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Relationship between the Three Laws of Dialectics of Nature and Agricultural Development

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Abstract Based on the three laws of dialectics of nature – the law of unity of opposites, the law of mutual change of quality and the law of negation of negation, this paper analyzes the relationship between the three laws and agricultural development, and proposes making good use of the three laws to promote the better development of agriculture and realize agricultural modernization.

Key words Dialectics of nature, Law of unity of opposites, Law of mutual change of quality, Law of negation of negation, Agricultural development

1 Introduction

Dialectics of nature is an important part of Marxist philosophy. Dialectics of nature contains three laws, namely, the law of unity of opposites, the law of mutual change of quality, and the law of negation of negation. There are universal laws in the development of society, man and nature, and these three laws can be applied to all things. Dialectics of nature is a science about the general laws of nature and the development of science and technology, as well as the general methods for human beings to understand and transform nature^[1–2]. It has strong time value and practical guiding significance. Agriculture is the largest industry in China, and the development of agriculture is inseparable from the guidance of good technology and science.

The discipline of dialectics of nature is broad and profound. It is not only the fundamental truth of all things in the world, but also a tool for understanding things, thinking and debating. Everything in the world, from ants to the whole universe, has its own laws. The so-called law is a law of the operation and destruction of everything itself. An important part of Marxist philosophy is dialectics of nature, which shows the development of society, nature and man, and is the general law found in the process of development. This is an important theoretical system of the country in the process of scientific and technological development.

As the saying goes, food is the most important thing for the people, and agriculture plays an important role in the national economy^[3]. At present, it is proposed in China's 14th Five-Year Plan to "give priority to the development of rural agriculture and comprehensively promote rural revitalization", which is enough to show the importance of agriculture in China. The three laws of dialectics of nature are also closely related to the development of agriculture. Following the three laws of dialectics of nature, we can make good use of science and technology to promote the progress of agriculture, modernize agriculture and realize the harmonious

sympiosis between man and nature. Human beings are born in nature, but human beings also transform nature. Engels believes that labor is an important feature that distinguishes human beings from animals. Human labor is purposeful and planned, and agriculture is produced in this purposeful labor. Agriculture is produced through human labor, and the products of agriculture meet the needs of human clothing and food. The three laws of dialectics founded by Marx are also closely related to agriculture.

2 Relationship between the three laws of dialectics of nature and agricultural development

2.1 Relationship between the law of unity of opposites and agricultural development The law of unity of opposites, also known as the law of contradiction, is the fundamental law in materialist dialectics, which shows the relations and contradictions between things and the interior and exterior of things. This contradiction is also the fundamental way to understand and transform the world. In the world, no matter how big or small things are, there are contradictions both inside and outside. The primary and secondary aspects of the contradiction have a certain impact on things. Just like Chinese agriculture, the object of agriculture is an organic living body, and life is the highest form of material movement. Engels also said that every moment of a creature is not only a representation of itself but also a symbol of something else. In other words, every moment of life is being destroyed and re-born, and it is a research object that can be debated, which conforms to the contradictory law of dialectics of nature.

Biology itself is in a dynamic process, and agriculture contains countless organisms. Applying the theory of dialectics to the field of agriculture can bring about a great change in agriculture. Agriculture includes organisms, and organisms include basic contradictions, such as contradictions between development and growth, between birth and death, and between individuals and groups. These contradictions will always exist and run through the whole life.

2.2 Relationship between the law of mutual change of quality and agricultural development The law of mutual change of quality is the second law in dialectics, and it is also a law of trans-

formation from quantitative change to qualitative change. Everything is unified by quality and quantity, which are not only related to each other but also different. Quality is the foundation, and without quality, quantity is meaningless. Quantity restricts quality, and does not exist without a certain amount of quality^[4]. For example, only enough trees can form a forest, and only enough water can form a lake.

The same is true in agriculture. More plots can form arable land, more sheep can form sheep pens, and more fish can form fish ponds. At present, China's agricultural development should pay attention to the unity of quality and quantity, and pay attention to both quality and quantity. In China, agriculture is the foundation of economic development, and people's food security is the first. The problem of food security is first of all reflected in the satisfaction of "quantity". Only by satisfying the quality and quantity of grain can we ensure the steady development of China's agricultural economy. Quantity-based agriculture has been the basic mode of agricultural development in China for a long time. However, only paying attention to the development of quantity-based agriculture will inevitably cause losses to the agricultural economy. For example, the quantity of agricultural products is large, but the quality is very poor; large quantity will cause burden to the agricultural system, the operating efficiency will decrease, and the income of farmers will be reduced^[5].

In recent years, due to the excessive production of agricultural products in some places, agricultural products are unmarketable, resulting in the waste of agricultural products and the phenomenon of farmland being abandoned. In this case, more attention should be paid to the quality of agricultural products and quality-based agriculture should be established with quality development as the focus. In modern China, the intensity of developing quality-based agriculture is higher than that of quantity-based agriculture, both in terms of economic benefits and spatial structure. But what is more important is to develop both quality and quantity at the same time, and the two should be coordinated and developed together. China's agriculture should combine quality and quantity. While developing quality-based agriculture well, we should place great emphasis on quality. We should be quality-oriented, give consideration to both quality and quantity, and strive for quantity while ensuring quality. Just like the law of mutual change of quantity and quality in dialectics, the two complement each other. Therefore, we should make good use of the law of mutual change of quantity and quality in agriculture to speed up the construction of modern agriculture.

2.3 Relationship between the law of negation of negation and agricultural development The law of negation of negation is also one of the basic laws of dialectics, telling people that in the process of development, things are the unity of progress and twists and turns, indicating that the development of things is not a straight line, but a spiral. Just like a development process of agriculture from the past to the present, it is also a process of circulation and continuous innovation. For example, protected cultivation in agriculture is based on greenhouses. By learning advanced technology from foreign countries, Chinese farmers invented "folk

greenhouses", and China's first generation of solar greenhouses were formed. This road is to first negate the foreign greenhouse route, and in the negation, it has developed greenhouses in line with the conditions of China. However, the first generation of technology must be flawed, so the first generation was negated and they began to explore greenhouses more suitable for China's development. It is in the process of negation of negation.

In the course of decades of development, China's agricultural greenhouse has been in continuous exploration. In the spiral process, it is constantly improved so as to achieve the improvement of the production level. Looking back on the process of building solar greenhouse in China, it seems like a cycle, but great changes have taken place within it. Therefore, the development of agricultural mechanization is also a process of negation of negation. In the process of China's agricultural production, the most essential law of dialectics is also used to realize the continuous improvement of China's agriculture.

3 Conclusion

In nature, everything has its own law of development. Soil, crops, biology and climate in agriculture are all in a state of movement and interaction in nature. They constitute an agro-ecosystem and exchange materials and energy with each other. Soil is the basis of crop production in agriculture. The combination of soil, water and microorganisms provides the growth environment and nutrients for crops, so that crops can steadily grow and develop for a long time. In the huge ecological environment of agriculture, the stability of agro-ecosystem is realized only when animals, plants and microorganisms are linked to each other. Agriculture is the product of the earliest period of mankind, and agricultural science and technology has also made great progress. At present, the development of China's agriculture is in a critical period, the realization of agricultural modernization is inseparable from the level of science and technology, and needs theory as the basis. While developing agricultural science and technology, we should also learn dialectics of nature, attach importance to the cultivation of dialectical thinking, help farmers make good use of these three laws, solve problems with dialectical vision, and guide practice with theory, to continue to promote the level of agricultural modernization to achieve higher development.

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