

Study on optimized combination and utilization model of agricultural and animal husbandry resources in mountain ecotone

H G Zhang¹ and X Y Tang^{2,3}

¹Agriculture Resource and Environment Research Institute, Tibet Academy of Agriculture and Animal Science, Lhasa 850000, China

²Laboratory of Development and Application of Rural Renewable Energy, Ministry of Agriculture and Rural Areas / Biogas Institute of Ministry of Agriculture and Rural Areas, Chengdu 610041, China

E-mail: tangxiaoyu@caas.cn

Abstract: [Purpose] The development of agriculture and animal husbandry in Tibet is basically based on the interlaced development of agriculture and animal husbandry in mountainous areas. The interlaced agricultural and animal husbandry areas in mountainous areas are the unity of special, harmonious and harmonious regional small environment. The special attributes of mountainous areas determine the rich agricultural and animal husbandry resources, ecological development cycle areas, characteristic agricultural products areas and tourism. The division and regionalization of recreational zones and the optimal combination and utilization of agricultural and animal husbandry resources in mountainous ecotone have very important effects on promoting the benign cycle of regional agricultural and animal husbandry economic development, the development of urban integration and the protection of industrial ecological environment. How to develop and construct a new type of "environment-friendly and resource-saving" agricultural and animal husbandry areas is very important. It is of great practical significance to promote the development of regional agriculture and animal husbandry industry, to establish an efficient production system of agriculture and animal husbandry and to speed up the increase of farmers' and herdsman's income. Rational and effective utilization of various beneficial resources can effectively solve the problems of material shortage, resource shortage and contradiction between supply and demand, and ensure the interlaced agriculture and animal husbandry economy in Tibet's mountainous areas. Sustainable development. [Method]On the basis of domestic and foreign literatures, this paper analyses and evaluates in detail the optimal combination and utilization



mode of agricultural and animal husbandry resources in mountainous ecotone area by means of management induction, [Result]that is, the modern high-efficiency utilization mode of new energy, the green integration development mode of "chain fusion" in seed and culture, and the multi-level agricultural capital. Four basic modes, i.e. the mode of efficient utilization of resources and the mode of recreational sightseeing and sightseeing in mountainous agriculture and animal husbandry. [Conclusion] The above four modes of optimal combination and utilization of agricultural and animal husbandry resources are the basic macro-combination modes of agricultural and animal husbandry resources in the mountainous ecotone of Tibet. They are discussed in detail from the perspectives of natural resources utilization, agricultural products production and processing, agricultural and animal husbandry production and construction, and eco-tourism development in order to provide better services. Development and construction of agricultural and animal husbandry circular economy in Tibet. Finally, according to the characteristics of Tibet's own development, this paper puts forward to promote the integration of scientific concepts, the strength of scientific and technological support, and the fund guarantee system in the basic fields, and to strengthen the integration of farmer-herdsman cooperatives and market organizations in practical application. Reference and extension of the model, incentive and compensation security system, etc., for the future development of mountain-type interlaced agriculture and animal husbandry in Tibet circular agricultural and animal husbandry and resource optimization and combination of construction to provide a reference and research results.

1. Introduction

A total of 87 villages and towns in 31 counties and districts, covering an area of 335,000 square kilometers, accounting for 27.28% of the total area of Tibet, are important areas for the production, living and living of farmers and herdsman in Tibet, as well as important bases for agricultural cultivation and livestock breeding in Tibet. The National Plan for the Protection of Ecologically Vulnerable Areas clearly points out that the ecotone between agriculture and animal husbandry in Tibet Autonomous Region is an economic development. The foundation and key point are that it has many vulnerabilities, such as weak anti-jamming ability, sensitivity to global climate change, strong fluctuation of time and space, and significant marginal effect. For the development of interlaced agriculture and animal husbandry in mountainous areas, there is a contradiction between the limited resources development space and progressive growth of agriculture and animal husbandry caused by the growth of agriculture and animal husbandry economy and the development of modern cities and towns. There are contradictions between environmental security and excessive waste and exploitation of resources, and between the effective utilization rate of agricultural and animal husbandry resources supply and the economic output rate of agriculture and animal husbandry, etc.[1-2] Faced with various problems, how to fully understand and scientifically guide the rational development and utilization of superior natural resources, change the mode of economic development and growth, adjust the industrial structure of agriculture and animal husbandry, improve the integration and complementarity of diverse resources, promote the development of agriculture and animal husbandry with Tibetan characteristics and increase the income of farmers and herdsman are of great practical significance. It

is necessary to speed up the development of modern agriculture and animal husbandry in the plateau. Actively exploring the mode of optimizing the combination and utilization of agricultural and animal husbandry resources, i.e. vigorously developing the ecological circulation agriculture and animal husbandry on the plateau and developing the circular agriculture and animal husbandry is the direction and fundamental way out for the future development of agricultural and animal husbandry economy in Tibet. Only in this way can the basic self-sufficiency rate of grain in Tibet be guaranteed, food safety and nutritional health be undertaken, and the benign, sustained and Development.

