

# Analysis on the Development Path of Ecological Agriculture Economy from the Perspective of Sustainable Development

Xiaoyao He<sup>1,2</sup>

<sup>1</sup>College for Urban Economics and Public Administration, Capital University of Economics and Business, Beijing, 100070, China

<sup>2</sup>Hetao College, Bayannaoer, Inner Mongolia, 015000, China

**Keywords:** Sustainable Development; Ecological Agriculture Economy; Agricultural Industrialization; Service System

**Abstract:** The report of the 19th National Congress clearly pointed out that to implement the strategy of rural revitalization, the term “ecology” has become the new standard for agricultural and rural development. The concept of “green development”, “ecologicalization” and “sustainability” of agriculture has been mentioned as new. the height of. From the perspective of sustainable development, this paper analyzes the current development path of eco-agriculture economy from many aspects, analyzes the development status of eco-agriculture in the perspective of sustainable development, determines the necessity and characteristics of eco-agriculture economic research, and strives to be ecological. The development of agricultural economy has explored a practical path.

## 1. Introduction

China is a developing country with the development of the agricultural system as the main economic framework [1]. The quality of agricultural economic conditions largely determines the stability of the subsequent economic environment extension, and determines China's position in the world economic environment [2]. Secondly, the effective development of the concept of sustainable development has a certain advanced significance in the urban construction environment where the existing ecological resources are extended, and it also provides a relatively stable penetration platform for the competitiveness of China's resource market [3]. Therefore, effectively combining the two concepts to promote the development of agricultural economy to meet the basic premise of sustainable development, in the existing social environment can maintain the sustainable recycling of agricultural land and environment, reduce the proportion of soil and water pollution and compound pollution It can effectively consolidate the image of China's food safety and provide a good space for the market competitiveness of subsequent agricultural products. Furthermore, effectively implementing the concept of sustainable development and having an advantage in the subsequent transformation of the agricultural economy will not only provide a more comprehensive platform for resource integration [4], but also transform the tendency of the subsequent agro-ecological development environment based on the strategic approach, thereby improving the farmers' own economic income. Level, laying a good reference indicator and economic conditions for subsequent economic development.

## 2. The Basic Model of Eco-Agricultural Economic Development

Sustainable ecological agriculture has limitations, openness, and systemic organicity. The effective development of ecological agriculture requires the efforts of both technical and managerial personnel to ensure that the corresponding duties and actual environment meet the continuation conditions, and on this basis. Effectively implement the production concept and promote the maximum use of land resources, so as to provide the most basic continuation prerequisites in the follow-up work environment [5].

Ecological agriculture is to adhere to the basic principles of “ecological environmental protection, safety and efficiency, resource conservation, and low carbon cycle” in the development of

agricultural economy to achieve “green development” [6]. It is necessary to greatly increase the output of various agricultural and sideline products, but also to protect the environment; it is necessary to enrich the nutrition of agricultural products, and to ensure the quality and safety of products. At present, there are many types of ecological agriculture development models and different classification standards [7]. There are two basic modes of common eco-agricultural economic development. Circulation mode: A virtuous cycle of agro-ecosystem designed according to the laws of material circulation and energy flow in ecosystems [8]. In the process of system circulation, the product of each link is the raw material of the next link, so that the waste of each link can be reused, turning waste into treasure, reducing waste pollution and improving the utilization rate of resources. A common “planting + farming” cycle mode is available [9]. Landscape mode: This model makes use of the hierarchical structure of natural space, different altitudes and different spatial environment components to create different biological populations. The biggest advantage of the landscape model is the use of vertical spatial layout, saving land, and maximizing resource utilization through multi-level transformation of matter and energy. Common cases such as: “The top of the mountain pine cypress wears a hat, the mountain fruit bamboo wraps around the mountain, the rice hops under the mountain, the ridges of the ridges of the ridges”, the “top mountain planting trees in Guangdong Province, the mountainside planting tea, the mountain under the mountain Fish grazing, etc [10].

### 3. Development of Ecological Agriculture Economic Development Path From the Perspective of Sustainable Development

#### 3.1 The basic direction of ecological agriculture economic development

Mission Objective: Adhere to the scientific development concept as the guiding principle, guided by the spirit of the 18th Party Congress, aim to build an ecological Changde and strive to create a national greening model county, and seize the rare opportunities facing the current ecological agriculture development. And adjust the structure as the main line, coordinate urban and rural greening integration, accelerate the construction of modern ecological agriculture, and realize the development of agricultural industrialization, as shown in Figure 1.

