

The Pattern Research of Agricultural Ecological Civilization of China

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Abstract: Ecological civilization is the more advanced one beyond modern industrial civilization and it may become a common sense and an optimum choice of all mankind. Its formation could go back to agricultural civilization thousands of years ago. The 17th CPC National Congress report proposed explicitly “the construction of ecological civilization”. The agricultural ecological civilization construction is the significant strategic target in China’s economy and society development. This paper analyzes the pattern of agricultural ecological civilization of China and elaborates emphatically the measures of realizing agricultural ecological civilization so as to provide the reference for the agricultural ecological civilization construction.

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1. INTRODUCTION

During the process of transforming nature, human beings explore and utilize nature unduly; our economic growth is realized at an excessively high cost of resources and the environment. The development patterns of high input, low output and high pollution led to global shortage of resources and ecological crisis. And improper productive and consumption pattern resulted in severe ecological environment damage. So we should restrict human being’s practice in order to promote the harmonious development of human beings, nature and the society. Ecological civilization is a kind of cultural ethics that aims at the harmonious coexistence between nature and man, society and man and man and man. This civilization targets a virtuous cycle, overall development and sustainable prosperity. As comrade Hu Jintao points in the Report to the Seventeenth National Congress of the Communist Party of China: promoting the ecological civilization by basically forming an energy and resource efficient and environment-friendly structure of industries, pattern of growth and mode of consumption. We will have a large-scale circular economy and considerably increase the proportion of renewable energy sources in total energy consumption. The discharge of major pollutants will be brought under effective control and the ecological and environmental quality will improve notably. Awareness of ecological civilization will be firmly established in the whole of society. Agriculture is the base of the national economy, agricultural ecological civilization degree reflects the national ecological civilization degree directly. So the agricultural ecological civilization construction is the important content of the ecological civilization constructions. To achieve the agricultural ecological

civilization goals, the following patterns are recommended.

2. INITIATING THE CONCEPT OF SAVING ENERGY AND RESOURCES AND PROTECTING THE ECOLOGICAL ENVIRONMENT VIGOROUSLY

Ecological consciousness is the base of building ecological civilization. Norwegian philosopher Arne Naess put forward the “deep ecology”, which analyzed the root causes of the relationship failure between man and nature to find the true value of human life. He considered that the ecological crisis was the crisis of survival and culture in contemporary society, its root lied in the existing social system, human behavior patterns and values concept. In fact, Chinese traditional culture always embodied the view of “harmony between heaven and man”, which played an active part in the sustenance and development of the Chinese nation and country. So China should absorb the significant implications of our traditional culture and make a fundamental transformation in our concepts and we should also popularize the concept of respecting nature, saving energy and resources, set up ecological conscience, and abandon the consciousness of materialism, economism and consumerism to realize the harmonious relationship between human and nature.

However, the eco-conscious construction is a systematic construction project and it needs comprehensive means to transfer the exterior statute into the inner discipline. As the former Soviet Union eco-ethics scholar Peide Ci Kim said: once the norms of treating the nature morally come to people’s internal needs, it will play an important role in solving ecological problems. The comprehensive means of education and training, social orientation, and social

mechanisms of reward and punishment should be utilized in the external system. Therefore, we should strengthen ecological and moral education to let each individual establish the ecological concept and grasp his role in the environmental protection and enhance the environmental crisis sense and protection awareness. Furthermore, the cultural carrier, such as television, radio, libraries, cultural centers, radio and television networks should be made full use of to form a position network that covers all levels of rural areas and re-plant the wings of the spirit for the farmers to change the consensus of ecological civilization into the normative guidelines which are complied with by all the people.

3. ADOPTING THE PRODUCTION PATTERN OF ECO-AGRICULTURE

The development history of Chinese eco-agriculture is long, the agricultural production is essentially taking eco-agriculture technology apart from the "oil-agriculture" stage, and the ancestors left us a lot of valuable ecological thinking and eco-technology which still catch the world's attention. When the shortcomings of oil-agriculture became increasingly prominent, China chooses to the road of sustainable development of agriculture, and developing eco-agriculture further is one of its measures. In a sense, modern eco-agriculture is neither a revival of the ancient, nor a denial of oil agriculture, it is the combination of ancient eco-agriculture and oil agriculture. The ancient eco-agriculture agriculture and oil agriculture have their own advantages and disadvantages, the former can increase the soil fertility, and the latter can increase the material and energy flow. The modern eco-agriculture assimilates their good qualities and avoids their weak points. Namely, the modern eco-agriculture refers to making full use of the essence of ancient eco-agriculture techniques and modern industry and science and technology to improve the soil fertility, the quality of rural ecological environment and the sustainable use capacity of agricultural natural resources continuously so as to establish an integrated system of agriculture of using modern technology, modern equipment and modern management gradually. The national seven ministries and commissions have chosen 102 countries successively as eco-agriculture demonstration country in 1993 and 2000 to offer typical model and successful experience that others go by. Although modern eco-agriculture has a short history in China, it has made great achievements which have attracted worldwide attention. Its development practice proves: modern eco-agriculture can promote agricultural production development and increase peasant's income. It benefits to economize on energy resources, protect ecological environment and increase agricultural sustained