The model of optimum combination and utilization of agricultural and animal husbandry resources in mountainous ecotone studied in this paper is helpful for academia to have a deeper understanding of the efficient utilization of resources under the special natural environment and ecological characteristics of Tibet at present, and also provides ideas and methods for realizing sustainable development of agriculture and animal husbandry in plateau, protection of regional ecological environment and harmonious development of human and nature in the future. The factors such as the great difference of altitude gradient, the diversity of climate types, the complexity of natural conditions, the abnormal change of weather, the abundance and diversity of agricultural and animal husbandry resources in the mountain-type ecotone determine that there are more mountains and less land to change, the landscape is complex and diverse, and the per capita arable land area is relatively small; the vulnerability of natural ecology is obviously enhanced, the resistance ability is obviously low; the scale of agricultural and animal husbandry industrialization production is small, and the agricultural production is relatively low. Deep processing and high-quality brand development need to be improved. Therefore, in view of the mode of optimum combination and utilization of agricultural and animal husbandry resources in mountainous ecotone, we should combine theory with practice, innovate development ideas, tap resources potential, change resource allocation, develop and utilize core technologies, optimize the best combination mode, improve the productivity of agricultural and animal husbandry resources utilization, and promote the rational, full and effective utilization and development of agricultural and animal husbandry resources in Tibet to the maximum extent possible. Protecting the natural ecological environment, highlighting the comparative advantages and local characteristics of mountain-based agriculture and animal husbandry, and creating mountain-based circular agriculture and animal husbandry industrial clusters, in accordance with the principle of "superior regions, superior resources, superior industries, priority development", in-depth excavation and research to promote the efficient utilization of mountain-based circular agriculture and animal husbandry mode, which is different from conventional plains, basins and other agricultural and animal husbandry development modes, for the future West China. The practice of Tibet's modern circular agriculture and animal husbandry model on the plateau provides reference and reference.

2. Basic situation and function of the development of mountainous agriculture-animal husbandry ecotone in Tibet

2.1. General situation of the development of mountainous agro-pastoral ecotone in Tibet

The mountainous ecotone of agriculture and animal husbandry in Tibet Autonomous Region is the main agricultural and animal husbandry production and implementation area, as well as the important residential area and rural urban construction area, as well as the important production base of

agricultural and animal products. It is also the birthplace of natural ecological environment protection in the plateau. The Agro-Animal husbandry in the ecotone basically maintains the original natural ecosystem. The overall climate characteristics are as follows: thin air, low air pressure and low oxygen content. More sunshine, strong radiation; lower temperature, large temperature difference. Mainly including the following different altitude gradients of mountains, low mountains, gentle slopes and valleys intersected by staggered rivers and corresponding farming and animal husbandry planting areas, breeding areas, etc., because of the particularity of the terrain, the different types of areas and levels are determined, the scope of concentration and dispersion are unified, according to the statistical yearbook of Tibet Autonomous Region, which occupies 30.78%, 26.56%, 7.53%, 2.01% respectively. 15.27% and 3.54%. Different regions have different landforms, and the structure and functional attributes of mountain agriculture and animal husbandry have their own characteristics. According to the altitude gradient section of planting and raising, there are not only barley planting areas and yak farming areas with relatively flat and vast elevation gradient between 4000 and 4800m, but also border counties such as Lazi County, Dingri County, Dingjie County and Gangba County. Highland barley planting areas and yak farming areas with relative concentration between 0 m are mainly along the Yarlung Zangbo River basin and the melting of alpine snow water, covering Qushui County, Linzhou County, Gacha County and Gongga County, and Linzhi County, Gongbu Jiangda County with an elevation gradient of less than 3 000 m are relatively rich in natural resources, agriculture and animal husbandry. The development of industry economy is relatively fast. Different regions have different development modes and characteristics of agriculture and animal husbandry. Although Tibet has incomparable advantages in climate, light, environment, resources, soil and other aspects, it is still in a state of extensive primitive agricultural and animal husbandry production in the development of agriculture and animal husbandry. The productivity benefits of farmers and herdsmen are low, the level of mechanization of Agriculture and animal husbandry is low, and the economic development of agricultural and animal husbandry areas is slow. The specific reasons are summarized as follows: the small scale, small quantity and weak strength of the development of agriculture and animal husbandry industry lead to the absence of a virtuous circle and value-added industrial chain of agriculture and animal husbandry, seriously affecting the enthusiasm of farmers and herdsmen in production; the special attributes of natural resources, high altitude, complex terrain, large temperature difference between day and night, and the restriction and influence of natural conditions on agricultural and animal husbandry production and construction. There are many risks and uncertainties; far away from the deep plateau of the interior, relatively advanced agricultural and animal husbandry production methods and methods, scientific concepts, information technology and so on lag far behind. The result of many reasons is that the development of Qinghai Province, Yunnan Province, Guizhou Province and Sichuan Province is extremely slow and low relative to the surrounding Northwest region [3].

2.2. *Discussions on the functions of the mountainous agricultural-pastoral ecotone in Tibet*

Tibet's natural attributes give special development environment to alpine, canyon, River and farming and animal husbandry planting areas, forming unique farming and animal husbandry cultivation and breeding methods. Mountain-based farming and animal husbandry has created a relatively dynamic and balanced internal environment for development according to the characteristics of different

regions, effectively blocking the negative impact of external climate change and ecological disasters on regional small-scale farming and animal husbandry, and forming mountains. Natural safety barriers and protective measures in agro-pastoral ecotone, especially in maintaining natural ecological environment, sand control and soil consolidation, vegetation restoration and soil and water conservation, have played a natural attribute and coordination role; long-term agricultural and animal husbandry production and construction have basically formed a fixed development model, and complex and changeable topography and vegetation have provided abundant for agricultural and animal husbandry production. Biodiversity-vegetation resources and production conditions; the melting of alpine snow water and the important water resources in river valleys provide necessary conditions for the construction of agriculture and animal husbandry and the survival of human beings; the enrichment of solar energy and wind energy is not only an indispensable condition for human beings and even for the survival of species, but also an important precondition for promoting the regulation of regional agricultural and animal husbandry construction and maintaining the four-season alternation of agriculture and animal husbandry. The abundant forest and grass resources and livestock excrement around are good renewable resources for agriculture and animal husbandry, which are helpful to the understanding and utilization of farmers and herdsmen's livelihood in the micro-field. Superior, natural and unique ecological tourism resources, rich and colorful human landscape, characteristic culture, folk customs and other resources have laid the foundation for the development of tourism, the construction of ecological towns and the promotion of tourism brand. Basics. This paper mainly relies on the regional advantages of Tibet's mountainous agriculture and animal husbandry, fully taps and combines the potential available resources of agriculture and animal husbandry, takes "clean production" of agriculture and animal husbandry as the breakthrough point, effectively promotes the maximum utilization of resources to better serve the production and construction of agriculture and animal husbandry, promotes the harmonious coexistence of human and nature, and unifies economy and ecology [4][5].

