, coordination, and balance between the government and the market of Inner Mongolia animal husbandry district.

1.Contribute to Clearly Positioning of the Factor Endowment Structure of the Sustainable Development of Inner Mongolia's Animal Husbandry

Due to its geographical location and resource status, Inner Mongolia, as an important animal husbandry region in China since ancient times, has played an indispensable role in the development of animal husbandry in China. However, from the perspective of modern ecological animal husbandry, the development of animal husbandry in Inner Mongolia mainly depends on policies and resource factors, and the development depends too much on traditional management methods. Especially compared with animal husbandry in developed areas, it not only has an imperfect industrial system, high pressure on resources and the environment but also has weak ecological service function and limited innovation drive. In the existing research on animal husbandry in Inner Mongolia, it mainly studies the external factors such as policy and institutional environment for the sustainable development of animal husbandry in Inner Mongolia, while there are few changes in animal husbandry structure caused by the change of internal factor endowment structure. Therefore, it is necessary to have a guiding theory for the research on the sustainable development of animal husbandry in Inner Mongolia from the perspective of internal factor endowment structure. As an important theory to study the economic development of underdeveloped countries and regions based on the internal factor endowment structure, new structural economics can better explore the internal factor endowment and structure of the sustainable development of animal husbandry in Inner Mongolia, and identify the comparative advantages of animal husbandry in Inner Mongolia by comparing with the factor endowment and structure of animal husbandry in developed regions, Fundamentally solve the way of realizing sustainable development of animal husbandry in Inner Mongolia.

According to the theory of new structural economics, the starting point of animal husbandry economic development in western underdeveloped areas such as Inner Mongolia is its factor endowment structure, and the fundamental difference between animal husbandry in underdeveloped areas and that in developed areas lies in the difference of factor endowment structure[24]. In other words, the fundamental reason for the difference between the animal husbandry in underdeveloped Inner Mongolia and that in developed areas is the difference of their factor endowment structure, and the factor endowment structure to realize the sustainable development of animal husbandry in Inner Mongolia is the starting point to catch up with the development of animal husbandry in developed areas.

Because the animal husbandry in Inner Mongolia and the animal husbandry in developed areas have different endowment structures of animal husbandry production in the process of realizing

sustainable development, the difference of factor endowment structure will make the relative price of animal husbandry in different regions to obtain its factor endowment in animal husbandry competition different, resulting in the difference of animal husbandry production cost. Generally speaking, compared with animal husbandry in developed areas, the factor endowment of animal husbandry in Inner Mongolia is relatively insufficient in technological progress and capital factors, but relatively abundant in the land, labor, and other factors; The situation of animal husbandry in developed areas is just the opposite. They have relatively abundant technological progress and capital factors, but relatively scarce factors such as land and labor force. Therefore, if the relatively abundant factors are adopted in the development process of animal husbandry in Inner Mongolia, not only the cost of production activities will be relatively low, but also the comparative advantage of development will be formed by its lower cost; If its relatively scarce elements are adopted, the result is just the opposite. In other words, if Inner Mongolia animal husbandry develops its own comparative advantage based on relatively abundant production factors, it is easy to improve the production competitive advantage and realize sustainable development. It can be seen that the production factor endowment structure of animal husbandry not only determines the comparative advantage production structure of animal husbandry in Inner Mongolia at its time point but also the starting point for the sustainable development of animal husbandry in Inner Mongolia.

2.Contribute to Clearly Guide the Sustainable Development of Inner Mongolia's Animal Husbandry Industry to Follow the Comparative Advantage Strategy

New structural economics studies the economic development of underdeveloped areas by exploring the comparative advantage determined by their own factor endowment structure under the condition of insufficient preconditions. Therefore, Inner Mongolia's animal husbandry, as a national economic characteristic industry in the western underdeveloped areas, taking the new structural economics as its theoretical guidance, will help Inner Mongolia's animal husbandry to explore the path of rapid, inclusive, and sustainable development under the condition of insufficient preconditions such as technological progress and capital. That is, starting from the lack of prerequisites as the starting point, to explore the practical path of sustainable development of animal husbandry in "underdeveloped" Inner Mongolia, following the theoretical analysis framework of "factor endowment-comparative advantage-development strategy-enterprise viability-institutional structure-development performance" of new structural economics. The specific characteristics are as follows: starting from the objective reality and taking the factor endowment structure of sustainable development of animal husbandry in Inner Mongolia as the foothold, develop the sustainability of animal husbandry; Follow the internal law

of sustainable development of animal husbandry, combined with its factor endowment structure to form comparative advantage and realize competitive advantage. It is precisely because this exploration path not only follows the internal law of sustainable development of animal husbandry but also combines the actual situation of underdeveloped animal husbandry in Inner Mongolia, so it makes its path more operational and effective.

3.Contribute to Clearly Confirm the Viability of Animal Husbandry for the Sustainable Development of Inner Mongolia's Animal Husbandry

Following the development strategy of comparative advantage is a key factor for new structural economics to measure the viability of enterprises in underdeveloped countries in the competitive market. From this, it can be deduced that whether enterprises have viability is the key point to test the success or failure of enterprises in implementing the development strategy of comparative advantage. Therefore, this practical viewpoint of new structural economics can help Inner Mongolia's animal husbandry to clearly confirm that the viability of animal husbandry is the key to measuring whether it has sustainable development and the level of development. At the same time, whether the animal husbandry in Inner Mongolia has the ability of animal husbandry is also the key factor to measure the success or failure of the implementation of the government's policy of making good use of the situation and the development strategy of comparative advantage of animal husbandry.

As the name implies, if the animal husbandry policy implemented by the government can successfully guide the animal husbandry in Inner Mongolia to follow the path of comparative advantage development determined based on its own factor endowment structure, Inner Mongolia's animal husbandry is easier to obtain the viability of animal husbandry in the market; On the contrary, if the animal husbandry policy implemented by the government fails to successfully guide Inner Mongolia's animal husbandry to follow the development path of comparative advantage determined based on its own factor endowment structure, it will be difficult for Inner Mongolia's animal husbandry to obtain the viability of animal husbandry in the market.

Therefore, if an inner Mongolia animal husbandry enterprise has strong viability in the market, the better it follows the strategy of comparative advantage and the stronger its competitiveness; Similarly, if the viability of animal husbandry is weak, it indicates that the enterprise has failed to follow or violated the comparative advantage strategy, and its animal husbandry competitiveness cannot be improved and developed.

Therefore, the strength of animal husbandry in Inner Mongolia with the viability of animal husbandry is not only an important standard to measure the implementation of the comparative

advantage strategy of animal husbandry in Inner Mongolia, but also an important index to test the development degree of animal husbandry in Inner Mongolia.

4.Contribute to Clarify the Effective Market and Promising Government for the Sustainable Development of Inner Mongolia's Animal Husbandry

New structural economics puts forward that a successful country must be based on a market economy and a promising government. For countries in transition, an effective government is especially important[25]. In other words, while playing a decisive role in the allocation of resources in an effective market, it must also play a role in guiding the government according to the situation[26]. Only by making good use of the "invisible" and "visible" hands at the same time can we help developing countries form a new pattern in which the market and the government are organically unified, complement each other, and promote each other's economic development.

In view of this, the sustainable development of animal husbandry in Inner Mongolia should not only play the role of an effective market but also play the role of an effective government. The reason is that if we mainly rely on the spontaneous evolution of the animal husbandry market, it will often lead to the slow and inefficient process of factor endowment and structural upgrading of sustainable development of animal husbandry in Inner Mongolia; The reason is that if the animal husbandry market mainly relies on the spontaneous evolution of the animal husbandry market, it will often lead to a slow and inefficient process of upgrading the sustainable development of Inner Mongolia's animal husbandry and its structure; while if it mainly relies on government administrative control, the sustainable development of Inner Mongolia's animal husbandry It is prone to problems such as information distortion and rent-seeking. Therefore, the effective market and promising government theory of new structural economics can be used as a theoretical guide to solving the relationship between the animal husbandry market and the government, and can better handle the relationship between the government and the market in the sustainable development of animal husbandry.

To sum up, as the practical and theoretical guidance for the sustainable development of animal husbandry in Inner Mongolia, new structural economics provides a scientific development path for the sustainable development of animal husbandry in Inner Mongolia, which is based on the endowment structure of animal husbandry factors, guided by the comparative advantage strategy, the key to the viability of animal husbandry, and the synergy of effective market and government.

