

## Study on the Construction Path of Agricultural Ecological Civilization in Yunnan Province under "Internet Plus"

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**Abstract:** The Nineteenth Congress once again emphasized the strategy of rural revitalization, which is the fundamental government to promote the development of agricultural modernization in China and to solve the problem of "three rural areas and farmers ". China is a large agricultural country, and the proportion of agricultural population accounts for about half of the national population. This paper makes an in-depth study and analysis on the path of agricultural ecological civilization construction in Yunnan Province under the "Internet +", and provides reliable suggestions for promoting the development of agricultural ecological civilization in Yunnan Province and strengthening the modernization of agricultural industry.

### 1. Strengthening the Leading Role of the Organization and Promoting the Construction of Agricultural Ecological Civilization in Yunnan Province

With the progress of science and technology, the mode of production and management in modern society has undergone great changes. The traditional mode of production and management is gradually being replaced by more advanced, more efficient and better modern mode of production. Mechanization, automation, intelligence and ecological mode of production have become the inevitable side of the development of modern society. At present, China's social economy is in the critical period of economic structure transformation and upgrading, and is facing great social changes in the process of development. In this critical period, how to ensure the harmonious and stable development of social economy is the key question to be considered in the process of developing economic construction and deepening reform and opening up. And to ensure the stable and harmonious development of social economy effectively, the key point is to do a good job of infrastructure construction, and to promote the development of agriculture, the construction of modern, mechanized, ecological agriculture is the focus of infrastructure work. Under the environment of "Internet+", with people's more and more profound understanding of the importance of ecological environment, how to promote the harmonious development of social economy and ecological environment has become a key lesson of global attention. In the current social environment, especially the widespread popularization and application of the concept of "Internet +" has promoted the development of Internet in various fields. "Internet + modern agriculture" has become an important guiding strategy for the construction of modern agricultural ecological civilization. The use of modern science and technology, combined with the concept of green ecology, to realize the intelligentization of agricultural production, the network of management, the digitization of management and the development of service online is an important basis for the construction of modern agricultural ecological culture, and also an important prerequisite for exploring the effective path of agricultural ecological civilization in Yunnan Province.

Yunnan Province is located in the Yungui plateau area, affected by the natural environment, the local agricultural development has obvious plateau special. In order to speed up the construction of agricultural ecological civilization in Yunnan Province, we must first strengthen the organizational leadership, give full play to the organizational and leading role, and do a good job in organizing and planning the construction of agricultural ecological civilization in Yunnan Province. In the meantime, a scientific and rational plan for the construction of agricultural ecological civilization has been worked out in the light of the characteristics and actual conditions of plateau agriculture in Yunnan, so as to realize the optimal allocation of agricultural resources and their rational exploitation and application in Yunnan Province, improve the utilization efficiency of agricultural resources significantly, increase agricultural production and income, and promote the development and progress of agricultural ecological civilization in Yunnan.

Through organized leadership planning and construction, it can coordinate the various departments involved in the construction of agricultural ecological civilization, promote the organic integration and cooperation of various departments, so as to ensure the smooth progress of the construction of agricultural ecological civilization[1].

## 2. Utilization of Biodiversity to Increase Crop Production

There are many kinds of organisms in Yunnan Province, which have outstanding advantages in species diversity. In order to strengthen the construction of agricultural ecological civilization in Yunnan Province under the "Internet+" environment, we must make full use of the advantages of biodiversity in Yunnan Province, so as to effectively increase crop yield, increase agricultural production and income, and promote the development and progress of agricultural ecological civilization in Yunnan Province (Fig .1). In the past, the agricultural production process blindly used chemical fertilizers and pesticides, the pursuit of a large number of applications of chemical fertilizers and pesticides brought about by the increase in crop production. However, the heavy use of chemical fertilizers and pesticides caused serious damage to the structure of the soil, so that the soil formed a solid knot, under the ground force. At the same time, the chemicals in chemical fertilizers and pesticides enter the soil, causing serious pollution to the soil, affecting the regional ecosystem and causing serious damage to the natural ecological environment.



Figure 1 Yunnan Gaoyuan characteristic agriculture

Yunnan region has sufficient precipitation and long illumination time, which is suitable for crop growth throughout the year, which is a natural excellent agricultural production in Yunnan Province. In the process of building agricultural ecological civilization, it is necessary to make full use of the natural conditions of Yunnan Province, give full play to the natural advantages of Yunnan Province, make use of intercropping, block cropping, rotation and strip cropping and other agricultural farming methods to realize the development of agricultural ecological development, while

achieving the improvement of crop yield, it can effectively protect the soil environment, reduce the pollution caused by chemical fertilizers and pesticides to the soil, effectively protect the ecological environment, and lay an important foundation for the construction of agricultural ecological civilization.