3. optimized combination and utilization model of agricultural and animal husbandry resources in mountainous agricultural-pastoral ecotone of Tibet

Land resources utilization is limited, climate is unusually changeable, landforms are peculiar and diverse, resources and vegetation are abundant, and the optimal combination and utilization of agricultural and animal husbandry resources should depend closely on the development and construction of local agriculture and animal husbandry. First, the production and life construction of agriculture and animal husbandry should be brought into full play by maximizing the use of renewable energy in nature, with emphasis on the efficient utilization of modern new energy resources. The second is to combine the cultivation of agriculture and animal husbandry production, planting, breeding and post-processing with the development model of "chain melting" green integration, so as to make full use of solar energy resources, wind energy resources and water energy resources to carry out rational and effective comprehensive development and utilization. The second is to deepen the scale production and marketing of comprehensive agricultural products from green aquaculture, green planting, characteristic deep processing and brand marketing. Industrial development model; three is to focus on the separation and recycling of fuel, green manure, organic fertilizer, farm manure and agricultural and animal husbandry wastes; four is to support the multi-level agricultural and animal

husbandry resources efficient utilization model of the agricultural and animal husbandry system; four is to feature farm yards, tourist attractions, ecological leisure vacation and folk customs experience as one of the mountain agricultural and animal husbandry leisure sightseeing tour. Travel mode. Mountainous Agro-Animal husbandry ecotone incorporates planting, aquaculture, agricultural product processing, leisure agriculture and natural clean production energy into the development system and scope of circular agriculture and animal husbandry. Through equipments and devices, the natural energy resources are reasonably and effectively transformed and applied, and the waste resources generated by planting and breeding are correspondingly transformed into reuse and recycling. In order to achieve the goal of reducing agricultural and animal husbandry waste resources, effectively improving the production performance and utilization efficiency of waste, promoting the optimal combination and utilization of various superior agricultural and animal husbandry resources, meeting the needs of regional agricultural and animal husbandry development to the greatest extent, and improving the development of mountainous agriculture and animal husbandry. The stability, sustainability and cyclicity of the ecosystem have enhanced the lasting momentum and power of the development of mountain agriculture and animal husbandry, laid a reasonable, effective and stable ecosystem of agriculture and animal husbandry, and realized a virtuous circle of promoting the development of agricultural economy, increasing the income of farmers and herdsmen, and protecting the ecological environment of agriculture and animal husbandry.

3.1. Analysis and evaluation of efficient utilization model of modern new energy

The regeneration and utilization of efficient clean production energy is one of the important means and measures for the development of circular agriculture and animal husbandry in mountainous areas. During the production and construction of agriculture and animal husbandry in Tibet, the natural world has endowed abundant light, wind and water resources with clean energy. Since the formation of the earth, it has been closely related to the existence of the world, human beings, animals and agricultural production departments. There are no pollution, unlimited utilization, easy to collect and store, etc. The natural energy to guide the optimal combination and utilization of mountain agriculture and animal husbandry resources has the advantages of less investment, quick results, easy to understand and learn, easy to understand and simple. Through the use of modern science and technology and equipment, as well as many years of production and living practice of farmers and herdsmen, the following utilization modes are explored and discussed: solar energy In terms of utilization, the emphasis is on heating and lighting. Firstly, the solar integrated circuit board on the roof of the house is designed to store and transmit the heat for night lighting; secondly, the solar water heater on the roof is used to absorb the solar radiation heat, so as to promote the heating and heat preservation of the cool water, so as to facilitate the use and demand of hot water in the daily life of farmers; thirdly, it is connected. Through the establishment of solar street lamp, the absorption and storage of light energy during the day, and the release of solar energy through the light of street lamp at night; fourth, the use of solar cookers, cooking and boiling water and daily needs. In the aspect of wind energy utilization, the main body is power generation, power supply and lighting. By setting up wind energy utilization device to absorb the air flow circulating between mountains for energy storage, the wind energy can be converted into output current for power supply in agricultural and pastoral areas. In the aspect of water energy utilization, the emphasis is on agricultural production and animal

husbandry, aquaculture and rough processing and utilization of agricultural products. Firstly, the top-down watershed of mountain-type Alpine water source can effectively irrigate different agricultural production and Cultivation in mountain-type, which provides convenience for rational and effective utilization of water resources. At the same time, agricultural cultivation along the river basin can effectively use water source for agricultural irrigation. Secondly, clean water resources provide safe drinking water sources for livestock breeding around; thirdly, good water sources provide broad space and development scope for regional agriculture and animal husbandry and aquaculture; fourthly, traditional farm water grinding turbines are established through small watershed rivers to make full use of water resources energy for daily roughing of agricultural products. (See Figure 1 for details).

