

Relationship between the Ecological Livability and the Green Development of Agriculture

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Abstract Ecological livability is one of the important tasks and objectives of the rural revitalization strategy proposed at the 19th National Congress of the CPC. The most precious wealth of the countryside is the excellent ecological environment, and China must unswervingly follow the route of green agricultural development. Based on current research on the relationship between ecological livable and agricultural green development, comprehensive policy documents, journal literature and related reports, this paper explored the background and connotation of ecological livable, the current situation of agricultural green development and existing problems, and profoundly analyzed ecological livable and the internal connection between agricultural green development, aiming to provide theoretical reference and scientific reference for the final realization of ecological livable goal.

Key words Ecological and livable; Agricultural green agricultural development; Rural revitalization

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Ecological livable is one of the important tasks of the rural revitalization strategy. It is the further sublimation of the new rural construction "village clean" formulation, as well as the theoretical connotation of rural construction "quality", which means that the development of agriculture and rural areas in the future to respect nature, comply with nature and protect nature in the first place in all work. The specific implementation plan for ecological livability mainly focuses on three aspects: green agricultural development, continuous improvement of living environment, and strengthening rural ecological protection^[1]. Among them, the green agricultural development path is one of the most important and the most core link. Based on current research on the relationship between ecological livable and agricultural green development, comprehensive policy documents, journal literature and related reports, this paper explored the background and connotation of ecological livable, the current situation of agricultural green development and existing problems, and profoundly analyzed ecological livable and the internal connection between agricultural green development, aiming to provide theoretical reference and scientific reference for the rural revitalization strategy of the future ecological livable goal.

Connotation and Background of Ecological Livability

Connotation of ecological livability

Ecological livability is a general summary of the overall situation of suitable rural development, which includes both the state of "ecology" and the connotation of "livability". "Ecology" means

that all the organisms and the environment in the whole countryside are in a relatively stable dynamic balance, *etc.* All the elements in the countryside are coordinated, interdependent and coexist harmoniously, in line with the ecological requirements of "clear waters and green mountains are golden mountains and silver mountains". "Livable" refers to the comprehensive evaluation of the degree of rural residence, including the natural environment, cultural environment and other aspects, which not only means the rural environment, but also covers multiple functions such as living comfort, safety and convenience. Ecological livability emphasizes taking the people as the center, takes the good ecological environment in rural areas as the most universal benefit to people's livelihood, and also transforms the ecological advantages of rural areas into economic advantages.

Proposed background of ecological livability

The proposal of ecological livability comes from General Secretary Xi Jinping's thought of ecological civilization. In the 1960s, when General Secretary Xi jumped the queue in Liangjiahe, he had already realized the adverse impact of overloaded human activities on the ecological environment, so he led the masses to use livestock and poultry waste and crop straw to build biogas digesters. It is the early practice of solving ecological problems in new China. Later, when General Secretary Xi was the county Party secretary in Zhengding, recognizing that extensive resource development and economic development will cause irreversible and serious damage to the rural ecological environment, he emphasized the need to actively afforestation to leave clear water and green mountains for future generations. In 2002, General Secretary Xi Jinping put forward the idea of building ecological Fujian Province, corrected the past wrong development model of "development first before governance"; and while working in Zhejiang province, he put forward the creative ecological civilization thought of "lucid waters and lush mountains are golden mountains and silver mountains". Since the 18th National Congress of the

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CPC, The CPC Central Committee with Comrade Xi Jinping at its core has incorporated ecological progress into the overall plan for building socialism with Chinese characteristics. The 19th National Congress of the Communist Party of China comprehensively put forward the strategic plan of accelerating the reform of the system for promoting ecological progress, promoting green development, and building a beautiful China.

