

Research on the Problems and Countermeasures of Circular Economy in Dairy Cattle Breeding under the Ecological Agriculture Circulation Mode

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Abstract: circular economy has become an important means to solve the problems of resources and ecological environment and realize the harmonious and sustainable development of human and nature. Eco agricultural circular economy is to apply the concept of circular economy to agricultural production, to achieve a sound ecological cycle and sustainable development of agricultural economy. This study will start with the concept and principle of circular economy, build a circular model with the main line of "forage planting - dairy farming - Waste Treatment - organic fertilizer returning to the field", and put forward the problems and Countermeasures in the development of circular economy breeding model of dairy cattle.

As an important move for China to adjust its economic structure and layout and realize the transformation of economic growth mode, circular economy has become the direction and standard for all industries to solve resource and environmental problems and adhere to sustainable development. Under the condition that natural resources are increasingly scarce and environmental constraints are more and more obvious, how to improve the traditional dairy farming mode based on the concept of circular economy, build a dairy farming mode of circular economy, make full use of resources, eliminate all kinds of hazards brought by pollution, avoid the resource bottleneck of dairy farming development, achieve the unity of economic, environmental and social benefits, and realize green sustainable development, It is an important problem to be solved. This study analyzes and constructs the basic model of dairy cattle circular economy breeding, and gives two kinds of resource-based circular economy models with biogas as the belt, and puts forward the Countermeasures for the development of dairy cattle circular economy breeding model, in order to be sustainable for China's dairy farming industry to provide reference for further development.

1 The Mode of Dairy Farming under the Mode of Ecological Agriculture Circulation

Ecological agriculture model is an agricultural ecosystem formed in agricultural production practice that takes into account the economic benefits, social benefits and ecological benefits of agriculture and optimizes its structure and functions. According to the organizational level of ecology, the mode of ecological agriculture can be divided into three levels, that is, regional and landscape layout mode, ecosystem circulation mode and biodiversity utilization mode. In an agricultural area and landscape area, the most important thing is to balance the overall layout of agricultural production, life and ecological functions. In an agricultural ecosystem connected by the flow of energy and material, the most important thing is to ensure the flow of energy, logistics and material recycling. Dairy farming in the mode of ecological agriculture refers to the cycle mode of "forage planting -- dairy farming -- waste disposal -- returning organic fertilizer to the field" based on dairy farming and high-quality forage grass planting.

Circular economy has become an important means for all industries to solve the problems of resources and ecological environment and realize the sustainable development of man and nature. So far, the concept of circular economy has been widely discussed. The dictionary of environmental science defines circular economy as the opposite of linear economy, short for material closed-loop flow economy. Universally implemented in the current domestic is the national development and reform commission, the definition of circulation economy, circular economy is a kind of efficient utilization of resources and recycling as the core, with "reduction, reuse, recycling" for the principle,

with low consumption, low emissions, high efficiency for basic characteristic, conforms to the concept of sustainable development of the economic growth pattern, is to "mass production, a large number of consumption, a large number of abandoned" fundamental change of the traditional growth pattern. The three r principles of circular economy include reduction principle, reuse principle and resource principle. Reduction principle: control the input of materials from the input end, reduce the material consumption as far as possible in the production process and produce the largest number of, the most useful and valuable articles; Reuse principle: that is, producers are required to use the input production factors as many times as possible and in a variety of ways in the production process; The principle of recycling: that is, producers are required to recycle or recycle the materials produced at the output end as much as possible to reduce the amount of waste.

Dairy circular economy refers to the human and natural resources, scientific and technological system, based on the theory of ecology, on the basis of 3 r principles of reduction, reuse, recycling, maximum limit will dairy waste into products, reduce the production of dairy waste and emissions, while reducing cow aquaculture pollution control and environmental regulation cost, thereby reducing the environmental pollution, improve the utilization rate of resources, realize the harmony of population, environment, resources, and sustainable development goals.

2 The Problems and Countermeasures of Dairy Farming under the Mode of Ecological Agriculture Circulation

As a major measure to adjust China's economic structure and distribution and realize the transformation of economic growth mode, circular economy has become the direction and standard for all industries to solve resource and environmental problems and adhere to sustainable development. Under the condition that natural resources are increasingly scarce and environmental constraints become more and more obvious, how to improve the traditional dairy farming mode based on the concept of circular economy and build the dairy farming mode of circular economy to make full use of resources, It is an important issue that needs to be solved urgently to eliminate various hazards brought by pollution, avoid resource bottleneck of dairy farming development, achieve the unity of economic environment and social benefits, and realize green and sustainable development. In this study, the basic model of dairy cow circular economy breeding was established, and the model of dairy cow circular economy was put forward to provide reference for the sustainable development of dairy cow breeding in China.

2.1 The dairy cattle breeding industry under the ecological agriculture cycle is a green, environmental sustainable development cycle economy model. However, there are also some problems in the development process. The following are the main problems and countermeasures. Dairy farming costs increase, comparative benefits decline. One of the important reasons restricting the development of dairy farming industry is the high cost of milk production and low profit of raising cattle. Especially under the condition of the increase of ecological agriculture cycle, the profit and benefit decrease. In recent years, the agricultural products market is related to food prices are up in varying degrees, nearly three years of feed prices rose a lot, but no prices for milk, combined with the climate change could lead to the high cost of prevention and cure of dairy cows, milk production to low, the problem of short effective production cycle (life) a cow's annual revenue is due to the price rise of all kinds of factors of production are greatly reduced.

2.2 Ideas lag behind. The concept of "valuing quantity over quality" ignores the improvement of the overall level. When it comes to growth, it means the increase of the number of cattle in stock. It is a common practice for dairy enterprises to purchase milk according to its quality and price. But there is no unified purchase milk industry standards, each enterprise, how to determine how the grading standard, transparency, fairness and openness of the differences, the dairy processing enterprises strictly carry out routine index requirements for milk sometimes misunderstood as being level demand, lead to escalation, showed the milk producers to pay attention to product quality awareness is relatively weak. One of the common misconceptions that should be corrected in dairy farming is that the emphasis is only on the input of adult cows, not on the breeding of reserve cows.

The concept of "heavy hardware, light software" the dairy farming industry needs the support of equipment and facilities, but more needs the talent, management and other software supporting. In short, if the concept of the lag left thinking, dairy farming is difficult to have a new breakthrough.

2.3 The development of characteristic dairy industry lags behind. Dairy features - buffalo milk products, with high nutritional value, belong to the dairy industry's high-end products. With the development of economy and the upgrading of consumption, consumers have more and more demands for high-end dairy products, and buffalo milk will become the first choice of high-end dairy products due to its rich nutrition, with a very broad market prospect. At present, this feature is mainly developed in Guangxi and other regions. According to incomplete statistics, the output of buffalo milk in Guangxi was 4,700 tons in 2005, ranking the first in China, but still in a state of no quantity but some highlights. At present, the development of buffalo dairy industry in China is lagging behind. In 2005, the country's buffalo milk production accounted for less than 1% of the total milk production, which was too small for the rapidly growing demand for special dairy products, resulting in the contradiction between the large demand for special dairy products and the insufficient supply of products. How to increase the breeding quantity of milk buffalo to ensure the production of leading enterprises is the key to expand the brand influence of dairy industry.

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