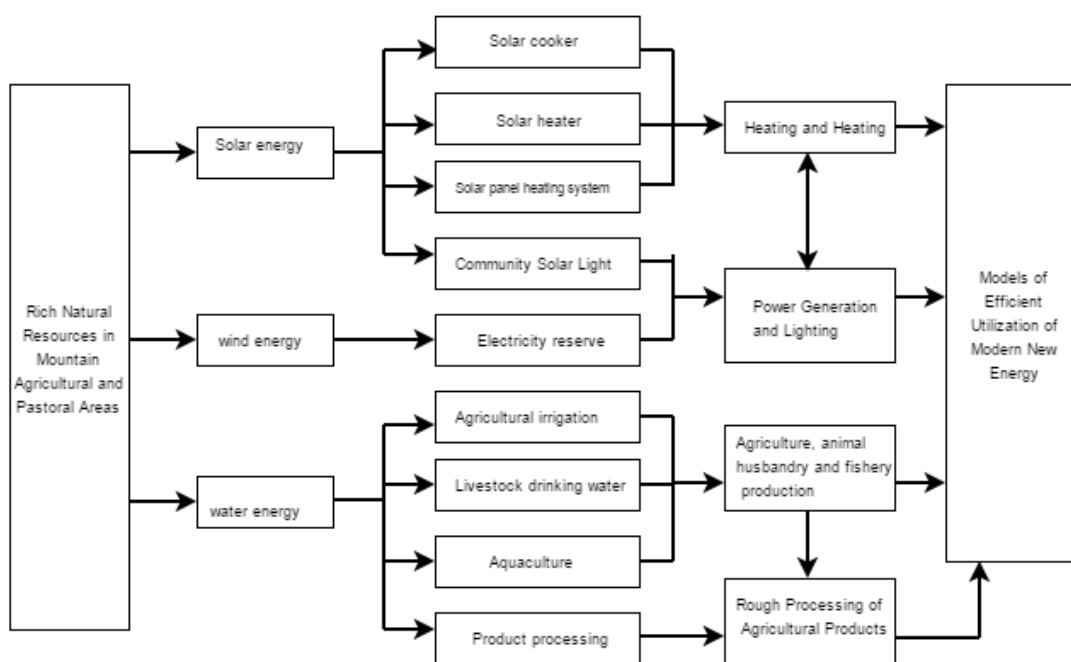


Figure 1: Schematic diagram of resource optimization combination for efficient utilization of modern new energy resources.

3.2. Analysis and evaluation of development modes of green fusion of nutrition chain melt

The green fusion development mode of "chain integration" of planting, breeding and processing is the management form of the industrialization chain of "chain integration" of mountain circular agriculture and animal husbandry. It is the production and life style closest to the local farmers and herdsmen. The concept of circular economy development runs through the pre-production, mid-production and post-production links of agricultural and animal husbandry development, and the production links give full play to the basis of agriculture and animal husbandry. This production function enables them to make full use of their resources and make rational use of their resources. Life links promote resource conservation and clean production, and give full play to the multi-function of agricultural and animal husbandry production. By relying on scientific and technological support, we firmly grasp the economic entity and mutual benefit as a link, improve the enthusiasm of farmers and herdsmen in

agricultural and animal husbandry construction, expand the space for agricultural and animal husbandry development, promote large-scale production and construction of agricultural and animal husbandry, and enhance agricultural production. Value-added resource utilization optimization combination model. Planting industry: first, advocating basic large-scale agricultural production in planting industry, increasing grain reserves laid the foundation for aquaculture; second, feeding maize and alfalfa were planted in the spare land to provide nutritious feed for livestock and make up for seasonal green storage feed; at the same time, legume crop planting and maize straw returning effectively could improve and enhance soil productivity; By effectively utilizing the idle resources of space, such as fruit trees planted on the ground, autumn fruiting can effectively increase the income of farmers and herdsmen, and also provide a forest habitat for free-range livestock. Breeding industry: first, stocking Tibetan chickens can effectively peck natural insects and effectively control the occurrence of local environmental diseases and insect pests. At the same time, all kinds of insects are also natural edible ingredients of Tibetan chickens. The two are mutually beneficial functions of forming resources. Two, Tibetan pigs possess the properties of arch soil, which play a regular protective role in the loose and ploughing of surface soil, and can effectively promote ground planting. Physical growth and labor saving; three, Tibetan Pig and Tibetan chicken can be returned to the field by raising the excrement of livestock, which provides a good source of fertilizer for the growth of ground crops; four, through livestock stocking, it can effectively promote harmonious coexistence and coexistence among different species, not only providing good outdoor activities for livestock, but also providing suitable housing for livestock. Realm, through field stocking to create green agricultural products, enhance the natural taste of livestock meat. Processing industry: first, through the deep processing of crop agricultural products-wheat crops, the intrinsic green value is enhanced; second, through the deep processing of livestock products, separated products and processed products are classified, which can effectively enhance the added value of products, through the development of market economy can effectively improve the value of enterprises and promote the income of farmers and herdsmen; third, through economic creation. The impact of income can effectively change farmers' ideas and management mode, promote the effective connection and development of planting, aquaculture and agricultural products processing industry, further re-investment, re-operation and re-development of funds, lay the foundation for expanding production scale and promoting economic development. (See Figure 2 for details).