Current Situation and Existing Problems of Agricultural Green Development in China

Green development trend of agriculture in China

In 2017, China innovatively put forward the concept of "green agricultural development". General Secretary Xi Jinping has stressed for many times that the important goal of green agricultural development is to protect the good ecological environment in rural areas and coordinate the organic integration of speed, increment and quality of agricultural development. At present, the level of green agricultural development in China is in a trend of steady improvement, mainly reflected in the continuous improvement of the agricultural standard system, the continuous enhancement of the supply capacity of green and high-quality agricultural products, the stable support of agricultural financial input, the remarkable achievements in rural ecological environment protection and the significant improvement of rural living environment^[2].

There are problems in green agricultural development in China

In green agricultural development, we should strengthen the protection and conservation of resources, achieve the goal of "double reduction" of chemical fertilizers and pesticides, and intensify efforts to explore waste utilization and innovative industrial models. At present, the focus of green agricultural development is to solve the farmland heavy metal pollution, planting pollution, livestock and poultry waste treatment difficulties and other prominent problems. The cultivated land polluted by heavy metals is mainly distributed in southern China, which is an important factor threatening the safety of agricultural products. The pollution comes from the extensive use of fertilizers and pesticides, and the remaining chemicals are dumped into the river, leading to the agricultural non-point source pollution and serious damage to the rural ecological environment. China is a big country in animal husbandry, and the current livestock and poultry waste pollution is one of the largest sources of pollution in China. From the personal observation in the countryside, the cattle, pigs and chickens raised by each household can not only smell bad, but also have a serious impact on the rural ecological environment, seriously restricting the green development of agriculture in China. In addition, the state stressed the need to implement the strictest arable land protection system and strictly observe the red line of 1.8 billion mu of arable land. However, the Ministry of Natural Resources found that in 2021, many areas still occupied arable land by digging lakes and arable land greening, and some areas also increased the area of

arable land by simple soil mulching and false planting^[3].

Relationship between the Ecological Livability and the Green Development of Agriculture

Green agricultural development is the fundamental guarantee for realizing ecological livability

Green agricultural development emphasizes taking "green" as the core driving force of development, and pays attention to the carrying capacity of ecological environment and resource elements^[4]. We should draw an ecological red line and a development boundary, and pay attention to the overall "green" tone of ecological livability. The task of building an ecologically livable countryside requires to realize the green development of agriculture first, and the green development of agriculture is also the inevitable requirement and fundamental guarantee to realize the ecological livability. The green development of agriculture needs to reduce the use of chemical fertilizers and pesticides, realize the recycling of livestock and poultry waste, and protect the cultivated land and ecological red line. These series of measures are an important basis for the realization of rural ecological livability. Countries in recent years by setting up the national key research and development projects, vigorously support "chemical fertilizer pesticide reduction efficiency comprehensive technology research and development", "agricultural non-point source pollution comprehensive treatment" and other special research, carried out the "fruit tea organic fertilizer alternative fertilizer action", "north-east straw processing action", "agricultural film recycling action", *etc.*, to realize the green development of agriculture provides important technology and technical support. Can be seen from the results of agricultural green development measures, rural fertilizer usage in recent years by about 30%, crop straw burning is strictly prohibited, through manure returned, farming with green way make livestock and poultry waste, a variety of agricultural green development measures for the implementation of rural ecological livable played an important role.

The goal of ecological livability plays a role in promoting the green development of agriculture

The Chinese countryside has a special significance for the Chinese people. The Chinese nation grew up by relying on the countryside, and the Chinese culture is also centered on the agricultural civilization^[5]. The key to judge whether the countryside is ecological and livable mainly depends on whether the rural ecological environment is damaged, whether a large amount of chemical fertilizers and pesticides are used in crop cultivation, whether the livestock and poultry manure is recycled and many other aspects. High-quality ecological environment is the advantage and precious wealth of the countryside, and it is the most intuitive appearance feature that can be felt by people. When you enter the countryside, you can feel the blue sky, clear water, pure land and fresh air, you can taste fresh fruit, drink clean water, eat safe food, have clean and tidy toilets, and have extremely convenient public service facilities, which is the beautiful countryside that

modern urbanites forget to leave. To build an ecologically livable new countryside, we need to take the rural ecological environment into account in agricultural development, ensure food security, promote resource recycling and clean agricultural production, and promote the green development of rural agriculture.