Therefore, as a characteristic industry of the national economy in the western underdeveloped areas, Inner Mongolia’s animal husbandry industry must be based on its factor endowments and structure to achieve sustainable development. Under the synergistic effect of an effective market

and a promising government, The endowment structure of industry factors and the continuous enhancement of comparative advantages will realize the rapid, inclusive, and sustainable development of Inner Mongolia's animal husbandry.

Ⅴ EASV-MG Demand analysis Framework for the Sustainable Development of Inner Mongolia's Animal Husbandry

With the in-depth promotion of the implementation of the national strategy for rural revitalization, the important status and role of animal husbandry in Inner Mongolia have been raised to a new level, which also means that in the future development, it will bring new opportunities to the development of animal husbandry in Inner Mongolia, and still face the major challenges of sustainable development. To fundamentally solve the major issue of sustainable development, it is necessary to use practical theories such as the New Structural Economics as a guide, combined with the actual situation and characteristics of Inner Mongolia's animal husbandry, and walk out of the road of sustainable development with the characteristics of Inner Mongolia's animal husbandry.

In view of this, this study uses the above-mentioned factor endowment, comparative advantage, development strategy, viability, effective market, and effective government as the core theoretical guidance to define the factor endowment structure (E) of the sustainable development of Inner Mongolia's animal husbandry and follow the comparison Under the premise of advantage (A), development strategy (S), animal husbandry viability (V), government and market (MG) function system characteristics and its model, analyze the sustainable development system of Inner Mongolia's animal husbandry from the perspective of system elements, To construct the EASV-MG model framework of the sustainable development system of Inner Mongolia's animal husbandry.

1.The Endowment Structure of Factors for the Sustainable Development of Inner Mongolia's Animal Husbandry

Based on the factor system analysis of sustainable development of animal husbandry, the factor system of sustainable development of animal husbandry in Inner Mongolia is mainly composed of general animal husbandry production factor endowment and special animal husbandry production factor endowment. Among them, the general factor endowment of Inner Mongolia's animal husbandry production includes five aspects: feed, labor, capital, land, and technological progress; The special factor endowments of Inner Mongolia's animal husbandry production include unique regional resource elements, unique national resource elements, and

unique natural resource elements.

1.1 Endowments of Production Factors of General Animal Husbandry

General animal husbandry production factor endowment refers to the animal husbandry production factors required for animal husbandry production activities. It is the most fundamental endowment to measure the development level of animal husbandry. Therefore, it is also the necessary factor endowment for animal husbandry in Inner Mongolia in animal husbandry production activities. Based on the different roles of general animal husbandry production factor endowment in animal husbandry production activities, general animal husbandry production factor endowment can be divided into resource animal husbandry production factor endowment and process animal husbandry production factor endowment. The number of resource and process animal husbandry production factors constitutes the general animal husbandry production factor structure for the sustainable development of Inner Mongolia's animal husbandry, and the resource animal husbandry production factors constitute the production resource elements in the sustainable development of Inner Mongolia's animal husbandry system; The production factors of process animal husbandry constitute the production process elements in the sustainable development factor system of Inner Mongolia's animal husbandry.

1.1.1 The Structure of Production Factors of Resource Animal Husbandry

The production factors of resource animal husbandry are the basic elements for the sustainable development of Inner Mongolia's animal husbandry, and they are also an indispensable factor endowment for animal husbandry production. They mainly include animal husbandry feed, animal husbandry labor, animal husbandry capital, and animal husbandry land.

(1)Animal Husbandry Feed

Animal husbandry feed refers to the general name of the food of animals raised in animal husbandry. Animal husbandry feed generally includes soybean, bean patting, corn, fish meal, amino acid miscellaneous meal, additives, whey powder, oil, meat quantity education, grain, sweet sorghum, and other varieties of feed. According to feed raw materials, it can be divided into roughage, green feed, silage, energy feed, protein supplement, mineral feed, vitamin feed, additives, etc.

Animal husbandry feed resources, especially high-quality animal husbandry feed resources, are not only the driving force to ensure the sustainable development of animal husbandry in Inner Mongolia, but also the basic element of sustainable development. In recent years, with the gradual transformation of the development pattern of animal husbandry in Inner Mongolia from the traditional scattered business model to the large-scale, intensive and standardized model, the

production of feed resources required for its development has also developed rapidly. However, compared with animal husbandry in developed areas of China, the element of animal husbandry feed presents the characteristics of a low degree of industrialization in Inner Mongolia.

As shown in Table 1, the total output of ruminant feed in 30 provinces, municipalities, and autonomous regions nationwide in 2017 was 922,61 million tons. Among them, Hebei Province in the more developed northeastern region has 123,200 tons, Liaoning has 101,74 tons, Heilongjiang has 80,180 tons, and Shandong, Tianjin, and Beijing in the east of developed regions have 61,97 tons, 44,180 tons, and 39,400 tons, respectively. The ruminant feed produced in Inner Mongolia in the underdeveloped western region is 214.95 million tons. In terms of its output alone, Inner Mongolia ranks first in the country with 214.95 million tons, accounting for about 23.3% of the country's total ruminant feed output. However, when measured by standards such as production technology, production capacity, and degree of industrialization, Inner Mongolia ranks first in the country with 214.95 million tons. Compared with developed regions, there are fewer group companies that have achieved large-scale and standardized production of feed. Most of them are relatively small-scale companies and feed factories operated by farmers and herdsmen. Irregularities are still more common, small, scattered, and chaotic. The situation leads to low feed production technology, low production capacity, and low industrialization.

Table 1 Main production areas of ruminant feed in 2017

Unit: Ton

Province	Compound feed	Concentrated feed	Additive premix feed	Ruminant feed
Hebei	849481	324892	57570	1231943
Liaoning	704532	305394	7499	1017425
Heilongjiang	429410	332861	39533	801803
Shandong	489492	60711	69520	619722
Beijing	287320	31284	71802	390406
Tianjin	324434	77810	39571	441815
Inner Mongolia	1687499	448004	14015	2149518

Data source: "China Feed Industry Yearbook 2018"

As shown in Table 2, the number of companies in the five provinces of Shandong, Jiangsu, Fujian, Guangdong, and Hainan with an annual output of more than 100,000 tons of feed has changed from 210 in 2015 to 262 in 2017, an increase of 52, an increase of 25%; production increased from 44.24 million tons to 48.13 million tons, an increase of 3.89 million tons, an increase of 9%. The number of enterprises in the five provinces and autonomous regions of Inner Mongolia, Ningxia, Gansu, Qinghai, and Xinjiang increased from 10 in 2015 to 11 in 2017, an increase of 1 with an increase of 10%; output increased from 1.46 million tons to 1.61 million tons, The increment is 140,000 tons, an increase of 10%.

In terms of feed production, whether in terms of the number of group enterprises or output, there is a large gap between Inner Mongolia and Shandong, Jiangsu, Fujian, and Guangdong in China's developed regions. In particular, the characteristics of Inner Mongolia in the feed

industry determine that the feed industry market is uneven, the processing and production waste is serious, and the shortage of high-quality animal husbandry feed resources is widespread. Therefore, at present, under the background that the state attaches great importance to the high-quality development of animal husbandry and comprehensively improves the supply security guarantee capacity of livestock and poultry products, Inner Mongolia animal husbandry needs to continuously improve production technology and accelerate the industrialization process in the development and construction of animal husbandry feed resources, to meet the needs of sustainable development of animal husbandry.

Table 2 The development of enterprises with an annual output of more than 100,000 tons in five provinces including Inner Mongolia in the west and Shandong in the east from 2015 to 2017

Unit: pcs, ten thousand t, %

Item	2015		2017		Number of companies		Yield	
	Number of companies	Yield	Number of companies	Yield	Increment	Increase	Increment	Increase
Inner Mongolia, Ningxia, Gansu, Qinghai, Xinjiang	10	146	11	161	1	10	14	10
Shandong. Jiangsu. Fujian. Guangdon g. Hainan	210	4424	262	4813	52	25	389	9

Data source: "China Feed Industry Yearbook 2018"

(2)Animal Husbandry Labor Force

Animal husbandry labor force is an indispensable resource guarantee for animal husbandry production and sustainable development. The elements of animal husbandry labor force refer to the labor force that has participated in and can participate in animal husbandry labor in the total population, including quantity and quality. Among them, the quality of animal husbandry labor force includes workers' physique, ideological consciousness level, cultural and scientific knowledge, professional production experience and labor skills. The physique of animal husbandry workers is not only the physiological basis for exerting labor force in labor, but also the physiological basis for improving workers' intelligence.