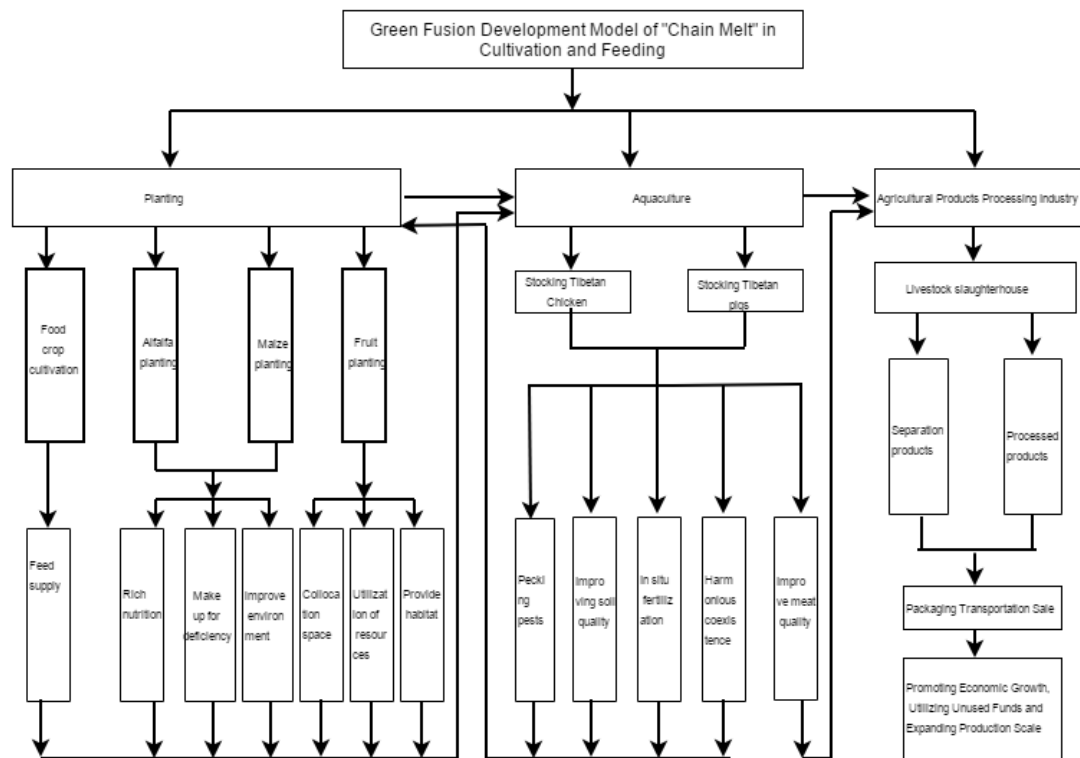


Figure 2: A sketch map of resource optimization and combination of "chain melt" green fusion development model for planting and feeding.

3.3. Multi-level high-efficiency utilization model of agricultural and animal husbandry resources

The multi-level mode of efficient utilization of agricultural and animal husbandry resources is that the development of mountain-type circular agriculture and animal husbandry understands and understands the optimal combination and utilization of resources from three angles of agricultural waste, animal husbandry waste and the production of living waste by farmers and herdsmen. The development of agriculture and animal husbandry and the livelihood of farmers and herdsmen will also produce a large amount of waste materials and variety of varieties. Different regions have different solutions. The utilization of multi-level agricultural resources in mountainous areas has both scientific reference and agricultural inheritance. The emphasis of this study is to make full use of various waste materials and optimize their combination and utilization. Agricultural waste: First, agricultural barley and rapeseed are the main crops of waste - straw, mainly by means of direct feeding livestock, auxiliary means - crushing and returning to the field and compressing to produce fuel, which is conducive to livestock fattening, improving land productivity and increasing economic output value; second, the autumn harvest of farmers and herdsmen will be residual in the field of withered grass, weeds and a large number of leaves to carry out. Land burning or returning to the field or collecting and retenting farm green manure. Livestock waste: First, chicken manure and pig manure produced by chicken farms and pig pens are usually fermented to produce organic fertilizer; second, sheep manure is the main fertilizer used by local farmers and herdsmen in crop cultivation, mainly through collecting

returned farmland and fermentation to produce organic fertilizer; third, cow manure produced in*farming*pastoral areas is used as fuel and market by air-drying. Trading is one of the sources of household heating in farming and pastoral areas, which has the advantages of burning odorless, pollution-free, high calorie and is well received by the market. This is the practice inherited by Tibetan farmers and herdsmen for a century. At the same time, the conditional farming and pastoral areas collect cow manure as the raw material of edible mushroom culture media centrally, which is the introduction of scientific and technological innovation. The waste materials produced by farmers and herdsmen's livelihood are as follows: first, the waste plastic mulch and shed film produced by planting industry; plastic bottles and glass bottles produced by agriculture; and waste household appliances, clothing and paper produced by farmers and herdsmen's livelihood are collected, classified, recycled, treated and reused centrally; second, the production and living of human beings in agricultural and pastoral areas. The construction and layout of biogas digesters for farming and animal husbandry are based on sewage, feces and other materials, and a small amount of agricultural and animal husbandry wastes. Because mountainous farming and animal husbandry areas are located in high altitude and low temperature areas, most of them are equipped with glass caps or plastic mulches to improve the heating effect, give full play to the biogas outgassing rate, serve the needs of heating and living in farming and animal husbandry areas, and effectively solve the waste pair of farming and animal husbandry areas. Pollution of soil resources, water resources, air and surrounding environment not only reduces the cost of treatment, but also realizes community cleaner production and living, and achieves the purpose of rational and effective utilization of waste resources. (See Figure 3 for details).