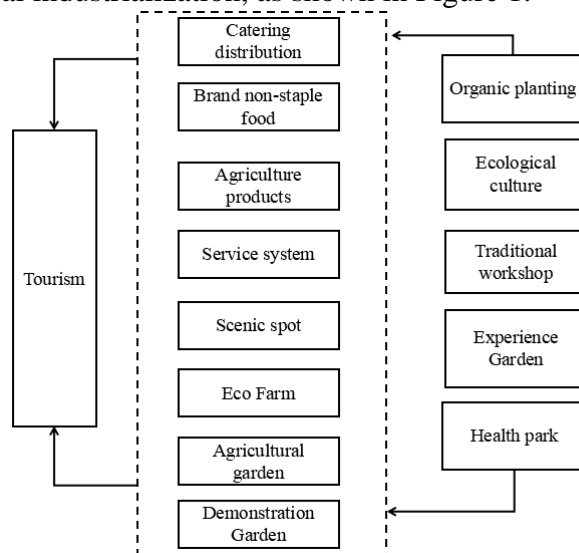


Fig.1. Industrial coordination structure of eco-agriculture and regional tourism power pole

Increase scientific investment and promote the construction of key projects in ecological agriculture. At the same time, we will actively do a good job in attracting investment, promote a new model of park development, and achieve new breakthroughs in brand building. Focusing on the development of pollution-free and green food, we will vigorously build a modern eco-agriculture demonstration park to drive the eco-agriculture industry to adopt high-end, high-quality, high-efficiency and ecological, low-carbon and sustainable development. Strengthen the

construction of leading enterprises and enhance the stamina of enterprise development. Adhere to the leading enterprises as the leading force in the industrialization of ecological agriculture.

Strengthening three guarantees: increasing investment, strengthening scientific and technological support, and strengthening team building. Increase investment promotion efforts, enhance the investment environment by strengthening the construction of soft environment, and attract domestic well-known ecological agricultural enterprises to settle in Changle County, and enhance the development potential. Encourage and guide enterprises to establish research service bases and product R&D centers, and increase research and development of new products and new technologies. Improve the mechanism, improve the system, and thoroughly study theoretical knowledge, laws and regulations, and business knowledge, and improve the performance and service level of cadres and workers.

### **3.2. Existing problems**

Institutional and ideological constraints. A good institutional environment is the basic guarantee for the development of agricultural economy, but the current economic system in China restricts the development of agricultural economy to a certain extent, mainly in the micro-level and macro-level. For the former, the degree of agricultural mechanization continuously promoted in China gradually reveals the traditional family. The institutional defect of contractual management of joint production has a negative impact on improving agricultural labor productivity and optimizing the allocation of resources, which hinders the growth of agricultural economy. For the latter, there is still a social system of urban-rural dual economy, and the whole society is gradually heavier. In view of the problems of agriculture, countryside and farmers, there are also some unfair treatments, which lead to the behavior in the field of practice affecting the sustainable development of agricultural economy to a certain extent.

Restrictions on the transformation of science and technology and achievements. With the rapid development of agriculture in China, the traditional methods of increasing resource input and labor force to obtain output can not make the agricultural economy achieve sustainable development. In this case, we need to change the mode of production to the road of technology for development. However, the current development of agricultural production technology in China is relatively slow, lacking sufficient scientific research funds and human resources, and has a low conversion rate of achievements. The uncertain development prospects of agricultural economy have led to a large loss of agricultural science and technology talents.

Lack of human and material capital. Manpower and material capital are the basic guarantee for the development of agricultural economy, but in most rural areas of China, the above two kinds of resources are lacking in the process of building ecological agriculture. The lack of material capital is mainly reflected in the lack of sufficient funds to promote the economic growth of eco-agriculture, which leads to the lack of sufficient stamina of eco-agriculture. Although China's agricultural development has been supported by national policies, only a small part of the capital flows to the countryside; in the development of ecological economy, human resources are also an indispensable element, but our backward rural education makes college students unwilling to stay in the countryside, rural human capital has a very low accumulation effect, strict. The growth of eco-agricultural economy has been seriously hindered.

### **3.3. Development path**

Vigorously develop and optimize the environmental protection industry in rural areas. The construction and development of the environmental protection industry has quite favorable conditions in rural areas. By vigorously developing the environmental protection industry, the progress of other industries in rural areas can be effectively promoted. At the same time, in the process of development of the environmental protection industry, a long-term relationship with the external ecological environment is established. In this case, not only can the ecological environment be effectively controlled and improved, but also environmental products and high value-added agricultural products can be developed and sold to promote the sustainable development of ecological agriculture. However, in the process of development, it is also necessary to save

resources and protect the rural environment.