Ecological livability and green agricultural development are coordinated and symbiotic

Ecological livability is to strengthen the protection of rural resources and the environment, coordinate the management of mountains, rivers, forests, farmland, lakes and grasslands, and create a beautiful Chinese new countryside. The goal of green agricultural development is also to promote the formation of green agricultural production model and make contributions to the construction of beautiful countryside with the guidance of friendly ecological environment and sustainable utilization of resources. The focus and goals of the two are consistent, and the common objective requirement of ecological livability and green development is to focus on solving the prominent problems in the current agriculture and rural areas, significantly improve the rural ecosystem, significantly improve the rural ecological service function, and build a harmonious and beautiful beautiful rural picture scroll.

Epilogue

General Secretary Xi Jinping has said that man and nature are a community of life. In fact, what is ecological livable, in many ancient poems has given us the answer, should be Tao Yuanming's "picking chrysanthemum under the east hedge, leisurely see the South mountain", is Su Shi's "water light clear good, mountain empty rain is also strange", is Wang Wei's "the moon between the pine, spring stone upper". These ancient poems depict elegantly vivid, fascinating scene. The future ecological livable country has a beautiful ecological environment, green

and healthy vegetables, convenient life facilities, also can let people have the wind quietly elegant, carefree state of mind. Urban life will no longer be the best choice of modern people, while the country will become people most yearning life place.

The goal of ecological livability puts forward higher requirements for green agricultural development. In the process of green agricultural development, we should fully respect the objective law of rural development, adapt measures to local conditions, base on regional characteristics, and adhere to the guidance of scientific and technological innovation, so as to make a good rural ecological environment become the growth point of people's living quality. We will have a deep understanding of the significance of green agricultural development for the realization of the goal of ecological and livable development, and under the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, we will solve prominent problems in agriculture and rural areas, and build a beautiful new rural home where people live and work in peace and contentment.

References

- [1] HE CZ, WANG SS, ZHAO ZY. Micro-practice of ecological livability and farmer narrative[J]. Journal of China Agricultural University: Social Science Edition, 2022, 39(4): 53-72. (in Chinese).
- [2] BA YY. Exploring the path of green development of agriculture in China under the background of rural revitalization[J]. Agricultural economy, 2022(11): 7-9. (in Chinese).
- [3] YANG ZK. Who has the order to still touch the red line of arable land? [N]. Workers' Daily, p.004. (in Chinese).
- [4] XU J. The value implication and practical direction of green agricultural development in the new period[J]. Agricultural Economy, 2022(11): 10-12. (in Chinese).
- [5] SHEN Y. Take the road of green development to build an ecological and livable Shaoxing[J]. Zhejiang Forestry, 2021(11): 2, 1. (in Chinese).

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- [17] ARSLAN M. Study on plant chemical constituents and in-vitro antioxidant activity of expanded dry jujubes based on near-infrared and middle-infrared spectroscopy techniques[D]. Zhenjiang: Jiangsu University, 2023. (in Chinese).
- [18] ZHAO YX, GUO JC, MA QY, *et al.* Triterpenoids with tumor cytotoxic activity and their preparation methods and applications. CN202110378576.1[2023-08-13]. (in Chinese).

- [19] HU YX, CHANG FH, BAI TY, *et al.* Role of polycyclic aromatic hydrocarbons and aryl hydrocarbon receptor in the development of tumor [J]. Chinese Journal of Biochemical Pharmaceutics, 2015(6): 185-188. (in Chinese).
- [20] LEI CG, CHEN JP, LU XX. The nutritive value and health function of Zhiphi Jujube Dates[J]. Progress in Modern Biomedicine, 2006, 6(3): 56-57. (in Chinese).

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