Inner Mongolia is one of the important bases of animal husbandry in China. With the continuous development of animal husbandry, the number of animal husbandry employees is also increasing year by year. To better analyze the advantages and disadvantages of animal husbandry labor resources in Inner Mongolia, Hebei Province, Liaoning, and Heilongjiang in the more developed northeast region and Shandong, Tianjin, and Beijing in the eastern region of the developed region are selected as the comparative regional objects for research and analysis. As shown in Table 3, the number of people engaged in animal husbandry in 2017 was 82.5 million. Among them, there are 3.412 million people in Hebei Province, 21,000 people in Liaoning Province and 34,000 people in Heilongjiang Province in the more developed northeast region,

4.642 million people in Shandong, 157,000 people in Tianjin, and 12000 people in Beijing in the eastern region of the developed region, and 993,000 people in animal husbandry in Inner Mongolia.

To sum up, through the analysis of the labor resources of animal husbandry in Shandong, Tianjin, Beijing in the eastern region and Hebei, Liaoning, Heilongjiang, and Inner Mongolia in the northeast region, the results show that whether it is Shandong, Tianjin, and Beijing in the developed eastern region or Hebei, Liaoning and There is a dual structure of rich and scarce animal husbandry labor resources in the three provinces of Heilongjiang. For example, the proportion of animal husbandry employees in Shandong and Hebei is about 5.6% and 4.1% respectively, and that in Beijing and Liaoning is only about 0.01% and 0.03% respectively; Compared with that, the proportion of animal husbandry employees in Inner Mongolia in the number of animal husbandry employees in China has reached about 1.2%, which better shows that animal husbandry labor force will be a factor endowment with potential comparative advantage in the sustainable development of animal husbandry in Inner Mongolia.

Table 3 Annual animal husbandry employment in the three provinces of Inner Mongolia in the west, Shandong in the east, and Hebei in the northeast in 2017

Unit: ten thousand people.%

Region	2017	Number of employees	Percentage
Eastern Part	Shandong	464.2	5.6
	Beijing	1.2	0.01
	Tianjin	15.7	0.19
Northeast	Hebei	341.7	4.14
	Liaoning	2.1	0.03
	Heilongjiang	3.4	0.04
West Part	Inner Mongolia	99.3	1.2
Entire Country		8250	

Data source: relevant province and autonomous region yearbook 2018

(3)Animal Husbandry Capital

The capital of animal husbandry refers to the value-form and currency expression of the material data and labor used in the production and circulation of animal husbandry under the conditions of the market economy. It is also an indispensable and important means for livestock production units to obtain various factors of production under the conditions of a market economy. According to the stage of capital in the reproduction process, it can be divided into the capital in the field of production and capital in the field of circulation. The former mainly refers to the capital occupied by various means of production and products in progress, and the latter refers to the capital occupied by various finished products, as well as the capital occupied by cash, deposits, and receivables in the circulation field. According to the method of capital value transfer, it is divided into fixed capital and circulating capital. The former refers to labor methods such as houses, equipment, agricultural machinery, fruit trees, draught animals, and breeding animals. Its characteristic is that it can participate in the production many times to transfer its own value to the new product. The latter refers to labor objects such as seeds, feed, fertilizers,

pesticides, and raw materials. Its characteristic is that after participating in a production, it is all consumed, and its value is completely transferred to the new product.

The shortage of animal husbandry capital is one of the most important problems restricting the sustainable development of animal husbandry in Inner Mongolia. Compared with the animal husbandry in developed areas of China, the capital invested in production activities of animal husbandry in Inner Mongolia is relatively insufficient, which is mainly reflected in three aspects: insufficient accumulated capital investment of farmers and herdsmen, insufficient financial investment in agriculture and animal husbandry, and insufficient credit capital investment of financial institutions.

1) Insufficient Investment in Accumulated Capital of Farmers and Herdsmen

In animal husbandry capital, the total power of agricultural machinery and the ownership of large, medium, and small tractors are one of the methods to measure the accumulated capital investment of farmers and herdsmen. This method is used to analyze the accumulated capital investment of farmers and herdsmen in Inner Mongolia.

As shown in Table 4, the total power of agricultural machinery and the possession of large, medium, and small tractors nationwide in 2018 were 10,03.717 million kilowatts, 4.22 million units, and 18.183 million units respectively. Among them, Shandong Province in the developed northeastern region has 104.152 million kilowatts, 479,000 units, and 2.013 million units; Beijing has 1.256 million kilowatts, 4 million units, and 2 million units; Tianjin has 3,479,800 kilowatts, 14,000 units, and 3 million units. In the more developed northeastern region, Hebei has 77.062,000 kilowatts, 273,000 units, and 1.223 million units; Liaoning has 22.437 million kilowatts, 170,000 units, and 408,000 units; Heilongjiang has 60.84 million kilowatts, 552,000 units, and 1.057 million units. In Inner Mongolia, it has 36.637 million kilowatts, 316,000 units, and 857,000 units. From the above data, it can be seen that Inner Mongolia, as one of China's important animal husbandry bases, has about 35.2% of Shan dong's total agricultural machinery power, Hebei's 47.5%, and Heilongjiang's 60.0%, and the country only accounts for about 3.6%; The number of large and medium tractors is about 65.8% of Shandong, 115.8% of Hebei, and 57.2% of Heilongjiang; the country only accounts for about 7.5%; the number of small tractors is about 42.6.8% of Shandong, 71.1% of Hebei, Heilongjiang's 81.1%; the whole country only accounts for about 4.7%. As shown in Figure 4, although there have been small changes in 2019, whether, in terms of the total power of agricultural machinery or the ownership of large, medium, and small tractors, the situation is almost the same as in 2018. The conclusion is that it is an important animal husbandry base in my country. Compared with Shandong in developed areas and Hebei and Heilongjiang in more developed areas in Inner Mongolia, the accumulated

capital investment of farmers and herdsmen in Inner Mongolia is obviously low and insufficient.

Therefore, the lack of accumulated capital investment by farmers and herdsmen in Inner Mongolia directly affects the efficiency of Inner Mongolia's animal husbandry production activities, and at the same time, it also restricts the sustainable development of Inner Mongolia's animal husbandry to a large extent.

Table 4 Annual total agricultural machinery power and ownership of large, medium, and small tractors in the three provinces of Inner Mongolia in the west, Shandong in the east, and Hebei in the northeast from 2018 to 2019

Unit: ten thousand kilowatts. ten thousand units

Region		2018			2019		
		Total power of agricultural machinery	Number of large and medium agricultural tractors	Number of small tractors	Total power of agricultural machinery	Number of large and medium agricultural tractors	Number of small tractors
Entire Country		100371.7	422.0	1818.3	102758.3	443.9	1780.4
Eastern Part	Shandong	10415.2	47.9	201.3	10679.8	48.2	199.1
	Beijing	125.7	0.4	0.2	122.8	0.4	0.2
	Tianjin	348.0	1.4	0.3	359.8	1.3	0.4
Northeast	Hebei	7706.2	27.3	122.3	7830.7	28.0	122.4
	Liaoning	2243.7	17.0	40.8	2353.9	17.7	40.2
	Heilongjiang	6084.0	55.2	105.7	6359	57.8	103.7
West Part	Inner Mongolia	3663.7	31.6	85.7	3866.4	35.4	83.5

Data source: National Bureau of Statistics

2) Insufficient Financial Investment in Agriculture and Animal Husbandry

As one of the autonomous regions in the underdeveloped regions in Western China, Inner Mongolia has a gap in the funds invested in animal husbandry production activities compared with the government finance of Shandong in the developed regions and Hebei and Heilongjiang in the more developed regions. As shown in Table 5, from 2015 to 2019, the government expenditure on agriculture, forestry, and water affairs in Shandong were 107.6 billion yuan, 99.85 billion yuan, 95.36 billion yuan, 94.34 billion yuan, and 96.44 billion yuan respectively, while in the same year, the government expenditure on agriculture, forestry, and water affairs in Inner Mongolia were 87.473 billion yuan, 90.396 billion yuan, 80.771 billion yuan, 72.902 billion yuan, and 67.558 billion yuan respectively. There is a gap in the total allocation for agriculture, forestry, and water affairs between the two governments, The difference between the maximum amount and the minimum amount in the same year was 28.88 billion yuan. Therefore,

Table 5 financial expenditures on agriculture, forestry, and water affairs in the three provinces of Inner Mongolia in the west, Shandong in the east, and Hebei in the northeast from 2015 to 2019

Unit: 100 million yuan

Region		2019	2018	2017	2016	2015
Entire Country		22330.5	20493.3	18380.3	17808.3	16641.7
Eastern Part	Shandong	1076.0	998.5	953.6	943.4	964.4
	Beijing	584.6	576.0	518.4	443.6	424.8
	Tianjin	161.5	165.7	158.4	161.0	156.1
Northeast	Hebei	978.3	906.3	782.9	800.8	712.5
	Liaoning	502.6	461.7	459.2	480.7	446.1
	Heilongjiang	882.0	834.5	815.2	801.8	681.5
West Part	Inner Mongolia	874.7	904.0	807.7	729.0	675.6

Data source: National Bureau of Statistics

due to the limited financial resources of the Inner Mongolia government and the relatively insufficient financial investment and allocation for animal husbandry, the animal husbandry in Inner Mongolia is also in a relatively weak position in terms of production and development.