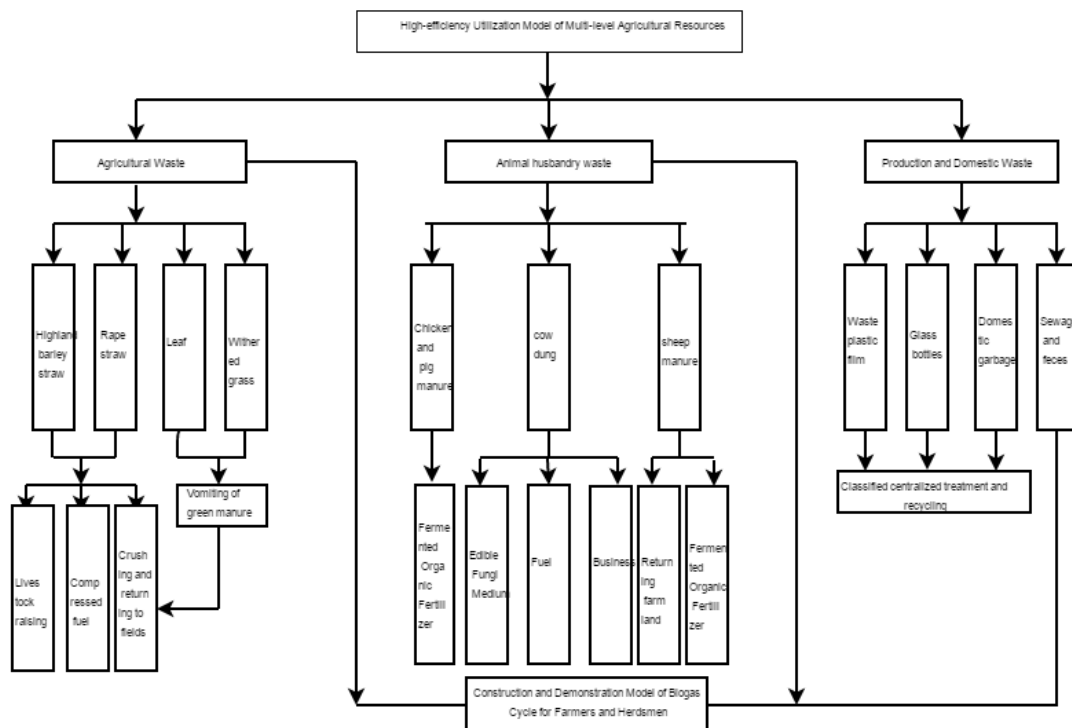


Figure 3: Schematic diagram of resource optimization and combination of multi-level efficient utilization model of agricultural and animal husbandry resources.

3.4. Mountain agriculture and animal husbandry leisure tourism model

Mountain agriculture and animal husbandry leisure tourism mode is an effective combination and utilization mode of mountain circular agriculture and animal husbandry development, which fully combines natural landscape resources, human history and culture resources, pastoral agriculture and animal husbandry life development resources, leisure and recreation vacation resources, folklore tourism resources, farmers' pleasure returning to rural resources, and provides people-oriented development concept in an all-round way, providing appreciation, entertainment and drinking. Food, accommodation, experience and other comprehensive services, integrated with economic, ecological, humanistic and social functions, belong to the rising industry of regional economic development in the future. They belong to the new industrial form and consumption mode of modern agriculture and animal husbandry. They are also important for promoting the development of regional agriculture and animal husbandry economy, optimizing the industrial structure of Agriculture and animal husbandry, stimulating the employment and income of farmers and herdsman, and increasing production. It is of great practical significance to extricate agriculture from poverty and promote the structural reform of the supply side of agriculture and animal husbandry. Fully tapping and utilizing the rich types of resources in Tibet to blend and complement each other, and promoting the development of leisure tourism products in mountain areas of Tibet from low-level supply and demand to high-level supply and demand will become an important way for farmers and herdsman to increase their income in the future[6][7]. (See Figure 4 for details).

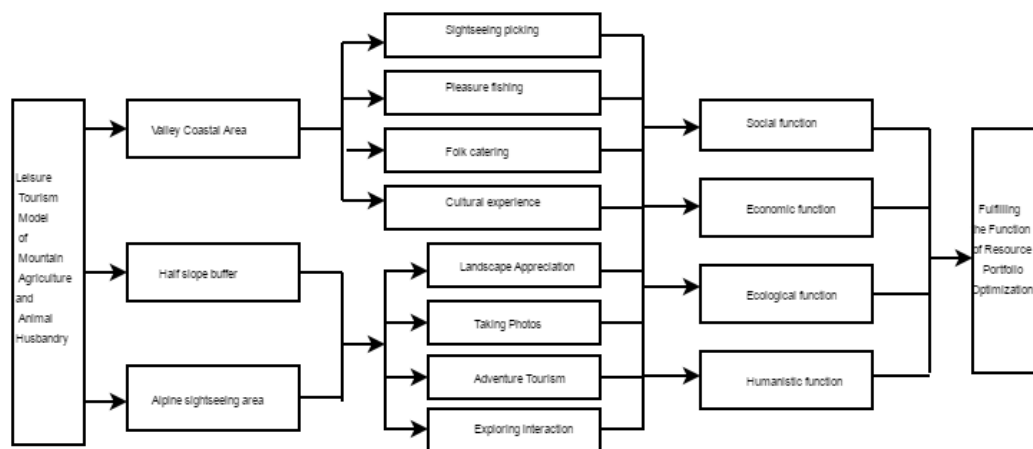


Figure 4: A sketch map of optimum combination of resources for mountain agriculture, animal husbandry, leisure and sightseeing tourism model.

4. Future prospect of optimized combination utilization model of agricultural and animal husbandry resources in 4 mountainous agricultural-pastoral ecotone

The optimum combination and utilization of circular agricultural and animal husbandry resources is a brand-new mode of agricultural and animal husbandry development. From the perspective of management, it is both a brand-new development concept and an advanced thought strategy. It uses the scientific concept of development, the concept of sustainable development, the theory of circular economy and the technology of optimum combination of resources, mainly through the optimum combination and utilization of resources, the Agro-Animal husbandry ecosystem. Improvement of

quality and dynamic balanced development mechanism of agricultural and animal husbandry economic growth can effectively make full and rational use of various types of resources. The purpose is to achieve the best combination and utilization of agricultural and animal husbandry resources, reduce the input and use of harmful substances, minimize environmental pollution and ecological damage, promote the construction of "clean production" system of agriculture and animal husbandry, and promote population, resources and economic growth. The economic growth mode of agriculture and animal husbandry in the ecotone of agriculture and animal husbandry in mountainous areas of Tibet is coordinated development of environment and other living organisms. The future practice of optimizing combination and utilization mode of agricultural and animal husbandry resources in the ecotone of agriculture and animal husbandry in mountainous areas of Tibet is described below.