Continuously improve the productivity of agro-ecosystems. To develop the agricultural economy to achieve sustainable development goals, the development of ecological agriculture is an important way. Therefore, it is necessary to fully understand the laws of ecology and the laws of nature, and carefully follow the rules for the development of ecological agriculture to further improve the productivity of the agro-ecosystem. In the process of ecological agriculture development, adopting local conditions to regulate and optimize the agro-ecosystem and its structure, ensure the effective circulation of resources, ensure the rational flow of energy, and rationally arrange agricultural production and economic activities according to the carrying capacity of the environment, and promote ecological agriculture. Sustainable development. Strengthen the construction of grass-roots agricultural science and Technology Extension Service system, strengthen cooperation with agricultural research institutes, and actively introduce suitable new varieties, new technologies and new achievements. We will further improve the three-level agricultural technology extension service network of “county agricultural experts-town agricultural technology instructors-village science and technology demonstration households”. We will improve information service platforms such as Changle Agricultural Information Network and the “Three Agricultural Services Hotline” to promote agricultural science and technology into villages and households. We will carry out extensive scientific and technological education and training for farmers, promote crop varieties, create high yields of grain, cotton and oil, apply fertilizers through soil testing and formulation, prevent and control crop diseases and insect pests, and prevent and control epidemics, so as to speed up the transformation of agricultural scientific and technological achievements and further improve the comprehensive benefits of agriculture.

Develop an ecological energy-based agricultural economic model. In the course of human development, modern agriculture has played a positive role in promoting, but it has also exposed many drawbacks. Therefore, in the development of ecological agriculture, the production of modern industrial products should be effectively reduced, and the application of chemical products in ecological agricultural production should be further reduced. By vigorously promoting the application of modern agricultural technology, ensuring agricultural production and organizational behavior in the ecological agricultural system. The self-regulation is successfully completed on the basis of the purpose of achieving a virtuous cycle of agricultural economic development. By developing solar energy, bioenergy and other ecological energy sources, rural areas can significantly reduce the investment in petrochemical products, deepen the potential of the ecological agriculture system, and enhance the sustainable development of the agricultural economy.

Improve the agricultural social service system. The relevant preferential policies and the construction of the legal system are important guarantees for promoting the sustainable development of the agricultural economy. Government departments should support agricultural investment and loans through various channels, increase protection of the ecological agricultural products market, encourage the export of agricultural products, and establish pilot operations in some rural areas to expand the economic scope of intensive agriculture and carry out ecological agriculture technology. Widely promoted. In addition, the water conservancy facilities will be strengthened and maintained, and the chaotic and chaotic behaviors will be treated to crack down on counterfeit and shoddy ecological agricultural products, thus ensuring a good ecological agriculture development environment.

#### **4. Conclusion**

In the process of national economic development and social progress, agricultural economy plays an extremely important role. China should actively explore and practice the eco-agricultural economy, control and improve the pollution situation of the ecological environment to the maximum extent, make full use of the sustainable development resources of agriculture, and strive to solve the problems encountered in agricultural development, so as to realize the sustainable development of the agricultural economy.

## Acknowledgement

Research program of humanities and social sciences at universities of inner mongolia autonomous region, njsy19246.

## References

- [1] Granlund K, Rankinen K, Etheridge R, Seuri P, Lehtoranta J. Ecological recycling agriculture can reduce inorganic nitrogen losses – model results from three Finnish catchments. *Agricultural Systems*, 2015 133 167-176.
- [2] Rollin O, Benelli G, Benvenuti S, Decourtye A, Wratten S D, Canale A. Weed-insect pollinator networks as bio-indicators of ecological sustainability in agriculture. A review. *Agronomy for Sustainable Development*, 2016 36 (1) 8.
- [3] Petrović Zdravko, Jović Vojislav, Manojlović Dragan. Ecological protection of agriculture through Serbia's legal regulations and judicial practice. *Economics of Agriculture*, 2015 62 (3) 645-660.
- [4] Olof Andrén. How Will an Increase in Ecological Agriculture Affect Soil Carbon Balances in Sweden?. *Journal of Thoracic Imaging*, 2015 30 (6) 73.
- [5] Gurr G M, Lu Z, Zheng X, Xu H, Zhu P, Chen G. Multi-country evidence that crop diversification promotes ecological intensification of agriculture. *Nature Plants*, 2016 2 (3) 16014.
- [6] Geertsema W, Rossing W A, Landis D A, Bianchi F J, Van Rijn P C, Schaminée, Joop HJ. Actionable knowledge for ecological intensification of agriculture. *Frontiers in Ecology and the Environment*, 2016 14 (4) 209-216.
- [7] Head J W, Marples K, Simpson J. Mediterranean Agriculture, Ecology, and Law: Creating a New Non-state Actor to Counteract Agro-ecological Collapse in the Mediterranean Basin. *Mediterranean Studies*, 2017 25 (1) 98-146.
- [8] Norton L R. Is it time for a socio-ecological revolution in agriculture?. *Agriculture, Ecosystems & Environment*, 2016 235 13-16.
- [9] Gustav Cederlöf. Low-carbon food supply: the ecological geography of Cuban urban agriculture and agroecological theory. *Agriculture and Human Values*, 2015 33 (4) 1-14.
- [10] Tomo Popović, Nedeljko Latinović, Ana Pešić, Zecevic Z, Djukanovic S. Architecting an IoT-enabled platform for precision agriculture and ecological monitoring: A case study. *Computers & Electronics in Agriculture*, 2017 140 (140) 255-265.