3) Insufficient Supply of Credit Capital from Financial Institutions [28]

The difficulty of financing has always been a problem perplexing the development of animal husbandry in Inner Mongolia. In particular, with the gradual transformation of the development pattern of animal husbandry in Inner Mongolia from the traditional scattered business model to the large-scale, intensive and standardized model, the financing scale required for the production and operation of animal husbandry by farmers and herdsmen is also expanding. However, compared with developed areas, the overall breeding scale of animal husbandry in Inner Mongolia is still small and scattered, a long cycle and high risk with due to the imperfect security system and other factors, financial institutions are often reluctant to invest more credit capital in animal husbandry. As a result, the animal husbandry's demand for credit capital continues to increase, and financial institutions' insufficient supply of credit capital for the animal husbandry has led to an imbalance in the supply and demand of credit capital, which has severely restricted the sustainable development of the livestock industry in Inner Mongolia. (Table 6)

Taking the Bank of Inner Mongolia as an example, the main loan industries in 2019 include wholesale and retail, manufacturing, construction, agriculture, forestry, animal husbandry, and fishery, leasing, and business services. Among them, the loan amount of agriculture, forestry, animal husbandry, and fishery is 4.470261 billion yuan,accounting for 6.2% of the total loan amount, ranking the fourth among the five industries, while the loan amount of wholesale and retail industry ranking the first is 14.775611 billion yuan, accounting for 20.4% of the total loan amount, which is 3.3 times that of agriculture, forestry, animal husbandry, and fishery. As mentioned above, the main reason for the insufficient supply of credit for animal husbandry by financial institutions is that the weak repayment ability of farmers and herdsmen of most animal husbandry production and operation entities, insufficient collateral, lack of guarantee resources, and other factors that increase the credit risk of financial institutions, thus strengthening the cautious

Table 6 Distribution of Inner Mongolia Bank's Loans by Major Industries in 2019

Unit: Thousand Yuan,%

Serial number	Industry	Loan amount	Percentage of total loans
1	Wholesale and retail	14,775,611	20.4
2	Manufacturing	13,333,458	18.4
3	Construction industry	6,311,210	8.7
4	Agriculture, forestry, animal husbandry and fishery	4,470,261	6.2
5	Leasing and business services	4,336,927	6.0
Total		43,227,467	59.8

Data source: Inner Mongolia Bank Co., Ltd. 2019 Annual Report

attitude of financial institutions towards animal husbandry financing, As a result, the credit capital supply of financial institutions is insufficient.

(4) Animal Husbandry Land

Land elements are the most basic material resources for the formation of animal husbandry in Inner Mongolia. Ensuring the safety of animal husbandry land resources is an indispensable condition for ensuring the sustainable development of animal husbandry. The following is a further in-depth analysis of the advantages and disadvantages of animal husbandry land resources in Inner Mongolia by comparing the land resources with Shandong, Tianjin, and Beijing in the eastern part of developed regions and Hebei, Liaoning, and Heilongjiang provinces in the more developed northeast.

As shown in Table 7, the following contents and characteristics can be obtained through the sorting of "China Land and Resources Statistical Yearbook 2020". In 2019, the retention of cultivated land, garden land, forest land, grassland, construction land, and basic farmland in China were 120.333 million hectares, 13.328 million hectares, 249.92 million hectares, 260.254 million hectares, 37.24 million hectares, and 104 million hectares respectively. Among them, Shandong ranks first with 7.479 million hectares, followed by Heilongjiang with 11.5827 million hectares, and Inner Mongolia with 6.977 million hectares; In garden, the top three provinces are Shandong, Liaoning, and Hebei, and Inner Mongolia ranks fifth with 97000 hectares; In terms of forest land, Hebei ranks first with 75.71 million hectares, followed by Inner Mongolia with 24.19 million hectares, and Heilongjiang ranks third with 23.667 million hectares; In grassland, Inner Mongolia ranks first with 64.8353 million hectares, accounting for 24.9% of the national grassland area; In terms of construction land, Shandong, Hebei, and Heilongjiang are in turn, and Inner Mongolia ranks fourth with 1.623 million hectares; In terms of basic agriculture, Inner Mongolia ranks third with 6.0813 million hectares.

Table 7 Landholdings in three provinces including Inner Mongolia in the west, Shandong in the east, and Hebei in the northeast in 2019

Unit: ten thousand hectares

Region		Arable land	Garden	Woodland	Grassland	Construction land	Basic farmland
Entire Country		12033.3	1332.8	24992.0	26025.4	3724.0	10400.0
Eastern Part	Shandong	747.9	103.4	145.0	3.0	267.0	665.3
	Beijing	21.5	14.4	71.8	0.2	38.2	18.7
	Tianjin	43.7	3.7	4.2	0.1	40.3	35.7
Northeast	Hebei	630.3	60.6	7571.0	80.8	191.4	554.4
	Liaoning	406.3	66.7	621.9	45.5	155.6	354.1
	Heilongjiang	1158.3	7.2	2366.7	204.6	164.8	1017.6
West Part	Inner Mongolia	697.7	9.7	2419.0	6483.5	162.3	608.1

Data source: National Land Resources Yearbook

Through the analysis of the above data, the results show that the special geographical location

of Inner Mongolia determines the land resources for animal husbandry, whether compared with Shandong, Tianjin, and Beijing in the developed eastern region of Hebei, Liaoning, and Heilongjiang in the more developed northeast region, Forage land, a resource element, is an element endowment with comparative advantages in realizing sustainable development of animal husbandry in Inner Mongolia.

To sum up, through the comparison and analysis with the data of basic and necessary conditions and resource element endowment of animal husbandry production activities in Shandong, Tianjin, Beijing, Hebei, Liaoning, and Heilongjiang, the following conclusions can be drawn. Inner Mongolia animal husbandry has a certain degree of weakness in animal husbandry feed and animal husbandry capital elements but has potential comparative advantages and comparative advantages in animal husbandry labor force and animal husbandry land resources elements. This unique advantage needs further reform and innovation in realizing the sustainable development of animal husbandry in Inner Mongolia. Therefore, the resource-based production factors for the sustainable development of animal husbandry in Inner Mongolia have the endowment structure of lack of animal husbandry feed, lack of animal husbandry capital, and animal husbandry labor force and animal husbandry land need to be fully reformed and innovated.

1.2 Process Animal Husbandry Production Factors

Process animal husbandry production factors are a kind of production factor that work synergistically in the production process of Inner Mongolia's animal husbandry. They mainly include technological innovation, animal husbandry systems, and animal husbandry culture.

1.2.1 Technological Innovation

As an important starting point for China's economic and social development during the 14th Five Year Plan period, scientific and technological innovation not only plays a core role in China's modernization but also strategic support for China's scientific and technological self-reliance. Therefore, scientific and technological innovation is also an important process production factor that has a direct impact on the improvement of quality and efficiency of animal husbandry production and management in Inner Mongolia, which plays an indispensable role in the realization of sustainable development of animal husbandry in Inner Mongolia.

The fundamental source of scientific and technological innovation lies in people, that is to say, innovation is the first driving force, and talents are the first resource. In view of this, the scientific and technological innovation elements of the sustainable development of animal husbandry in Inner Mongolia can be investigated from the number of animal husbandry technology institutions, the level distribution of institutional talents, and the benefit value.