4.1. Integration of scientific ideas

This paper mainly elaborates on the following three aspects: taking the circular economy theory of various countries as the guidance, fully considering the natural attributes and characteristics of regional agricultural and animal husbandry development, taking the development of ecological circular economy as the goal, re-examining and evaluating the advantages and disadvantages of the traditional mode in the general development mode, evaluating the theory and prospects of the existing and future resource combination and optimum utilization mode, and further understanding and excavation. The internal relationship and coordination among human beings, resources and environment should be established, and an innovative development and efficient combination utilization model should be established to guide the development of circular economy of agriculture and animal husbandry in Tibet in the future, to change the excessive dependence of agricultural and animal husbandry production on resource development and consumption, and to promote the optimal combination and utilization model of ecological agricultural and animal husbandry resources in the plateau; to actively promote the ecological environmental protection consciousness and scientific development of the plateau farmers and herdsmen Understanding, raising the awareness of ecological environment protection and green consumption of farmers and herdsmen, abandoning the concept and thought of "great development, large production, large construction and large consumption", advocating a good situation of "saving resources, protecting ecology, improving environment and promoting development", actively promoting the scientific development concept of "reducing, reusing and recycling" in agricultural and animal husbandry production, and rationally and fully combining and utilizing oneself Natural resources and agricultural and animal husbandry waste resources in the world, to minimize the production of agricultural and animal husbandry production and living waste, to achieve the rational use of resources and reduce pollution emissions; design different sectors and industries of resource mix recycling industry chain, conducive to different levels and categories of waste become the premise of recycling economic development, and further realize orderly circulation of resources. Ring and rational development, to maximize the demand and supply of resources between different types of industries, to achieve a balance between the rational use of resources and sustainable development.

4.2. Science and technology support

The optimization and combination of agricultural and animal husbandry resources follow the concept of "science and technology is the first productive force". Science and technology are the basic guarantee for development. We should fully tap the regional agricultural and animal husbandry circulation technology demonstration system, carry out a series of research on technology, development and innovation, and give full play to the brand-new concept of production, values and agricultural economy of agriculture and animal husbandry. This paper mainly discusses from the following four aspects: setting up the concept of scientific training of talents, actively training and introducing professional and technical personnel of different disciplines, attaching importance to the status and role of professional and technical personnel in circular agriculture, giving full play to the enthusiasm, initiative and creativity of talents to integrate various disciplines into a comprehensive development; increasing investment in scientific research funds to support the cycle Development and development of agricultural and animal husbandry technology, promotion and application of new technology, new equipment and new methods, so as to promote the universal application and promotion of new technologies, methods and products, and give full play to the role of scientific and technological achievements in agricultural production; regular construction of farmer and herdsman training system, training seminars and practical guidance of professional technical experts, and promote understanding of agriculture and animal husbandry The frontier development of agriculture and animal husbandry is conducive to stimulating the enthusiasm, initiative and creativity of peasant households. Effective exploration and establishment of an integrated entity of production, education and research and a scientific and technological support platform for efficient utilization of agricultural and animal husbandry resources will promote scientific and technological breakthroughs in the technology of optimizing the combination of resources and utilization, give full play to the effect of multi-links, effectively link up traditional agriculture and animal husbandry with modern agriculture and animal husbandry, and Research has been fruitful, farmers and herdsman have demonstrated, and the region has driven the reciprocal and mutually beneficial relationship, so as to realize the scientific and technological innovation platform of production, science and research to serve the development and construction of agricultural economy.

4.3. Agricultural and herdsman cooperatives and market operating organizations

Efficient utilization and combination of agricultural and animal husbandry resources and even the construction and development of agricultural and animal husbandry cycle are the economic integration that takes the family unit of farmers and herdsman as the main body, the development organization that takes many individual individuals as the cooperative body, that is, the cooperative of farmers and herdsman as the backing, and the development of market economy as the goal. This paper mainly discusses from the following three aspects: farmers and herdsman are the main body of practice in the actual production and construction of agriculture and animal husbandry, as well as the entity that has the most say in the development of agriculture and animal husbandry. They have accumulated rich experience and practices in the long-term production and construction. These experiences and practices are the concise of scientific theory and methods, because small farmers with family as the unit disperse the main body, agricultural production and scale. Limited ability to resist natural risks and the contradiction between small-scale production and large-scale production have contributed to the development of agricultural and herdsman cooperatives. Farmers and herdsman are the basic unit

and indispensable component of the development of circular agriculture and animal husbandry. Cultivating new farmers and herdsmen who "learn knowledge, understand culture and know technology" is the main practitioner and operator of the development of circular economy of Tibetan agriculture and animal husbandry in the future. Society is not only a carrier organization for farmers and herdsmen, but also a good link for the development of market economy. It plays an important role as a link between the preceding and the following. It has its own service function, as well as the function of propaganda, creation and promotion of circulation mode. It also serves the economy and society, responds to existing problems to government departments and puts forward collective organizations for effective decision-making of optimizing the combination and utilization of resources. Weaving is a third-party social organization that enhances collective economy of farmers and herdsmen, opens up agricultural products market, develops marketing strategy and drives regional farmers' economic development. Based on market economic organization, individual farmers and herdsmen, farmer and herdsman cooperatives all have a unified and indivisible organic carrier, and the absence of any aspect affects the development of agricultural and animal husbandry economy.