development ability. It can promote agriculture to develop deeply and broadly so as to promote the whole quality of agriculture. Therefore, it is not only the farmer's survival base and development essence, the potential exist and charm show of agricultural steady development but also the target and long-term countermeasure of building of a new socialist countryside to carry on eco-agriculture construction continuously and protect countryside sight and mountains-and-waters beautiful scenery of country during the strategies of the building of a new socialist countryside and ecological civilization. As comrade Wen Jiabao said: the 21 century is the key historical stage to realize our agriculture modernization, the modern agriculture should be the effective eco-agriculture. So it is an important carrier of the concept of ecological civilization and it should be promoted further under the guidance of ecological civilization.

It is the necessary condition for eco-agriculture technical promotion to change the scientific research results into practical productivity. The development of market-oriented agricultural science and technology intermediary organizations should be encouraged and supported in strengthening the dominant position of government's agricultural technical support and promotion to form the perfect eco-agriculture technical promotion network in which the country technical services sector is regarded as the backbone and various professional teams and the masses participate actively so that the group has the agricultural promotion workers, the village has the agricultural promotion group, the township (town) has the agricultural technical promotion station and the county (city) has the agricultural technical promotion center. Moreover, the competition and incentives mechanism should be introduced in the eco-agriculture technical promotion projects to mobilize all aspects of forces to participate in the eco-agriculture technical promotion.

In addition, the government should increase the science capital investment of ecological agriculture construction. According to the research of Chinese Academy Agricultural Economics Research Institute Qian Keming: if the government increases additional 1 yuan investment on the agricultural technology, it can make the agriculture and animal husbandry output value increase 11.87 yuan; while the increase ratio between rural infrastructure investment and material inputs of farmers is 6.75 and 1.27 respectively. If the government increases additional 1 yuan agricultural science and technical investment, it can reduce the production costs 9.35 yuan, while increasing additional 1 yuan investment in rural infrastructure, it can only reduce material costs 5.31 yuan. Moreover, the agricultural science and technical investment also belongs to "green box" policy which is fully utilized by many countries.

Therefore, China should also make full use of “green box” policies, adjust the investment structure of supporting agriculture, give priority to eco-agriculture research and development projects, especially pest control, soil fertility cultivation, comprehensive utilization of agricultural biological diversity and support agricultural research institutes and colleges to study the basic and advanced research of eco-agriculture.

4. PROPOSING ECOLOGICAL LIFE STYLE

The rural housing is the basic living and production sites. On the direction of the concept of ecological civilization, the planning, design, construction, use, maintenance, removal of rural housing construction should minimize the building energy consumption and the energy-saving, land-saving, water-saving and wood-saving rural housing should be built. For example, the straw can be made into crop blocks to replace the traditional brick. The Fourteenth Meeting of the Tenth National People's Congress Standing Committee adopted the “Renewable Energy Law of People's Republic of China” on February 28, 2005 and it came into effect on January 1, 2006. The article II of this Act states the so-called renewable energy is wind, solar, hydropower, biomass, geothermal energy, ocean energy and other non-fossil energy. Through the development and use of renewable energy in rural areas, it can reduce environmental pollution through turning waste (straw, manure, garbage) into treasure (fuel, feed, fertilizer) with technical means. For example, the biomass is the earliest, the largest, the most direct source of energy which is used by human and it stems from trees, crop straw, firewood, water plants, manure of livestock, processing residues of agro-forestry product and organic waste. It can be converted to high-grade energy and replace much conventional energy.

It is the foundation for garbage collection to carry out the scientific classification in the rural living garbage. The Ministry of Construction in the general principles 1.6 of urban living garbage disposal and pollution control technology policy states that the garbage disposal technology and equipment of sanitary fill, incineration, compost and recycling have the appropriate conditions of application, one of them or the right mix can be chosen on the conditions of adhering to local conditions, technical feasibility, equipment reliability, appropriate scale, comprehensive management and use. Therefore, the choice of rural living garbage disposal technology should also be guided by this principle.

5. CONCLUSION

Agricultural ecological civilization construction is the strategic target in China's ecological civilization construction. Initiating the concept of saving energy and resources and protecting the ecological environment vigorously, adopting the production pattern of eco-agriculture and proposing ecological life style are the main patterns of agricultural ecological civilization of China. Building agricultural ecological civilization will contribute to the harmonious development of human, nature and society, reach the goal of building of a new socialist countryside, deal with the problems of “agriculture, villages and farmers” and make the economy develop steadily and healthily.

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