Firstly, in Table 8, there were 2713 breeding poultry farms and 2120 breeding livestock farms in 2018. Among the breeding poultry farms, Shandong, Liaoning, and Hebei provinces ranked in the top three with 385, 238, and 106 respectively, while Inner Mongolia ranked sixth with 14; Among the breeding livestock farms, Liaoning ranked first with 47.6% of the national breeding livestock farms, Heilongjiang and Shandong ranked second and third, and Inner Mongolia ranked fifth with 16. It can be seen from the above that Inner Mongolia has a certain degree of weakness compared with Shandong, Liaoning, Hebei, and Heilongjiang.

Table 8 Factors of poultry farms in three provinces including Inner Mongolia in the west, Shandong in the east, and Hebei in the northeast in 2018

unit: PCS

Region		Breeding Poultry Farms	Breeding Animal Farm
Entire Country		2713	2120
Eastern Part	Shandong	385.0	71.0
	Beijing	48.0	4.0
	Tianjin	8.0	12.0
Northeast	Hebei	106.0	35.0
	Liaoning	238.0	101.0
	Heilongjiang	60.0	91.0
West Part	Inner Mongolia	14.0	16.0

Data source: China Animal Husbandry and Veterinary Yearbook

Secondly, as shown in Table 9, there are 32 animal husbandry stations and 13 poultry breeding and improvement stations in China, with 258, 608, 183, 36 and 70, 282, 75, and 27 respectively according to the educational level of postgraduates, undergraduates, junior colleges and technical secondary schools. Among them, the educational level of animal husbandry stations is distributed in the number of staff, and Beijing has the largest number of postgraduates, Inner Mongolia and Liaoning ranked third with 7 people, while Inner Mongolia ranked second in the distribution of undergraduate level; In the poultry breeding and improvement station, Heilongjiang and Hebei have absolute advantages at that talent level. Finally, in table 10, there are 27 feed supervision institutes and 37058 veterinary stations across the country, with 201, 371, 68, 18 and 826, 29479, 55171, and 35891 respectively according to the educational level of postgraduates, undergraduates, junior colleges and technical secondary schools. Among them, the educational level of feed supervision institutes is distributed in the number of staff, and Liaoning has the largest number of postgraduates, Inner Mongolia and Beijing ranked fifth with two people, while Inner Mongolia ranked sixth in the distribution of undergraduate level; In terms of the number of veterinary stations, Shandong and Hebei ranked first and second with 1429 and 1336 respectively, Inner Mongolia and Heilongjiang ranked third with 1035. At the graduate level, Tianjin ranked first with 29.9% of the number of graduate students in China, Shandong ranked second with 130, Heilongjiang and Inner Mongolia ranked third and fourth with 29 and 23 respectively, and at the undergraduate level, Inner Mongolia ranks third with a comparative advantage of 1350 people.

Through the above analysis, it can be seen that compared with the animal husbandry in

Table 9 Basic situation of animal husbandry technology institutions in three provinces including Inner Mongolia in the west, Shandong in the east, and Hebei in the northeast in 2018

Unit:PCS, person

Region		Animal Husbandry Station					Poultry Breeding and Improvement Station				
Entire Country		Number	Number of people in number according to academic qualifications				Number	Number of people in number according to academic qualifications			
			postgraduate	Undergraduate	College	Technical secondary school		postgraduate	Undergraduate	College	Technical secondary school
		32	258	608	183	36	13	70	282	75	27
Eastern Part	Shandong	1	10	9	6	2	0	0	0	0	0
	Beijing	1	29	25	11	0	0	0	0	0	0
	Tianjin	1	2	15	2	0	0	0	0	0	0
Northeast	Hebei	1	1	41	1	4	1	0	46	6	0
	Liaoning	1	7	12	3	1	0	0	0	0	0
	Heilongjiang	1	3	10	2	0	1	5	68	8	1
West Part	Inner Mongolia	1	7	30	14	0	0	0	0	0	0

Data source: China Animal Husbandry and Veterinary Yearbook

Table 10 The basic situation of animal husbandry technology institutions in the three provinces of Inner Mongolia in the west, Shandong in the east, and Hebei in the northeast in 2018

Unit:PCS, person

Region		Feed Inspection Office					Veterinary station				
Entire Country		Number	Number of people in number according to academic qualifications				Number	Number of people in number according to academic qualifications			
			postgraduate	Undergraduate	College	Technical secondary school		postgraduate	Undergraduate	College	Technical secondary school
		27	201	371	68	18	31058	826	29479	55171	35891
Eastern Part	Shandong	1	14	11	3	3	1429	130	1827	1977	1942
	Beijing	1	5	16	0	1	137	19	378	270	122
	Tianjin	1	2	20	3	0	7	247	180	136	572
Northeast	Hebei	1	6	21	2	1	1336	15	885	2161	1527
	Liaoning	1	23	21	3	1	735	17	1166	1642	289
	Heilongjiang	1	1	12	5	4	1035	29	1721	2683	926
West Part	Inner Mongolia	1	2	11	4	1	1035	23	1350	1681	1327

Data source: China Animal Husbandry and Veterinary Yearbook

Shandong, Liaoning, Hebei, and Heilongjiang, the number of animal husbandry in Inner Mongolia, the level distribution of institutional talents and the level of benefit value are still relatively low, which also shows that the scientific and technological innovation ability of animal husbandry in Inner Mongolia is relatively weak.

1.2.2 Animal Husbandry Systems

In the process of realizing the sustainable development of animal husbandry, the animal husbandry institution plays an important role. From the function of the animal husbandry institution, it has both normative and incentive functions. The former is the basic code of conduct formulated by the government to regulate and restrict violations according to the law of animal husbandry development, and the latter is an incentive institution given by the government to promote the development of animal husbandry.

In the statistical process, due to the great differences in the standards and methods of support and supervision of animal husbandry systems in Beijing, Tianjin, Heilongjiang, Shandong, Liaoning, and Hebei, to make the compared contents more comparable, the policy contents and data with greater relevance in various places are selected for comparability induction and classification and are divided into strong and strong according to the supervision and incentive

strength Strong, average, weak and weak. Although there are regional differences in animal husbandry in the provinces and autonomous regions compared, the overall characteristics are as follows: the intensity of incentive and supervision in developed areas is particularly large, such as Beijing and Shandong provinces, especially in terms of supervision norms, which is not only a large number of fines but also strict law enforcement; As one of the underdeveloped regions in the west, Inner Mongolia shows a weak trend in terms of incentive and look around supervision system compared with Heilongjiang and Liaoning in the more developed regions and Beijing and Shandong in the developed regions. The reason is related to the limited local financial resources in Inner Mongolia.

1.2.3 Animal Husbandry Culture

Animal husbandry culture refers to the sum of material culture and spiritual culture related to animal husbandry created in the production and practice of animal husbandry. As the carrier of animal husbandry culture includes not only livestock and poultry varieties, animal husbandry production tools, and technical system, but also ecological ideas, social production relations, and other material entity culture related to animal husbandry production, the value of animal husbandry culture is mainly reflected in three aspects: economic value, ecological value, and social value. These three values play an indispensable role in the development of animal husbandry in Inner Mongolia.

Economic value is the driving force for the development of animal husbandry production activities in Inner Mongolia. For a long time, in the process of realizing the development from small to large, Inner Mongolia animal husbandry mainly imitates the development mode and path of animal husbandry in developed areas to a great extent, and can not well follow the development law of animal husbandry in this area and extensively develop animal husbandry economy at the expense of environmental resources. Therefore, it is difficult to achieve sustainable development of animal husbandry in Inner Mongolia, which can not better follow the development law of animal husbandry in this region and lacks the development path of effective reference according to local conditions. Secondly, from the perspective of ecological value, due to the underdevelopment of the animal husbandry economy in Inner Mongolia, there is a serious tendency to pay more attention to animal husbandry economic development than animal husbandry ecological protection. Therefore, it is difficult to achieve a harmonious and coordinated relationship among humans, livestock, and environment, and can not make effective and rational comprehensive utilization of animal husbandry resources.

Through the comparative analysis of the process factor endowment of animal husbandry production activities in Beijing, Tianjin, Shandong in the East, Liaoning, Hebei, Heilongjiang in

the northeast, and Inner Mongolia in the west, Inner Mongolia's animal husbandry has some weaknesses in scientific and technological innovation, animal husbandry system and animal husbandry culture. Therefore, the sustainable process of animal husbandry in Inner Mongolia presents the internal endowment structure of a low level of scientific and technological innovation, insufficient support for the animal husbandry system, and animal husbandry culture to be improved.