4.4. Reference, promotion and application of resource optimized combination utilization model

Modern agriculture and animal husbandry and traditional agriculture and animal husbandry have different development directions, orientations and modes. Different regions have different resources, environments and layout of agriculture and animal husbandry. How to effectively tap, rationally utilize and match the resources of agriculture and animal husbandry varies. In terms of production and construction of agriculture and animal husbandry, processing and circulation, technology and mode, and consumption integration, the actual development situation should be considered. Further study is in line with its own development system. The successful models of circular economy development of agriculture and animal husbandry both at home and abroad have their own development attributes and characteristics. The model should be used for reference and introduced with full consideration of their own regional economic development, natural resources richness and the location conditions of development. The suitability, advantages and disadvantages of the model should be evaluated by referring to the effect of the model. Major innovation and digestion and reabsorption rationally design their own optimal combination and utilization mode of resources; the extension of the mode fully takes into account the scope of application of existing conditions, whether farmers and herdsmen accept and accept the degree, whether the input cost of the mode matches the economic benefits of output and other issues; the application of regional characteristics, reasonable, effective and give full play to various types of diversified resources Effective utilization of resources, improve the best utilization mode of various resources, adhere to the development concept of "innovation, coordination, green, open and sharing", and gradually realize the effective allocation of diversified resources, rational and effective utilization of waste resources and good sustainable development of natural ecological environment [8].

4.5. Financial security and other support systems

Everything's development is based on the guarantee of funds, which produces economic benefits and promotes the benign development of economic construction. Therefore, the development of circular agriculture and animal husbandry in Tibet should actively increase the financial investment in

agriculture and animal husbandry, promote the construction of agricultural and animal husbandry infrastructure and the management of agricultural and animal husbandry environment, and provide a good positive guarantee system. The following three aspects should be done well: giving full play to the policy leading position of local government and fully mobilizing all parties to participate in the construction of circular economy through the investment and support of financial funds. The initiative of the establishment should be given preferential and incentive policies from tax, subsidy, finance and project fund construction, regulated and restrained by administrative and legal means, guided by propaganda and education to promote the rational and effective development of agricultural and animal husbandry resources, and lay a foundation for the efficient utilization of agricultural and animal husbandry resources. New construction and development, improvement of relevant laws and regulations, such as the Cleaner Production System Law of Agriculture and Animal Husbandry, Regulations on Pollution Prevention and Control of Agricultural and Animal Husbandry and the Law on Construction of Eco-cycle Agriculture, which are conducive to promoting the development of circular economy of agriculture and animal husbandry, standardize the sharing of implementation standards and results of production and construction, and actively encourage farmers, enterprises and companies to take safety in production as the basis, and put agriculture into practice. Efficient utilization and combination of animal husbandry resources should be brought into the track of standardization, institutionalization and clarification [9]. In compensation mechanism, the government and relevant departments should give distinct treatment to the implementation of efficient utilization of agricultural resources, and carry out ecological compensation, technological compensation and financial compensation for typical demonstration-driven circulation mode to enhance "key products and funds compensation". Based on the principles of key regions, key technologies and key development, an effective mechanism of technological compensation for circular agriculture and animal husbandry was explored and constructed [10].

5. Conclusion

At present, the construction and development of circular economy of agriculture and animal husbandry has become the national development strategy. Tibet is in the stage of accelerating the modernization and urbanization of the plateau. It is facing many serious problems such as shortage of resources and environmental destruction. In order to further seize the important development opportunities and promote the early construction of a well-off society in an all-round way, the development and construction of agriculture and animal husbandry in Tibet should follow the principle of Based on the benchmark of "agricultural construction and development", this paper focuses on the "optimum utilization mode of agricultural and animal husbandry resources in mountainous ecotone" as the research object. According to the principles of "reduction, reuse and resource utilization", scientific development and construction will achieve maximum economic benefits and sustainable development of agriculture and animal husbandry with the least waste and waste discharge, and make rational and effective use of Tibet's unique rich natural resources. Landscape resources and human resources will turn waste from agriculture and animal husbandry and agricultural and pastoral areas into treasures to realize the recycling and reuse of agriculture and animal husbandry, promote the healthy development of agriculture and animal husbandry, realize the unity of economic, environmental and social benefits, and build a resource-saving and

environment-friendly society. This paper briefly expounds the optimum utilization mode of agricultural and animal husbandry resources in mountainous ecotone from four main aspects. Among them, the modern high-efficiency utilization mode of new energy mainly focuses on the optimum utilization of advanced equipment and devices to obtain abundant natural renewable resources, and the green fusion development mode of "chain melt" is mainly based on the cultivation and production of agriculture and animal husbandry, animal husbandry and agricultural products. Deep processing is a horizontal and vertical integration mode, with the development of agricultural and animal husbandry industry market and economic development as the main body; the efficient utilization mode of multi-level agricultural and animal husbandry resources is the full combination and rational utilization of the waste resources generated by planting, animal husbandry and production and living in agricultural areas as the main body; the leisure and sightseeing tourism mode of mountain agriculture and animal husbandry is a comprehensive regional human, landscape, tourism and entertainment. The dominant characteristic resources such as music and catering are the main body of comprehensive development. The theory, model and practice of circular economy development in agriculture and animal husbandry is a pioneering and innovative research work. This article, supported by the open subject of the Key Laboratory of Renewable Energy Development and Utilization in Rural Areas of the Ministry of Agriculture and Rural Areas, expounds the basic framework of the optimum utilization model system of agricultural and animal husbandry resources in mountainous ecotone through visits and investigations in some areas of Tibet. Because my professional and level limitations only provide my own personal views on the development of circular agriculture and animal husbandry, I hope to provide reference ideas and successful experience for the future development and construction of circular agriculture and animal husbandry economy in Tibet.

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