### 3. Strengthening Wildlife Conservation

In recent years, the high market prices of wild resources, which makes a small number of people in order to gain immediate benefits, random cutting, hunting wild animals and other illegal acts repeatedly prohibited, causing a very serious damage to the ecological environment. In order to build agricultural ecological civilization, we must fully consider the protection of wild resources, combine the protection of wild resources with the construction of modern agricultural ecological civilization (figure 2), promote the continuous development of agricultural industry in Yunnan Province in the direction of modernization and ecologicalization, and effectively realize the sustainable development of agricultural industry, which is of great significance to the construction of sustainable social economy and environment-friendly economy in our country.

In the process of building an agricultural ecological civilization, the government must give full play to its function and strengthen the publicity of the concept of wildlife conservation, especially the popularization of the knowledge of wildlife resources, such as the law of breeding of wildlife resources, so as to raise the people's ideological understanding and strengthen the people's view of wildlife conservation ideologically. At the same time, the people are encouraged to strengthen the study of the breeding knowledge and technology of wild resources, through the implementation of scientific harvesting mechanism, that is, it can realize the increase of farmers' income, at the same time, it can realize the sustainable development of wild resources, realize the harmonious and unified development of ecological environment protection and agricultural production construction, and truly strengthen the construction of agricultural ecological civilization in Yunnan Province[2].



Figure 2 Wild fungi in Yunnan

### 4. Reducing the Impact of Heavy Metals on the Agricultural Industry

With the development of modern industry, heavy metals have become the most important pollution factor in ecological environment. Because the heavy metal content in the soil increases, not only has the serious influence to the crop yield, causes the crop yield to drop. In addition, the situation of water resources, fertilization, cultivation methods, farming system and so on, will affect the construction of agricultural production, and then affect the yield of crops. Therefore, to promote the construction of agricultural ecological civilization, that is, to protect the ecological environment, but also to achieve agricultural production to increase production and income, effectively solve the "three rural" problem, we must reduce the shadow of heavy metals on the agricultural industry. To

achieve this goal, on the one hand, in the process of industrial production and construction, to achieve pollution and sewage, reduce heavy metal emissions. In addition, in agricultural production, the use of chemical fertilizers, pesticides and other chemicals must be strictly restricted, scientific use of chemical fertilizers and pesticides to reduce heavy metal residues, and the use of organic fertilizer or other ecological methods to effectively adjust the pH of soil, improve soil structure, restore the activity of heavy metals in soil, reduce the transfer of heavy metals to crops, so as to effectively realize the ecological production of agriculture.

## 5. Strengthening the Construction of Shelterbelts to Protect the Ecological Environment

Under the environment of "Internet+", to build agricultural ecological civilization effectively in Yunnan, we must strengthen the construction protection. In Yunnan agricultural industry, rubber garden is a very important part of agricultural production, and rubber industry is also an important pillar industry in Yunnan's economic structure (see figure 3). Taking Xishuangbanna area as an example, most of the rubber gardens are distributed in mountainous areas, which is very important to the ecological environment. At present, in the process of construction of rubber industry in Yunnan, there is obvious degradation phenomenon in the construction of rubber shelterbelt, which has caused serious dryness to the ecological environment. Because the construction of ecological shelterbelt lags behind, it seriously affects the diversified development of local ecology, but also affects the conservation of soil and water, resulting in more and more serious soil erosion phenomenon. In view of this problem, it is necessary to strengthen the shelterbelt construction and promote the ecological environment to return to good condition, which is also an important prerequisite to ensure the sustainable development of local agricultural production construction. It can be seen that under the "Internet+", strengthening shelterbelt construction is a necessary measure to realize the construction of agricultural ecological civilization in Yunnan, and also a necessary measure to realize the harmonious coexistence between man and nature, which has a profound influence on the sustainable development of our country's social economy[3].



Figure 3 Yunnan rubber forest

## 6. Conclusion

Promoting rural prosperity, strengthening agricultural construction and raising the production level of agricultural industry not only play a vital role in solving the problem of rural poverty, but also are necessary construction measures to promote the balanced and stable development of our country's social economy. Agriculture, as the basic industry in the social economic structure, is also the fundamental to ensure the stable and harmonious development of our country's social economy and ensure the food security. It can be seen that agriculture is an important foundation for the whole society, and the development of agricultural ecological civilization is also a fundamental task in the construction of social and economic development in our country. Therefore, we must make full use of the advantages of data resources brought by the "Internet+" environment, integrate the

agricultural resources of Yunnan Province organically, optimize the allocation of agricultural resources, use ecological methods to find the modern agricultural ecological model, organically coordinate agricultural production and ecological environment protection, promote the harmonious and unified development of the two, and effectively build the agricultural ecological civilization of Yunnan Province.

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