1.3 Endowment Structure of Production Factors of Special Animal Husbandry

Special animal husbandry production factor endowment refers to the unique factor endowment of animal husbandry in Inner Mongolia, which is embodied in two factors: regional resources and national resources.

1.3.1 Regional Animal Husbandry Production Factor Endowment[27]

Regional animal husbandry production factor refers to a unique factor endowment of animal husbandry in Inner Mongolia due to its special geographical location in animal husbandry production activities.

Inner Mongolia has a vast grassland, stretching more than 4000 kilometers from Daxinganling in the east to the Juyan sea in the West. It is an important part of the grassland in Eurasia. There are 11 key grasslands in China, including 5 in Inner Mongolia: the world-famous Hulunbuir grassland, Xilin Gol Grassland, Horqin grassland, Wulanchabu grassland, and Ordos grassland. The total area of grassland in the region is 78.8 million hectares, accounting for 66.6% of the total land area of the region and 22% of the national grassland area, ranking first in the country. Among them, the available area is 63.591 million hectares, accounting for 80.7% of the total grassland area in the region. Due to the different influences of southeast marine monsoon, different dry and wet climates, and the influence of mountain uplifts such as Daxing'an Mountains and Yinshan Mountains, complex and diverse grassland types and landscapes have emerged. The zonal natural grassland vegetation horizontally distributed in the whole region can be divided into five categories from east to West: meadow grassland (forest grassland), typical grassland, desert grassland, grassland desertification, and desert. In addition, there are four types of non-zonal hidden grassland, including low flat meadow, mountain meadow, swamp meadow, and incidental utilization grassland.

Meadow grassland is the best natural vegetation in Inner Mongolia, with a total area of 8.6287 million hectares, accounting for 10.95% of the total grassland area in the region. It is mainly distributed in the Daxinganling Mountains and the high plains, low mountains, and hills at the East and West of the mountains. Among them, it is distributed in the east of Hulunbuir high plain in the west of the mountains and the east of Xilingol high plain, accounting for 80%. Meadow

grassland is located in the transition zone from forest to grassland, showing the coexistence of forest vegetation and grassland vegetation. Typical grassland is the main body of grassland in Inner Mongolia, with a total area of 27.6735 million hectares, accounting for 35.1% of the total grassland area in the region. It is widely distributed in the Midwest of Hulunbuir high plain, most of Xilingol high plain, the first line of hills at the north foot of Yinshan Mountain, the east of Ordos high plain, and the southeast of Xiliaohe plain. Desert grassland is located in the transition zone from grassland to desert, with a total area of 8.4199 million hectares, accounting for 10.68% of the total grassland area of the whole region. It is distributed in a narrow strip between typical grassland and grassland desertification from northeast to southwest, mainly in the northwest of Xilingol high plain, Wulanchabu high plains and the west of Ordos high plain. Desert is a zonal grassland mainly composed of super arid semi shrubs and Shrubs under extremely arid climate conditions, with a total area of 16.9231 million hectares, accounting for 21.47% of the total grassland area of the whole region. It is located in the westernmost part of Inner Mongolia and is bordered by grassland desertification in the East. It is roughly bounded by the watershed of Yabulai mountain. It is concentrated in the Midwest of Alexa high plain, the north of Plant Middle Banner, the northwest of Plant rear banner, and the northwest of Hanjin Banner.

As mentioned above, relying on its regional advantages, Inner Mongolia has played its unique advantages in the construction and development of an animal husbandry base.

1.3.2 Endowment of Production Factors of National Animal Husbandry

National factors of production refer to a type of element endowment with national characteristics that can be used and played by farmers and herdsmen in Inner Mongolia's animal husbandry production activities. It is specifically manifested in ethnic-religious beliefs, lifestyles, and folk customary laws. Inner Mongolia is a multi-ethnic autonomous region composed of 49 ethnic groups including Mongolia, Han, Hui, Manchu, Daur, Ewenki, Oroqen, Korea, Xibe, Tujia, and Dongxiang[28].

The Mongolian nationality is a nationality that implements regional ethnic autonomy in Inner Mongolia. As an ethnic minority with a long history, its unique historical culture contains a strong sense of nationality. Among them, religious beliefs, lifestyles, and folk customs are an important part of their daily livestock production factors. The endowment of production factors of animal husbandry with ethnic characteristics is undoubtedly hard to match and compare with other developed regions' animal husbandry. At the same time, they are also indispensable resource elements for the sustainable development of Inner Mongolia's animal husbandry. As the researcher said, “For thousands of years, nomads on the grassland have followed this rule,

transforming the relationship between humans, animals, and pastures into a dynamic balance. Nomadic pastures are the best among pastures, humans, and animals. The choice is the most effective way of life in the grassland ecological environment"[29].

In addition, in terms of dietary customs, the local Mongols have formed a dietary habit dominated by dairy products and meat products for a long time. This lifestyle emphasizes natural green, pays attention to environmental protection and conservation, and regards wasting food and water resources as shameful behavior. In terms of living, the nomadic migration living by water and grass must be light and practical for the demolition and resettlement of yurts in the living place. It is forbidden to uproot turf and dig grassland land deeply to avoid possible damage to the grassland. In other words, the ecological culture formed by the Mongolian lifestyle, as a kind of local knowledge, mainly emphasizes a value concept that people must protect the ecological environment because of their own survival needs [30].

1.4 The Factor Endowment Structure of Sustainable Development of Animal Husbandry in Inner Mongolia

Through the investigation and analysis of the general animal husbandry production factor endowment and special animal husbandry production factor endowment for the sustainable development of animal husbandry in Inner Mongolia, the following conclusions can be drawn.

Firstly, the resource-based production factors for the sustainable development of animal husbandry in Inner Mongolia have the endowment structure characteristics of lack of animal husbandry feed, lack of animal husbandry capital, and animal husbandry labor force and animal husbandry land need to be fully reformed and innovated, while the process animal husbandry production factors show a low level of scientific and technological innovation, The insufficient support of animal husbandry system and the endowment structure of animal husbandry culture to be improved.

Secondly, there are relatively abundant structural characteristics of regional and national animal husbandry production factor endowment for the sustainable development of animal husbandry in Inner Mongolia.

2. Comparative Advantages and Strategic Choices of the Sustainable Development of Inner Mongolia's Animal Husbandry

Based on the investigation and analysis of the endowment structure characteristics of general and special production factors of animal husbandry in Inner Mongolia, this paper demonstrates that animal husbandry in Inner Mongolia has comparative advantages such as labor resources, regional resources, and national resources by using the theory of new structural economics, so as to explore the necessity of comparative advantage strategy in realizing the sustainable

development of animal husbandry in Inner Mongolia.

2.1 Comparative Advantages of Sustainable Development of Animal Husbandry in Inner Mongolia

According to the new structural economics, the comparative advantage of animal husbandry in Inner Mongolia at this stage should be determined by the factor endowment structure at that time point. Compared with the animal husbandry in Beijing, Tianjin, and Shandong in the east of developed areas and Hebei, Liaoning, and Heilongjiang in the northeast of more developed areas, it is concluded that the factor endowment structure of animal husbandry in Inner Mongolia at this stage is: the financial resources of animal husbandry are relatively insufficient, the scientific and technological innovation and animal husbandry system are relatively backward, and the land resources of animal husbandry have development potential, regional and national animal husbandry has a relatively abundant factor endowment structure.

Therefore, this factor endowment structure is not only the comparative advantage of animal husbandry in Inner Mongolia at this stage, but also the key to realizing the sustainable development of animal husbandry in Inner Mongolia.

2.2 Strategic Choice of Sustainable Development of Animal Husbandry in Inner Mongolia

The characteristics of factor endowment structure of animal husbandry in Inner Mongolia determine the comparative advantage of factor endowment structure, and its comparative advantage is an indispensable resource element for the sustainable development of animal husbandry in Inner Mongolia. However, according to the theoretical analysis of new structural economics, for developing countries, the strategic choice for successful economic development is the strategy of comparative advantage. In other words, if Inner Mongolia animal husbandry wants to give full play to its comparative advantage of factor endowment structure and realize the sustainable development of animal husbandry, it must follow the development strategy of comparative advantage[31]. For example, in 2003, Lin Yifu and Li Yongjun put forward in the article "Comparative Advantage, Competitive Advantage and Economic Development of Developing Countries": The relationship between comparative advantage and competitive advantage is closer to a mutually complementary relationship[32]. Comparative advantage is the basis and necessary condition of competitive advantage because only by giving full play to the comparative advantage of the economy, the competitive advantage of enterprises and industries can be formed. In their view, low-income countries (developing countries) should adopt a step-by-step development strategy. First, they should start with their comparative advantages, that is, the industries with low-level and low-cost competitive advantages called by Porter, and form their high-level competitive advantages through gradual accumulation and investment; However,

countries with relatively high per capita income (developed countries) should maintain their high-level competitive advantage in one or some enterprises, industries, and products[33]. Of course, maintaining a high-level competitive advantage must also be based on following the comparative advantage and accumulating a low-cost competitive advantage.

Based on the above theoretical analysis, only by following the comparative advantage strategy can Inner Mongolia's animal husbandry form a competitive advantage and realize sustainable development. Therefore, the sustainable development of animal husbandry in Inner Mongolia is a kind of development of animal husbandry and a development advantage in the endowment structure of animal husbandry factors in the competition with animal husbandry in developed and more developed areas. Therefore, the first step to realizing the sustainable development of animal husbandry in Inner Mongolia is the comparison and competition between animal husbandry in Inner Mongolia and animal husbandry in developed and more developed areas in terms of animal husbandry factor endowment structure. The second step is to give full play to the comparative advantage of factor endowment and change the comparative advantage into development advantage. As the name suggests, to achieve sustainable development, Inner Mongolia's animal husbandry first needs to determine its comparative advantage according to its factor endowment structure, and then develop its competitive advantage based on the comparative advantage of animal husbandry. Only by following the development strategy of comparative advantage, Inner Mongolia animal husbandry will develop a competitive advantage based on the comparative advantage of animal husbandry, so as to realize sustainable development.

2.3 The Viability of Inner Mongolia's Animal Husbandry

According to the comparative analysis of animal husbandry with developed and more developed areas, the realization of sustainable development of animal husbandry in Inner Mongolia needs its ability. The acquisition of its ability first needs to follow the development strategy of comparative advantage to develop animal husbandry competition. At the same time, it also needs a market mechanism that can effectively reflect the relative value of animal husbandry production factors and animal husbandry products in Inner Mongolia. The reason is that only by developing the comparative advantage determined by its factor endowment structure can effectively reduce the cost of animal husbandry production factors and enhance the market competitive advantage of animal husbandry products, so as to form the ability to obtain production profits and survival value under the market economic system. In other words, if do not follow the law of the development of comparative advantage strategy, it will not only increase the cost of production factors of animal husbandry and reduce the market competitive advantage

of animal husbandry products but also lead to the inability to obtain their ability of production profit and survival value, which requires policy subsidies and protection from the government to maintain their survival.

In addition, the effective competitive animal husbandry market is also an indispensable part of Inner Mongolia animal husbandry to obtain its own ability. The reason is that the effective competitive market can fully reflect the scarcity of animal husbandry production factors and animal husbandry products in Inner Mongolia. According to the scarcity reflected by the effective competitive market, Inner Mongolia animal husbandry develops self-sustaining advantageous animal husbandry to meet the market needs of animal husbandry products, so as to achieve the acquisition of the viability.

2.4 An Effective Market and Promising Government for the Sustainable Development of Inner Mongolia's Animal Husbandry

New structural economics emphasizes that economic development is a process of continuous changes in the industry, technology, infrastructure, and institutional structure. In this process, both "effective market" and "promising government" are needed[34].

Therefore, Inner Mongolia animal husbandry, as one of the important animal husbandry bases in China, also needs the synergy of an effective market and promising government in order to achieve sustainable development.

2.4.1 An Efficient Market

The reason why an effective market is indispensable for the sustainable development of animal husbandry in Inner Mongolia is that the role of an effective market can not only fully reflect the price scarcity of production factors of animal husbandry in Inner Mongolia, but also an indispensable place to identify comparative advantages. It is these functions that guide Inner Mongolia animal husbandry to select animal husbandry products with comparative advantages for production and development according to the relative price of animal husbandry production factors in the animal husbandry market, form a competitive advantage and obtain the viability of animal husbandry, so as to promote the sustainable development of animal husbandry in Inner Mongolia. In other words, only the price signal formed under the effectively competitive animal husbandry market system can make Inner Mongolia animal husbandry give full play to its comparative advantages, carry out the production and development of advantageous animal husbandry products, form the competitive advantage of Inner Mongolia animal husbandry, and promote the sustainable development of Inner Mongolia animal husbandry.

Therefore, from the perspective of new structural economics, an effective market can not only help local governments and Inner Mongolia animal husbandry identify comparative advantages

and determine advantageous animal husbandry development strategies according to their animal husbandry production factor endowment, but also an effective market mechanism to guide Inner Mongolia animal husbandry resources to achieve Pareto optimal allocation.

2.4.2 A Promising Government

The characteristics of animal husbandry in Inner Mongolia determine that the sustainable development of animal husbandry in Inner Mongolia needs an effective market to coordinate the allocation of production factors. At the same time, it also needs a promising government that actively plays the role of making good use of the situation. At present, with the transformation of animal husbandry in Inner Mongolia in line with its comparative advantage according to its factor endowment, the role of a promising government not only needs to help Inner Mongolia animal husbandry identify its comparative advantage according to its factor endowment structure, but It is also necessary to guide the development of advantageous animal husbandry in Inner Mongolia and enhance the market competitiveness of animal husbandry through the formulation and implementation of sustainable strategic planning, so as to obtain the viability of animal husbandry.

In addition, the characteristics of animal husbandry in Inner Mongolia also determine that the process of realizing the sustainable development of animal husbandry in Inner Mongolia is not only the process of transformation and upgrading of animal husbandry production factor endowment but also the process of continuous improvement of various technologies and soft and hard infrastructure required by the government to effectively realize the smooth transformation and upgrading of animal husbandry production factor endowment. In the process of transformation, the technology, soft and hard infrastructure required by the relatively advantageous factor endowment structure must meet it's needs standards in order to form a competitive advantage. On the contrary, the technology and soft and hard infrastructure that do not meet or match with it will increase the waste of resource elements and the increase of production costs, reduce the competitive advantage, and lead to the failure of sustainable development of animal husbandry in Inner Mongolia.

Therefore, with the transformation of factor endowment structure to comparative advantage, solving the improvement of technology, software, and hardware infrastructure in the process of animal husbandry transformation in Inner Mongolia has become the primary problem. However, due to the characteristics of animal husbandry, these problems can not be solved only by the animal husbandry market, which requires the intervention of the government. Therefore, it is the synergy of promising government and effective market that jointly promotes the development of competitive advantage of animal husbandry in Inner Mongolia according to its factor endowment,

so as to realize the sustainable development of animal husbandry in Inner Mongolia.

2.5 The Sustainable Development of Animal Husbandry in Inner Mongolia ESAV-MG Development Path

Based on the above definition of the factor endowment structure (E), following the comparative advantage (A), development strategy (S), animal husbandry viability (V), and the role of government and market (MG) for the sustainable development of animal husbandry in Inner Mongolia, the EASV-MG model framework of the sustainable development system of animal husbandry in Inner Mongolia is constructed.

The sustainable development system of animal husbandry is a complex giant system, which not only includes the macro research on the overall economy of animal husbandry but also includes various professional types of economic problems. From the perspective of the composition of system elements, the sustainable development system of animal husbandry is composed of several interrelated subsystems, in which element endowment structure (E), following comparative advantage (A), development strategy (S), animal husbandry endogenous capacity (V) as endogenous power subsystem and government and market (MG) as external power subsystem have a certain structure, It directly determines the operation mechanism and effect of animal husbandry sustainable development system. Therefore, how to deal with the coordination mechanism and effect of endogenous power subsystem and external power subsystem is the key to construct the development path of EASV-MG for the sustainable development of animal husbandry in Inner Mongolia.

2.5.1 The Endogenous Driving Force and Development Path of Sustainable Development of Animal Husbandry in Inner Mongolia

Based on the theory of new structural economics to the analysis of animal husbandry in Inner Mongolia, the process of sustainable development and the formulation of the development strategy of animal husbandry in Inner Mongolia is based on the comparative advantage of animal husbandry in Inner Mongolia, which is determined by the unique production factor endowment structure of animal husbandry in Inner Mongolia in this period. Therefore, factor endowment structure and comparative advantage are the two core system elements in the endogenous power subsystem to realize the sustainable development of animal husbandry in Inner Mongolia.

According to the theory of new structural economics, if Inner Mongolia animal husbandry wants to realize sustainable development, it must develop according to the comparative advantage determined by its factor endowment structure. In other words, the path of sustainable development of animal husbandry in Inner Mongolia must follow its comparative advantages, form competitive advantages, and then obtain the viability of animal husbandry in the

competitive market of animal husbandry. On the contrary, if it does not follow its comparative advantages, it will not be able to form a competitive advantage in the competitive market of animal husbandry, resulting in difficulty in obtaining the viability of animal husbandry, so the government needs to subsidize. Due to the lack of the viability of animal husbandry, without sustained policy support and subsidies, the consumption of limited factor resources will eventually lead to stagnation or even regression in the process of realizing sustainable development. Therefore, in the process of realizing the sustainable development of animal husbandry in Inner Mongolia, strategic choice and policy-making should follow the development of comparative advantage according to their factor endowment structure, and continuously and continuously coordinate and upgrade the factor endowment structure of endogenous power subsystem, so as to promote the sustainable development of animal husbandry in Inner Mongolia.

To sum up, from the perspective of the factor endowment of the endogenous power subsystem, through the investigation and analysis of the factor endowment structure (E) of the endogenous power subsystem for the sustainable development of animal husbandry in Inner Mongolia、following the comparative advantage (A)、development strategy (S) and the viability of animal husbandry(V), can be summarized as the following two aspects.

Firstly, the endowment structure of the endogenous power subsystem is the source of realizing the sustainable development of animal husbandry in Inner Mongolia. From the perspective of sustainable development, the apparent reason for the gap between animal husbandry in developed eastern regions and more developed northeast regions and that in Inner Mongolia is the gap in the degree of development, and the fundamental reason is the difference in the endowment structure of animal husbandry production factors. As the name suggests, animal husbandry in Beijing, Tianjin, Shandong, Hebei, Liaoning, and Heilongjiang have comparative advantages in financial resources, technological innovation, policy and system, and other factor endowments; The animal husbandry in Inner Mongolia has comparative advantages in natural resources, national resources, regional resources, and other factor endowments. Therefore, Inner Mongolia's animal husbandry is based on relatively abundant factor endowments such as natural resources, national resources, and regional resources. The development of animal husbandry products and services in line with its comparative advantages can better form a competitive advantage in the market and obtain its ability.

Secondly, the development of comparative advantage determined by the element endowment structure of endogenous power subsystem is the objective requirement and inevitable choice to realize the inclusive, healthy, and sustainable development of animal husbandry in Inner

Mongolia. If the government formulates a strategic policy in line with the sustainable development of Inner Mongolia's animal husbandry according to the characteristics of the comparative advantages of Inner Mongolia's animal husbandry in natural resources, national resources, regional resources, and other factors, and guides the advantageous animal husbandry resources of Inner Mongolia's animal husbandry to the animal husbandry products and services with development potential, it will not only realize the optimal allocation of animal husbandry resources, Moreover, it will form a competitive advantage in the market and obtain the self-sustaining ability of animal husbandry, so as to promote the convergence of animal husbandry in Inner Mongolia from extensive and traditional to inclusive, healthy and sustainable development. On the contrary, if the government does not take into account the characteristics of comparative advantages of animal husbandry in Inner Mongolia in terms of natural resources, national resources, regional resources, and other factor endowments, taking the government led blood transfusion development strategy will violate the market resource allocation mechanism, and the government will become the leader of animal husbandry resource allocation in Inner Mongolia, which will lead to the failure to give full play to the comparative advantages of animal husbandry in Inner Mongolia, and it will be difficult to form competitive advantages and obtain the viability of animal husbandry, which will hinder the sustainable development of animal husbandry in Inner Mongolia.

To sum up, the element endowment structure of the endogenous power subsystem owned by Inner Mongolia animal husbandry is the key to the sustainable development of animal husbandry. In order to realize the convergence of Inner Mongolia animal husbandry from extensive and traditional to inclusive, healthy, and sustainable development, it is necessary to clarify the comparative advantages of the element endowment structure of the endogenous power subsystem, What kind of comparative advantage strategy can effectively give play to the comparative advantage of its factor endowment structure. Secondly, in the process of formulating and implementing the comparative advantage strategy, through the comparative advantage of the element endowment structure of the endogenous power subsystem, can form a competitive advantage in the animal husbandry market and obtain the viability of animal husbandry, so as to promote the inclusive, healthy and sustainable development of animal husbandry in Inner Mongolia in the process of constantly seeking transformation and upgrading. Therefore, the endogenous power development path for the sustainable development of animal husbandry in Inner Mongolia is factor endowment structure (E)→following comparative advantage (A)→development strategy (S)→the viability of animal husbandry (V), that is, the EASV endogenous power development model framework for the sustainable development of animal

husbandry in Inner Mongolia.

2.5.2 The External Driving Force and Development Path of Sustainable Development of Animal Husbandry in Inner Mongolia

According to the theory of new structural economics, effective market and promising government are two indispensable external elements for the inclusive, healthy and sustainable development of animal husbandry in Inner Mongolia. If the endogenous power development path composed of endogenous power subsystem (factor endowment structure (E), following comparative advantage (A), development strategy (S) and the viability of animal husbandry (V), explores the development path of comparative advantage determined by the sustainable development of animal husbandry in Inner Mongolia Based on its factor endowment, Then the external power development path composed of external power subsystems (effective market (M) and promising government (G)) explores how the two external factors of effective market and promising government interact and coordinate effectively in the endogenous power development process of sustainable development of animal husbandry in Inner Mongolia.

Therefore, through the investigation and analysis of the effective market (M) and promising government (G) of the external power subsystem for the sustainable development of animal husbandry in Inner Mongolia from the perspective of the external elements of the external power subsystem, it can be summarized into the following two aspects.

Firstly, according to the theory of new structural economics, the effective market here is a market that can effectively allocate the resources of animal husbandry production factors in Inner Mongolia by identifying the relative price of animal husbandry production factors at a certain point in the competitive market. By identifying the role of the relative price of animal husbandry production factors, the effective market can scientifically and reasonably guide the animal husbandry in Inner Mongolia to invest the limited animal husbandry resources into animal husbandry products and services in line with its comparative advantages, form a competitive advantage and obtain the viability of animal husbandry of animal husbandry in the process of realizing the lowest cost of animal husbandry production factors and the optimal allocation of animal husbandry resources, So as to promote the sustainable development of animal husbandry in Inner Mongolia.

Secondly, compared with animal husbandry in developed countries, there are still many problems in the effective animal husbandry market mechanism in China, which need to be further reformed and improved. In addition, the development pattern of animal husbandry in Inner Mongolia is gradually changing from the traditional scattered business model to the large-scale, intensive and standardized model, It is difficult to realize the minimum cost of animal

husbandry production factors and the optimal allocation of animal husbandry resources in Inner Mongolia only by effective market, so it can not form a competitive advantage. Therefore, there is a need for the intervention and role of the government. The role of a promising government is not only to strengthen the construction and reform of effective market mechanisms from the macro policy level but also from the micro-level based on the comparative advantages determined by the endowment structure of animal husbandry in Inner Mongolia. The development strategy of Inner Mongolia is guided to promote sustainable development by following the comparative advantages determined by its factor endowment structure. Therefore, the development path of exogenous power for the sustainable development of animal husbandry in Inner Mongolia is an effective market (M)→promising government (G), that is the MG exogenous power development model framework for the sustainable development of animal husbandry in Inner Mongolia.

Based on the theory of new structural economics, Through the analysis and demonstration of the endogenous power development path composed of endogenous power subsystems (factor endowment structure (E), following comparative advantage (A), development strategy (S) and the viability of animal husbandry (V)) ,and the exogenous power development path composed of exogenous power subsystems (effective market (M) and promising government (G))from the perspective of system elements, can be concluded that the effective operation of the sustainable development system of animal husbandry in Inner Mongolia not only needs to give play to the comparative advantages of the endogenous power subsystem, but also needs the synergy of the exogenous power subsystem to jointly promote the sustainable development of animal husbandry in Inner Mongolia.

Therefore, the model framework of Inner Mongolia animal husbandry sustainable development system is the EASV-MG framework, that is, the sustainable development path of Inner Mongolia animal husbandry is the EASV-MG path.

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